Reviewer's report

Title: The Impact of Methodological 'Shortcuts' in Conducting Public Health Surveys

Version: 3 Date: 16 January 2008

Reviewer: Michael Battaglia

Reviewer's report:

Discretionary Revisions:

1. Because the paper deals with survey errors it would be useful to point the reader to a text that covers this topic in case they want to learn more about survey errors. I suggest that Bob Groves book, Survey Errors and Survey Costs, be cited in the Background section.

2. On page 6 it could be useful to point out that the method of interviewers proceeding in a serpentine manner through the sample cluster could lead in some housing units being missed -- another source of error in surveys.

3. On page 6 the expected response rate is 90%. In the results section I had trouble determining what the actual final response rate was. I would also cite the AAPOR guidelines for calculating response rates for surveys which can be found at www.aapor.org.

4. Page 7. Was a comparison of vaccination dates made in an attempt to identify vaccinations reported with incorrect dates? This could lead to overestimates of vaccination coverage, although for this survey you point out that does not appear to be an important issue.

5. Page 8. In the discussion of the weights you may want to point out that the design weight reflects the reciprocal of the probability of selection. Most surveys start with this weight and then make adjustments for unit nonresponse and sometimes employ poststratification or raking to population control totals. The same point applies to the discussion on Page 17 where you indicate "some bias may remain". The use of nonresponse-adjusted and poststratified weights can lead to further bias reduction relative to just using design weights.

6. Page 13. In the Discussion section you may want to cite Groves again and mention that all surveys face cost versus bias trade-offs and that the methods you utilized can be used to assess those trade-offs.

7. Page 14 In the discussion of the follow-up visits it could be useful to the reader to find out how much of the nonresponse that you eliminated by the follow-up was due to noncontacts versus initial refusals. The mix of noncontacts and refusals varies from survey to survey and from country to country, but it could still be useful to provide something on this.
Page 15. You may want to point out the results found for the entire sample, in terms of the impact of short-cuts, may not carry over to domain estimates. For example, there could be differential impacts of the survey methods on the vaccination estimates by maternal education as an example.

General comment -- This is useful paper for those interested in design trade-offs in surveys conducted in less developed countries. The specific topic of the survey is childhood vaccination and your methods for focusing on the trade-offs for that type of survey are well done.

What next?: Accept after discretionary revisions

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:
I declare that I have no competing interests.