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

(a) Indicate the study's design with a commonly used term in the title or the abstract (b) Provide in the abstract an informative and balanced summary of what was done and what was found		Item No	Recommendation	
(b) Provide in the abstract an informative and balanced summary of what was done and what was found  Introduction  Background/rationale  2 Explain the scientific background and rationale for the investigation being reported  Dipicetives  3 State specific objectives, including any prespecified hypotheses  Methods  Study design  4 Present key elements of study design early in the paper  5 Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection  Participants  6 (a) Cohort study—dive the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up  Case-control study—dive the eligibility criteria, and the sources and methods of 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 of selection of participants  (b) Cohort study—For matched studies, give matching criteria and humber of controls per case  (b) Cohort 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 effect modifiers. Give diagnostic criteria, if applicable  Por each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias  9 Describe any efforts to address potential sources of bias  2 Describe any efforts to address potential sources of bias  3 Describe any efforts to address potential sources of bias  4 Describe any efforts to address potential sources of bias  6 Describe any efforts to address were handled in the analyses. If applicable, describe which groupings were chosen and why  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was Maderessed  Cross-sectional study—If applicable, explain	Title and abstract			ı .
### And what was found    Background/rationale   2			(b) Provide in the abstract an informative and balanced summary of what was done	
Background/rationale  Dispectives  3 State specific objectives, including any prespecified hypotheses  Methods  Study design  4 Present key elements of study design early in the paper  5 Describe the setting, locations, and relevant dates, including periods of 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 case ascertainment and control selection. Give the rationale for the choice of cases and controls  Cross-sectional study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  8* For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias  9 Describe any efforts to address potential sources of bias  2 Explain how the study size was arrived at  Case-control study—Give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias  9 Describe any efforts to address potential sources of bias  2 (a) Describe any methods used to examine subgroups and interactions  (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  Crass-sectional study—If applicable, describe analytical methods taking account of sampling strategy				2
State specific objectives, including any prespecified hypotheses	Introduction			
State specific objectives   3   State specific objectives, including any prespecified hypotheses	Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	
Study design 4 Present key elements of study design early in the paper 5 Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection 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 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 of selection of participants (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed 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 effect modifiers. Give diagnostic criteria, if applicable  Pota sources/ 8* For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias 9 Describe any efforts to address potential sources of bias  Study size 10 Explain how the study size was arrived at 11 Explain how duantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why 2 (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  Cross-sectional study—If applicable, explain how matching of cases and controls was addressed  Cross-sectional study—If applicable, explain how matching of cases and controls was addressed	Objectives	3		5
Setting 5 Describe the setting, locations, and relevant dates, including periods of 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 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 of selection of participants  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  Balas 9 For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group  Balas 9 Describe any efforts to address potential sources of bias  Poscribe any efforts to address potential sources of bias  Poscribe which groupings were chosen and why  (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed  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	Methods			ı
Setting 5 Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection  (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 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 of selection of participants  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  8* For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias  9 Describe any efforts to address potential sources of bias  For each variables  10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  (a) Describe any methods used to examine subgroups and interactions  (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort 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	Study design	4	Present key elements of study design early in the paper	2
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 case ascertainment and control selection. Give the rationale for the choice of eases and controls  Cross-sectional study—Give the eligibility criteria, and the sources and methods of selection of participants  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  Balas sources/  8* For each variable of interest, give sources of data and details of methods of 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  Study size 10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  7 Statistical methods  12 (a) Describe any methods used to examine subgroups and interactions (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  Cross-sectional 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	Setting	5		5
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 case ascertainment and control selection. Give the rationale for the choice of eases and controls  Cross-sectional study—Give the eligibility criteria, and the sources and methods of selection of participants  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  For each variable of interest, give sources of data and details of methods of 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  Study size  10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  7 (a) Describe any methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  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				1 9
selection of participants. Describe methods of follow-up  Case-control study—Give the eligibility criteria, and the sources and methods of case ascertainment and controls election. Give the rationale for the choice of cases and controls  Crass-sectional study—Give the eligibility criteria, and the sources and methods of selection of participants  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  For each variable of interest, give sources of data and details of methods of 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  Study size  10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  Case-control study—If applicable, explain how matching of cases and controls was addressed  Crass-sectional study—If applicable, describe analytical methods taking account of sampling strategy	Participants	6		• 0
Case-control study—Give the eligibility criteria, and the sources and methods of 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 of selection of participants  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  Data sources/  measurement  8 For each variable of interest, give sources of data and details of methods of 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  Study size  10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  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				
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 of selection of participants  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  For each variable of interest, give sources of data and details of methods of 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  Study size  10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  Statistical methods  12 (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  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			Control of the second of the s	
and controls  Cross-sectional study—Give the eligibility criteria, and the sources and methods of selection of participants  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  Data sources/  8* For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias  9 Describe any efforts to address potential sources of bias  Study size  10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  7 Statistical methods  12 (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  Crass-sectional study—If applicable, describe analytical methods taking account of sampling strategy				
Selection of participants  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  Por each variable of interest, give sources of data and details of methods of 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  Study size  10 Explain how the study size was arrived at  Case-control study—If applicable, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed  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				
Selection of participants  (b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  Por each variable of interest, give sources of data and details of methods of 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  Study size  10 Explain how the study size was arrived at  Case-control study—If applicable, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed  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			Cross-sectional study—Give the eligibility criteria and the sources and methods of	
(b) Cohort study—For matched studies, give matching criteria and number of exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  Data sources/  8* For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias  9 Describe any efforts to address potential sources of bias  Study size  10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  Statistical methods  12 (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  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				
exposed and unexposed  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 effect modifiers. Give diagnostic criteria, if applicable  Data sources/  8* For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias  9 Describe any efforts to address potential sources of bias  Study size  10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  Statistical methods  12 (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  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				
Variables  7 Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable  8 For each variable of interest, give sources of data and details of methods of 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  Study size  10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  (a) Describe all statistical methods, including those used to control for confounding  (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  Case-control study—If applicable, describe analytical methods taking account of sampling strategy  (A) Provided the first and the number of cases and controls was addressed  Cross-sectional study—If applicable, describe analytical methods taking account of sampling strategy				n K
Variables  7 Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable  Data sources/ measurement  8* For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias  9 Describe any efforts to address potential sources of bias  Study size  10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  Statistical methods  12 (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  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			Case-control study—For matched studies, give matching criteria and the number of	17.0
modifiers. Give diagnostic criteria, if applicable  For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias  9 Describe any efforts to address potential sources of bias  Study size  10 Explain how the study size was arrived at  11 Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  Statistical methods  12 (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how matching of cases and controls was addressed  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				
modifiers. Give diagnostic criteria, if applicable  Pata sources/ measurement  8* For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias 9 Describe any efforts to address potential sources of bias  Study size 10 Explain how the study size was arrived at  Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  Statistical methods 12 (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed  (d) Cohort 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	Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect	
Data sources/ measurement  Study size  Quantitative variables  12  13  14  15  15  16  17  17  18  18  18  10  11  11  11  11  12  13  14  15  15  16  17  17  18  18  18  19  10  10  10  11  11  11  11  11  12  13  14  15  15  16  17  17  18  18  18  19  10  10  10  11  11  11  11  12  12  13  14  15  15  16  17  17  18  18  18  19  10  10  10  11  11  11  11  12  12  13  14  15  15  16  17  17  18  18  19  19  10  10  11  11  11  12  12  13  14  15  15  16  17  17  17  18  18  18  19  19  19  19  19  19  19				
assessment (measurement). Describe comparability of assessment methods if there 7 is more than one group  Bias 9 Describe any efforts to address potential sources of bias  Study size 10 Explain how the study size was arrived at  Quantitative variables 11 Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  Statistical methods 12 (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  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	Data sources/	8*	For each variable of interest, give sources of data and details of methods of	
Bias 9 Describe any efforts to address potential sources of bias  Study size 10 Explain how the study size was arrived at  Quantitative variables 11 Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why  Statistical methods 12 (a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  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	measurement		assessment (measurement). Describe comparability of assessment methods if there 7	Q
(a) Describe all statistical methods, including those used to control for confounding  (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  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			is more than one group	٥
(a) Describe all statistical methods, including those used to control for confounding  (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  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	Bias	9	Describe any efforts to address potential sources of bias	and
(a) Describe all statistical methods, including those used to control for confounding  (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  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	Study size	10	Explain how the study size was arrived at	V
(a) Describe all statistical methods, including those used to control for confounding  (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  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	Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable.	_
(a) Describe all statistical methods, including those used to control for confounding  (b) Describe any methods used to examine subgroups and interactions  (c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  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			describe which groupings were chosen and why	\$}
(c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  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	Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	, 'è
(c) Explain how missing data were addressed  (d) Cohort study—If applicable, explain how loss to follow-up was addressed  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			(I) D. 1	1: 1
Cross-sectional study—If applicable, describe analytical methods taking account of sampling strategy			(c) Explain how missing data were addressed	/\ /\
Cross-sectional study—If applicable, describe analytical methods taking account of sampling strategy			(d) Cohort study—If applicable, explain how loss to follow-up was addressed	r (00
Cross-sectional study—If applicable, describe analytical methods taking account of sampling strategy			Case-control study—If applicable, explain how matching of cases and control	a
Cross-sectional study—If applicable, describe analytical methods taking account of sampling strategy			addressed	્
sampling strategy				
(a) Describe any constitute analysis				
	Continued on next page		C) 2000 five any sensitivity analyses	



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 7. 8		
		analysis		
		(b) Give reasons for non-participation at each stage		
		(c) Consider use of a flow diagram		
Descriptive	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information		
data		on exposures and potential confounders		
		(b) Indicate number of participants with missing data for each variable of interest  (c) Cohort study—Summarise follow-up time (eg, average and total amount)		
		(c) Cohort study—Summarise follow-up time (eg, average and total amount)		
Outcome data	15*	Cohort study—Report numbers of outcome events or summary measures over time		
		a developed in each exposure category or summary measures of		
		exposure mo application		
		Cross-sectional study—Report numbers of outcome events or summary measures		
Main results	16	exposure  Cross-sectional study—Report numbers of outcome events or summary measures  (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		
		precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and		
		why they were included		
		(b) Report category boundaries when continuous variables were categorized		
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful		
		time period		
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses		
Discussion				
Key results	18	Summarise key results with reference to study objectives		
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		
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity		
		of analyses, results from similar studies, and other relevant evidence		
Generalisability	21	Discuss the generalisability (external validity) of the study results		
Other informati	on			
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		
		for the original study on which the present article is based		

<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.

