Reviewer's report

**Title:** A snapshot from ongoing enhanced surveillance of invasive listeriosis in Lombardy, Italy, 2006-2010

**Version:** 2 **Date:** 7 December 2012

**Reviewer:** Benjamin Silk

**Reviewer's report:**

This is an excellent summary of surveillance data on invasive listeriosis cases and *L. monocytogenes* isolates from a populous region of Italy. In particular, the authors have demonstrated considerable expertise in the molecular epidemiology of listeriosis. However, the report is overly long and could be condensed to improve readability. While valid, conclusions related to the importance of outbreak detection and investigation are not supported by the data because no outbreaks were detected in Lombardy, Italy during the study period.

**Major Compulsory Revisions**

1. The report is overly long (approx. word count= 3,900) and could be condensed to improve readability. The background (~600 words) and discussion/conclusions (>1,700 words) might be best places to remove extraneous content. Also, redundancy in reporting data in the discussion, when similar data have already been described in the results, should be reduced.

2. While valid, conclusions related to the importance of outbreak detection and investigation are not supported by the data because no outbreaks were detected in Lombardy, Italy during the study period. Instead, I expected more of a synthesis to provide the key points on this summary of the molecular epidemiology of listeriosis in Italy.

3. As a related comment, the authors report that no outbreaks were detected during the study period. However, there is no information presented on what is done to identify or investigate clusters. In other words, it would be interesting and useful to know more about the statistical or analytic methods that are applied for cluster detection and/or epidemiological methods for cluster investigation (e.g., patient interviews on food exposures). Otherwise, the reader is left wondering how it is possible that no outbreaks were detected, and especially whether outbreaks were missed.

**Minor Essential Revisions**

1. Overall, the quality of the writing in English is good. But it may still be beneficial for a writer/editor with English fluency to review the manuscript. For example, the discussion uses the word attitude incorrectly in two places. Is the intended word aptitude? Another example is in the third paragraph of the introduction, where the first sentence would read better with a change in verb
tense “…notification of listeriosis has been mandatory since 1993.” A third example is the fifth paragraph of the introduction, where the first sentence needs to be rewritten to improve sentence construction.

2. Some results report means with an accompanying statistical measure of variability. For example, the second paragraph states “…mean age of patients was 64.7 ± 15.1 years. This measure of variability should be defined in the methods above.

3. In the results and table 1, the terms case fatality rate, all-cause fatality rate, and crude fatality rate are used interchangeably. If they are the same measure, a single term should be selected for consistency. If they are not the same measure, some explanation of the difference would be helpful.

4. Many readers may print the article in black and white, which makes the color schemes for the legends of the figures very difficult to discern. It would be very helpful to reconsider using shades of colors that are amenable to black and white print. Also, I did not see where the legend for figure 1 defines percentages versus number of isolates.

Discretionary Revisions

1. It seems reasonable to assume that invasive listeriosis predominately affects immunocompromised individuals and the elderly everywhere, not just in European countries. Accordingly, the first sentence of the second paragraph in the introduction could be revised.

2. In the fifth paragraph of the introduction, the statement about ‘electronic probability of typing data’ needs clarification. I see MLST as advantageous because it is becoming a global standard, which aids in broader comparisons of L. monocytogenes isolates internationally.

3. The methods section has five subheadings that could be merged into one broader subheading, such as “Isolate characterization.”

4. In the second to last paragraph of the results, the sentence “No epidemiological link was detected…” could start a new paragraph since it begins an idea that is separate from the preceding sentences in the paragraph.

5. In the second paragraph of the discussion, which considers reasons why outbreaks are difficult to detect, the statement “infrequent clinical manifestations vs. a likely frequent exposure” needs clarification to better convey the meaning.

6. In table 2, the title includes “Only the clusters containing more than three isolates are included,” which would be more appropriately placed below as a footnote.

**Level of interest:** An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published

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.