

My name is Thomas Golab. I serve as President of the American Council on Science and Health, a 41-year old pro-science consumer advocacy organization. We publicly support evidence-based science and medicine. We help consumers, media, and policymakers see past scaremongers and activists.

I am testifying today because, as the leader of an organization that promotes sound science and medicine and debunks what we call “junk”, my colleagues and I are concerned that particularly in policymaking there be an open and honest debate about the science being used.

Overall, the CASAC finds that the Draft PM PA depends on a Draft Particulate Matter (PM) Integrated Science Assessment (ISA) that, as noted in the April 11, 2019, CASAC Report on the Draft PM ISA, does not provide a sufficiently comprehensive, systematic assessment of the available science relevant to understanding the health impacts of exposure to PM, due largely to lack of a comprehensive, systematic review of relevant scientific literature, inadequate evidence and rationale for altered causal determinations, and a need for clearer discussion of causality and causal biological mechanisms and pathways. Given these limitations in the underlying science basis for policy recommendations, as well as diverse opinions about what quantitative uncertainty analysis and further analysis of all relevant data using the best available scientific methods would show, most CASAC members conclude that the Draft PM PA does not establish that new scientific evidence and data reasonably call into question the public health protection afforded by the current 2012 PM<sub>2.5</sub> annual standard.

America, thanks to the Clean Air Act and the EPA has the cleanest air among all developed nations. Both WHO and NASA satellites show we have the lowest PM<sub>2.5</sub> (see below). The science surrounding PM<sub>2.5</sub> and its impact on human health is critical. Taxpayers have paid for many studies focusing on PM<sub>2.5</sub> and its impact. And as a result of those studies, regulators want to create new regulations that will restrict PM<sub>2.5</sub>. But to what end? What in the data of these studies demonstrate a health threat from PM<sub>2.5</sub>? What in the data of these studies suggests any acceptable level of PM<sub>2.5</sub>? What in the data of these studies shows that limiting PM<sub>2.5</sub> in the U.S. will save lives, while thousands die from PM<sub>10</sub> in Asia?

On April 8, 2019 U.S. New & World Report article noted: “Proceedings of the National Academy of Sciences, put a human toll and a price tag – some \$886 billion a year – on the health impacts caused by air pollution, especially from fine particulate matter known as PM 2.5.” This study has been downplayed and rightly so. The PNAS study is riddled with errors. One such error is the fact that in making the claim that their estimations are that 107,000 die annually from PM 2.5, the authors then claim this is equal to the number of traffic fatalities in the U.S. each year. The U.S has never had traffic fatalities even approach 100,000 annually. In fact, for the past nine years the traffic fatality rate has been between 30,000 and 40,000.

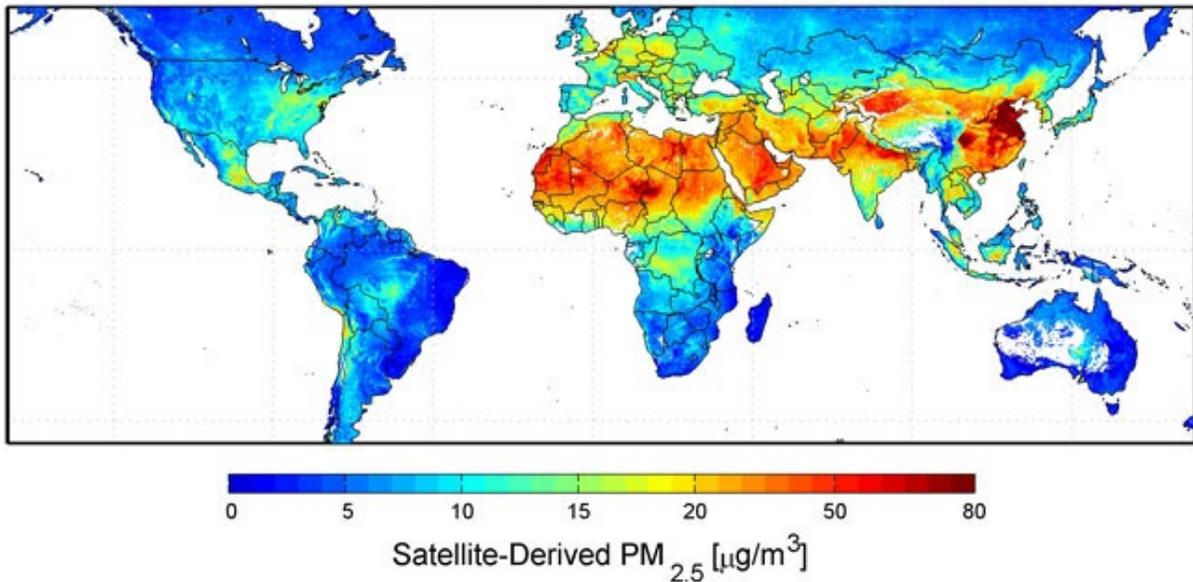
Further an Imperial College study found that air pollution contributed to the deaths of more than 15,600 men and more than 14,750 women, less than 1/3 the “estimate” made in the PNAS study. And what I believe to be a very comprehensive study, published on the JAMA Network on November 20, 2019, involved a cohort study of more than 4.5 million US veterans, 9 causes of death were associated with PM<sub>2.5</sub> air pollution – and these 9 deaths occurred between 2006 and 2016.

It is also disturbing that none of the studies I was able to examine differentiated between outdoor air quality and indoor air quality. This is significant because we do know of deaths from indoor pollutants like radon. In fact, the EPA itself has determined that radon is a major cause of lung cancer among non-smokers. Deaths from radon actually increased a couple of decades ago when people started better insulating their homes, which helped to trap the radon. So here we have an EPA suggestion that to conserve energy homes should be better insulated, then when deaths from radon started rising, the EPA recommended ways to help the radon escape.

ACSH Science Advisors Dr. James Enstrom and Dr. John Dunn have worked for decades on the issue and issues surrounding PM 2.5 as well as other air quality issues. And while they have made their work open for all to see, they have not been given the same courtesy from the scientists who are generously funded to produce the studies that make claims that PM 2.5 is killing and making Americans sick. Dr. Enstrom’s work on this issue has repeatedly been ignored by those involved. His October 17, 2019 statement notes that

2019 PM PA overwhelming cites “positive authors” and de-emphasizes – nearly ignoring – “null authors.” This is a selection bias, a form of cherry-picking results, which has been discouraged among the scientific community, which some in the EPA accuse CASAC of doing.

Dr. Engstrom and Dr. Dunn’s treatment by the EPA and its taxpayer-funded scientists and their inability to gain access to the studies being used to set policy is the reason the American Council on Science and Health is behind the move to bring greater transparency to the science and policymaking process.



Global satellite-derived map of PM<sub>2.5</sub> averaged over 2001-2006. **Credit:** Dalhousie University, Aaron van Donkelaar