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Associations of multiple metals with kidney outcomes in lead workers: author response

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To the Editor

We thank Dr. Kawada for his interest in our manuscript entitled “Associations of Multiple Metals with Kidney Outcomes in Lead Workers.”[1] As clearly stated in the methods, diabetes and hypertension diagnoses (based on participant report of physician diagnosis or medication use) were added to models but not retained in final models because they were not significantly associated with the kidney outcome variables and did not substantively change the beta coefficients of the metal exposure variables. Notably, final models were adjusted for diastolic blood pressure. Quantitative data on associations between urine metal concentrations and kidney outcomes are shown in Tables 3–5 in the manuscript and Appendix Table 2. Magnitude is indicated by the beta coefficient which reflects the change in outcome per unit change in independent variable, e.g., metal dose measure. R squared data (not shown in our publication) indicate the amount of outcome variability explained by the variables in the model. We agree that adjustment for variables that potentially confound associations is important and routinely examine and adjust for, when statistically appropriate, many covariates in our analyses.

References

1. Shelley R, Kim NS, Parsons P, et al. Associations of multiple metals with kidney outcomes in lead workers. *Occup Environ Med*. 2012; 69:727–35. published Online First 2012/07/31. DOI: 10.1136/oemed-2012-100765 [PubMed: 22843435]