Reviewer’s report

Title: Quantifying the impact of community quarantine on SARS transmission: estimation of secondary case count difference and number needed to quarantine.

Version: 1 Date: 31 July 2009

Reviewer: Caterina Rizzo

Reviewer’s report:

General comment
This is an interesting paper on a quantitative estimation of quarantine effectiveness that uses an interesting statistical approach. The authors try to describe the method and to discuss the results. However, it seems that they could use their current data to argue even better for the primary role of such results in guiding public health authorities for the introduction of quarantine measures in the case of an epidemic, when applicable. Especially in this particular moment while the pandemic is spreading and social distancing measures with antivirals represent the only possible strategy to mitigate the pandemic.

Major Compulsory Revisions
1- The introduction is misleading; it looks more as a review article than an introduction to the study, I suggest moving the section where the authors described different methods used for estimate the effectiveness of quarantine measures into the discussion section try to compare their main results with those derived from other studies.

2- What is the additive link function? Is this the log? This should be better described in the method section.

3- Since Ref 28 seems have not been published yet, and it would be difficult to read the other two reference indicated 38-39, it is necessary to describe briefly some results from the dataset used. So give a brief descriptive overview of data to let the readers understand what data you are using.

4- Numbers are not very clear in your text, are index case 332? At some point, the text refers to 204 index cases that had no community contacts, where these excluded from the analysis? Then, these 140 subjects who were excluded as SARS cases came out in the method section.

5- The limitations of the study should be better addressed, especially with regard to 95%CI.

6- The current situation due to the circulation of the pandemic virus should be better described in the discussion section and not with regard to the outbreaks in general (in some outbreak quarantine does not apply as a containment measure at all) as it is now.

7- The quarantine measure may have ethical impacts; could this be alluded to in
the discussion.

**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