Reviewer's report

Title: Drownings in Sweden with emphasis on the presence of alcohol and drugs - a retrospective study, 1992-2009

Version: 3 Date: 8 December 2012

Reviewer: Tim Driscoll

Reviewer's report:

I apologise to the authors for the delay in providing this review. This manuscript presents the results of a largely descriptive epidemiological study of drownings in Sweden over an 18-year period, with a focus on the presence of alcohol and drugs. The dataset is essentially a census of drowning deaths that occurred over the study period. The analysis seems to have been performed competently and comprehensively and the language in the manuscript is clear, although there are some minor errors. People interested in the burden and prevention of drowning should find the manuscript useful.

I have a few major compulsory revisions to suggest and some comments that I hope will be of use to the readers.

My main concern (which is not a big deal) is in regards to the last paragraph on page 5, under the heading "Unintentional drowning". This paragraph presents results in terms of two separate concepts - place of occurrence (e.g. lake) and circumstance of occurrence (e.g. boating). There are so many percentages here, and percentages of sub-groups, that it is very hard for the reader to gain a comprehensive understanding of what the results really were or showed. I think the authors should give strong consideration to presenting the results separately - where did the people drown and what were the circumstances of the drownings? As a specific example, 20% of the drownings involved boats and a small percentage involved other vehicles of various sorts. What were the circumstances of all the rest?

As an extension of this, it is helpful to consider why the presence of alcohol or drugs might be relevant. The authors mention some reasons but it seems to me that for unintentional deaths at least this is of most interest and relevance if this is looked at in terms of circumstance. Is it a big issue in drowning associated with boating? Recreational swimming? Snowmobiles? Fishing? Etc. I notice at the end of the manuscript the authors mention that they didn’t have much information on factors leading up to the drowning and following the drowning. However, they do appear to have had some information (e.g. boating, various types of vehicles) and it would be helpful to use whatever information they had to undertake the sort of analysis I have just suggested. If the necessary information is not available, I guess it won’t be able to be done.

The final significant suggestion I have is to consider what the manuscript is like
for the naïve reader. There are a LOT of percentages presented, sometimes of all drownings, sometimes of specific subsets, sometimes of subsets of subsets. This can be very difficult to understand after a while. The manuscript would benefit by a review to ensure that just the key results, general findings and patterns are presented in the text, with the reader otherwise free to look for the detail in the tables (and the figures). This would make the text shorter, and perhaps might result in longer or additional tables (or might not).

A few minor comments:
- page 4 para 3: interchangeably, not interchangeable;
- page 9, para 2, line 7: missing the word ‘and’ after the comma;
- page 10, para 2, line 2: missing the word ‘of’ before ‘children’;
- page 11 line 2: the section on level of impairment should be “…and increasing levels of impairment are associated with…”.

All the tables should have decimal tabs when there are columns of numbers. Currently the numbers are all left-aligned.

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

**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