Reviewer's report

Title: An Evaluation of Reporting Timeliness of Public Health Surveillance Systems for Infectious Diseases

Version: 1 Date: 5 May 2004

Reviewer: James J. Gibson

Reviewer's report:

General - This is a thoughtful and useful paper of interest to public health epidemiologists and to a range of other professionals using public health disease surveillance information, such as persons responsible for preparedness for public health emergencies or terrorist attacks at every level of government. Its main conclusions (that the disease surveillance system needs to better document "meta-information" to permit assessment of its own reporting timeliness, and then to use that information for regular systematic assessments of timeliness) are reasonable, follow for the most part from the data in the paper, and are worth disseminating. A problem with the paper is that one of the major expressed goals (to determine if the system is timely enough to support aberration detection for identification of multistate outbreaks) is not included in the Conclusions!

The largest issue here may be to determine what the sources of poor disease reporting timeliness are, and to draw conclusions on what could be done to improve timeliness, since it is clear that timeliness is often not nearly good enough. A few publications have attempted to do this, but there is much room for more work on this question.

The paper is longer than needed to make its point. However terseness may be less essential for internet-published publications, and clarity can be served sometimes by using a few more words.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached) - None

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct) - 1) Page 3, bottom paragraph, second sentence, add something like "its assessment" after "of factors and...." to help the sentence make sense.

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Discretionary Revisions (which the author can choose to ignore) - Two points may or may not be worth consideration before publishing this paper:

1) A problem with assessing reporting timeliness at the national level is that access to key details to define to reporting lag period, such as just when the disease had its onset, and when the medical system first detected it, are usually missing, yet are key to an accurate determination of reporting lag. Thus it might be worth pointing out more clearly that (apparently) many cases of disease reports had to be excluded from the analysis because of missing values for these, and the large number of exclusions might have biassed the results in Table 3.

2) While not vital to the purpose of this paper, it might be worth pointing out that in figure 1 the intervals 2 and 3 include several other key necessary steps that strongly influence reporting lag: In particular the lag caused by investigation of the initial report to verify if it fits the case definition, and the delay in reporting from the medical care system to public health, both lags that hold potential to improve reporting timeliness.
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:

No competing interests. We are about to publish a study of reporting completeness and timeliness within our State system, which I think is a supporting interest rather than a competing interest.