

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

Item	Item No	Recommendation	Section, page number, paragraph, excerpts, other comments
<b>Title and abstract</b>	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	Title, page 1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Abstract, page 2
<b>Introduction</b>			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Introduction, paragraph 1-2. Excerpt: "In India, the limited evidence on temperature and health risks has focused mostly on the effects of heat waves, and has mostly been local."
Objectives	3	State specific objectives, including any prespecified hypotheses	Introduction, paragraph 3. Excerpt on objective: "we quantify heat and cold effects on all medical causes of death for all ages as well as on stroke, ischaemic heart disease, and respiratory diseases among adults aged 30-69 in India."
<b>Methods</b>			
Study design	4	Present key elements of study design early in the paper	Methods, paragraph 3-4.
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Methods, paragraph 1-2.
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants	Methods, paragraph 5-6. Cases were deaths of specific mortality causes (all medical, stroke, ischaemic heart disease, and respiratory diseases).
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Methods, paragraph 2-5. Excerpts: "We used daily mean temperature as the main exposure", "This case-crossover model has the benefit of controlling for all time-invariant confounders.", "We applied a two-stage approach to examine temperature associations with all known medical causes of deaths... by age group (ages 0-29 years, 30-69 years, 70 years and above)."
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	Methods, paragraph 2

Bias	9	Describe any efforts to address potential sources of bias	Methods, paragraph 3. Excerpt: “Matching control days by month and day of the week avoids bias from systematic or slowly-evolving temporal confounders such as day-of-week effects, seasonality, and time trends.”
Study size	10	Explain how the study size was arrived at	Methods, paragraph 1-2, 5-6. Excerpts: “Address information from these death records permit geocoding of 565282 deaths from 2001-2013”, “We excluded deaths without valid death dates (about 2% of all deaths, n=9557).”, “...excluded the northwestern regions with low death counts (n=5917).” Also see Table 1 in S1 Appendix.
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Methods, paragraph 2
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	Methods, paragraph 3-4
		(b) Describe any methods used to examine subgroups and interactions	Methods, paragraph 5 & 7
		(c) Explain how missing data were addressed	Methods, paragraph 2. Excerpt: “We excluded deaths without valid death dates (about 2% of all deaths, n=9557).”
		(d) If applicable, describe analytical methods taking account of sampling strategy	Not applicable
		(e) Describe any sensitivity analyses	Methods, paragraph 9
<b>Results</b>			
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	Table 1 in S1 Appendix
		(b) Give reasons for non-participation at each stage	Table 1 in S1 Appendix
		(c) Consider use of a flow diagram	Table is a better option than flow diagram given the number of models examined
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Details are already described in the method section.

		(b) Indicate number of participants with missing data for each variable of interest	Details are described in the method section and in Table 1 in S1 Appendix
Outcome data	15*	Report numbers of outcome events or summary measures	Fig 1; Table 1 in S1 Appendix
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	Not applicable. Time-invariant confounders were controlled for by study design. Air pollution data were unavailable for analysis.
		(b) Report category boundaries when continuous variables were categorized	Category boundaries for temperature ranges can be found in the Methods, paragraph 7 and the column headings of Table 1 & 2
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	We calculated absolute number of temperature-attributable deaths (Table 2) using the attributable risks fractions (Table 1).
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	Results, paragraph 5
<b>Discussion</b>			
Key results	18	Summarise key results with reference to study objectives	Discussion, paragraph 1-2. Excerpts: “We demonstrate that cold temperatures contribute to higher attributable risks than hot temperatures in India”, “We identified differences in the temperature-mortality associations between stroke, ischaemic heart disease, and respiratory diseases.”
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	Discussion, paragraph 7. Excerpt: “the temperature data had a coarse spatial resolution...lead to biases in either positive or negative directions.”
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Discussion, paragraph 1,4,5
Generalisability	21	Discuss the generalisability (external validity) of the study results	Not applicable. Study is only meant to provide estimates for India. Further research is needed in other LMIC countries.
<b>Other information</b>			
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	Provided in online submission

\*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](http://www.strobe-statement.org).