Reviewer's report

Title: Is Drinking Water A Risk Factor For Endemic Cryptosporidiosis? A Case-Control Study In The Immunocompetent General Population Of The San Francisco Bay Area

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Version: 1 Date: 20 Nov 2002

Reviewer: Prof Christopher K Fairley

Level of interest: A paper of considerable general medical or scientific interest

Advice on publication: Unable to decide on acceptance or rejection until the authors have responded to the compulsory revisions

This is a clearly presented paper dealing with an important area- are the risk factors for endemic cryptosporidiosis different from those identified during investigations of epidemics of disease. This is important because the number of cases from endemic disease is very substantially higher than from epidemic disease and the risk factors may be different.

I have a number of points that should be addressed by the authors.

1. The authors may have overlooked a recently published large Australian case control study of endemic cryptosporidiosis (335 cases and 1331 controls) that is relevant to the interpretation of their results (Robertson B et al Case-control studies of sporadic cryptosporidiosis in Melbourne and Adelaide, Australia. Epidemiology & Infection. 128(3):419-31, 2002 Jun.

2. The authors should include a power calculation for their study to give readers an idea of the significance of the negative findings in the study. They should also comment in the discussion about wide confidence intervals in some of their point estimates and whether the felt clinical important findings were ruled out.

3. The authors should comment on the role of ascertainment bias in their finding that overseas travel was significant. If patients presenting with diarrhoea, who have travelled recently, are more likely to have a faecal sample taken, the this will appear as a risk factor when it is not one. This should be commented on in the discussion as a possible explanation for their findings.

4. More details should be provided on how the cases were identified- what was the active surveillance program and how did it operate. Why is it better than other cases identified through surveillance.

5. It's not clear in the methods paragraph 3, what is meant by "sexual and non sexual contacts for each
location etc..” A very clear explanation of this is very important to interpret the results.

6. Decimal points in the tables 2-4 should be reduced for clarity.

7. The discussion should include detailed comments about the different types of adjusted analysis and why they caused a reversion of the odds for water.

Discretionary Revisions.
The paper is long and could be significantly shortened without loss of information. E.g. the introduction need only be half a page.

**Competing interests:**

None declared.