Occupational Health and Safety

'Working with you for a safer, healthier future'

RISK ASSESSMENT - 5 STEPS TO RISK ASSESSMENT

1 LOOK FOR HAZARDS

'A Hazard' is anything or any situation with the potential to cause harm, if uncontrolled.

2 DECIDE WHO MIGHT BE HARMED AND HOW

Staff, Visitors, Contractors, Young people, Trainees, Pregnant workers, etc.

3 EVALUATE THE RISKS

Consider the potential consequences if 'the Hazard' remained uncontrolled

Risk Rating Matrix
(Potential Severity x Likelihood).

4 IDENTIFY AND IMPLEMENT APPROPRIATE CONTROL MEASURES

Control measures must be based on 'ERIC PD' (see later).

Record your findings using the Risk Assessment Proforma.

5 REVIEW YOUR ASSESSMENT ON A REGULAR BASIS

Amend Risk Assessment if changes occur, but review at least once a year

Cyngor Sir y Fflint
Flintshire
COUNTY COUNCIL

‘a risk assessment is nothing more than a careful and systematic examination of what, in your work could cause harm to people - so that you can weigh up whether risks are suitably controlled or whether more could or should be done to control them’

GENERAL GUIDANCE

It is a legal requirement within various pieces of legislation to carry out risk assessments in your workplace. A risk assessment is nothing more than a careful and systematic examination of what, in your work, could cause harm to people. It enables you to weigh up whether you have taken enough precautions or should realistically do more to prevent that harm. The objective of the risk assessment process is to produce a well considered safe system of work.

The Flintshire County Council risk assessment proforma takes the assessor through a structured assessment process - all sections of the form must be completed. The objective of the proforma is to establish what risks exist if a hazard remained uncontrolled, what control measures are currently in place and what additional controls may be required to ensure that the risks are reduced.

HAZARD AND RISK

Hazard

Anything or any situation that can cause harm, if uncontrolled

Hazard	Example
Physical	fire, electricity, vibration, noise
Chemical	fertilizers, pesticides, lead, carbon monoxide
Biological	hepatitis, HIV, legionella
Ergonomic	display screen equipment, manual handling
Psychological	stress, bullying
Unsafe Acts	not following procedures, using makeshift or faulty equipment, driving too fast for the conditions.
Unsafe Conditions	slippery floor, faulty ladder, torn carpet, blocked fire exit.

Risk

The chance that somebody will be harmed by the hazard

How to assess the risks in your workplace

STEP 1

Look for the hazards - If you are doing the assessment yourself, walk around your workplace and look at what could reasonably be expected to cause harm -be realistic as you do this. As well as looking for the obvious ask your employees or their representative what they think, they may have noticed things which are not immediately apparent to you. Manufacturers' instructions or safety data sheets can also help you spot hazards and put risks in their true perspective, as can accident, incident and ill-health records.

STEP 2

Decide who might be harmed and how they might be harmed - consider:

- young workers, trainees, new and expectant mothers, pupils, people with disabilities, etc., who may be at particular risk;
- cleaners, visitors, contractors, maintenance workers etc. who may not be in the workplace all the time;
- members of the public, or people you share your workplace with, is there a chance that they could be hurt by your activities.

STEP 3

Evaluate the risks

Consider the potential consequences if the hazard remained uncontrolled, using the simple Risk Ranking Matrix that follows.

Risk Ranking

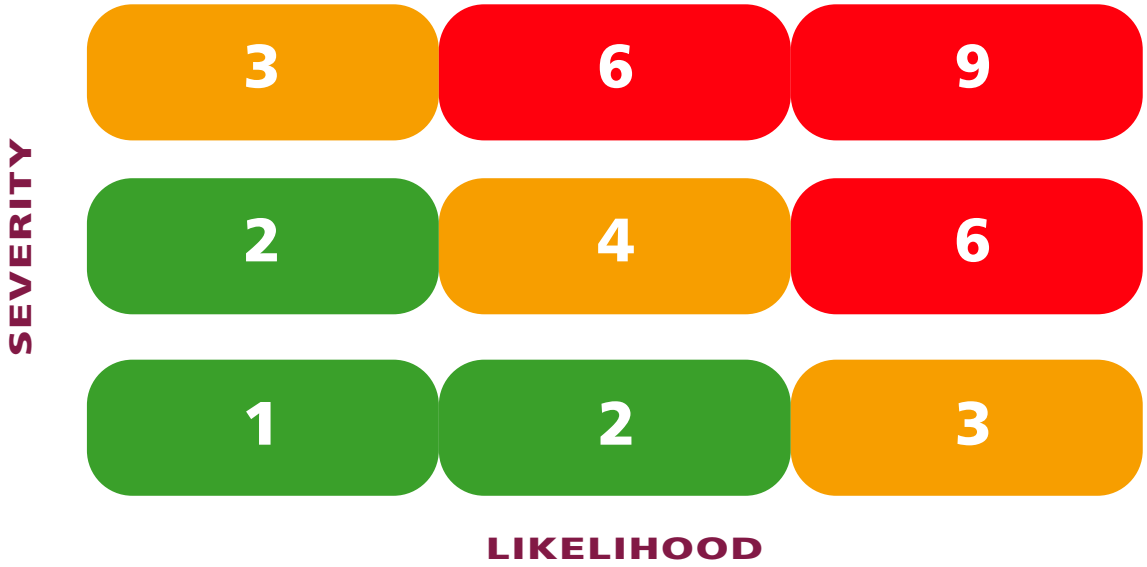
RISK RANKING MATRIX

(RISK RANKING = SEVERITY X LIKELIHOOD)

High (3)
Death, major injury or work related illness, permanent harm or disability

Medium (2)
Injuries or work related illness where people are unable to undertake their normal work for more than 3 days; semi-permanent harm or injury

Low (1)
All other minor injuries - first aid treatment with no permanent harm - minor cuts and bruises



Low (1)
Where harm is unlikely to occur under normal circumstances.
Low expectation of occurrence

Medium (2)
Where harm is likely to occur in time.
Or
Exposure to the hazard exists intermittently or hazardous event occurs occasionally

High (3)
Where the hazard is likely to occur imminently or in the very short term.
Or
Exposure is permanent or occurs frequently.
Or
Much evidence of previous harm

OUTCOME/REQUIRED ACTION (Severity x Likelihood "score")

HIGH (6-9)

Immediate action is required to control the risk before any further activity.

MEDIUM (3-4)

Work may proceed if additional control measures are implemented within strict timescales. These measures and timescales must be proportionate to the potential consequences.

LOW (1-2)

Work can proceed - no significant action is required other than monitoring that things do not change and that existing measures are being monitored and maintained.

Risk Control

Ultimately, the level of risk will depend on the effectiveness of the controls that are in place.

STEP 4

1. Consider what controls are currently in place to control this hazard.
2. Then consider relevant guidance to ensure that best practice has been applied and that the principle of **'ERIC PD'** has been followed:

Eliminate if possible - eg laminated floor panels that click into place (no adhesive), purchasing prefabricated roofing sections, prevent vehicles reversing by redesigning delivery areas

Reduce the risk - eg water-based adhesive or paint (rather than toxic or flammable products), purchasing small lighter packages, plastic blades on hover mowers, machinery with lower noise levels, reduce voltage / battery operated tools, reduced speeds of vehicles, proper maintenance

Isolate the staff from the hazard - eg enclose the process to avoid human contact, fixed guarding of machinery, noise reducing enclosure, isolation, locking off electrical systems

Control the risk - by engineered devices and instruction eg dust or fume extraction, machinery safeguards, reduction in exposure limits, written procedures, suitable and sufficient training, safe systems of work, method, statements and permits-to-work, warning notices, Local/Organisation rules, personal hygiene eg spread of HIV, Hepatitis

Personal protective equipment - use as a last resort, correct use and timely replacement eg goggles, gloves, hardhats, safety shoes etc

Discipline - eg adhering to procedures, method statements, safe systems of work etc and supervision and the application of discipline when ignored

3. The Risk Ranking Matrix should then be used again to help decide whether the existing precautions are adequate or whether more in fact should or could be done to reduce the risk further.

4. If you are satisfied that all reasonable precautions have been taken you need to make sure that:
   - The details of your considerations and actions have been recorded on the Risk Assessment form.
   - The information is kept readily accessible and available for reference.
   - The control measures have been effectively communicated to the people who need to know them.
   - The effectiveness of the control measures are monitored.

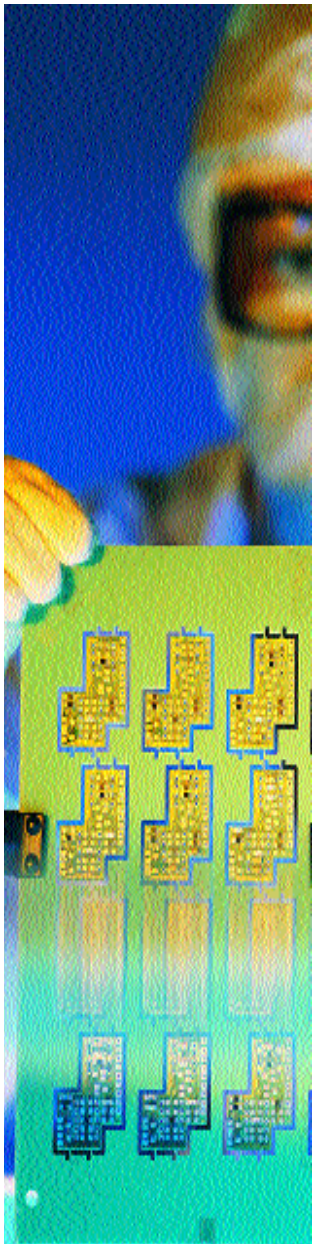
5. If you think more could or should be done to reduce the risk further, even if that is purely increased supervision or because of amended guidance you should record what further action is required on the Risk Assessment form. The necessary action needs to be allocated to a specific person or group of people and a target date attributed to the action. Once the action has been completed and the required additional precautions put in place the Risk Ranking Matrix should be used to recalculate the risk level for the task or operation.

STEP 5

Review your assessment and revise it if necessary - Sooner or later you will bring in new machines, substances and procedures which could lead to new hazards. Therefore the risk assessment must be reviewed if there are any significant changes. However, it is good practice to review your assessment on a regular basis to see if the control measures are still effective. Remember to involve your staff as they often work with the hazards on a regular basis.

SAMPLE RISK ASSESSMENT - "Thought Process"

The steps involved in making a risk assessment can be illustrated by relating the following thought process to the activity of replacing a light bulb.



Activity or operation:	**Replacing a light bulb**
Those at risk:	You will identify this as being the person who will change the light bulb & any persons in the immediate area.
Hazards	**Physical, Chemical, Biological, Ergonomic?** - (including unsafe acts and/or conditions) eg ***Physical*** *- Contact with electricity (230 volts) ; contact with broken glass ; contact with hot surface, use of access equipment ; work at height ; environmental factors (eg floor condition, ambient lighting levels, accessibility) ;* ***Ergonomic*** *- eg posture/over-reaching*
Potential Risk: ***Hazard "(including effects)"***	Consider the "What if" principle (worst case scenario). In this activity there is the potential for any of the following to occur : *Use of inappropriate access equipment eg a wheeled office chair ; failure to isolate the electrical supply ; work at height (eg a lamp being changed on a landing area at the top of a long flight of stairs!) ; over-reaching to change the lamp due to the height of the light fitting ; a fall through a fully-glazed door at the foot of the stairs ; the presence and activities of other people in the area.* The outcome could be : ***a major injury or a fatality***
RISK RANKING	WITHOUT CONTROLS (this is Severity x Likelihood) - Note the Ultimate Risk is the highest scoring item(s)
Existing Risk Taking into account how the task is actually undertaken and what Control Measures are in place:	Consider how the task is undertaken under **actual** circumstances: This will take into account the equipment used, the method adopted, knowledge, experience and ability of the person(s) involved, the manner in which they are using any equipment and facilities, type and level of training provided, maintenance schedules, the condition of the working environment at the time, eg tidy?, poorly lit? etc
RISK RANKING	**WITH EXISTING CONTROLS** (Severity x Likelihood) - **Note the Ultimate Risk is the highest scoring item(s)**
Control Measures Required	Consider the ERIC PD options, these could include: Provision of 'energy-saving' lamps - these will reduce the frequency of exposure because they have a longer service life ; Provision of suitable access equipment (eg a step-ladder or 'cherry picker') ; safe system of work - to include planning (eg time of day, notification/communication with others who may be affected, ensuring that the electrical supply is isolated), light fittings, scheduled maintenance (opportunity maintenance) appropriately trained staff.
RESIDUAL RISK RANKING	**RANKING WITH REQUIRED CONTROLS IMPLEMENTED - Note the Ultimate Risk is the highest scoring item(s)**
	Consider the consequences and likelihood of injury assuming that the control measures have been fully implemented:

RISK ASSESSMENT FORM

Directorate	*Community and Housing*	**Activity** (Brief Description)	*Changing light bulb*
Service	*Architects*	**People at Risk**	*B Wire (Caretaker)*
Location	*Xplace (Community Centre), Main Hall*	**Date**	*Oct 2004* **Review Date** *Oct 2005*
Assessor	**Harold Smith**	**Issue Number**	*001*

Item No	Hazard (include effects)	RISK RATING (without controls) High/Medium/Low	Existing Control Measures	RISK RATING with existing controls High/Medium/Low
1.	***Contact with electrical supply at 230 volts*** *(electric shock, burns, electrocution)*	***HIGH (3 x 2)***	*1. Mr Wire has had training in basic electrical safety and is aware of the need to isolate the supply before continuing with this task.*	***LOW (1 x 2)***
2.	***Use of access equipment to change lamp*** *(unstable work platform, falls and consequences)*	***MEDIUM (2 x 2)***	*2. No ladders were available at the time of the assessment, a stool was in the immediate area.*	***MEDIUM (2 x 2)***
3.	***Working at height*** *(falls from height and consequences)*	***HIGH (3 x 2)***	*3. The height of the lamp from the floor is approximately 2.5 metres (just over 8 feet). The height of the stool is approximately 0.6 metres (2 feet).*	***MEDIUM (2 x 2)***
4.	***Handling lamps (fragile and/or hot glass)*** *(cuts/laceration, burns, eye contact with sharp projectile)*	***MEDIUM (2 x 2)***	*4. Lamps are changed only when they have blown, the caretaker knows the appropriate wattage so they should not need changing whilst they could be hot (e.g. for a different wattage)*	***LOW (1 x 1)***
5.	***Posture (including stretching/twisting/reaching)*** *(loss of balance, back and/or upper limb injuries)*	***MEDIUM (2 x 2)***	*5. Because of the height of the lamp and the stool used for access the caretaker has to stretch in order to change the lamp.*	***MEDIUM (2 x 2)***
	Ultimate Risk	***HIGH***	***Ultimate Existing Risk***	***MEDIUM***

FURTHER ACTION REQUIRED TO REDUCE RISKS TO ACCEPTABLE LEVEL

Item No	Further action necessary to control risk	Action By	Date Completed	RESIDUAL RISK (with further controls) High/Medium/Low
1.	*No further action necessary at this time. Consider the use of lower voltage supply/fittings (e.g. 12volt halogen lamps), also longer life lamps (energy saving) will reduce the frequency of this activity.*	*R. Shore*	*12 Nov 2004*	*LOW (1 X 1)*
2.	*This activity should not be carried out until suitable access equipment (step ladders) have been provided and that the caretaker is trained in safe working with ladders.*	*R. Shore*	*12 Nov 2004*	*LOW (1 X 1)*
3.	*No further action required at this stage, however consideration may be given to lowering the height of the fitting or use of a 'rise and fall' light fitting.*	*R. Shore*	*12 Nov 2004*	*LOW (1 X 1)*
4.	*Written (documented) safe system of work to ensure that lamps are given time to cool before handling them.*	*R. Shore*	*12 Nov 2004*	*LOW (1 X 1)*
5.	*Provision and safe use of step ladders will prevent problems related to awkward posture.* *(In addition to points 1-5 above, supervision/monitoring should be routinely undertaken by the line manager.)*	*R. Shore*	*12 Nov 2004*	*LOW (1 X 1)*
		Ultimate Residual Risk		***LOW***

Assessor(s) Signature(s) **Managers Signature:**

Other relevant Risk Assessments:

RISK ASSESSMENT FORM

Directorate		**Activity** (Brief Description)	
Service		**People at Risk**	
Location		**Date**	**Review Date**
Assessor		**Issue Number**	

Item No	Hazard (include effects)	RISK RATING (without controls) High/Medium/Low	Existing Control Measures	RISK RATING with existing controls High/Medium/Low
	Ultimate Risk		*Ultimate Existing Risk*	

FURTHER ACTION REQUIRED TO REDUCE RISKS TO ACCEPTABLE LEVEL

Item No	Further action necessary to control risk	Action By	Date Completed	RESIDUAL RISK (with further controls) High/Medium/Low
		Ultimate Residual Risk		

Assessor(s) Signature(s)	**Managers Name:**	**Managers Signature:**
Other relevant Risk Assessments:		