

Author's response to reviews

Title: Respiratory symptoms in children living near busy roads and their relationship to vehicular traffic: Results of an Italian multicenter study (SIDRIA 2)

Authors:

Enrica Migliore (enrica.migliore@cpo.it)
Giovanna Berti (g.beriti@arpa.piemonte.it)
Claudia Galassi (claudia.galassi@cpo.it)
Neil Pearce (n.e.pearce@massey.ac.nz)
Francesco Forastiere (forastiere@asplazio.it)
Roberto Calabrese (roberto.calabrese@unito.it)
Lucio Armenio (l.armenio@pediatria3.uniba.it)
Annibale Biggeri (abiggeri@ds.unifi.it)
Luigi Bisanti (lbisanti@asl.milano.it)
Massimiliano Bugiani (m.bugiani@aslto4.it)
Ennio Cadum (e.cadum@arpa.piemonte.it)
Elisabetta Chellini (e.chellini1@cspo.it)
Valerio Dell'Orco (valerio.dellorco@tiscali.it)
Gabriele Giannella (gabriele.giannella@aslmn.it)
Piersante Sestini (sestini@unisi.it)
Giuseppe Corbo (gmcorbo@yahoo.com)
Riccardo Pistelli (pneumologia@h-columbus.it)
Giovanni Viegi (viiegig@ifc.cnr.it)
Giovannino Ciccone (gianni.ciccone@cpo.it)
SIDRIA 2 Collaborative Group (claudia.galassi@cpo.it)

Version: 4 **Date:** 13 February 2009

Author's response to reviews: see over



UNIVERSITA' DI TORINO

DIPARTIMENTO DI SCIENZE BIOMEDICHE
E ONCOLOGIA UMANA

Sezione di Epidemiologia dei Tumori
CPO-Centro di riferimento per l'Epidemiologia
e la Prevenzione Oncologica in Piemonte

Enrica Migliore

Cancer Epidemiology Unit

Department of Biomedical Sciences and Oncology

University of Turin

Via Santena 7

10126 Torino

Italy

Tel: +390116336856

Fax: +390116334664

e-mail: enrica.migliore@cpo.it

Torino, 13 February 2009

Environmental Health
BioMed Central Ltd
Middlesex House
34-42 Cleveland Street
London W1T 4LB, UK

Manuscript number: 3145967701926989

Dear Dr Grandjean,

Please find attached a revised version of the manuscript entitled "Respiratory symptoms in children living near busy roads and their relationship to vehicular traffic: Results of an Italian multicenter study (SIDRIA 2)".

According to the suggestions received we included in the revised manuscript several results regarding data validation, previously reported only in the draft manuscript.

Thank you very much for your attention and your consideration.

Yours sincerely,

Enrica Migliore

Reviewer: Josep Anto

I've reviewed the answers provided by the authors as well as the changes and additional analysis that have performed. In the new version, and the supplementary tables, most of the questions that I did raise have been approached satisfactorily. However, I'm still concerned with the way that analysis accounting for recall bias are reported. Basically, I'd suggest that some of the analysis now reported in a draft of a forthcoming manuscript, be provided, as sensitivity analysis, in the current version. I'd suggest incorporating Fig 1 (validation of exposure measurement with external data) and Fig 2 (internal validation for those living in the same census block, traffic levels imputed from those with no symptoms) from the new manuscript or the current version. This will result in a better paper than splitting this information in two separate papers. Obviously this may involve some re-arrangement of tables and figures between the current version and the online supplement as well as the import of some sentences form the new draft to the current version.

We included in the revised manuscript most of the results regarding data validation previously reported in the draft manuscript. In details, we included a new paragraph in the Method section in which the methods used for external and internal validation are briefly described. We reported the main results of these analyses in a paragraph of the Result section and in the online supplement, and we discussed them in a new paragraph of the Discussion section ("Strengths and limitations").

Reviewer: Bert Brunekreef

The main question is answered, but not adequately, and not in the re-submitted paper itself but in another manuscript which was added confidentially but not technically submitted! My inclination is to ask the authors to turn this whole thing inside out: the original paper is not very original, whereas the non-submitted manuscript has at least the potential to address the response bias question in a fair amount of detail. But to bring out that message (which is original), the paper which was not technically submitted needs to be redone completely.

We included in the revised manuscript most of the results regarding data validation previously reported in the draft manuscript. In details, we included a new paragraph in the Method section in which the methods used for external and internal validation are briefly described. We reported the main results of these analyses in a paragraph of the Result section and in the online supplement, and we discussed them in a new paragraph of the Discussion section ("Strengths and limitations").