

Template iWSSP step 3 – Definitions for likelihood, severity and risk level to be used in the risk assessment

Likelihood

	Description drinking water	Description sanitation
Likely	Will probably occur in most circumstances; has been observed regularly (e.g. daily to weekly).	Has often been observed in the past and / or is likely to occur in the next 12 months (or another reasonable period)
Possible	Might occur at some time; has been observed occasionally (e.g. monthly to quarterly or seasonally).	May have happened in the past and / or may occur under regular circumstances in the next 12 months (or another reasonable period)
Unlikely .	Could occur at some time but has not been observed; may occur only in exceptional circumstances.	Has not happened in the past and is unlikely to happen in the next 12 months (or another reasonable period).

Severity / Consequence

	Description drinking water	Description sanitation
Major impact	Major water quality impact; illness in community associated with the water supply; large number of complaints; significant level of customer concern; significant breach of regulatory requirement.	Hazard or hazardous event potentially resulting in serious illness or injury, or even loss of life (e.g. severe poisoning, loss of extremities, malaria, schistosomiasis, chronic diarrhoea, chronic respiratory problems, neurological disorders); and / or may lead to legal complaints and concern and/ or major regulatory non-compliance
Moderate impact	Minor water quality impact (e.g. not health related, aesthetic impact) for a large percentage of customers; clear rise in complaints; community annoyance; minor breach of regulatory requirement.	Hazard or hazardous event potentially resulting in self-limited health effects or minor illness (e.g. acute diarrhoea, vomiting, minor trauma) and/ or moderate regulatory non-compliance
No/minor impact	Minor or negligible water quality impact (e.g. not health related, aesthetic impact) for a small percentage of customers; some manageable disruptions to operation; rise in complaints not significant.	Hazard or hazardous event resulting in no or minor health effects (e.g. temporary symptoms like irritation, nausea, headache) and/ or minor regulatory non-compliance

Risk matrix

Example of a 3x3 risk matrix:

Consequences			RISK MATRIX	
Major impact (Score: 3)	Moderate impact (Score: 2)	No or minor impact (Score: 1)		
3	2	1	Unlikely (Score: 1)	Likelihood
6	4	2	Possible (Score: 2)	
9	6	3	Likely (Score: 3)	

Risk categories

	Description drinking water	Description sanitation
High – clearly a priority: requires urgent attention	Actions need to be taken to minimize the risk.	
	Possible options should be documented (as part of the improvement plan developed in the next task) and implemented based on community priorities and available resources.	It is possible that the event results in injuries, acute and/ or chronic illness or loss of life.
Medium – medium- or long-term priority: requires attention	Once the high priority risks are controlled, actions need to be taken to minimize the risk.	
	Possible options should be documented (as part of the improvement plan developed in the next task) and implemented based on community priorities and available resources. Or where the likelihood of a hazard occurring is low because effective control measures are in place but the consequences are major (e.g. microbial risks), special attention should be given to maintaining the control measures and their appropriate operational monitoring to ensure that the likelihood remains low.	It is possible that the event results in moderate health effects (e.g. fever, diarrhoea, small injuries) or unease (e.g. noise, malodours).
Low – clearly not a priority	No action is needed at this time, but actions may need to be taken (not a priority). The risk should be revisited in the future as part of the review process.	
	Or control measures are effective, and attention should be given to ensure that the risk remains low.	No health effects anticipated.