Reviewer's report

Title: Unexpected Decline in Tuberculosis Cases Coincident with Economic Recession -- United States, 2009

Version: 2 Date: 9 May 2011

Reviewer: Delphine Antoine

Reviewer's report:

Title: Unexpected decline in Tuberculosis Cases Coincident with economic recession – United States, 2009

Version: 1 Date: 7 May 2011

Reviewer: Delphine Antoine

Reviewer's report

General:
This article addresses possible explanations for important decline in TB cases in the US in 2009.

The main finding of the paper is to demonstrate that the decline in TB cases is not due to changes in surveillance methods but may be due to several factors that may coincide with economic recession. The article reads well. It provides a good example on how to question trends in TB notification. However, some clarification are needed for a better understanding, in particular for non US readers, and possible limitations of methods should be further discussed.

Major compulsory Revisions:

Background:
At least one sentence on the TB epidemiological situation in the US should be added.

Methods:
Case definition of annual incident cases of TB disease should be added
In second paragraph, the definition of high burden counties should be clarified

Discussion:
In the first sentence, you should summarize what results of your study were used to uncover potential underreporting.

Possible limitations of the study should be addressed (including possible limitations of the methods used to calculate expected cases, using clustering as a measure of recent transmission etc.)

Abstract:
The abstract does not completely reflect the content of the article, especially in the background and result sections and should be revised.

For example:

• The objective in the background section is not exactly the same than the one in the background section of the text. The later seems more to correspond to the content of the article as the article does not only address the issue of underreporting mentioned in the abstract.
• The results section does not include the main findings of the study on which the conclusion is based.

Minor Essential Revisions:

Background:
The change in software systems is difficult to understand (persons outside US may have difficulties to understand what mean change form Universal CDC software, the Tuberculosis Information Management System to a choice of National Disease Surveillance system compliant application. For example, “compliant application” may not be understood, do you mean that the main change was using a National electronic disease surveillance system (used for all disease including TB) instead of a dedicated application for TB? I would suggest to rephrase the sentence for a better understanding.

Results:
First paragraph Line 7: What do you mean by modernized TB screening procedures?

Discussion:
It will be helpful to clarify how could the type of immigration screening impact on the number of reported cases.
I am not sure to fully understand the last paragraph of the discussion. It should be clarified (How does this impact on your result?) or removed.
You do not discuss possible impact of changes in TB control. Does this mean that no changes have occurred in the study time period?

Reference : references 2 to 4, 10, 11, 12 should include the author (individuals or organisation)

Discretionary revisions:

Background:
For clarification, I would suggest to summarize the possible reasons of the decline in TB cases that you have investigated in the beginning of the second paragraph.
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