Reviewer’s report

Title: Assessing the role of contact tracing in a suspected H7N2 influenza A outbreak in humans in Wales

Version: 1 Date: 29 April 2009

Reviewer: Istvan Kiss

Reviewer’s report:

This is an interesting paper that describes the role of contact tracing in preventing an outbreak of possible avian influenza. The authors use a compilation of hospital data to pinpoint cases and suspected cases with influenza-like illness. The authors conclude that CT is a useful tool in controlling an outbreak and that in many cases the experience of the personnel in prioritizing is very important. This is particularly the case where quick and precise laboratory tests are not available.

While this is a worthwhile analysis, I felt that the paper is not easy to read and it does not flow well. I think this paper can be improved to provide a more complete and clearer story.

The paper should have page numbers (line numbers would be nice too) so that comments can be more easily targeted to specific parts/sections.

While there are no major revisions from analysis point of view, I encourage the authors to thoroughly revise the paper to improve the presentation and clarity.

Specific comments:

In abstract->results:
- provide examples for “other encounters”

In Bacground:
- provide more background or a reference about the “UK guidance”
- “individuals were show to be” ->”individuals were shown to have” or “to be infected with”
- “contact tracing overnight identified 6 suspected …” – was this CT from the 4 confirmed H7 cases?
- what is the difference here between “suspected” cases and “contacts”? does suspected mean contact with one of the 4 cases and also ILI?
- how many days back is the contact history compiled for?
- was CT carried out only from suspected cases?
- a suspected case initiates CT and then those contacts that have ILI initiate further tracing?

- more details about the data-base would be useful. who recorded the data in the first place, is the data available etc?

In Contact Tracing

- [2.3]-[2,3]

In Results:

- according to the analysis presented, the network only displays heterogeneity in degree distribution (or number of contacts). Can the authors clarify the meaning of “wide range of heterogeneities”
- caption of Fig 1: squares are “poultry flocks”? 
- there seems to be at least one blue node that is not linked to a red circle or square, this should not happen according to the description 
- in the caption the total number of nodes of different type and the number of links of different type should also appear.
- does Figure 2 tell us anything interesting? 
- Figure 4 is very informative 

In Discussion:

1st paragraph:

- where did case 1 acquired large number of contacts, in hospital? was he/she not isolated?

- were there resources for CT stretched at any point? how many more days before CT resources would have been considerably stretched?

**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