Reviewer's report

**Title:** Does traffic exhaust contribute to the development of asthma and allergic sensitization in children? Findings from recent cohort studies

**Version:** 1  **Date:** 9 January 2009

**Reviewer:** Francesco Forastiere

**Reviewer's report:**

This is a nice review of the existing cohort studies on the effect of traffic on respiratory diseases in children. I found the review well organized and interesting. However, I have the following suggestions to improve its readability.

Minor essential revisions.

1. Each study should well characterize the exposure assessment methods and describe whether it was based on distance or some GIS indicators, measurements at fixed or home sites, land use regression models, or dispersion models. It would be nice to have some notes in the introduction that describe the various methods to give to the readers the possibility to understand how the single study was done. The second, third and fourth paragraphs on page 2 starting with “Misclassification...” needs some statement before and needs to be restructures as they are really confused. There is a need of references there.

2. There is a specific request in several parts of the paper to specifically address asthma/wheezing phenotype. However, the readers may be confused about the interpretation of that. I suggest to have some notes in the introduction that describe the difficulties of studying asthma and symptoms at young age and also address the issue of sensitization as a specific outcome. This introduction should illuminate the reader in the examination of the relevant literature.

3. Try to explain the difficulties of doing a quantitative meta-analysis of the data. Try to report the effect size in an understandable and uniform way.

4. Minor points regarding the abstract. The term “to support” is not appropriate here. I do not believe that the increased risk was “demonstrated”

**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'