

Health in Hackney Scrutiny Commission

Item No

29th June 2022

The science on the health impacts of poor air quality - expert briefing

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PURPOSE

The purpose of the item is to hear from a senior academic expert on the latest research on the health impacts of poor air quality both indoor and outdoor and to discuss the progress being made in implementing Hackney's own *Air Quality Action Plan 2021-25* and to explore areas for improvement or greater focus. This is a briefing session not a full review.

OUTLINE

Air pollution is ubiquitous, but in urban and especially highly trafficked areas, exposures can be high. Numerous research studies, replicated across the world agree that breathing air of poor quality impacts on people's health. Exposure to poor air quality is associated with both ill health and premature death. It affects everyone, but in particular children, older people 65+ and those with CVD/respiratory disease. People may be affected by poor air quality even if they never experience any noticeable pollution related health effects such as breathing problems. Air pollution can cause short term (nearly immediate) symptoms and long term (chronic disease) effects. Most of the air pollution in London is produced by traffic, heating, and burning of solid fuels. Over 40% per cent of the NO2 in London comes from road transport so this is why the highest concentrations of NO2 are recorded at busy roadside locations.

The GLA has recently published a useful guide (see 6f below) which provides an overview of the science and the current policy context as well as Hackney specific detail.

Attached please find:

- 6b Briefing from Dr Ian Mudway (Imperial College) 'Impacts of air quality on health'
- 6c Presentation from LBH 'Health impacts of air pollution evidence and responses'
- 6d Full report from LBH 'Health impacts of air pollution evidence and responses'
- 6e Hackney's Air Quality Action Plan 2021-25
- 6f GLA's Air Quality in LB Hackney a guide for Public Health professionals

Running order

No.	Subject	Name	Organisation	Time
1	Impacts of air quality on health	Dr Ian Mudway* biog	Imperial College, Faculty of Medicine Senior Lecturer in Public Health	7.05
2	Questions for clarification			7.25
3	Presentation from LBH on 'health impacts of air pollution – evidence and responses' and overview of progress in implementing Hackney's Air Quality Action Plan 2021-25	Chris Lovitt Dave Trew	Hackney Council Deputy Director of Public Health Land Water Air Team Manager, Environmental Services	7.35
4	Questions from Members and discussion.			7.55- 8.30

Also invited to contribute to the discussion are:

Cllr Chris Kennedy, Cabinet Member for Health, Adult Social Care, Voluntary Sector and Culture Cllr Mete Coban, Cabinet Member for Environment and Transport Cllr Polly Billington, Chair of Skills, Economy and Growth Scrutiny Commission Helen Woodland, Group Director of Adults Health and Integration Dr Sandra Husbands, Director of Public Health for City and Hackney Aled Richards, Strategic Director, Sustainability and Public Realm Sam Kirk, Environmental Services Strategy Manager,

ACTION

The Commission is requested to give consideration to the briefings and discussion.

^{*} Dr Ian Mudway is a senior lecturer in the School of Public Health at Imperial, a member of the MRC Centre for Environment and Health; MRC & Asthma UK Centre in Allergic Mechanisms of Asthma and the NIHR-PHE Health Protection Research Units in Environmental Exposures and Health and Chemical and Radiation Threats and Hazards. He has over 25 years of experience researching the impacts of air pollution on human health and in the development of assays to quantify the toxicity of the chemical cocktails that pollute the air we breathe. Over this period Dr Mudway has published over 100 research papers, reports and book chapters on these topics, as well as providing advice to the local, national and international governments and NGOs. Dr Mudway is passionate about the communication of science to lay audiences and has worked extensively with artists and educationalist to promote the public understanding of the risks associated with environmental pollutants. Currently his work is focused on understanding early life impacts of pollutants on the development of the lung and cognitive function in children living within urban populations, as well as furthering our fundamental understanding of the mechanisms that drive these adverse effects and modify an individual's susceptibility to air pollution.