

Health and Safety Policy Annex A: Risk assessment guidance

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Undertaking a risk assessment

The following is a simplified structure for carrying out a risk assessment.

- Decide on the type of risk assessment.
- Is the object of the risk assessment static or dynamic?

For relatively static operations, the risk assessment should be such that it is not necessary to repeat it every time someone is exposed to a hazard in comparable circumstances.

For more dynamic activities – that is, where the detailed work activity may change fairly frequently or the workplace itself changes and develops (for example, on a temporary site or where the work involves peripatetic workers moving from site to site) – the risk assessment might have to concentrate more on the broad range of risks that might arise so that detailed planning and employee training can take account of those risks and enable them to be controlled as and when they arise.

Identify the activities

Analyse the activities involved in the overall activity being risk assessed and list them.

Ensure that relevant hazards and or risks are addressed. The aim is to identify the significant risks in the workplace. Do not obscure those risks with an excess of information or by concentrating on trivial tasks. Address what actually happens in the workplace or during the work activity.

Ensure that all groups of employees and others who might be affected are considered. Do not forget office staff, night cleaners, maintenance staff, security staff and visitors. Identify groups of workers who might be at particular risk – for example, young (risk assessments for people under the age of 16 need to be presented to the parents or guardians of that individual; for young people in general, the assessment should take into account their immaturity, physical and mental capabilities – see Instruction 26) or inexperienced workers, those who might work alone or any disabled staff.

Assess the hazards involved

Next, identify the hazards – that is, those aspects of the work (such as substances or equipment used, work processes or work organisation) which have the potential to cause harm. If there are any specific acts or regulations that are required to be complied with, these may help identify the hazards.

Hazards may include equipment, physical, chemical or biological hazards (note that special assessments have to be done for these – for example, COSHH for chemical hazards), human factors (including health and disability), waste materials, material handling or physical parameters of the site.

Be systematic in looking at hazards and risks. For example, it may be necessary to look at hazards or risks in groups such as machinery, transport, substances, electrical and so on. In other cases, an operation-by-operation approach may be needed.

Assess the severity of each hazard

These are given a risk rating depending on where in the range (between very low and very high) the severity of the hazard is.

Assess the probability or likelihood

These are also given a risk rating depending on where in the range (between very low and very high) where the probable outcome of the hazard becoming a risk.

Determine the risk rating for each hazard

Assess the risks from the identified hazards. If there are no hazards, there are no risks. Some risks may already be controlled in some way, whether by deliberate

measures or by the circumstances in which they are found. The effectiveness of those controls needs to be taken into account in assessing the residual risk.

If using the above values for probability and severity, the risk is simply: risk equals severity multiplied by probability (risk = severity x probability).

Rank according to priority

Use the risk rating system determined in paragraph 20 to allocate a priority to the risk determined. Remember that trivial risks can usually be ignored, as can risks arising from routine activities associated with life in general, unless the work activity compounds those risks or there is evidence of significant relevance to the particular work activity.

Actions and control measures required

The law recognises that there is no need to waste resources on small risks, thus the exercise is a means of identifying the risks which do need attention, and in which order they should be tackled. There is a priority in which remedial measures should be considered:

Can the hazard be eliminated? Can the hazard be reduced? Can people be removed from the hazardous situation? Can the hazard be contained? Can people's exposure to a hazard be reduced? Can protective equipment be used?

Take account of existing preventive or precautionary measures – they may already reduce the risk sufficiently in terms of what needs to be done to comply with relevant statutory provisions. But are they working properly? Does action need to be taken to ensure they are properly maintained?

Emergency procedures

These can include training, first aid, evacuation procedures and accident procedures. It is important that a specifically identified person is responsible for each of the actions or control measures deemed required and for each of the emergency procedures decided upon.

All employees are to be aware of any emergency plan within their place of work. Individuals should be identified to take responsibility for responding to an emergency; however, ensure that others can assume the responsibility if an individual is absent or incapacitated.

Record the assessment

The law requires that the risk assessment be recorded if there is significant risk. This is to be recorded on the council's risk assessment form on the [Health and Safety Portal](#), recording significant findings and any group that is identified as being at risk. The findings are then to be brought to the attention of each employee.

Review the assessment

The risk assessment should be reviewed:

- when all remedial actions have been taken
- to ascertain if the measures have been successful (modify assessment as required)
- when the law or codes of practice change
- when the activity, process or any of its components change
- whenever there is reason to suspect that it is no longer valid.

Risk rating

The risk rating system adopted by the council involves the multiplication together of the likelihood and severity of injury. The risk ratings aid the assessor to quantify the level of risk and to allow valid comparisons to be made.

Risk rating model

Risk Rating Model	Very Low	Low	Medium	High	Very High
Very Low	Very Low Maintain control measures	Very Low Maintain control measures	Medium Improve control measures	High Improve control measures immediately. Consider stopping work	Very High Stop work. Improve control measures immediately.
Low	Very Low Maintain control measures	Low Maintain control measures	Medium Improve control measures	High Improve control measures immediately. Consider stopping work	Very High Stop work. Improve control measures immediately.
Medium	Medium Improve control measures	Medium Improve control measures	Medium Improve control measures	High Improve control measures immediately. Consider stopping work	Very High Stop work. Improve control measures immediately.
High	High Improve control measures immediately. Consider stopping work	High Improve control measures immediately. Consider stopping work	High Improve control measures immediately. Consider stopping work	High Improve control measures immediately. Consider stopping work	Very High Stop process. Improve control measures immediately.
Very High	Very High Stop work. Improve control measures immediately.	Very High Stop work. Improve control measures immediately.	Very High Stop work. Improve control measures immediately.	Very High Stop work. Improve control measures immediately.	Very High Stop work. Improve control measures immediately.

Likelihood of it happening

Very Low, Low, Medium, High, Very High.

Severity of injury

- Very low rated injury – hazard will not result in serious injury or illness; remote chance of damage beyond minor first aid case.
- Low rated injury – hazard can cause illness, injury or equipment damage; remote chance of damage beyond minor first aid case.
- Medium rated injury - hazard can cause illness, injury or equipment damage – higher chance of damage that could be beyond minor first aid and may require emergency services to respond.
- High rated injury – hazard can result in serious illness, severe injury, property and equipment damage, that is beyond minor first aid and would require emergency services to attend.
- Very high rated injury or death – danger exists, hazard capable of causing death and illness on a wide scale.

Hazard checklists

The following checklists contain details of the various categories of hazards which should be considered by those undertaking a risk assessment. The lists of examples of hazards in each category are not exhaustive and consideration must be given to all significant hazards.

Hazards associated with materials and substances

Category	Type of harm	Examples of hazard
Mechanical	Trapping (crushing, drawing in and shearing injuries)	<ul style="list-style-type: none">• Two moving parts or one moving part and a fixed surface conveyor belt and drive• Vehicle tail lifts• Shredding machines, compactor
	Impact (includes puncture)	Something that may strike or stab someone or can be struck against (such as a moving vehicle, vehicle tail lifts, automatic doors, drill)

	Entanglement (rotating parts)	<ul style="list-style-type: none"> • Drill chuck and bit • Power take off shaft • Food mixing machines • Abrasive wheel
	Ejection (of work piece or part of tool)	<ul style="list-style-type: none"> • Staple gun • Using hammer and chisel • Abrasive wheel
Fire, explosion, combustion	Burns	<ul style="list-style-type: none"> • Heating oil • Cooking oil • Paper store • Plastic foam, including furniture
Flammable substance (including highly and extremely flammable)	Burns	<ul style="list-style-type: none"> • Petrol • Propane gas • Methane • Paraffin • Acetone
Oxidising substances	Burns	<ul style="list-style-type: none"> • Some oxidising agents • Highly flammable gas in confined space
Health hazards		
Corrosive or irritating substances	Skin effects	<ul style="list-style-type: none"> • Acids and alkalis • Cleaning chemicals • Petrol • Used engine oil
Particles	Respiratory diseases	<ul style="list-style-type: none"> • Asbestos fibres • Silica dust • Dust mite faeces • Pigeon droppings • Coal dust • Grain or wood dust
Toxic substances	Poisoning	<ul style="list-style-type: none"> • Weed killer • Pesticide
Biological agents	Infectious disease (such as HIV, hepatitis, Weil's Disease)	<ul style="list-style-type: none"> • Hypodermic needles • Sewage • Body fluids • Polluted water

Hazards by contact	Cuts, abrasions	<ul style="list-style-type: none"> • Glass • Rough timber • Concrete blocks
	Burns, frostbite	<ul style="list-style-type: none"> • Hot food • Frozen food • Hot oils • Refrigerants

Hazards associated with the place of work

Category	Type of harm	Examples of hazard
Pedestrian access	Tripping, slipping	<ul style="list-style-type: none"> • Damaged floors • Trailing cables • Spillages • Debris • Wet grass • Sloping surface • Uneven steps • Changes in floor level
Work at heights	Falls	<ul style="list-style-type: none"> • Fragile roof • Edge of roof • Edge of mezzanine floor • Work on ladder • Erecting scaffold • Hole in floor
Obstructions	Striking against	<ul style="list-style-type: none"> • Low headroom • Sharp objects
Stacking or storing	Falling materials	<ul style="list-style-type: none"> • High stacks • Insecure stacks • Inadequate racking • Stacking at heights
Work over or near liquids, dusts, grain and so on	Falling into substances, drowning, poisoning, suffocation and so on	<ul style="list-style-type: none"> • Silo • Tank • Reservoir • Sump • Work over or on a river • Swimming pools
Emergencies	Trapping in fire	<ul style="list-style-type: none"> • Locked exits • Obstructed egresses • Long exit route

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Hazards associated with the working environment

Category	Type of harm	Examples of hazard
Light (also increases risk of contact with other hazards)	Eye strain	<ul style="list-style-type: none"> • Glare • Poor lighting
Temperature	Heat stress, sunburn, melanoma, hypothermia	<ul style="list-style-type: none"> • Outdoor work • Hot weather • Cold weather • Wind chill factor • Work in rain, snow and so on • Hot or very cold processes
Confined spaces	Asphyxiation, explosion, poisoning and so on	<ul style="list-style-type: none"> • Work in a tank • Chimney • Pit • Basement • Unventilated room • Vessel • Silo • Service tunnels
Ventilation	'Sick building syndrome', nausea, tiredness and so on	<ul style="list-style-type: none"> • Fumes • Odours • Tobacco smoke

Hazards associated with method of work

Category	Type of harm	Examples of hazard
Manual handling	Back injury, hernia and so on	<ul style="list-style-type: none"> • Lifting • Lowering • Carrying • Pushing • Pulling • Hot or cold loads • Rough loads • Live loads – animal or person
Repetitive movements	Work related upper limb disorders	<ul style="list-style-type: none"> • Keyboard work • Using screwdriver

		<ul style="list-style-type: none"> • Using hammer and chisel • Stuffing envelopes
Posture	Work related upper limb disorders, stress and so on	<ul style="list-style-type: none"> • Seated work • Above head height • Work at floor level
Contractors	Injuries and ill health to employees by contractor work	<ul style="list-style-type: none"> • Working above employees • Use of harmful substances • Dangerous equipment on site
Contractors	Injuries and ill health to contractors' employees by work in premises	<ul style="list-style-type: none"> • Services (such as underground electricity cables) • Hazardous materials on site
Work in public areas	Injuries and ill health of the public	<ul style="list-style-type: none"> • Trailing cables • Traffic or plant movement • Obstruction to blind person • Obstruction to prams and so on • Work above public, such as from scaffold

Other types of hazard

Category	Type of harm	Examples of hazard
Attack by animals	Bite, sting, crushing and so on	<ul style="list-style-type: none"> • Bees and wasps • Dog • Bull • Fleas
Attack by people including verbal abuse. Classed as Violence at work (VAW)	Injury, illness, post-traumatic stress disorder	<ul style="list-style-type: none"> • Criminal physical attack • Angry customer • Drunken person • Drug abuser • Mentally ill person

Natural hazards	Various injuries, illnesses	<ul style="list-style-type: none">• Lightning• High winds• Heavy rain/flooding• Snow• Extreme temperatures (hot/cold)
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