

Additional File 2: Risk of bias assessment tool

Name of author(s) _____ Year of publication _____

Name of paper/study _____

Note: if there is insufficient information in the article to permit a judgment for a particular item, please answer **No (High Risk of Bias)** for that particular item.

Risk of Bias Item	Answer: Yes (Low Risk of Bias) or No (High risk of Bias)
External Validity	
1. Was the study's target population a close representation of the national population in relation to relevant variables, e.g. age, sex, occupation?	
2. Was the sampling frame a true or close representation of the target population?	
3. Was some form of random selection used to select the sample, OR, was a census undertaken?	
4. Was the likelihood of non-response bias minimal?	
Internal Validity	
5. Were data collected directly from the subjects (as opposed to a proxy)?	
6. Was an acceptable case definition of VAP used in the study?	
7. Was a reliable and valid diagnosis method for VAP utilized?	
8. Was the same mode of data collection used for all subjects?	
9. Was the length of the shortest follow-up period for VAP appropriate?	
10. Were the numerator(s) and denominator(s) for the calculation of the incidence of VAP appropriate?	

Summary item on the overall risk of study bias

Low Risk of Bias: 8 or more “yes” answers. Further research is very unlikely to change our confidence in the estimate.

Moderate Risk of Bias: 6 to 7 “yes” answers. Further research is likely to have an important impact on our confidence in the estimate and may change the estimate.

High Risk of Bias: 5 or fewer “yes” answers. Further research is very likely to have an important impact on our confidence in the estimate and is likely to change the estimate.