Reviewer's report

Title: Measuring the Burden of Arboviral Diseases: The Spectrum of Morbidity and Mortality of Four Classic Infections

Version: 1 Date: 8 September 2010

Reviewer: Craig Williams

Reviewer's report:

1. Is the question posed by the authors new and well defined?
   Yes

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?
   Yes

3. Are the data sound and well controlled?
   Yes

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?
   For the most part, although there is a section of the Discussion which requires remediation (see specific comments)

6. Do the title and abstract accurately convey what has been found?
   Yes, although use of the term 'classic infections' seems like conversational language and lacks definition

7. Is the writing acceptable?
   Yes

Reviewer's report

Please number your comments and divide them into:

- Major Compulsory Revisions
  None.
- Minor Essential Revisions
Title: I find the term 'classic infections' as used in the title to be uninformative, and conversational in tone. Might it be better to actually name the infections in the title? What is a 'classic infection'? I'm sure this can be easily remedied.

Discussion: pg 13 para 2. The statement on line 3 of this paragraph, that "...infections that were once contained in remote tropical locations are likely to spread to new areas." is uninformed, unsupported and one of debatable validity. The authors betray a lack of reading of modern, quality literature on this topic. While this point is merely used to add weight to the argument about the extent of impact of vector borne diseases, it is not well used here. Growing population size and increases in inter-regional air travel are much more important factors. This section should be revised, and authors need to exercise caution before perpetuating semi-truths about vector-borne disease and climate change.

Also, in the same paragraph, the authors imply that the Indian Ocean chikungunya outbreak of 2005 was related to warmer temperatures and shorter EIPs. While this may have been one factor, they have neglected the important issue of the increased virulence of the strain due to an envelope change related to a point mutation. All up, the discussion of the impact of climate change on vector borne disease epidemiology reads as very broad-brush and uninformed. Perhaps this section was written quickly.

This said, I'm confident these problems can be readily fixed, as they present no great problem for the publishability of the paper.

- Discretionary Revisions

None.

Level of interest: An article of importance in its field

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.