Author’s response to reviews

Title: A case control study of differences in non-work injury and accidents among sawmill workers in rural compared to urban British Columbia, Canada

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Author’s response to reviews: see over
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Dear Sir/Madam:

This is our point-by-point response to queries raised by reviewers for our paper entitled :”
A case control study of differences in non-work injury and accidents among middle aged men in rural compared to urban British Columbia, Canada”.

A) Response to Editorial Team’s Comments:
   1. We have provided a title page as requested.
   2. We have indicated the corresponding author.
   3. We have added a statement of ethical approval (see below) for this study in the methods section.
   “Ethical approval was obtained from the University of British Columbia (UBC) and the British Columbia Ministry of Health to conduct this study. A Data Access Subcommittee consisting of health ministry personnel, staff from the British Columbia Ministry of Information and Privacy, and the UBC Centre for Health Services and Policy Research has been established to handle requests for linkage to the BCLHDB and to ensure that such requests meet scientific and ethical standards, are in the public interest, and conform with the Freedom on Information and Protection of Privacy Act”
   4. We have provided an abstract as requested.
   5. The journal conforms with the style required by BMC Public Health.

B) Response to Reviewer # ONE’s Comments:
   1. Rewrite the Introduction/ Background/ Literature Review to address the following: This has been done in the way suggested by the reviewer. 
   2. Rewrite the AIMS Section. We agree with the reviewer and have used the aims statement (with some modification) suggested by him. ”
   3. The reviewer has suggested a stronger justification for our case control study design. We have, accordingly, re-written the justification for our study design with a focus on why we have chosen case control design. As well, this is a study based on a cohort of workers the idea raised by the reviewer to use hospital admissions data for numerators and census data for denominators, although a good idea, is unnecessary given the resource (the cohort) that we have at our disposal. The study design is, as the reviewer notes, somewhat opportunistic, in that we have employed a nested case-control design existing an existing cohort. This could be thought of as opportunistic
or as efficient use and exploitation of an expensive-to-gather data set. The reviewer also notes that case-control designs are usually used to investigate complex differences in risk factors and exposures. We have employed a nested case-control study here is somewhat unusual fashion in a homogeneous workforce with further strict control for confounding by socio-economic and demographic factors. As well, by controlling for occupational category (manger, tradesman, unskilled worker etc) we have effectively controlled also for exposure as exposures to physical demand, psychosocial demand, control, social support, and chemicals tends to be fairly homogeneous within these broad occupational categories. Given this fine control for confounding of SES and exposure variables, the differences observed, using case control methods in this homogeneous cohort, is likely in fact to be due to rural/urban and migration status differences.

4. The reviewer notes a mistake in our case identification (on page 11 and in line 12). 
This error has been corrected.
5. Discussion section has been re-written, with more discussion of migration, and limitations sections added. We have done this.

Minor Essential Revisions
1. The title could be re-written. A more focused title, as suggested by the reviewer, has been provided.
2. The abstract was missing. An abstract is now provided.
3. Comment re: line 3 the reviewer is not certain what we mean by “systematically worse”. We have clarified this phrase.
4. Comment re: line 8. We are using injury than accident rate throughout the text for clarity.
5. Comment re: Line 18: non-health accident and injury outcomes”. This is a typo and has been rectified.

C) Response to Reviewer # TWO’s Comments:
1. Consistency needed in describing injuries as intentional and non-intentional. This terminology has been clarified in the literature review.
2. Explain BC abbreviation. BC stands for the province of British Columbia.
3. This reviewer states that the term accident is less favourable. This term has been replaced with injury in the text. In particular we have replaced the phrase motor vehicle accident with motor vehicle trauma.
4. The reviewer would like us to reference previous studies of BC workers on workplace injury. These references have been added (see introduction).
5. The reviewer would like us to shorten the lit review on medical misadventure. We have, according to suggestions from the first reviewer entirely re-written
introduction/background sections and have shortened this part of the lit review in the process..

6. The reviewer would like us to reference the BCLHDB. We have done so.

7. We have removed the error (noted by Reviewer #1 too) re: mental health outcome at the end of Section 4.2. We have fixed this error.

8. Reviewer wants to know, in section 4.2, if it was possible to determine where the migrating urban dweller moved to. We have addressed this issue directly in this section.

9. It is not clear to this reviewer whether or not motor vehicle trauma was work or non-work related. This is clarified in the text. In first para of the methods we have added the sentence “These E-codes pertain only to non-work injury.”

10. The reviewer would like the univariate analyses repeated in the text. We have done this now.

11. Reviewer wants a stronger discussion. We have strengthened the discussion and given more complete discussion of limitations of data and study.

12. Reviewer suggests revising table 1. We have clarified this table.

13. Reviewer suggests to state in text that drowning is excluded. It is clear in table 1 that accidental drowning is included under the category of “other non-work injury”.

15. Reviewer suggests formatting table 3 similarly to table 2. We have respectfully not done this as table 3 conveys extra information that we feel would be missing if re-formatted as in table 2.

Minor Essential Revisions
1. Needs consistent referencing style. We have made the style consistent.

2. Last line, page 1 “non-health accidents”. This error has been fixed.

Discretionary Revisions
1. Re-consider the title to include MVT. We would rather not as this study is about more than MVT.