## STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No	Recommendation	Page
Title and	1	(a) Indicate the study's design with a commonly used term in the title or the	Page 1
abstract		abstract	
		(b) Provide in the abstract an informative and balanced summary of what was	Page 2
		done and what was found	
Introduction			
Background/	2	Explain the scientific background and rationale for the investigation being	Page 3
rationale		reported	
Objectives	3	State specific objectives, including any prespecified hypotheses	Page 3
Methods			
Study design	4	Present key elements of study design early in the paper	Page 3
Setting	5	Describe the setting, locations, and relevant dates, including periods of	Page 3
-		recruitment, exposure, follow-up, and data collection	-
Participants	6	(a) Cohort study—Give the eligibility criteria, and the sources and methods of	
		selection of participants. Describe methods of follow-up	
		Case-control study—Give the eligibility criteria, and the sources and methods of	Not applicable
		case ascertainment and control selection. Give the rationale for the choice of	
		cases and controls	
		Cross-sectional study—Give the eligibility criteria, and the sources and methods	Page 4
		of selection of participants	
		(b) Cohort study—For matched studies, give matching criteria and number of	
		exposed and unexposed	Not applicable
		Case-control study—For matched studies, give matching criteria and the	
		number of controls per case	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and	Page 4
		effect modifiers. Give diagnostic criteria, if applicable	
Data sources/	8*	For each variable of interest, give sources of data and details of methods of	Page 4
measurement		assessment (measurement). Describe comparability of assessment methods if	
		there is more than one group	
Bias	9	Describe any efforts to address potential sources of bias	Page 4
Study size	10	Explain how the study size was arrived at	Page 4
Quantitative	11	Explain how quantitative variables were handled in the analyses. If applicable,	
variables		describe which groupings were chosen and why	Page 4
Statistical	12	(a) Describe all statistical methods, including those used to control for	Page 4
methods		confounding	
		(b) Describe any methods used to examine subgroups and interactions	Page 4
		(c) Explain how missing data were addressed	Not applicable
		(d) Cohort study—If applicable, explain how loss to follow-up was addressed	Not applicable
		Case-control study—If applicable, explain how matching of cases and controls	
		was addressed	
		Cross-sectional study—If applicable, describe analytical methods taking account	
		of sampling strategy	
		(e) Describe any sensitivity analyses	Not applicable

Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	Page 4
		(b) Give reasons for non-participation at each stage	Not applicable
		(c) Consider use of a flow diagram	-
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Pages 4 and 7
		(b) Indicate number of participants with missing data for each variable of interest	Not applicable
		(c) Cohort study—Summarise follow-up time (eg, average and total amount)	Not applicable
Outcome data	15*	Cohort study—Report numbers of outcome events or summary measures over time	Not applicable
		Case-control study—Report numbers in each exposure category, or summary measures of exposure	
		Cross-sectional study—Report numbers of outcome events or summary measures	Pages 4 -5 /Table1&2
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	Pages 4 -5 /Table1&2
		(b) Report category boundaries when continuous variables were categorized	Table 1/2
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Not relevant
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	Not applicable
Discussion			
Key results	18	Summarise key results with reference to study objectives	Pages 5-6
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	Page 5-6
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Pages 5-6
Generalisability	21	Discuss the generalisability (external validity) of the study results	Page 6
Other information	1		
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	Page 7

<sup>\*</sup>Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

**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.