Reviewer’s report

Title: Effect Modification of Environmental Factors on Influenza-Associated Mortality: A Time-Series Study in Two Asian Cities

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Reviewer: Jeffrey Shaman

Reviewer’s report:

The authors have better presented their findings, which do indicate an interaction of temperature/humidity and influenza on mortality in two subtropical Chinese cities. I think the paper is acceptable for publication pending some small revisions.

I don’t think the results presented with the longer 1998-2006 Hong Kong time series are quite as consistent with the 2004-2006 results, as the authors claim. When comparing Tables 3 and S1, there are interactions evident with the longer time series—in fact, the results for temperature and relative humidity post better p-values for the different mortality categories, and absolute humidity is comparable. However, the increasing trend in percentage change of mortality counts when moving from the low to high category disappears. Instead, there is a V-shaped response to temperature (and to a lesser extent to absolute humidity). The authors should state this explicitly in the Results, and remove (or significantly alter) the second sentence of the Discussion, which is at odds with these supplemental findings.

The inconsistency between the shorter and longer time series analysis, emphasizes the need for an expanded study of these relationships.

Figure 2 is too large and not entirely visible in the rendered PDF.

Figure S1 (the supplemental figure) is missing portions and needs to be fixed.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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