Reviewer's report

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

Version: Date: 19 October 2005

Reviewer: Peter Gerner-Smidt

Reviewer's report:

General
The paper presents in an elegant way comparative data on the burden of salmonellosis in Europe by using information about Swedish travelers during the period 1997-2003. It is possible to compare the risk of acquiring salmonellosis among travelers because the Swedish notification systems for enteric disease contains detailed data on travel that may be related to number of Swedish travelers to different countries in another registry.

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

I miss comments on the observed differences in the burden detected in the different countries. The difference between Norway and Bulgaria is almost 800-fold. Is this a reliable estimate of the difference? How big is the uncertainty of the estimates and is it possible to make an estimate of it (confidence intervals or similar)?

Specific comments
p. 3 Selection of patients. What is the definition of travel related salmonellosis? How was travelers with more than one travel destination handled in the study?
p. 4 Travel patterns. How were the “controls” in the TDB selected? All travelers to European destinations? A random sample?
p. 7 Conclusion and the figure. I don’t understand how a direct correlation between the overall incidence of salmonellosis and the proportion of S. Enteritidis will tell anything about the relative contribution of eggs and poultry as sources of infection. The proportion of S. Enteritidis infections alone will tell that. Please elaborate.

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)
A couple of suggestion for analyses it could be interesting to include:
The authors have data on the proportion of Swedes traveling as tourists and for business to the different destinations. Could these data be used to estimate the risk of acquiring salmonellosis as a tourist and as a business traveler although the authors may not have specific data about the purpose of the infected travellers?
What does a comparison of the distribution of serotypes and phage types in the travelers with the national data in each country where that information is available show?
What next?: Accept after minor essential revisions

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests