Reviewer’s report

Title: The comparative Burden of Salmonellosis in the European Union Member States, Associated and Candidate Countries

Version: 1 Date: 7 November 2005

Reviewer: Henriette de Valk

Reviewer’s report:

General
This is a very interesting and unique report providing comparative data on the burden of Salmonellosis in different European countries. The existence of a detailed data base on travel, and the detailed information on imported cases of Salmonellosis in Sweden, have made this study possible. Similar data sources are, to my knowledge, not available in other countries. Therefore this study is quite unique.

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

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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)

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Discretionary Revisions (which the author can choose to ignore)

The risk is expressed as the number of cases, by country, per 100 000 travellers to that country. The duration of travel is not taken into account. However, it is likely that travel to southern countries (Spain, Greece) are mostly leisure trips and of longer duration as compared to nearby countries. If this is so, the risk for these southern countries will be overestimated.

If the information on duration of stay is available in the travel database, it would be interesting to at least give the information whether duration of stay is similar in the different countries and if they differ substantially, to give the exact information (average duration of stay by country), or to correct for this, or to discuss this as a possible source of error in the discussion.

The IID study carried out in England (Wheeler et al, 1999, BMJ 318: 1046-1050) provides data on the incidence of salmonellosis in the community and the incidence of Salmonellosis presenting to a general practice, in 1995. These data are within a same order of magnitude (220 per 100 000 person years at community level, 157 per 100 000 person years presenting to a GP, and 80 per 100 000 confirmed by laboratory test) as the incidence estimated by this study for 2000 (119 per 100 000 confirmed cases). There are of course differences (the proportion of cases consulting a GP and getting a stool culture is likely to differ between Sweden and England, and the incidence in 2000 is expected to be lower than in 1995) but the fact that the estimates are within the same order of magnitude, is an argument in favour of the validity of the method used.

The authors argue that better surveillance systems are necessary to provide comparable data between countries. This is of course true. However, this is not sufficient. Surveillance systems will concern laboratory confirmed cases only. The probability that a case consults a physician, and gets a stool culture, is likely to differ between countries. It will be difficult to harmonise these practices between countries because they depend on the health system and facilities in each country. Better reporting of confirmed cases only will therefore not be sufficient to ensure that data are comparable.
This study has the advantage that all cases have consulted and have been confirmed in Sweden, and have therefore probably been equally likely to consult and get a stool culture, independant from the country where they were infected.

**What next?:** Accept after discretionary revisions

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

**Quality of written English:** Acceptable

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests