Reviewer's report

Title: Transmission patterns of smallpox: systematic review of natural outbreaks in Europe and North America since World War II

Version: 2  Date: 13 February 2006

Reviewer: Harry F Hull

Reviewer's report:

General This is an excellent review of the literature on smallpox outbreaks and will be useful public health professionals involved in planning for a smallpox outbreak.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

I believe that the authors should include a discussion on how plans for smallpox response can be improved as a result of this review. The most conclusion is that early detection leads to improved control. The other is the importance of hospitals in the spread of disease. Accordingly, improving disease surveillance to ensure a high degree of suspicion by physicians so that the disease is diagnosed early and reported promptly to the public health authorities is essential. Aggressive vaccination of medical and hospital personnel likely to be exposed as well as patient in the same hospital as smallpox cases is another.

What next?: Accept after discretionary revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests: I have no competing interests.