

THE UNIVERSITY of EDINBURGH School of Engineering

Risk Assessment: Estimation of Risk

Low, medium, high?

We perceive risk differently or are prepared to take on a different levels of risk...



...which can result in very different outcomes of a risk assessment.





"...he's one of the results of our 'Risk Assesment Survey'!"



We therefore need to have a process to make risk assessment less subjective.

Use a risk rating matrix?



Risk Rating Matrix

Probability	Severity					
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)	
< 1% (1)	1	2	3	4	5	
1% (2)	2	4	6	8	10	
2-5% (3)	3	6	9	12	15	
6-20% (4)	4	8	12	16	20	
21-100% (5)	5	10	15	20	25	



Classification of Risk

Low	Moderate	Significant	High	
1 - 3	4 - 7	8 - 14	15 - 25	
No further action required	Keep under review	Implement additional control measures within 3 months to bring risk rating below 7.	Stop activity immediately	



Descriptors of Severity

	Insignificant	Minor	Moderate	Major	Catastrophic
Injury/Harm	No injury or illness.	First aid treatment or illness resulting in absence from work of no more than 1 day.	Injury requiring treatment in hospital or illness resulting in absence from work for no more than 3 days	Permanent injury or long-term illness that is RIDDOR* reportable.	Death or significant life- changing injury or illness.
Business disruption	Negligible	Short term disruption of < 1 day.	Disruption of < 1 week.	Multiple services disrupted of > 1 week.	Long term loss of business function
Environmental impact	Negligible	Localised to immediate area of incident.	Contained within room. Possibility of evacuating building.	Affecting building causing evacuation and possibly impacting on adjacent buildings.	Spreading to adjacent buildings, the campus or wider neighbourhood.
Teaching capability	Negligible	May impact teaching but readily resolvable with ad hoc changes to scheduling/ staffing.	Will impact teaching requiring changes to timetabling / staffing but limited to < 1 week.	Delivery of courses at risk.	Cancellation of courses.
Quality of student experience	Negligible	May impact student experience but readily resolvable.	Students dissatisfied but controlled internally.	NSS rating significantly affected.	Totally unsatisfactory student experience.
Research capability	Negligible	May impact research capability but readily resolvable within 1 or 2 days.	Will impact but limited to < 1 week	Major impact but limited to < 3 months	Long term impact on ability of lab to undertake research.
Reputation	Negligible	Short term internal loss of staff / student morale.	Local Media Short term loss of staff / student morale or public reputation.	Local/ National Media Public reputation undermined with direct effect on student recruitment.	National Media Loss of reputation which significantly affects student/ staff recruitment over a number of years.
Financial loss	< £1,000	<£10,000	< £100,000	< £1,000,000	> £1,000,000

What next?

Would you be interested in helping me to develop the matrix and the descriptors so that they may be used as a template?

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