

June 8, 2022

US EPA CASAC Ozone Review Panel Regarding Ozone NAAQS Reconsideration

[https://casac.epa.gov/ords/sab/f?p=113:19:8532987399969:::19:P19\\_ID:972](https://casac.epa.gov/ords/sab/f?p=113:19:8532987399969:::19:P19_ID:972)

[https://youtu.be/5Qsqhqb5\\_F0](https://youtu.be/5Qsqhqb5_F0) (minutes 20-26)

<http://scientificintegrityinstitute.org/OzonePanel060822.pdf>

## Dr. James Enstrom's Verbal Comment to EPA CASAC Ozone Review Panel

I am Dr. James Enstrom. I have had a long career as an epidemiologist at UCLA and I have made significant contributions to air pollution epidemiology, particularly regarding the importance of transparency and reproducibility. The 2000 EPA CASAC, the 2000 EPA Administrator, and the [April 2022 EPA Ozone Policy Assessment Reconsideration](#) all recommended that the ozone NAAQS remain unchanged at 70 ppb. Thus, the Ozone Panel should not reconsider the ozone NAAQS at this time, but should reconsider it later during the regular 5-year review cycle. Instead, the Ozone Panel should assess six fundamental aspects of the science underlying the NAAQS.

1. Assess the extensive criticism of the linear no-threshold (LNT) model and estimate the threshold below which ozone has no adverse human health effects. U Massachusetts Professor Edward Calabrese published a May 17, 2022 "LNTGate" critique of LNT (<https://doi.org/10.1016/j.cbi.2022.109979>). It illustrates how acceptance of the LNT dose-response model was unethically advocated and advanced in the 1950s by key scientists and by *Science*, America's leading science journal. Unfortunately, *Science* will not acknowledge errors in four historical articles that are cornerstones in acceptance of the LNT model.
2. Assess the human health effects of ozone based on actual human exposure to ozone, not on the readings of ambient air monitors (<https://doi.org/10.1016/j.envint.2018.07.012>). There is extensive published evidence that most Americans are personally exposed to less than 20 ppb of 8-hour ozone because they spend up to 90% of their time indoors (<https://doi.org/10.1111/ina.12942>). In addition, the average seasonal 8-hour maximum ozone concentration in 2019 in the US was 43 ppb (<https://www.stateofglobalair.org/air/ozone>). The average indoor and outdoor ozone levels are both far below the current ozone NAAQS of 70 ppb (1.0 ppb~2.0 µg/m<sup>3</sup>). Thus, most Americans are not exposed to unhealthy levels of ozone.
3. Assess the extreme publication bias against null air pollution health effects findings by examining key null findings that have been ignored by EPA. My December 10, 2021 CASAC PM Panel comment (<http://scientificintegrityinstitute.org/PMpanel121021.pdf>) and my February 25, 2022 CASAC PM Panel comment (<http://scientificintegrityinstitute.org/PMpanel022522.pdf>) document that the 2021 PM ISA and PA ignored at least 60 authors, including me, who have published null findings or criticized the PM2.5 NAAQS. Similar publication bias exists regarding the ozone NAAQS.
4. Assess the evidence that ozone health effects must be based on findings that are transparent and reproducible. My 2017 and 2018 reanalyses of the ACS CPS II cohort found serious flaws in the seminal Pope 1995 article and the 2000 HEI Reanalysis and demonstrated the importance of access to underlying data (<http://scientificintegrityinstitute.org/DRPM25JEEPope052918.pdf>). However, *Science* Editor-in-Chief Holden Thorp recently demonstrated his strong bias against EPA transparency by personally stating to me that he will not publish any evidence that I submit to *Science* that supports "Strengthening Transparency in Regulatory Science" (<http://scientificintegrityinstitute.org/ThorpJEE041822.pdf>).

5. Assess the evidence that the ozone NAAQS is so low that it is impossible to ever reach attainment in many areas, especially in California. The April 15, 2022 SCAQMD Notice of Intent to sue EPA is necessary because it is impossible for the South Coast Air Basin to attain the 1997 Ozone NAAQS of 80 ppb without massive emissions reductions from Federal sources not controlled by SCAQMD (<http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>). EPA must recognize that California is a very healthy area of the US and that the current clean air in California is not harming its citizens (<http://scientificintegrityinstitute.org/AQMPJEE081516.pdf>) . Overregulation by EPA is hurting California both scientifically and economically.

6. Finally, CASAC Panel members must recognize the different interpretations of weak epidemiologic evidence and engage with critics like myself. Simply note the difference between the 2020 CASAC and the 2022 CASAC regarding the assessment of the same PM2.5 data (<https://junkscience.com/2021/10/former-casac-chair-added-as-plaintiff-in-young-v-epa/>). It is important that you assess evidence objectively, keeping in mind the above points. This request is particularly critical at a time when the US faces a serious energy crisis that is made worse by unjustified EPA regulations on ozone and PM2.5.

Thank you very much.

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From: **Dr. Harvey Risch** <harvey.risch@yale.edu>  
Date: Thu, Jun 9, 2022 at 8:19 PM  
Subject: Comment re: EPA CASAC Ozone Panel  
To: Yeow, Aaron <yeow.aaron@epa.gov>

Because EPA regulations have a major impact on life in America, they need to be based on the best scientific methods and include all relevant public health evidence. Thus, assessment of ozone health effects must properly address the following important issues: 1) threshold for human health effects, 2) actual human exposure, 3) publication bias against null findings, 4) transparency and reproducibility of findings, 5) realistic attainment levels, and 6) alternative interpretations of health effects evidence. Specific details regarding these six issues are contained in the June 8, 2022 EPA CASAC Ozone Panel Public Comment of Dr. James Enstrom. Please consider very seriously what Dr. Enstrom discussed. Thank you.

Harvey Risch

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**From:** [Dr. Harvey Risch](#)  
**To:** [Yeow, Aaron](#)  
**Subject:** Submitted comments to the EPA CASAC PM Panel  
**Date:** Wednesday, December 1, 2021 5:45:10 PM

Dear Mr. Yeow:

I am writing to support Dr. James Enstrom's observations that PM2.5 epidemiology research to-date does not provide sufficient evidence to claim that PM2.5 levels are causally related to mortality.

Harvey Risch

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