

## **Reviewer's report**

**Title:** Effects of ozone and particulates on pediatric patient asthma-related emergency department visits in Washington, DC, from 2001-2004

**Version: 1 Date:** 11 September 2006

**Reviewer:** Russell Lopez

### **Reviewer's report:**

General

This study examines the association between ambient air pollutants and pediatric emergency visits and admissions. Its findings are likely to be widely cited as it demonstrates that levels of ozone and PM<sub>2.5</sub> found in US metropolitan areas have demonstrable health effects.

The paper is generally complete and needs little revision. There are a few minor changes that could be made that would strengthen it.

1. The authors study both visits and admissions. This should be reflected in the title.
2. As the study will be read by non-epidemiologists, the authors should better describe splining and Poisson regression. A sentence or two on each would assist lay readers in understanding why these are the appropriate methods for this study.
3. There is a literature on the use of census tracts to explore the role of SES on individual health. The authors may want to cite N. Krieger and others.
4. There is a debate as to whether diagnosis of asthma in very young children is correct. Some suggest that the very small airways of infants can lead to wheeze that is not necessarily reflective of asthma. Would this been an issue in the data presented here?

Again, the paper is on a very important topic. The information on the SES gradient itself is informative. The suggestions above are meant to flesh out a few of the underlying issues addressed by the study.

**What next?:** Accept after minor essential revisions

**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.