

Activity A4

Understanding risk assessment

What is risk assessment?

Risk assessment is nothing more than a careful examination of what could cause harm to people, to weigh up whether sufficient precautions have been taken or more should be done to prevent harm.

The purpose is to make sure that no one gets hurt or becomes ill. Accidents and ill-health can ruin individual's lives and affect business too, if output is lost, machinery or equipment is damaged or you have to go to court and you could end up having to pay a fine or go to prison.

Risk assessment of the workplace is a legal requirement.

Learning objectives

By the end of this activity you should be able to:

- identify and record hazards in the workplace
- determine the level of risk posed by a hazard using the Risk Graph
- make recommendations to remove hazards or reduce risks.

Materials you will need

- Risk assessment form.
- Risk graph.

There are **five principles of risk assessment** (see *Five Steps to Risk Assessment*, available at www.hse.gov.uk/risk/):

1. Identify hazards
2. Decide who might be harmed, and how
3. Evaluate the risks and decide whether existing precautions are adequate, or more should be done
4. Record the findings of the assessment
5. Review the assessment and revise it, if necessary.

Definitions

Hazard: Something that can cause harm, illness or damage to health or property.

Risk: The likelihood or chance that harm, illness or damage from a hazard will occur, and the degree of harm (how many people might be affected and how badly).

Control measure: Something that reduces or eliminates exposure to a hazard.

Table A4.1 shows an extract of a risk assessment for a motor vehicle repair workshop. Note that it explains the standard of safety that is expected to be reached.

Table A4.1. Five steps to risk assessment

1. Hazard	2. Who might be harmed?	3. Existing controls	4. Standard to be reached	5. Future action(s)
Manual handling In the stores; movement of components.	All employees, particularly those in the stores.	Forklift truck used to move materials into store and take components to workshop. Manual handling still required.	Avoid the risk of injury by removing need for manual handling or provide mechanical aids. If risk cannot be avoided, a more detailed assessment is needed (Manual Handling Operations Regulations)	Supervisor to arrange manual handling training for the staff in the store. More detailed assessment to be carried out
Noise Particularly in body repair work.	All employees, particularly those involved with body work.	Ear defenders must be worn when panel beating. Ear defenders available in vehicle repair for use with certain equipment, for example air saw.	Exposure to noise must be assessed and controlled. Where risk cannot be adequately reduced, hearing protection should be provided.	Supervisors to monitor use of ear defenders
Welding Toxic fumes, sparks, arc-eye.	Employees performing the task. Others nearby.	A range of head and body protection used depending on the type of welding operation. Local exhaust ventilation (LEV) in place.	Exposure to radiation must be prevented. COSHH applies.	Screens to be provided to protect others from radiation. Arrange periodic testing of LEV plant.

Table A4.1. Five steps to risk assessment – continued

1. Hazard	2. Who might be harmed?	3. Existing controls	4. Standard to be reached	5. Future action(s)
Slips, trips and falls on the level	All employees. Visitors.	Good housekeeping standards maintained through training and monitoring. Floors degreased weekly. Absorbent granules put on spills as soon as possible. Entrances and exits maintained.	Condition and type of flooring, amount of lighting and standard of housekeeping should be such to prevent injury.	Walkways and storage areas designated by yellow lines.

Guidelines for determining the level of risk

To decide on what level of risk arises from a hazard, you have to think about:

- the likelihood of an incident and
- the potential effect or severity of an incident.

The **likelihood** can be decided on a scale of 1 to 5.

1. Highly unlikely: not known to occur.
2. Remote possibility: known to occur.
3. Occasional: has happened before.
4. Fairly frequent, some occurrences.
5. Frequent occurrences.

The potential effect or **severity** can also be decided on a scale of 1 to 5.

1. Minor injury.
2. Over three day injury.
3. Temporary incapacity/disease.
4. Permanent incapacity.
5. Fatality.

You use the numbers from these two factors to draw horizontal and vertical lines on the risk graph shown on the next page. You will find the level of risk where the two lines cross.

Action to be taken

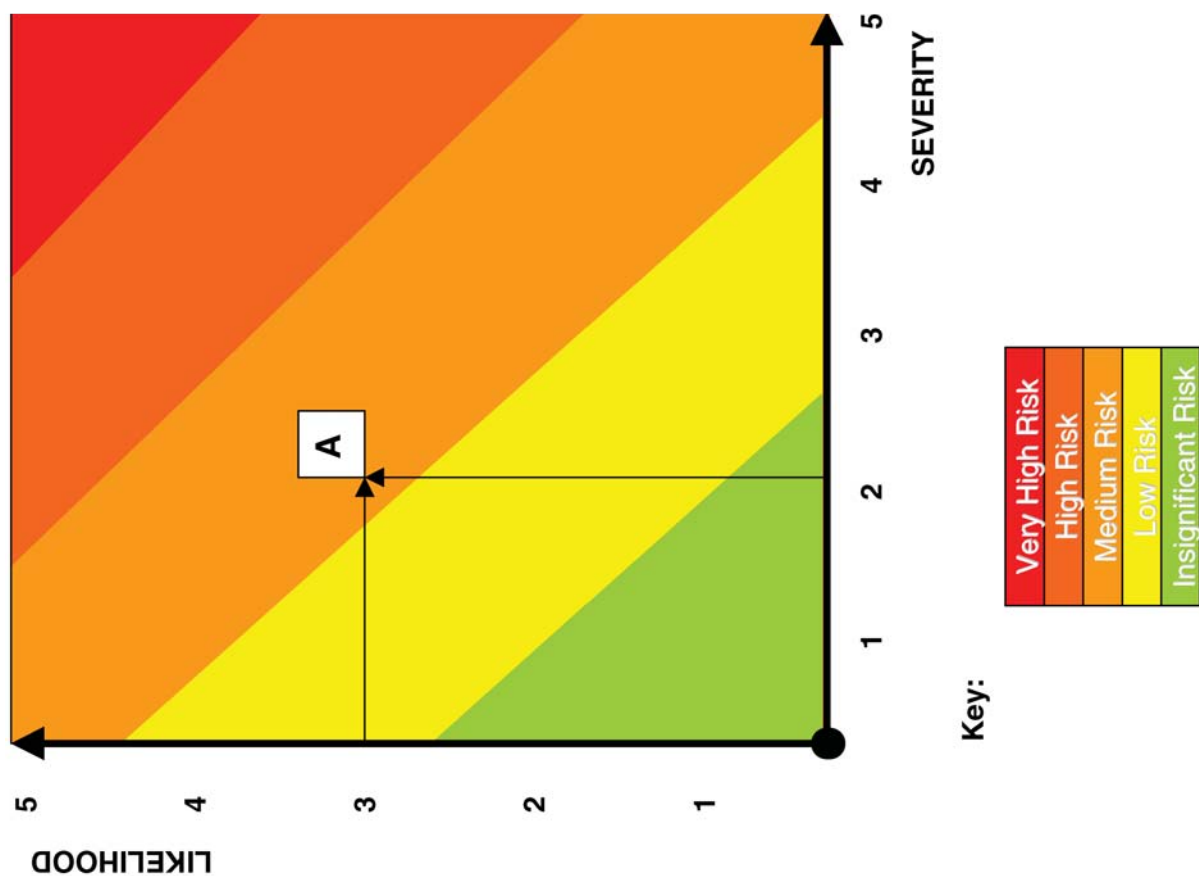
The level of risk that you identify will decide what action should be taken:

Level of risk	Action to be taken
Very high risk	Stop activity. Take immediate action.
High risk	Take action the same day.
Medium risk	Take action within one week.
Low risk	Monitor the situation.
Insignificant risk	No action required.

Example A shows an accident that occasionally happens (**Likelihood number 3**) resulting in an over-three-day injury (**Severity number 2**).

Where the lines cross is identified as a **Medium risk** and action should be taken within one week.

Risk graph



Carry out a risk assessment

Stage 1

Working in small groups, use the risk assessment form to identify and record:

- any hazards in the workplace
- who may be exposed to the hazard
- what control measures are in place – your teacher or trainer can give guidance on how to identify these.

Stage 2

Assess the level of risk of identified hazards by plotting a graph.

Stage 3

Evaluate the risk.

Decide:

- if the existing controls are adequate
- what future actions are recommended
- the time frame to eliminate or minimise the risk.

Record your findings in the 'future actions' column of the risk assessment form.

Stage 4

Provide feedback. Be prepared to discuss your findings and explain your reasoning to the whole class if your teacher or trainer asks you.

Risk Assessment Form

Location: Ed? ...

Assessment carried out by: John GANNON

(Signed) J. GANNON

Date: 21/05/06

No	Hazards (list)	Who might be harmed? (list)	Existing controls (list)	Future action(s) required	Time frame and/or review date
(Example)	Manual Handling in the store; movement of components.	All employees, particularly those in the stores.	Fork-lift truck used to move materials into store and take components to required. Manual handling still required.	Manager to arrange manual handling training for the staff in the store.	One month
	Loose cables	Student/teacher	Trunking	More detailed assessment to be carried out	Two weeks
	Soldering iron	anyone	Ventilation	check all trunking	once a month
	stacked equipment	anyone	Signs	check all vents	once a month
	Wet surface	anyone	don't allow drinking in class	uses more shelves	once a week
				more signs	once a month
				paper towels	

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Risk assessment form

Location: carried out by: date:

No	Hazards (list)	Who might be harmed? (list)	Existing controls (list)	Future action(s) required	Time frame and/or review date
(Example)	Manual handling In the stores; movement of components.	All employees, particularly those in the stores.	Powered pallet truck used to move materials into store and take components to workshop. Manual handling still required	Supervisor to arrange manual handling training for the staff in the store. More detailed assessment to be carried out	One month (enter specific date). Two weeks (enter specific date).

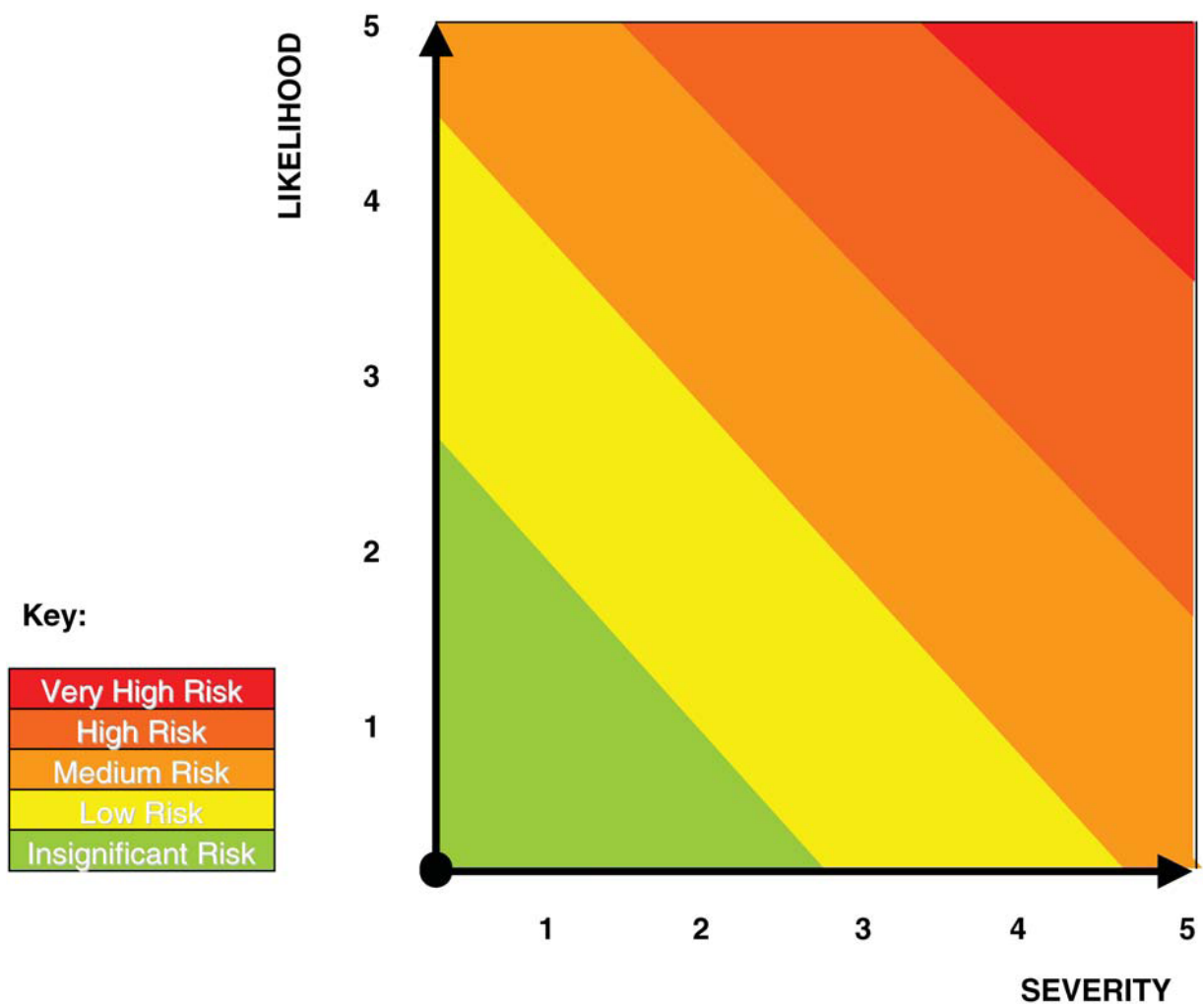
No	Hazards (list)	Who might be harmed? (list)	Existing controls (list)	Future action(s) required	Time frame and/or review date

Risk graph

Location: Date:

Hazard:

Level of risk:



Assessment carried out by: Signed: