Reviewer's report

Title: Long-term Exposure to Traffic-related Air Pollution and Type 2 Diabetes Prevalence in the Netherlands

Version: 1 Date: 13 July 2011

Reviewer: Tim Nawrot

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Dijkema and colleagues studied the association between prevalence of type 2 diabetes and long-term exposure to type 2 diabetes in a cross-sectional screening study including approximately 8000 subjects (50 to 75 years olds).

Major comments
- Traffic related pollutants decay exponentially with increasing distance from roads traffic. Therefore, using log distance in the smoothed analysis might reflect the exposure better.
- BMI is a major risk factor for type II diabetes. The authors adjust in sensitivity analysis for BMI. Effect-modification by BMI on the air pollution diabetes prevalence should also be addressed.

Minor
Abstract last sentence of result section add p-for interaction
I wonder whether to stop the smoothing at percentile 95th or 90th and 5th 10th would give more accurate measurements.

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:

no competing interests