

From: **James E. Enstrom** <jenstrom@ucla.edu>
Date: Wed, Feb 2, 2022 at 4:15 PM
Subject: Request to Discuss PM2.5 Deaths and PM2.5 NAAQS
To: Xiao Wu <xiao_wu@mail.harvard.edu>
Cc: Xiao Wu <wuxiao@stanford.edu>

February 2, 2022

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Dear Dr. Wu,

I am writing because I have strong evidence that two publications co-authored by you contain FALSE statements. The July 17, 2020 *Sciences Advances* article “Evaluating the impact of long-term exposure to fine particulate matter on mortality among the elderly” by Xiao Wu, Danielle Braun, Joel Schwartz, Marianthi-Anna Kioumourtzoglou, and Francesca Dominici ([DOI: 10.1126/sciadv.aba5692](https://doi.org/10.1126/sciadv.aba5692)) claims “Leveraging 16 years of data—68.5 million Medicare enrollees—we provide strong evidence of the *causal* link between long-term PM2.5 exposure and mortality under a set of causal inference assumptions.” The January 26, 2022 Health Effects Institute Research Report 211 (HEI RR 211) “Assessing Adverse Health Effects of Long-Term Exposure to Low Levels of Ambient Air Pollution: Implementation of Causal Inference Methods” by Francesca Dominici, Antonella Zanobetti, Joel Schwartz, Danielle Braun, Ben Sabath, and Xiao Wu (https://www.healtheffects.org/system/files/dominici-rr-211-report_1.pdf) claims “The consistency of the associations across methods provides stronger support than past studies for what is likely a *causal* effect between long-term exposure to PM2.5 and mortality” (page 21) and “collectively our results indicate that long-term PM2.5 exposure is likely to be *causally* related to mortality” (page 51).

These two EPA-funded publications are part of a long-running campaign by senior author Dominici to make unjustified claims that are currently being used by the Biden EPA to justify tightening the PM2.5 NAAQS. A recent New York Times article about HEI RR 211 is an example of the Dominici campaign (<https://www.nytimes.com/2022/01/26/climate/air-pollution-study-epa.html>): “The findings come as the Biden administration is considering whether to strengthen the national standard for PM 2.5, which is currently set at a yearly average of 12 micrograms per cubic meter, a level higher than that recommended by the World Health Organization. Researchers concluded that 143,257 deaths could have been prevented between 2006 and 2016 if the standard had been tightened to 10 micrograms per cubic meter. ‘If we were to reduce PM 2.5, we would be saving a substantial amount of lives,’ said Francesca Dominici, a professor of biostatistics at Harvard who led the study, which took four years to complete. ‘It’s highly significant.’ ‘This is important evidence for E.P.A. to consider,’ Dr. Dominici added.”

Because Harvard Biostatistics Professor Dominici (<https://www.hsph.harvard.edu/francesca-dominici/>) has made MANY FALSE statements about health effects of PM2.5 during the past 15 years, I have filed a formal complaint of scientific misconduct against her. My complaint consists of the following nine points that challenge the scientific validity of her claims that fine particulate matter (PM2.5) *causes* premature deaths in the US:

1. Her **deliberate falsification** of the research record on PM2.5 deaths obscures the many NULL findings
2. Her **opposition to transparency** in EPA research hinders reproducibility of all PM2.5 death findings
3. **Enstrom 2017 challenges** the validity of PM2.5 NAAQS and her findings of Medicare PM2.5 deaths
4. **Smith 2021 reanalysis** of Di JAMA 2017 challenges her findings of PM2.5 deaths below 12 $\mu\text{g}/\text{m}^3$
5. Her service on the EPA-funded NASEM NAAQS Committee **violates** NASEM conflict of interest policy
6. Her advocacy for tightening the PM2.5 NAAQS is erroneous given the existing **low US PM2.5 levels**
7. She **misuses Medicare records** for weak ecological epidemiology and unjustified causal conclusions
8. Her access to confidential Medicare records is **without the informed consent** of 69 million Americans
9. Her **30+ Chinese co-authors** are a concern for HIPAA violation of Medicare records confidentiality

Because you are part of the Dominici campaign, I request the opportunity to discuss with you my evidence that there is NO proof that PM2.5 *causes* death and NO scientific or public health justification for tightening the PM2.5 NAAQS (<http://scientificintegrityinstitute.org/PMPanel121021.pdf>). Please respond to me via email or telephone by February 7, 2022.

Thank you very much for your consideration.

Sincerely yours,

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