Response from Director of Public Health to the Interim Joint Director for Environment, Waste and Operations and Portfolio Holder for City Management in relation to air quality

RESPONSE: Had a bit of time to work through the report and does all look good and moving in a positive direction. I have been provided with some more detailed feedback which I include below which hopefully you will find useful.

Page 4 first paragraph – perhaps reword to include 'external' and 'location' i.e. "…small number are still exposed at their home location to external levels above the objective". [this is because there may be other factors influencing internal air quality].

It would seem reasonable to adjust the AQMA order using the proposed process and timetable, with a view to adjusting the AQMA in line with the report.

Page 7 please include Public Health Devon in the list of partners.

Drawing attention to a previous reply to the Transportation Strategy and Road Safety Manager and the Senior Environmental Technical Officer following query on exceedances:

"Given the number of exceedances it would be difficult to attribute causality. Previous UK studies have sought to consider high pollution events with hospital admissions episodes, but require careful statistical modelling as there may be lag between episode and rise in admissions, and other confounders to consider.

However, there is clear international evidence for a 'dose response effect' where on average a 10 µg/m3 increase in NO2 concentrations (previous day) was significantly associated with increased risk of total (0.46%), cardiovascular (0.37%), and respiratory (0.47%) mortality. The concentration-response curves were almost linear, even below the current WHO air quality guidelines (There is no 'safe' level, with disagreement between UK Government's higher limits, and the World Health Organisation as to appropriate and achievable limits). Around 1 in 20 deaths in Exeter were attributable to air pollution (NB. old modelling, updated 2022, data now available states 3.1%).

We need to be clear there are acute and chronic effects of air pollution, including nitrogen dioxide; exceedance is only one part of a complex picture. Long-term exposure can cause chronic conditions through systemic inflammation, whilst acute episodes can exacerbate existing conditions, such as asthma. Exposure to traffic pollution can create overall effects, such as reduction in lung function in population, with an increase in prevalence of, for example, children with clinically relevant declines.

It should be borne in mind that there are a number of other pollutants from vehicles that can cause additional harms such as, of those studied, benzene or particulate matter. Whether NO_2 is a good proxy is open to debate, particularly when the proportion of PM is increasing due to heavier electric vehicles."

It is for this reason we welcome the continued measures to improve air quality and population exposure, with cobenefits for the environment, and health, including in relation to increased activity through active travel, and other initiatives.

Noting that there are a number of internal pollutants within enclosed environments (i.e. car or home), that may need exploring further, but currently outside the scope of these reports. We are working with housing and other colleagues in relation to issues such as damp/mould, and will consider other sources, such as cooking, in relation to retrofit or other interventions.

Assuming liaising with Transportation Strategy and Road Safety Manager so they can compare proposals highlighted in the AQ report with those actions highlighted in the draft Local Transport Plan, due for consultation later this year.

If looking to engage early and seek to develop behaviour change around initiatives, please get in touch. Although, like many have dwindling resources, can see where we can work together to seek better outcomes. This also goes for work around the Local Plan. Welcome the Equalities Impact Assessment for the AQMA review; please let us know if any further information required from our Joint Strategic Needs Assessment, or other data we may have access to. This could for example consider where there may be higher vulnerable groups within given geographical areas (and any mitigations that may be put in place, inform planning decisions etc.).

Director of Public Health and Communities