

Legislation Update Service Risk Assessment Methodology

Risk assessments must only be carried out by persons with **appropriate competence and knowledge**. The competent person should ensure that, where appropriate, staff with knowledge of the area / process / activity participate and are appropriately consulted in the risk assessment process, particularly with respect to hazard identification, determination of controls and reduction of risk.

Risk assessments should be carried out **as soon as is reasonably practicable before** any work / activity is carried out, if there has been a change or proposed change in the process or activity, or following an incident or near miss. The following steps should be followed in carrying out the risk assessment:

Hazard identification

Identify all significant hazards associated with the area or activity. A hazard is something with the potential to cause harm in terms of injury, ill health, and damage to property, the workplace or the environment. This may be a process, situation, activity or substance. Hazards take many forms including chemicals, electricity, use of a ladder, sharp objects and even people (think about unsafe behaviour, poor attitude or persons undertaking the activities or working in the area such as young persons). Visit all parts of the site / area and **consider all activities** to be undertaken including potential abnormal / emergency situations.

Consider persons affected

For each hazard you need to be clear about who might be harmed; it will help identify the best way of managing the risk. You need to consider all workers i.e. persons who are performing work or work-related activities that are under your control. Some workers may have particular requirements such as new or young workers, people with disabilities, lone workers or new and expectant mothers. Extra thought may also need to be given to cleaners, visitors, contractors etc. who may not be in the workplace all the time.

Existing controls

The first step in evaluating the risk. Consider all control measures that you have in place to control exposure to the hazards. Examples include training, written procedures, personal protective equipment (PPE), signage, guarding, etc. Think about how effective these controls are. This will help you in determining the risk level.

Legal obligations relating to the implementation of necessary additional controls must also be considered.

Determine the severity of the hazard

The severity relates to the actual harm likely to be caused if an incident takes place. Use a score of 1-5 to evaluate the severity based on the definitions below:

1. Insignificant injury or effect on health (minimal or no treatment e.g. minor scratches, bruising or grazes)
2. Minor injury or effect on health (minimal first aid treatment, e.g. cuts not needing stitches, small burns, temp skin irritation, eye irritation, no absence from work)
3. Moderate injury or effect on health (short term absence from work e.g. cuts requiring stitches, broken bones, damaged tendons/ligaments)
4. Major injury or effect on health (long-term absence from work, reportable occupational disease e.g. amputations, loss of sight, manual handling injury leading to significant disability, diagnosis of occupational asthma)
5. Catastrophic injury or effect on health (e.g. fatality, occupational cancer)

Determine the likelihood of the hazard happening

The likelihood relates to the chance of the hazard causing harm (at the severity indicated) occurring. Factors to take into account include frequency and duration. Use a score of 1-5 to evaluate the likelihood based on the categories below. As a guide the following descriptions are suggested:

1. Highly unlikely – remote chance of happening under foreseeable operating conditions
2. Unlikely – small chance of happening
3. Possible – even chance of happening at some point
4. Likely – more likely than not to happen
5. Highly likely – almost certain to happen

Determine the risk level

Multiply the severity and likelihood scores to obtain the risk level score using the risk matrix below.

		Likelihood					
		Highly likely	Likely	Possible	Unlikely	Highly unlikely	
			5	4	3	2	1
Severity	Catastrophic	5	25	20	15	10	5
	Major	4	20	16	12	8	4
	Moderate	3	15	12	9	6	3
	Minor	2	10	8	6	4	2
	Insignificant	1	5	4	3	2	1

HIGH	15-25	Action must be taken to reduce the risks before the work / activity can commence or continue
MEDIUM	9-14	Improvement actions required to reduce the risk followed by monitoring
LOW	4-8	Monitoring required to ensure risk level does not increase
NEGLIGIBLE	1-3	Current level is deemed acceptable

Additional controls

Based upon the observations and risk level score calculated, decide if additional controls are required to further reduce the risk. Legal obligations relating to the implementation of necessary additional controls must also be considered.

Eliminating hazards & reducing risk

Risks must be prioritised to ensure the most serious (highest) risks are dealt with first. When determining controls or considering changes to existing controls, consideration shall be given to eliminating and reducing the risks according to the Hierarchy of Risk Control:

- a) eliminate the hazard;
- b) substitute with less hazardous processes, operations, materials or equipment;
- c) use engineering controls and reorganisation of work;
- d) use administrative controls, including training;
- e) use adequate personal protective equipment.

Residual risk

The remaining level of risk **after** additional control measures have been implemented. Again, refer to the risk matrix to calculate your residual risk score.

Communication

Workers must be made aware of hazards, risks and actions determined that are relevant to them.