

Evaluating Risk

Likelihood

An important part of your risk assessment process is to evaluate if the identified hazards and risks are sufficiently controlled or if more needs to be done to control the risk to a low/tolerable acceptance. Think about how likely it is that the hazard will occur in the environment in which it is encountered.

Use the below chart to help you identify the likelihood.

Likelihood of harm	Percentage scale
Very unlikely	Less than 10%
Unlikely	10% to 39%
Likely	40% to 59%
Very likely	60% to 80%
Almost certain	More than 80%

Severity/impact

Now consider the likely severity or impact of the hazard occurring. It is important to consider the most likely and realistic outcome and not what 'possibly' could happen with unrealistic outcomes.

Use the below chart to help you identify the severity/impact.

Severity/impact	Description
Very Minor	Minor cuts or scratches with minor first aid
Minor	Bruising or sprains
Moderate	Fractures, deep cuts or burns
Major	Permanent disability
Severe	Fatalities or damage causing a critical disruption

Risk rating and prioritisation of risk

When evaluating risk, the likelihood and severity are both considered together to arrive at an overall residual risk. Consider each hazard and think about the safety control measures already in place to help reduce the risk associated with the hazard. Choose the outcomes on the scale that you think represent the reality of the activity. The chosen outcomes are then cross referenced as follows to arrive at the residual risk rating.

Likelihood ↓	The risk level for the hazard under evaluation should be determined by considering the (Likelihood) and then cross referencing with the likely (Severity/impact) to arrive at the Overall Risk Evaluation .				
Almost certain	Medium	Medium	High	High	High
Very Likely	Low	Medium	High	High	High
Likely	Low	Medium	Medium	High	High
Unlikely	Low	Low	Low	Medium	Medium
Very unlikely	Low	Low	Low	Low	Medium
Severity/impact →	Very Minor	Minor	Moderate	Major	Severe

Low	Acceptable or Tolerable - No additional controls required. The risk is at a level that can be accepted provided controls are implemented.
Medium	Moderate Risk – Action and control is needed to reduce the risk. Think again about your control measures and decide what else can be done to reduce the risk.
High	Substantial Risk – The residual risk is too high. Work is not to be started or continued.

Risk Control Measures

When deciding on what action to take, you should always follow the hierarchy of controls as below:

- **Elimination** – can I remove the hazard altogether? If not, how can I control the risks so that harm is unlikely?
- **Substitute the hazard** – try a less risky option (e.g., switch to using a less hazardous substance).
- **Contain the risk/ Engineering Controls** – prevent access to the hazard (e.g., by guarding).
- **Administrative Controls** - Change the way work is carried out.
- **Reduce exposure to the hazard** – reduce the number of persons exposed to the hazard and/or reduce the duration of exposure.
- **Personal protective equipment** – provide personal protection for individual risks.
- **Skill/supervision** – rely on the competence of the individual.
- **Welfare arrangements** – provide washing facilities to remove contamination and first-aid facilities.

