Safety Risk Assessment Worksheet

A structured way to assess a hazard, decide whether the risk can be accepted, and record what will be done about it. The matrix follows the five-by-five model in ICAO Doc 9859. Adjust the definitions to match your own organisation's risk criteria before use.

The risk matrix

Probability		A Catastrophic	B Hazardous	C Major	D Minor	E Negligible
5	Frequent	5A Intolerable	5B Intolerable	5C Intolerable	5D Tolerable	5E Tolerable
4	Occasional	4A Intolerable	4B Intolerable	4C Tolerable	4D Tolerable	4E Tolerable
3	Remote	3A Intolerable	3B Tolerable	3C Tolerable	3D Tolerable	3E Acceptable
2	Improbable	2A Tolerable	2B Tolerable	2C Tolerable	2D Acceptable	2E Acceptable
1	Extremely improbable	1A Tolerable	1B Acceptable	1C Acceptable	1D Acceptable	1E Acceptable

Intolerable	Stop or do not start the activity until the risk is reduced to at least tolerable.
Tolerable	Acceptable only with mitigation, and with acceptance by the appropriate level of authority.
Acceptable	Acceptable as it stands. Monitor and keep under review.

Severity definitions

A	**Catastrophic**	Multiple deaths, or equipment destroyed.
B	**Hazardous**	Serious injury or a few deaths; a large reduction in safety margins; major equipment damage.
C	**Major**	Serious incident or injury; a significant reduction in safety margins.
D	**Minor**	Nuisance, operating limitations, minor incident or use of emergency procedures.
E	**Negligible**	Few consequences.

Tip. Assess the most credible outcome of the hazard, not the worst imaginable one. Record the risk before and after mitigation so the decision-maker can see what the controls are buying.

Risk assessment record

Activity or system: _____ **Assessed by:** _____ **Date:** _____

No.	Hazard	Possible consequence	Existing controls	P	S	Risk	Further mitigation	Owner and due date	Residual risk
1									
2									
3									
4									
5									
6									

P = probability (1 to 5). S = severity (A to E). Risk = the combined index, for example 3C. Risk acceptance: name and authority of the person accepting any tolerable risk

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