Reviewer’s report

Title: Maternal occupational exposure and oral clefts in offspring

Version: 1 Date: 29 Mar 2017

Reviewer: CM Rocheleau

Reviewer's report:

Thank you for the work that has gone into these revisions. I have a few minor comments on the revision, however these will not impact the conclusions or essential facts that are already presented, so these can be left to the authors' and editors discretion.

1. Page 10, lines 251-255: although results were not statistically significant, stratifying exposure by low vs high was suggestive of a possible dose-response for some chemicals. That is an interesting finding and worth mentioning in the text, as it was in the response to reviewer comments.

2. Page 12, lines 295-296: no other human studies have investigated metals and oral clefts. A number of animal studies have shown associations between cadmium, cobalt, and nickel and oral clefts.

3. Page 12, lines 309-310: using a JEM (versus expert rater review) would only avoid recall bias if non-malformed controls were used. There is no reason to think mothers of infants with oral clefts would provide more extensive job descriptions than mothers of infants with other sorts of birth defects. I suggest striking this sentence.

4. Page 13, lines 317-320: low sensitivity is also due, in part, to inherent variation in tasks (and consequently exposure) within individuals with the same job title. Most JEMs were also derived from either population-based (male and female workers) or all-male populations; previous research has shown that men and women with the same job title tend to perform somewhat different tasks. See, for example, Locke et al Occup Environ Med 2014;71(12):855-64.

5. I'm still a little concerned about overadjustment, and not entirely confident of the authors' conceptualization of family history (first, because family history is often a predictor of the outcome or an effect modifier, but is unlikely to be a confounder-- how would genetic variants be causally related to exposure?-- and secondly, because I see it as analogous to adjusting cases for one genetic profile and controls for another) but that is not a reason to postpone publication. Competent researchers can disagree on the best manner of analyzing data, so long as the actions the authors took are clearly stated-- and they are in this manuscript. Since the crude and adjusted odds ratios are relatively similar, it is unlikely that these decisions make any difference one way or another.
Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

Declaration of competing interests
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?

If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal