Reviewer's report

Title: Particulate matter components and subclinical atherosclerosis: common approaches to estimating exposure in a Multi-Ethnic Study of Atherosclerosis cross-sectional study

Version: 4 Date: 13 April 2013

Reviewer: Bart Ostro

Reviewer's report:

The authors have addressed most of my major concerns. The remaining issue is the use of the cross-sectional model rather than using the full data set with repeated measures. We know from many other studies (for example, the analysis of hormone replacement therapy) that results from cross-sectional studies can be very misleading. Therefore, if the authors insist on only presenting results based on the cross-section, it should be more heavily caveated both in the conclusion section of the abstract and in the discussion section with an indication that the results are suggestive of an effect but await further analysis using more sophisticated approaches for exposure (this is in their current conclusion) and a longitudinal analysis with repeated measures.

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:

no competing interests.