

COMMENTS ON EPA'S PARTICULATE MATTER STAFF PAPER

OFFERED ON BEHALF OF THE AMERICAN PUBLIC HEALTH
ASSOCIATION

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Good afternoon.

My name is John Balbus. I am a physician board certified in both internal and occupational and environmental medicine.

I am offering my comments on behalf of the American Public Health Association, the oldest organization of public health professionals, representing more than 50,000 members from over 50 public health occupations.

I also direct the Health program at Environmental Defense, a non-profit environmental organization.

The APHA applauds the EPA for its successes in reducing people's exposure to harmful air pollutants over the past 30 years.

It is our opinion, however, that the recommendations of the current PM staff paper do not go far enough to protect the nation's health. This is in part due to the systematic underestimation of risk as put forth in the document's risk assessment. This is where I will focus my comments. In the interest of time, and with apologies to David Letterman, I will just give you the top four ways the risk assessment aims too low.

Number 4: **It limits itself to too few geographic areas**

Even among the five cities analyzed there was significant variability in the risk reduction offered by the recommended standards. The Staff Paper relies too heavily on extrapolating results from these five cities to the rest of the nation, with the likely result being overestimation of the benefits of the proposed standards.

Number 3: **It only uses a single day lag, instead of a distributed lag.**

The Staff paper's own sensitivity analysis acknowledges that models that only use a single day lag underestimate effects by as much as 50%. (viz., 4-36)

Number 2: **The sensitivity analysis uses unsupportable thresholds**

Despite repeated acknowledgement that the epidemiologic literature gives no evidence for a threshold, the Staff Paper uses them in its sensitivity analysis and carries them through to the policy discussion. These thresholds falsely reduce the magnitude of the estimated risks and also make the recommended standards appear to reduce risks more than they actually do.

Number 1: **It ignores significant health endpoints**

Many recent studies have shown additional serious health effects associated with PM exposure. By failing to consider these health effects, the EPA is seriously underestimating the true population health burden from fine particulate air pollution. In addition, there is a general failure to consider morbidity endpoints when determining proposed standards, even though morbidity endpoints tend to occur at exposure levels below those associated with mortality.

There you have it. Four independent reasons why the PM Staff Paper's risk assessment underestimates the true public health burden associated with fine particulate air pollution. These (and other) flaws are carried forward to recommend standards that do not sufficiently protect the public's health, such as the false choice between tightened annual or 24 hour standards for PM 2.5. Similar flaws lead to a recommendation to keep the thoracic particulate standard at the same level as under the current PM 10 standard.

We call on the CASAC to recognize that the science indicates even the most stringent of these current recommendations do not fully protect the health of our infants, children, and adults from harm caused by fine particle air pollution.

Thank you for your attention.

