

Reviewer's report

Title: Risk behaviors in a rural community with a known point-source exposure to chronic wasting disease

Version: 2 Date: 8 April 2008

Reviewer: Trond Peder Flaten

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General

Since the report in the Lancet in 1996 which strongly indicated that BSE (bovine spongiform encephalopathy, "mad cow disease") had transmitted to humans and caused a new variant of Creutzfeldt-Jakob disease, public focus and research efforts on this class of diseases (transmissible spongiform encephalopathies or "prion diseases") has increased enormously. Considerable evidence indicates that the pathogen ("prion") has transmitted cross-species from cows to humans, but this is still not unequivocally proved. There is an urgent need to increase our knowledge of cross-species transmission (infectivity) of these pathogens, and the present report by Garruto et al. presents a unique study in this field, taking opportunity of an incident in 2005 where a deer later showed to be infected with the prion disease CWD (chronic wasting disease) was prepared as food at a feast attended by over 200 people. In recent years, CWD has spread to several States in the U.S., greatly increasing the potential for human contact with infected animals. CWD has so far not been definitively linked to prion disease in humans, and this study represents the first systematic attempt to do so. The report describes the establishment of a cohort to prospectively study the possible transmission of CWD prions from deer to humans and a thorough description of the possible risk factors under investigation in this surveillance project. This is a unique study which clearly merits publication although there of course are no results yet: Due to the very long incubation period of prion diseases (several years to decades), results from the study can not be expected to occur in many years.

Minor essential/discretionary revisions

The manuscript is generally very clearly written, and I see no reasons to suggest major changes. I have only a few minor points to raise:

1. Title page: Affiliation no. 1 is not complete and no. 2 lacks a comma.
2. Page 5: references should be marked [1,2] instead of [1-2]. Check throughout manuscript.
3. Page 5, 2. paragraph, 1. line: add "(NYSDEC)" after the name.
4. Page 6, line 5: No need to give the Web address in the text, just list the reference number [4]. However, reference 4 in the reference list needs to be

reformatted and the Web address added.

5. Page 6, 2. para, line 5: “Creutzfeldt-Jakob”, not “Creutzfeld-Jakob”.

6. Page 10 (3 last lines)-11 (1. line): Delete “(12.5%)” three times as this percentage refers to subsets of the sample (8 persons), while the other percentages in the paragraph refer to the whole sample (possibility for confusion).

7. Page 1, 4th sentence under “General risk”: If the 32.1% refers to bar no. 2 in Fig. 5, I believe that the wording should be something like “Furthermore, 32.1% of the 81 participants indicated that they hunted in the Oneida County CWD containment area, although not exclusively.”

8. Reference no. 4: Check formatting (see comment above for page 6).

9. Reference no. 27: Delete “Ref Type: Newspaper” and check formatting.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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