James E. Enstrom, PhD, MPH, FFACE
Retired UCLA Research Professor (Epidemiology)
President, Scientific Integrity Institute
http://scientificintegrityinstitute.org/
jenstrom@ucla.edu

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The Case for Removing Harvard TH Chan School of Public Health (HTHCSPH) Professor of Biostatistics Francesca Dominici (Dominici) from the NASEM DEL-BEST NAAQS Committee

Dominici should be removed from this NASEM Committee for the five reasons presented below. These reasons provide strong evidence that she cannot honestly and objectively contribute to the Committee goal to "consider frameworks to assess causality of health and welfare effects of air pollutants in EPA's Integrated Science Assessments (ISAs) conducted as part of EPA reviews of National Ambient Air Quality Standards (NAAQS)."

1.Dominici has been using detailed US Medicare records since 2006 to conduct ecological epidemiology research and to publish etiologically flawed links between air pollution and various health conditions, particularly death. In spite of repeated efforts, I have been unable to confirm that Dominici and her collaborators have proper access to Medicare records on 69 million Americans who represent about 95% of all Americans aged 65+ years since 2000. Individual Medicare recipients, including myself and my relatives and scientific colleagues, NEVER granted permission to Dominici to have our Medicare records used for ecological epidemiology, which Dominici is using to advocate for more restrictive NAAQS. Dominici possesses so much information on individual Medicare recipients that I believe she can identify many of these individuals even if she does not possess their name and street address. The information she possesses can be linked with other databases that contain full name, full address, and age or date of birth. Thus, I want to determine if Dominici has been violating Medicare patient confidentiality. Because I have been unable to get any response from Dominici, I have directed my efforts to one of her former graduate students, Liuhua Shi, ScD (Shi) of Emory University, who also has access to these Medicare records. Since July 8, 2021 I have requested that Shi release to me the de-identified Medicare records that she possesses for about 500 residents of a particular zip code (http://scientificintegrityinstitute.org/estjeeadd070821.pdf). Because Shi has not responded to me, I have directed my request to several top officials at Emory University on August 30, 2021 (http://www.scientificintegrityinstitute.org/CurranJEE083021.pdf). Since none of these officials have responded to me, I am expanding my efforts to stop the epidemiologic misuse of Medicare records.

2. A September 6, 2021 PubMed.gov search of "Dominici Medicare" yielded 83 ecological epidemiology articles by Dominici during 2006-2021 that are based on Medicare records. Of these, 46 presented positive associations of PM2.5 with disease or death in the US. They contain aggressive conclusions like the one in her July 2021 Epidemiology article (doi: 10.1097/EDE.0000000000001354): "We estimated that reducing PM2.5 and O3 concentrations to levels below current standards [NAAQS] would increase life expectancy by substantial amounts compared with the recent increase of life expectancy at age 65 of 0.7 years in a decade." I content that all these articles are based on improper use of Medicare records and are meant to improperly influence the EPA ISA for PM2.5. Obviously, these articles will overwhelm the ISA literature review and will obscure the small number of important articles that do not support the claim that PM2.5 causes premature deaths in the US.

3. Dominici's articles falsify the research record on PM2.5 and mortality because they ignore the extensive evidence that there is NO significant relationship between PM2.5 and total mortality in the US. In particular, Dominici has NEVER cited Enstrom 2005, Enstrom 2017, or other articles that find NO relationship. This NULL evidence directly contradicts Dominici's Medicare results, as detailed in my 31-page July 8, 2021 Review of a similar manuscript by Shi (http://scientificintegrityinstitute.org/estjeeadd070821.pdf). Furthermore, Dominici never mentions the extensive evidence that the Linear No Threshold (LNT) Model is severely flawed (https://doi.org/10.1016/j.envres.2021.111025). This evidence on LNT contradicts her claims of causality in low-level air pollutant health effects. Finally, Dominici never mentions the intense controversy that has existed for about 30 years regarding PM2.5 deaths, as summarized in my Review.

4. Dominici fails to acknowledge in her publications that there is NO public health benefit in lowering the annual EPA PM2.5 NAAQS of 12 µg/m³ because as of 2019 the average population-weighted PM2.5 level in the US was 7.7 µg/m³, as per the 2019 State of Global Air Map (https://www.stateofglobalair.org/data/#/air/map). The US level is among lowest in the world, where as the Chinese level of 48 µg/m³ is among the highest in the world. It is worth noting that Dominici's Medicare articles have a total of 34 Chinese co-authors, like Shi, and Shi now has her own Emory University research group (https://www.liuhuashi.com/people/), which includes 12 Chinese graduate students. It is amazing that NONE of Dominici's articles mention China. If Dominici and her Chinese co-authors really cared about PM2.5 health effects, they would focus on the very high PM2.5 level in China rather than on the very low PM2.5 level in the US.

5. Based on Dominici's biased articles emphasizing adverse air pollution health effects in the US and her falsification of the complete research record on air pollution health effects in the US, a strong case can be made that she is contributing to what has been described by renowned physicist Lawrence Krauss as "The Ideological Corruption of Science" (https://www.wsj.com/articles/the-ideological-corruption-of-science-11594572501). If Dominici remains on the NASEM DEL-BEST NAAQS Committee she will certainly damage its objectivity and credibility.