Reviewer's report

Title: The short-term association of components of fine particulate matter and mortality in the Denver Aerosol Sources and Health (DASH) study

Version: 2
Date: 25 April 2015

Reviewer: Xavier Basagana

Reviewer's report:

Minor Essential Revisions

In reference to my previous comment 1), in the paper by Dai et al (2014) the authors do find a significant association with cardiovascular mortality (note that they report percent changes, thus results are significant if the intervals do not cross zero). Thus, the text should be changed.

The results of cancer and non-cancer mortality shown in Figure A1 are interesting in my opinion should be included as supplementary material instead of "data not shown".

In reference to my previous comment 4), I still think power could be an issue. In the new sentence, the authors compare their study with references 1 and 3, but they should also compare it to Dai et al. (ref 21), which contains 1.5 million deaths from cardiovascular causes. Many of the significant associations they found are around a RR of 1.01 (percent change = 1.0), and the present study often fails to declare similar associations as significant.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I do not have any conflict of interest