Reviewer’s report

Title: Long-term particulate matter exposure and mortality: a review of European epidemiological studies

Version: 1 Date: 29 May 2009

Reviewer: Marcela Fu

Reviewer’s report:

The authors focused in an important public health topic scarcely studied in Europe, and hence it highlights the need of further standardised research in this field. The method for collecting published papers is exhaustive and well described. Discussion clearly remarks the difficulty in comparing so heterogeneous studies in Europe regarding methodology of measurements and outcomes.

Minor essential revisions:

Abstract:
- It should include the objective of the review, and the whole period of publication of the papers considered for review (2002-2007).

Methods:
- Please indicate the number of studies identified, which of them fitted in the inclusion criteria, and the number (and study design) of those finally included for review (as briefly documented in the Abstract).

Analytic studies on mortality from cardiovascular and respiratory diseases:
- p8: data from Swedish study are not precise (number of cases and response rate); please revise them and correct (were 1,397 cases instead of 1,393, and response rates to mailed questionnaire varied between 70 and 81%).
- p9: Please indicate in the text that the HR presented narratively are crude estimates. This will facilitate the reading.

Discussion:
- p11: it should include the whole period of publication of the papers considered for review (2002-2007).
- p11: It is not necessary to mention the study designs of the papers included for review. Instead of this, as mentioned previously, the authors should include this description in Methods or Results section.

Conclusions:
- At the beginning, please specify: European studies.

References:
- Reference 1 is not available at the link provided.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests' below.