Reviewer's report

**Title:** Childhood deaths from external causes in Estonia, 2001-2005

**Version:** 1 **Date:** 1 May 2007

**Reviewer:** Marianne Nichol

**Reviewer's report:**

**General**

Thank you for the opportunity to review this manuscript, which we read with interest. In general, we found the article to be well constructed and its content was important to our field. We would like to be encouraging to the authors, and offer some suggestions for the improvement of the article.

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

1. Presentation of rates and estimates without confidence intervals. The data presented on injury mortality is original and important. However, we feel that it could be improved through the use of confidence intervals around many of the key estimates (e.g. the rates presented in Table 1). Your data could be viewed as a sample across time, and therefore it would be useful to present these confidence estimates around your sample estimates.

2. Use of percentage agreement in Table 2. Some of the agreement that occurred in table 2 between the "autopsy records" and the SOE data could have occurred by chance; it is therefore sensible to calculate a measure of agreement such as kappa to estimate the amount of agreement, while adjusting for chance agreement.

3. Presentation of results. We found the level of detail that was presented to be a bit much; and perhaps overly detailed. We would suggest that the presentation of the findings be condensed to a few key patterns and points, and the detailed descriptions of individual injury events be eliminated. Your tables are quite well constructed, and the additional prose does not help.

4. Presentation of discussion. Our opinion was that the discussion could use some additional work. We would suggest that you identify some key messages here for the ongoing surveillance of injury deaths in Estonia, as well as for prevention, and that you limit your discussion to these key points. Your comparison of your study findings with what others have found could be used to highlight these key points; but should not be the main issues emphasized in the discussion.

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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)**

1. It might be reasonable to present the validity of the SOE data at the beginning of the results section and then present the nationally representative findings.

2. The specific descriptions of how children died (i.e. hung on fence post, barbed wire fence, trapped under fallen cupboard, one infant was found dead in the yard, father killed his whole family etc) are unnecessary since they do not appear to provide additional information in terms of injury trends or preventative measures that might be implemented.

3. Table 1. Since the "other injuries" category is composed of falls and being hit by objects, it would perhaps be useful to separate this group into its component causes, especially since falls tend to be a leading cause of non-fatal injuries.

4. Discussion. Since the overall injury rates are compared to those in other countries, presenting hypotheses as to why the rates might differ would help highlight the policy and public health implications of this research.
5. The introduction states that the injury death rate was 28.7 per 100,000 in 2000. The findings from this research show that average annual injury mortality from 2001 to 2005 is 19.1 per 100,000. It would be worthwhile to note the improvement in mortality and hypothesize why the decline has occurred. Perhaps it may be due to a difference in how the rates were calculated, or perhaps it is reflective of preventative measures that have been implemented since 2000. The progress made may highlight the effectiveness of programs and lend support to injury prevention initiatives.

6. If at all possible, please avoid the use of acronyms (short forms; e.g. SOE, EBFM, etc.; as these were not understandable to these readers.

7. The correct term is "gold standard" not "golden standard" (page 7)

Discretionary Revisions (which the author can choose to ignore)

The subcategories in table 1 could be made more obvious by using more pronounced indentations.

M Nichol and W Pickett

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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

Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

We declare that we have no competing interests