Author’s response to reviews

Title: Long-term Exposure to Particulate Air Pollution and Brachial Artery Flow-Mediated Dilation in the Old Order Amish

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Version: 2 Date: 04 Feb 2020

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We appreciate the reviewer’s attention and thank them for the additional comments.

In response, to the comment about the effect sizes, we have clarified the language regarding the effect sizes-- they are not equivalent to the earlier results because the exposure values have been normalized, by first subtracting the mean then dividing by the standard deviation, which is identical to expressing them as z-scores. We have revised the information in the tables and text to reflect this. We note that we present beta coefficients for the non-normalized PM exposures in the Supplemental Material if readers are interested to use them.

We have corrected the issues in the text regarding imprecise wording and thank the reviewer for catching these.
Regarding the units of shear stress and response to shear stress, we have added the units to Table 1. We also added summary statistics on pre- and post-occlusive blood velocity values, which are used in the calculation of shear stress and response to shear stress. Finally, we clarified the language in the Methods section to reflect that, in the models for shear stress and response to shear stress, we adjusted for BAD and other covariates.