Slide 1

Hello and welcome to Health and Safety, Risk Assessment Training session.

Slide 2

The objectives of this training session are to firstly explain what a workplace risk assessment is.

Identify why we must carry out risk assessments in the workplace,

Identify who should carry out the risk assessments,

And finally explain how to carry out a risk assessment and introduce you to our directory of generic risk assessments which have been developed to assist you in writing your own individual risk assessments.

Slide 3

Risk assessment is a risk management process which involves identifying potential hazards and analysing what could happen if the hazard resulted in an accident. So, what is an accident?

An accident is an unplanned and or unexpected event that can result in injury to a person or damage to property or equipment.

The reasonable foreseeability rule developed in common law negligence cases underpins health and safety legislation.

Most of us will recognise common workplace hazards, and employers are required to control these more obvious risks. If a reasonable person would recognise the risk associated with the work activity by applying common sense/knowledge, then it's reasonably foreseeable. For something to be foreseeable then it is probable and predictable. An accident may have been foreseeable if a reasonable and prudent person would have predicted it would happen. Examples of foreseeable accidents could be:

Trailing leads from electrical equipment causing a slip, trip, fall hazard

Operating machinery without guards or appropriate PPE.

Particular risks may be well-known in particular jobs, for example the risk of dermatitis will be a risk more prevalent for those working within Catering, Cleaning or Vehicle maintenance sectors.

Slide 4

Risk assessment is a term used to describe the overall process or method where you:

Identify hazards and risk factors that have the potential to cause harm (hazard identification).

Analyse and evaluate the risk associated with that hazard, this is the likelihood of someone being harmed by that hazard and the severity of that harm.

Determine appropriate ways to eliminate the hazard or control the risk when the hazard cannot be eliminated. These are known as control measures.

Risk assessments are living documents which must be regularly reviewed and monitored. Don't just complete your risk assessment and file it away!

Slide 5

Risk Assessments should not be complicated. Put simply a risk assessment looks at what in the workplace has the potential to cause harm and what action you can take to control these hazards.

Remember every day subconsciously we carry out risk assessments, when we drive our vehicles, cross the road etc. we just don't write them down!

Slide 6

What is the difference between Hazard and Risk?

A Hazard is anything that has the potential to cause harm or adverse health effect on a person or persons.

If there was a spill of water along a corridor then that presents a slipping hazard to anyone travelling along that corridor.

Risk is the chance or probability that a person will be harmed or experience an adverse health effect if exposed to a hazard. Factors that influence the degree of risk are the severity of the effect on that person.

Using our example of the water spill again. If this spill is on a main thoroughfare of the building, then there is a high risk or probability that some will slip on that water. Slipping on a wet floor has the potential to cause broken bones.

Slide 7

Remember when conducting your risk assessments, you should ignore the trivial and concentrate on the significant hazards arising out of the activity.

Slide 8

The ultimate purpose of a risk assessment is to make sure no one gets hurt.

Slide 9

The Management of Health and Safety at Work Regulations (Northern Ireland) 2000, require employers and self-employed to carry out suitable and sufficient assessments of the risks arising out of their work activities. Failure to carry out a risk assessment, which has the purpose of maintaining

safety in the workplace, will leave the employer liable for injury. An employer can be accused of being negligent, or for breaching their statutory duties.

Slide 10

Risk assessments are very important as they form an integral part of an occupational health and safety management plan for the organisation. They help to:

Create awareness of hazards and risk.

Identify who may be at risk (e.g., employees, pupils, visitors, contractors, the public, etc.).

Determine whether a control program is required for a particular hazard.

Determine if existing control measures are adequate or if more should be done.

Prevent injuries or illnesses, especially when done at the design or planning stage.

Prioritize hazards and control measures.

Meet legal requirements where applicable.

Prevent accident occurring and in doing so prevent cost of compensation payments, lost time, damaged equipment and loss of expertise.

Slide 11

Who should carry out risk assessments?

You should consult employees, your staff will have a good working knowledge of the task and job, are the most familiar with the operation being assessed. They will also know the risks involved and scope for potentially dangerous shortcuts and problems. Employees are more likely to understand why procedures are put in place to control risks and follow them if they have been involved in developing health and safety practices in their workplace. The person carrying out the risk assessment should have knowledge of the process, have the right attitude and know their limitations. If you are unsure, please ask for help.

Slide 12

Who should carry out risk assessments? Line Managers, Head of Sections/services/Principals are best placed to carry out the risk assessments are they will be familiar with workplace activities and will have knowledge of accident history.

Staff from EA health and safety can provide you with assistance and guidance. As mentioned in the previous slide involve your staff as they will be most aware of the workplace hazards and are more likely to understand why the procedures are in place if they have been involved in the risk assessment process.

Slide 13

If there are 5 or more employees, the significant findings of the risk assessment must be in writing.

You may require a separate risk assessment for employees who are new and expectant mothers and or young people.

Generic template risk assessments for new and expectant mothers are available through EA Health and Wellbeing section. Pregnant and new Mothers may be more prone to injury so you should consider their working conditions, the risk of physical injury and exposure to harmful substances which could be passed onto their child. In the case of young people (anyone who has not reached the age of 18) the employer has a responsibility to ensure that young people are not exposed to risk due to their lack of experience, being unaware of existing or potential risks and/or lack of maturity. Psychological and physical immaturity, inexperience, and a lack of awareness of, or disregard for, work hazards are among the factors which make young people more at risk in the workplace.

Slide 14

There are two type of risk assessments

Qualitative

Based on personal experience and judgement, and/or using general/historical risk data

Quantitative

Based on an assessment of the probability times severity of a given risk resulting in an overall risk.

The EA, in line with other government agencies, have moved to using a quantitative risk assessment which is based on 5 by 5 matrix.

Slide 15

If you think of the risk assessment as a series of steps. Firstly, divide your work into manageable categories. For example breaking the risk assessments into different locations, work activities or subject areas, use of equipment or technology, various activities, trips or visits out, any medical issues pertaining to individual pupils, any behavioural issues pertaining to individual pupils, evacuation of disabled persons and off site visits.

The next step in your risk assessment process will be to identify the hazards. A Hazard is anything that can cause harm. Think about substances; processes; the layout or structure or condition of premises, machinery and people. For instance, violent, aggressive and/or abusive individuals or behaviour are hazards which should be included in the risk assessment process.

Now think of who could be harmed by these hazards. You should identify different groups of people for example your staff and pupils. Think about people who might not be in the workplace all the time, such as visitors, members of the public, contractors and maintenance workers.

The next step will be to evaluate the risk. Having identified the hazards, you then have to decide how likely it is that harm will occur. In the quantitative risk assessments, we do this by applying numerical values to the severity of the injury and the likelihood of the injury occurring. Risk is a part of everyday life and you are not expected to eliminate all risks. What you must do is make sure you

Addressed the major significant risks and manage them by putting control measures in place.

The next step will be to prepare a plan for controlling the risks. The risk assessment should check the existing precautions you have in place, document these and then decide if you need more control measures to prevent harm.

Finally, once you have completed your risk assessment you must regularly review and revise your risk assessment. This is to ensure that the risk of being harmed within the workplace has not changed, that existing controls measures are still in place and that no further control measures are needed. You should review your risk assessments at least every year. A review may be required sooner, the reasons for this will be covered later in the training.

Slide 16

There are a number of template generic risk assessments available on our website which you can use to develop your own individual risk assessments. Click on the attached link to view these.

Slide 17

This is an example of one such risk assessment

Slide 18

Let's begin by looking at this risk assessment. You will need to complete your name against the section completed by, together with the date that you complete the risk assessment on and what the risk assessment is for. This example generic risk assessment is for a child running out of school.

Slide 19

The first step of the risk assessment process is to identify the hazards. Think of what could go wrong and how people could get hurt or made ill. Speak to your employees - they may be aware of hazards that aren't so obvious to you, observe the tasks, refer to your accident, near miss and ill-health records, read instructions or material safety data sheets for substances, tools and equipment – this will inform you of hazards.

Some common hazards that could be found in your organisation include:

Slips, trips and falls

Biological Hazards

Collisions, pedestrian or traffic

Electricity

Falling or moving objects

Lone Working

Manual handling

Temperature, humidity etc.

Unsafe systems

Unsuitable equipment.

Violence at work

Working at height

Use of substances

Behavioural incidents which could lead to an assault to staff

This is not an exhaustive list.

Slide 20

Once you have identified the hazards these should be recorded in this column of the risk assessment.

Slide 21

The next step of the risk assessment will be to be identify who can be harmed. The first group most likely to be at risk of harm will be those carrying out the task or activity - the employees themselves. Employees will have direct contact with the task, the equipment and the materials so will be most at risk.

You should then consider other people who whilst they are not necessarily performing the task, will be within the vicinity and have the potential to be harmed. For example, pupils, visitors to the site, members of the public, contractors etc. There may also be people with special requirements such as people with a disability, workers who are young or inexperienced workers.

Slide 22

When you have identified who can be harmed you should enter their details here under the column entitled to whom.

Slide 23

The next step in the risk assessment process will be to evaluate the risk. Quantitative risk assessments work by allocating numerical values to the Probability or likelihood of the risk arising

and the Severity of the injury and then multiplying them to give an overall risk rating. Severity X Likelihood = The Risk Rating.

Slide 24

When determining our severity and likelihood values you must bear in mind the existing control measures that you already have in place. The control measures which already exist will have an impact on the scoring. For example, if we were to score the risk of child running out of school without the existing control measures of door access controls fitted to the door, and without a perimeter fence around the school then the likelihood would be much higher.

Slide 25

Risks should be reduced to the lowest reasonably practicable level by taking preventative measures.

This slide sets out an ideal order to follow when planning to reduce risk from any activity. Consider each of the headings in the order shown, do not simply jump to the easiest control measure to implement, you will notice that PPE is listed as the last control measure in the diagram.

1. Elimination

Elimination should always be the first control measure you consider. Ask yourself, can this risk be removed entirely from this activity? For example, could you eliminate the risk of working at height by using extendable tools?

2. Substitution

Substitution is the second-best control measure you could use. Maybe the risk cannot be removed entirely but could it be reduced by replacing the material, substance or process with something less dangerous?

For example, substituting a hazardous chemical such as bleach with a safer alternative.

3. Engineering controls

The third option on our list is engineering controls these could be temporary, or permanent controls.

Examples of engineering controls could be enclosing dangerous items of machinery or moving parts which separate people from the dangerous part of the machine.

4. Administrative controls

The fourth option is administrative controls. These are the rules and systems you put in place to carry out the work safely. This is where we change the behaviour of people as opposed to removing the actual hazard.

Administrative controls emphasize improving safety through the implementation of policies, practices, and procedures. Examples of administrative controls could include prohibiting worker involvement unless the employee is qualified and undergone training, as well as reducing work times in order to reduce exposure to a potentially hazardous substance.

5. Personal protective clothing and equipment

Finally, on the list is personal protective clothing and equipment (PPE). PPE is the last line of defence or last resort in protecting against a hazard. PPE is not considered highly effective because it does not control workplace hazards the purpose of PPE is to protect employees in the event a hazard occurring.

Examples of PPE such as the use of safety googles or visors when completing ground maintenance activities such as grass strimming or use of ear defenders when working in a noisy equipment.

Slide 26

Once you have listed all your existing control measures you should now determine the severity of the hazard. Severity is the level of damage or harm a hazard could create.

Slide 27

Using the 1 to 5 matrix on this slide you should subscribe a severity rating to your hazard. The number 1 is the minor rating with 5 being used for single or multiple fatalities, widespread illness, permanent or life changing injuries. Please familiarise yourself with the matrix. You may find it helpful to print this matrix out or have it available on your screen when conducting your risk assessments.

Slide 28

Next you must determine the likelihood or probability of the hazard occurring. What are the chances of it happening with the current controls in place? Again, we use our 5 x5 matrix.

Slide 29

Using the matrix, you will see that number 1 represents a remote/rare less than 11% likelihood or chance with the number 5 is highly probable/almost certain to occur or greater than 85% chance of occurring. Please familiarise yourself with the matrix. You may find it helpful to print this matrix out or have it available on your screen when conducting your risk assessments.

Slide 30

Those who are not comfortable applying a quantitative yardstick to probability/likelihood may find determining these using the tool below helpful when determining a score.

Slide 31

Now that you have both the severity and likelihood scores established you simply multiply these two numbers to give you the risk rating. A severity rating of 2 and a likelihood score of 3 when multiplied together will give a risk rating of 6.

Slide 32

A red risk rating level of 15 -25 is a High – Intolerable Risk: Immediate action required. Activity should be stopped until control measures can be implemented to reduce risk before the work can resume.

An orange risk rating level of 8 to 12 is a Medium – Substantial risk: Activity can proceed, but with caution, ensuring control measures are maintained. Efforts should be made to control/reduce the risk.

A yellow risk rating level of 4 to 6 Low – Tolerable: Activity can proceed. Control measures must be monitored and reviewed as required to ensure they remain suitable and sufficient.

A green risk rating level of 1 to 3 Insignificant – Trivial: Monitor activity/task for future changes that would increase the risk.

Slide 33

This is the risk matrix. Those risks in the red zones will require immediate action.

Slide 34

Now that you have identified the risk level must develop a plan to control them. Ranking or prioritizing hazards is one way to help determine which risk is the most serious and which to control first. By assigning a priority to the risks, you are creating a ranking or an action list. Address the highest risks as a priority.

Slide 35

They can be different ways to treat the risk. For low level risks it may be possible to provide information to your employees, for those medium risks you may need to implement procedures or provide instructions. High level risks may require staff to undertake specific training and the development of safe systems of work. Remember the hierarchy of control measures when considering how to treat the risk. Elimination, Substitution, Engineering controls, Administrative controls and PPE.

Slide 36

The additional control measures which you have now determined as necessary should be documented in the column titled Additional Control measures.

Slide 37

Decide who is responsible for implementing these additional control measures in this column.

Slide 38

Determine when these additional control measures should be implemented. Be realistic with your time frames.

Slide 39

Once the additional control measures come into effect you will need to move these from this column into the existing control measures column. You should need review your severity and likelihood scores as the implementation of these additional control measures will reduce the risk and thereby decrease the risk scorings.

Slide 40

Now that you have completed your risk assessment you will need to review it. This review should be prompted by: -

New activities and hazards

New employees

New equipment

New work practices

Following an accident, incidents or near miss as this could be an indication that the current control measures are not sufficient or perhaps that they are not being acted on.

New Students / change in their medical condition / change in their behaviour

The use of new venues or locations

You should review your risk assessment at least annually.

Slide 41

Once you have reviewed your risk assessment you should record the date of review in this column.

Slide 42

A number of template risk assessment are available from the Health and Safety section on the EA website. This is an example of a COSHH risk assessment which should be completed when you are required to use substances which have the potential to be hazardous to your health.

Slide 43

This is a Display Screen Equipment risk assessment which should be completed by staff who use DSE such as PCs, laptops, tablets and smartphones daily, for continuous periods of an hour or more.

Slide 44

By completing the first page of the DSE risk assessment this will generate a risk rating and provide you with control measures to reduce the risk.

Slide 45

There is neither the desire nor the necessity to reinvent the wheel every time a risk assessment is required.

Generic risk assessments can and should be shared with colleagues. A number of generic risk assessments are available on the Health and Safety Section of the EA Website. If you have a risk assessment which you would like to share with others, please get in touch with a member of staff from the Health and Safety team and we can arrange to upload this to our existing collection of template risk assessments.

Slide 46

Here we have examples of activities which require a risk assessment, the list is not exhaustive: -

First Aid provision

Fire

Moving & Handling

Personal Safety

Lone Working

Slips/trips and falls

Violence in the Workplace

Working at Height

Site Traffic Management

Outdoor Supervision

Outdoor Play/ Sports Activities

Educational visits / Off site trips/ Residential Trips

Slide 47

If we think about a risk assessment in the simplest of terms. A risk assessment is a way of looking at

What could go wrong and why? Assessment.

What do we do to prevent it going wrong? Control.

What will we do if it still goes wrong? Emergency response and recovery.

Slide 48

Risk assessments don't have to be complicated or long. Paperwork never saved anyone, it's the actions arising out of the risk assessment which protect your staff, pupils and others. Risk assessments should be suitable and sufficient and need to be acted on.

Slide 49

Generic template risk assessments are available on the H&S section of the EA website.

You can contact the Health and Safety Service:

Via emailing

EASafetyTeam@eani.org.uk or telephoning

028 3751 2504

Alternatively contact H&S staff within your locality.

Slide 50

If you require any further assistance or have questions on risk assessments, please get in touch with the team.

Thanks for taking part in the risk assessment training course.