Reviewer's report

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

Version: 2 Date: 27 June 2011

Reviewer: Jacco Wallinga

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The manuscript describes a decline in tuberculosis cases in the United States in 2009 using time series analysis of reported tuberculosis cases according to multiple surveillance systems. Overall it is a well-written study with a clear hypothesis and the results are intriguing.

Minor Essential Revisions

(1) The manuscript shows only the difference between observed and expected numbers of cases. The reader has to trust the authors that the deviation between observed and expected numbers in 2009 cannot be attributed to a poor fit of the model. I would strongly recommend including a graph showing the original data with the observed number of cases, as well as the best fit of the ARIMA model, such that the reader can easily check the goodness of fit of the model and the magnitude of the deviation.

(2) I would also recommend describing explicitly in the methods section how the ARIMA model was selected that was used in the forecasting. It would be helpful to the reader to provide the details of this best fitting model in the methods section.

(3) Please explain why there is no correction for multiple testing in examining differences between observed and expected cases, whereas there is correction for multiple testing in the identification of time trends. There are a large number of tests performed for the difference between observed and expected cases with P<0.05 as a criterion. The few significant findings may arise as a consequence of performing this large number of tests.

(4) Please provide some explanation of the Joinpoint linear regression (including flexion points). Most of the prospective readers of this article have never heard of this method.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a
statistician.

**Declaration of competing interests:**

I declare that I have no competing interests