Reviewer's report

Title: Establishing a Proactive Safety and Health Risk Management System in the Fire Service

Version: 1 Date: 16 December 2014

Reviewer: Sara Jahnke

Reviewer's report:

This manuscript overviews the implementation and evaluation of a Risk Management assessment that was completed with the Tucson Fire Department. The authors make a compelling argument for the utility of this approach and provide strong qualitative support of the benefit. Overall, the manuscript offers a wealth of information that will likely prove useful to other fire departments seeking ways to decrease their risk of injury. A few notes on proposed revisions/clarifications are below.

Minor Essential Revisions:
1. Page 7 – Which institutions provided IRB approval for the work?
2. Page 7 – The introduction of the WRAC needs a reference.
3. Page 8 – For the sentence “In the case of a 4x4 matrix…” numbers (3) and (4) should be added to the text.
4. Page 10 – The authors state that “Implemented control strategies were selected after consideration…” who ultimately decided on the final list? Was it a collaborative effort between scientists and leadership?
5. Page 11 – Additional details about data analysis would be useful. Was all data coded by one person or were there multiple coders?
6. Page 12 – It is unclear what the response rate was. Were 64% of those solicited consented to participate?
7. It would be useful to know the timeline of the RM process with TFD. The authors state that the control strategies were implemented in the 3 years after the study started. How many sessions did the personnel participate in and how long did it take to identify and implement policies? For future efforts in this area, it would be useful to have an idea of the time commitment expected.
8. It is unclear how many firefighters participated in each group – on page 12, it appears that the same personnel participated in each phase. On page 19, the authors state that “it would have been better to have consistent attendance, with the same individuals participating in each session.”
9. References for the RM assessment approaches noted on page 22 would be useful to the reader.
10. Please outline the questions used in the focus group/key informant interviews.
11. The authors state there were two additional focus groups with eight firefighters. It is unclear who these firefighter were. Are these personnel people who did not participate in the RM process? If so, how were they selected and why were these particular members solicited? What was their involvement in the process and were their responses similar/different from those who did participate?

**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.