Risk Assessment Matrix

Use this table during risk assessment to help you define the **Risk Level Code**.

By considering

- → the *Probability* (probability or likelihood) of something happening and
- → the *Severity* (severity of consequences) of something happening,

you can get a **Risk Level Code**. This code is used with any applicable hazard assessments, forms or decision making.

Benchmarks

Two things to consider:

- → the *chances* of something happening (**Probability**) and
- → the *significance* of an incident (**Severity**)

Probability of Occurrence

First, given the current situation, the environment and the history, what are the *odds* of something happening?

Also consider the *frequency* of the activity.

- → If you're doing an action many times a day, the odds of an incident are greater than something you do once.

A - Very likely

- → Occurs often.
- → Hard to avoid.
- → To be expected.

B - Possible

- → 50/50 chance or close to it.
- → We might be overdue but it hasn't happened for a long while.
- → Conceivable, especially if something else goes wrong.

C - Low

- → Hard to imagine.
- → Rare in the past.
- → Not on the radar.

Severity of Occurrence

Second, *if* something should happen, what could the consequences be?

How negative would the effect be on you, your co-workers, the company, the environment?

1 - Major

- → Permanent disability, amputation or fatality
- → Total loss to property or equipment, repair cost over $50,000
- → Reportable to government agencies, toxic release

2 - Serious

- → Medical aid, temporary disability
- → Equipment or property damage between $5,000 and $50,000
- → Non-reportable spill or release of toxic substance

3 - Minor

- → First aid
- → Repair cost below $5,000
- → Minor leak

Confined Spaces

Entry to confined spaces poses a variety of hazards which are assessed individually on the appropriate forms using the Risk Assessment Matrix.

The most severe rating found in the assessment will serve as the overall rating for the confined space.

Rating	Conditions
A1 **A2** **B1**	A confined space where atmospheric or other conditions are immediately dangerous to life or health (IDLH) and may involve oxygen deficiency, explosive or flammable atmospheres, and/or concentrations of toxic substances. This space requires pre-entry and continuous atmospheric monitoring and continuous CS Attendant presence at each worker access opening. AKA Level 1 Confined Space

A3 **B2** **C1**	A confined space involving Moderate Hazard atmospheric or other conditions, with the potential for injury or illness if preventative measures are not used. Such a space requires continuous CS Attendant presence, pre-entry atmospheric testing and testing prior to each entry after all workers have exited, and/or on a pre-determined schedule. AKA Level 2 Confined Space
B3 **C2** **C3**	A confined space involving Low Hazard atmospheric conditions and has ease of entry/exit and a remote probability of a Moderate Hazard situation developing. This space requires a designated CS Attendant, atmospheric testing at the start of shift, an entry/exit record and an effective means of contacting emergency assistance. The person's in the space must be monitored on a schedule relative to the assessed risks. AKA Level 3 Confined Space

Confined Space Atmospheric Hazard Rating (confirmed by pre-entry testing)

High Hazard

An IDLH atmosphere that may expose a worker to risk of death, incapacitation, injury, acute illness or otherwise impair the worker to escape unaided from the space in the event of a failure of ventilation or respiratory protection systems.

Moderate Hazard

An atmosphere that may be contaminated, but with a remote probability of resulting in a High Hazard atmosphere. Air supplying respirators are not required, unaided escape is reasonably expected.

Low Hazard

An atmosphere that is confirmed to be uncontaminated on initial testing and with a remote probability to change in rating during the entry and work in the confined space.

Risk Assessment Matrix

What is the **Risk Level Code** ***(RLC)*** at the intersection of the *Probability* of an occurrence and the possible *Severity* of an occurrence?

Probability of Occurrence	Severity of Occurrence: 1 - Major	2 - Serious	1 - Minor
A – Very likely	A1	A2	A3
B - Possible	B1	B2	B3
C - Low	C1	C2	C3

Actions

What does the Risk Level Code typically mean?

	A1 A2 B1	No work to be completed. Controls must be developed/implemented.
	A3 B2 C1	Some risk controls must be in place. Implement additional controls as required and reviewed. FLHA and JHA to be completed and/or reviewed.
	B3 C2 C3	Safe Work Practice is reviewed. FLHA is completed. Implement additional controls as required.