

**Preliminary Comments from Dr. Jeremy Sarnat on
EPA's *Integrated Science Assessment (ISA) for Ozone and
Related Photochemical Oxidants (Final Report - April 2020)*
09-12-22**

At-Risk Communities

a. Based on the existing scientific record, what are the panel's views regarding the scientific evidence of effects of ozone exposures on at-risk communities?

b. What are the panel's views on how the evidence regarding disparities in exposure and health effects should be brought into the PA?

EPA's treatment of at-risk populations from ozone exposures in the 2020 Ozone ISA continues to be excellent and well-structured. The framework for including information about at-risk individuals and communities is very nicely presented in the Integrated Summary and clearly depicted in Table IS-9.

The Discussion Point specifically asks about 'at-risk communities' and scientific evidence regarding differential or enhance health risk. I think the ordinal ranking of SES and race at factors that confer added risk of 'inadequate to suggestive' is appropriate. Much of the scientific literature related to ozone exposure and at-risk communities is still limited and nascent.

An added factor that could be considered explicitly within this framework is home ventilation, which in many locales, is correlated with other SES measures. While the evidence on ventilation, and its direct impact on ozone infiltration, is not entirely clear at this time, I think the current literature does support its inclusion as relevant exposure factor that may affect ozone exposure and risk. The ISA itself includes a very good discussion and scientific summary of how ventilation may modify observed epidemiologic risk (Section 2-4-2, p. 2-21).