Reviewer's report

Title: Children as index case of pertussis in the community

Version: 1 Date: 28 November 2006

Reviewer: Daniel Floret

Reviewer's report:

General
Interesting study on transmission of pertussis that confirmed that an important number of cases can be found around one patient affected by pertussis with a major impact on prevention measures

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
As PCR or serology are apparently not available in this hospital, the criteria used by the authors for definition have a low sensibility. So, it seems important to try to better evaluate the number of cases who may have been missed.
We know how many contacts have been identified, how many have been excluded due to a lack of information but not how many did not attend though eligible.
Furthermore, this study cannot identify asymptomatic carriers who may be involved in the spread of the disease.
In table 1, the authors have identified primary, co-primary and secondary cases (definition is missing) it is possible and interesting to identify who contaminated who. So, it should be important to say what proportion of young children have been contaminated by adults

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
Where does the cut off 11 Year and half come from? Explain
Introduction: 1000 pertussis cases a year: whatever the age? How pertussis is surveyed in this country?
25.5% of index cases are vaccinated, that is rather high. Please comment. How old were they?

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

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

Statistical review: No