

Supplementary file 3. Risk of Bias Assessment Tool

Table 1. Cochrane risk of bias tool, adapted from Chau *et al.* (10).

Bias domain	Source of bias (Cochrane)	Bias description (Cochrane)	Source of bias (modified)	Bias description (modified)	Notes
Selection bias	Random sequence generation	Bias due to inadequate randomisation	Selective sampling	Bias due to use of different sampling methods at different locations (e.g. volume of water, frequency, number of colonies selected for characterisation)	If possible, note likely direction and magnitude
	Allocation concealment	Bias due to inadequate allocation concealment	NA	NA	NA
Performance bias	Blinding of participants/ personnel	Bias due to prior knowledge of the assigned intervention/ exposure by participants/ personnel	Use of methods which may vary in their outcome assessment	Bias introduced through the use of non-uniform analytical methods (e.g. during processing/ detection of AMR)	Note the evidence that the methods used to assess AMR were variable in their performance

Attrition bias	Incomplete outcome data	Bias resulting from the amount, nature, or processing of missing outcome data	Incomplete outcome data	Bias due to missing data for any of the samples collected/analysed (e.g. missing time points due to logistical reasons, weather conditions, others)	Note missing data, where available
Reporting bias	Selective reporting	Bias due to selective outcome reporting	Selective reporting	Bias due to not reporting, or disproportionately reporting measured outcomes relative to other outcomes	
Detection bias	Blinding of outcome assessment	Bias due to prior knowledge of participants influencing their assessment	NA	NA	NA

Other bias	Anything else	Bias due to conflict of interest, funding source, anything else (e.g. confounders)	Uncertainty of inputs	Lack of clarity or completeness regarding the provided information	Note points which may need further clarification.
				Confounders (e.g. seasonality; tides; rainfall; distance from pollution source)	Note all sources that may have an influence on the data collected.

Overall (qualitative risk of bias):

- High (High risk for one or more bias domains)
- Low (Low risk across all domains)
- Unclear (Low or unclear of bias across all key domains).