

- **The big issue from an accountability point of view in trying to measure health benefits is that with the exception of sudden, drastic changes such as the Dublin coal ban, changes in health status in relation to improved air quality will be modest and difficult to detect.**
 - **This is supported by benefits assessments we have done (e.g. sulfur in gasoline) where estimated impacts on health although significant, have been small relative to the contribution from other factors.**

- **One approach is to use established concentration response relationships in models such as aqbat or benmap to estimate benefits from measured air quality improvements.**
- **There are approaches like what Rick Burnett is doing to examine whether risks are changing over time, but it seems there can be a fair bit of noise in this analysis, making it difficult to establish for certain if the risk is changing and if so attributing this to a particular intervention.**
- **I would defer to statisticians as to whether statistical methods are available to try to separate the independent effects of individual pollutants, but I suspect the answer is no.**

- **It may be equally important to think about interpretation issues, for instance where effects of a pollutant such as NO₂ are detected, but there is some doubt about biological plausibility. In other words, if we don't believe that a pollutant can be pathophysiologically associated with the effects observed in epidemiological studies, how can the association be interpreted e.g. as a source marker and what other information would be valuable to shed further light on this.**

- **With respect to prioritizing the toxic effects of pollutants, I think there is some capacity for this, but I also wonder if we need to also think about prioritizing sources rather than individual pollutants.**

- **As far as the availability of a risk based framework for setting priorities, I'm not exactly sure what this is referring to. I am certainly not aware of a singular tool which covers the whole landscape of pollutants and sources under consideration, if that's what's being suggested. I suppose there are approaches like what was used to assess the global burden of disease attributable to various risk factors, but I believe it would require significant effort to adapt something like that for the current purpose.**