STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies* 

Page No	Recommendation	Item No	
2	(a) Indicate the study's design with a commonly used term in the title or	1	Title and abstract
	the abstract		
2	(b) Provide in the abstract an informative and balanced summary of what		
	was done and what was found		
			Introduction
4-5	Explain the scientific background and rationale for the investigation being	2	Background/rationale
	reported		
5	State specific objectives, including any prespecified hypotheses	3	Objectives
			Methods
5	Present key elements of study design early in the paper	4	Study design
5-6	Describe the setting, locations, and relevant dates, including periods of	5	Setting
	recruitment, exposure, follow-up, and data collection		
of 5-6	(a) Give the eligibility criteria, and the sources and methods of selection of	6	Participants
	participants		•
6-7	Clearly define all outcomes, exposures, predictors, potential confounders,	7	Variables
	and effect modifiers. Give diagnostic criteria, if applicable		
6-7	For each variable of interest, give sources of data and details of methods	8*	Data sources/
	of assessment (measurement). Describe comparability of assessment		measurement
	methods if there is more than one group		
8	Describe any efforts to address potential sources of bias	9	Bias
6	Explain how the study size was arrived at	10	Study size
7	Explain how quantitative variables were handled in the analyses. If	11	Quantitative variables
	applicable, describe which groupings were chosen and why		
7	(a) Describe all statistical methods, including those used to control for confounding	12	Statistical methods
n/a	(b) Describe any methods used to examine subgroups and interactions		
6	(c) Explain how missing data were addressed		
n/a	(d) If applicable, describe analytical methods taking account of sampling		
	strategy		
n/a	(e) Describe any sensitivity analyses		
			Results
6	(a) Report numbers of individuals at each stage of study—eg numbers	13*	Participants
	potentially eligible, examined for eligibility, confirmed eligible, included		
	in the study, completing follow-up, and analysed		
n/a	(b) Give reasons for non-participation at each stage		
n/a	(c) Consider use of a flow diagram		
8	(a) Give characteristics of study participants (eg demographic, clinical,	14*	Descriptive data
	social) and information on exposures and potential confounders		
n/a	(b) Indicate number of participants with missing data for each variable of		
	interest		
8	Report numbers of outcome events or summary measures	15*	Outcome data
9		16	Main results

		(b) Report category boundaries when continuous variables were	n/a
		categorized	
		(c) If relevant, consider translating estimates of relative risk into absolute	n/a
		risk for a meaningful time period	
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions,	n/a
		and sensitivity analyses	
Discussion			
Key results	18	Summarise key results with reference to study objectives	9-10
Limitations	19	Discuss limitations of the study, taking into account sources of potential	10
		bias or imprecision. Discuss both direction and magnitude of any potential	
		bias	
Interpretation	20	Give a cautious overall interpretation of results considering objectives,	9-10
		limitations, multiplicity of analyses, results from similar studies, and other	
		relevant evidence	
Generalisability	21	Discuss the generalisability (external validity) of the study results	10
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study	12
		and, if applicable, for the original study on which the present article is	
		based	

<sup>\*</sup>Give information separately for exposed and unexposed groups.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.