Reviewer’s report

Title: Cardiovascular health effects following exposure of human volunteers during fire extinction exercises

Version: 0 Date: 12 Jun 2017

Reviewer: Kristen Rappazzo

Reviewer's report:

This was a very well written article on the topic of where and how much firefighters are exposed to PM. I noted a few issues that need to be addressed.

You are using statistical significance testing but do not state alpha levels or consider issues of multiple testing. Either add those in or use alternative metrics (e.g., precision, patterns of association) to judge importance of effect estimates.

Line 221, can you translate 50,000-250,000 particles/cm^2 to ug/m^3?

Table 2: effects are either significant or they are not, they should not be ranked by p-value

Table 3: SP and DP have significant p-values, but the actual effect and standard error do not appear to be so. typo?

Generally tables and figures should stand on their own so acronyms used should be defined in footnotes.

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An article of importance in its field

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

Acceptable

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