Reviewer's report

Title: Birth cohort effect on LTBI prevalence, United States

Version: 1 Date: 20 April 2010

Reviewer: Alistair Story

Reviewer's report:

1. Is the question posed by the authors well defined? Yes – the question tackles a novel subject – Effects of birth cohort on LTBI prevalence. A large body of previous work has disentangled age, period and cohort effects on tuberculosis mortality but I can find no previous work that examines cohort effect (i.e. interaction of age and period) on LTBI prevalence.

2. Are the methods appropriate and well described? Yes – quite high density reading but brevity has not compromised clarity.

3. Are the data sound? I am not well informed about these source data but am reassured that they provide a sound basis from which to infer the findings. Efforts to address potential bias and confounding seem reasonable.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition? Yes

5. Are the discussion and conclusions well balanced and adequately supported by the data? Yes

6. Are limitations of the work clearly stated? Yes - Findings limited by only having birth cohorts up to 1946 - due to data limitations (1971 data only on those aged 25+).

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished? Yes

8. Do the title and abstract accurately convey what has been found? Yes

9. Is the writing acceptable? The writing is of a high standard. I would conclude that this work is good to go. Please convey my apologies for delayed response.