Reviewer's report

Title: Limiting worker exposure to Highly Pathogenic Avian Influenza A (H5N1): a repeat survey at a rendering plant processing infected poultry carcasses in the UK.

Version: 1 Date: 5 January 2011

Reviewer: Peter Rabinowitz

Reviewer's report:

Major compulsory revisions:

1) The statistical analysis is not clear- table 2 indicates that the total N is 157, but then on page 12 the text states that "Even though the total plant population remained unchanged, different individual seasonal workers were employed during the two incidents." This reviewer finds it hard to believe that the distribution of workers between risk groups remained unchanged between the two groups. The authors should check this and if necessary add another column to reflect the two different populations. Then this reviewer would still ask for a statistical test of the differences between the intervention rate in the first and second population, by group.

2) Please add details about how individual jobs were assessed for influenza transmission risk: was this by the plant manager, direct observation, worker self-report? This is important detail to allow other groups to consider replicating these methods.

3) In the discussion, the authors contrast the targeted approach used for rendering workers with the need for a uniform approach for cullers. However, it should be stated that for all types of workers, task based targeted approaches can be used to characterize exposure and risk prior to emergencies/outbreaks so that the response to such situations can be risk based.

4) In the discussion would mention the need for more task based influenza exposure research, not just outcomes (serology) research, since many of the serology studies of workers have been unrevealing.

Minor essential revisions:

Consider citing study by McQuiston et al ( McQuiston JH, Garber LP, Porter-Spalding BA, Hahn JW, Pierson FW, Wainwright SH, Senne DA, Brignole TJ, Akey BL, Holt TJ. Evaluation of risk factors for the spread of low pathogenicity H7N2 avian influenza virus among commercial poultry farms. J Am Vet Med Assoc. 2005 Mar 1;226(5):767-72.) which found that rendering poultry was a major driver of spread of AI between farms, indicating that there is definite biosecurity risk in the rendering process.

Discretionary revisions:
Please consider the term "task based exposure assessment" instead of or in addition to "targeted approach" since this more precisely describes what was done.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

No competing interests