

Checklist of information that should be included in new reports of global health estimates

Item #	Checklist item	Reported on page #
Objectives and funding		
1	Define the indicator(s), populations (including age, sex, and geographic entities), and time period(s) for which estimates were made.	5
2	List the funding sources for the work.	22
Data Inputs		
<i>For all data inputs from multiple sources that are synthesized as part of the study:</i>		
3	Describe how the data were identified and how the data were accessed.	5,6,7,8,9 Additional file 1
4	Specify the inclusion and exclusion criteria. Identify all ad-hoc exclusions.	6,7,8
5	Provide information on all included data sources and their main characteristics. For each data source used, report reference information or contact name/institution, population represented, data collection method, year(s) of data collection, sex and age range, diagnostic criteria or measurement method, and sample size, as relevant.	5,6,7,8,9 Additional file 1
6	Identify and describe any categories of input data that have potentially important biases (e.g., based on characteristics listed in item 5).	9,10,20
<i>For data inputs that contribute to the analysis but were not synthesized as part of the study:</i>		
7	Describe and give sources for any other data inputs.	
<i>For all data inputs:</i>		
8	Provide all data inputs in a file format from which data can be efficiently extracted (e.g., a spreadsheet rather than a PDF), including all relevant meta-data listed in item 5. For any data inputs that cannot be shared because of ethical or legal reasons, such as third-party ownership, provide a contact name or the name of the institution that retains the right to the data.	Additional file TableS2 Additional file 2
Data analysis		
9	Provide a conceptual overview of the data analysis method. A diagram may be helpful.	
10	Provide a detailed description of all steps of the analysis, including mathematical formulae. This description should cover, as relevant, data cleaning, data pre-processing, data adjustments and weighting of data sources, and mathematical or statistical model(s).	7,8,9,10
11	Describe how candidate models were evaluated and how the final model(s) were selected.	
12	Provide the results of an evaluation of model performance, if done, as well as the results of any relevant sensitivity analysis.	Additional file 1 Table S4a 4b S figure 1,3,6
13	Describe methods for calculating uncertainty of the estimates. State which sources of uncertainty were, and were not, accounted for in the uncertainty analysis.	13
14	State how analytic or statistical source code used to generate estimates can be accessed.	https://doi.org/10.6084/m9.figshare.26776894
Results and Discussion		
15	Provide published estimates in a file format from which data can be efficiently extracted.	Additional file 1 Table S4a-4b Additional file 4
16	Report a quantitative measure of the uncertainty of the estimates (e.g. uncertainty intervals).	Additional file 1 Table S4a-4b Additional file 4
17	Interpret results in light of existing evidence. If updating a previous set of estimates, describe the reasons for changes in estimates.	14,15,16,17
18	Discuss limitations of the estimates. Include a discussion of any modelling assumptions or data limitations that affect interpretation of the estimates.	20

This checklist should be used in conjunction with the GATHER statement and Explanation and Elaboration document, found on gather-statement.org