


Health and Wellbeing Board Tuesday 15 th March 2016	
Report of the London Borough of Tower Hamlets	Classification: Unrestricted
Impact of Air Quality on Health in Tower Hamlets	

Lead Officer	Somen Banerjee, Director of Public Health
Contact Officers	Tim Madelin, Senior Public Health Strategist, Healthy Environments and Communities Esther Trenchard-Mabere, Associate Director of Public Health
Executive Key Decision?	Yes

Summary

Air pollution has a significant negative impact on health with effects ranging from worsening respiratory symptoms and poorer quality of life, to premature deaths, from cardiovascular and respiratory diseases.ⁱ A recent report also suggests links between air quality and diabetes, obesity, and changes linked to dementiaⁱⁱ. In Tower Hamlets 7.4% of all deaths in people over 30 are attributable to particulate air pollution.ⁱⁱⁱ Air pollution contributes to widening health inequalities as levels of particulate matter and NO₂ are higher on the most heavily trafficked roads which are used more by disadvantaged people as places where they live, work and shop.

Professor Chris Griffiths, Centre for Primary Care and Public Health, Queen Mary University of London (QMUL) and colleagues will give a presentation at the Board meeting on the findings from a long term study of children in East London (including Tower Hamlets) which shows evidence of reduced lung volume in school children related to long term exposure to traffic pollutants consistent with impaired lung growth.

Tower Hamlets is currently implementing a range of measures arising from the borough's Air Quality Action Plan (AQAP) to demonstrate compliance with the UK Air Quality Strategy 2010. Tower Hamlets is exceeding the limit values contained within the European Union's Ambient Air Quality Directive (2008/50/EC) and therefore is required to implement measures to reduce air pollution. These measures consist of a range of consultation processes, monitoring, enforcement and projects including;

- BARTS Health Project
- Zero Emissions Network Project; and
- Tower Bridge Anti-Idling Project
- Neighbourhood Pathfinder project based around Marner Primary School

However the evidence of the impact or poor air quality on the health of our local population warrants greater priority being given to measures to improve air quality and mitigate the

impacts on health and wellbeing.

Recommendations

The Health & Wellbeing Board is recommended to:

1. Note the outcome of the research presented and the general impact on health and wellbeing from poor air quality.
2. Review and prioritise the following actions that could be undertaken at a local level to reduce the impact of poor air quality on health
 - Move towards replacement of LBTH fleet with electric vehicles
 - Put in requirements when procuring new contracts for suppliers to purchase electric vehicles when replacing or purchasing vehicles
 - Extend No Parking Zones around schools – could be piloted with schools where the Head Teacher is willing to support
 - Expand safe routes to school initiative to include air quality considerations
 - Agree criteria for requiring more new developments to be car free
 - Agree planning standards e.g. ventilation requirements for developments proposed to be build adjacent to main roads
 - Promote Electric Car Club and increase the number of electric charging points
 - Measures to promote cycling and walking and decrease car use
 - Improve the enforcement of the low emission zone standards
 - Lobby / negotiate with TFL to reduce through traffic, potentially to close roads during severe poor air quality episodes (60% of emissions due to through traffic)

1. REASONS FOR THE DECISIONS

- 1.1 To improve air quality so that effect on infant and children's lung growth is reduced and the excess mortality and morbidity rates associated with the current levels of air pollution are reduced. This will help meet the community plan priorities of 'A great place to live' and 'A healthy supportive community.' Air Quality has also been proposed as a priority for the refreshed Health and Wellbeing Strategy.

2. ALTERNATIVE OPTIONS

- 2.1 Do nothing additional, but continue to meet legal requirements of the UK Air Quality Strategy 2010.

3. DETAILS OF REPORT

- 3.1 This report is concerned with outdoor air pollution only. Indoor air quality is not covered although the council does have a number of activities such as the decent homes programme and the smoke free initiatives which will improve indoor air quality.
- 3.2 Tower Hamlets is currently implementing a range of measures contained within the borough's Air Quality Action Plan (AQAP) to demonstrate compliance with the UK Air Quality Strategy 2010. Tower Hamlets is exceeding the limit values contained within the European Union's Ambient Air Quality Directive (2008/50/EC) and therefore is required to implement measures to reduce air pollution. These measures consist of a range of consultation processes, monitoring, enforcement and projects including;
- BARTS Health Project
 - Zero Emissions Network Project; and
 - Tower Bridge Anti-Idling Project
 - Neighbourhood Pathfinder projects based around primary schools
- 3.3 Air pollution has a significant negative impact on health with effects ranging from worsening respiratory symptoms and poorer quality of life, to premature deaths, from cardiovascular and respiratory diseases.^{iv} In Tower Hamlets 7.4% of all deaths in people over 30 are attributable to particulate air pollution.^v Air pollution contributes to widening health inequalities as levels of particulate matter and NO₂ are higher on the most heavily trafficked roads which are used more by disadvantaged people as places where they live, work and shop. There is also evidence that these same people are more susceptible to the adverse health impacts of air pollution^{vi}.
- 3.4 There have been a number of recent reports which re-iterate and highlight the serious impact on health of air pollution including the TFL report 'Understanding the Health Impacts of Air Pollution in London'^{vii} and the report of the Royal Colleges of Physicians and Paediatric Child Health (RCP/RCPCH) 'Every breath we take: the lifelong impact of air pollution'^{viii} which reviewed the impact of exposure to air pollution across the course of a lifetime and highlights that each year in the UK,

around 40,000 deaths are attributable to exposure to outdoor air pollution and that it has been linked to cancer, asthma, stroke and heart disease, diabetes, obesity, and changes linked to dementia. The health problems resulting from exposure to air pollution have a high cost to people who suffer from illness and premature death, to our health services and to business. In the UK, these costs add up to more than £20 billion every year.

3.5 Key recommendations from the RCP/RCHP report include:

- **Put the onus on polluters.** Polluters must be required to take responsibility for harming our health. Political leaders at a local, national and EU level must introduce tougher regulations, including reliable emissions testing for cars.
- **Local authorities need to act to protect public health when air pollution levels are high.** When these limits are exceeded, local authorities **must** have the power to close or divert roads to reduce the volume of traffic, especially near schools.
- **Monitor air pollution effectively.** Air pollution monitoring by central and local government must track exposure to harmful pollutants in major urban areas and near schools. These results should then be communicated proactively to the public in a clear way that everyone can understand.
- **Quantify the relationship between indoor air pollution and health.** We must strengthen our understanding of the key risk factors and effects of poor air quality in our homes, schools and workplaces. A coordinated effort is required to develop and apply any necessary policy changes.
- **Define the economic impact of air pollution.** Air pollution damages not only our physical health, but also our economic wellbeing. We need further research into the economic benefits of well-designed policies to tackle it.
- **Lead by example within the NHS.** The health service must no longer be a major polluter; it must lead by example and set the benchmark for clean air and safe workplaces.

3.6 The main presentation from Professor Chris Griffiths, QMUL will outline the results of a six year study, (currently awaiting publication) which observes evidence of reduced lung volume in school children related to long term exposure to traffic pollutants consistent with impaired lung growth^{ix}.

3.7 There will also be a short presentation on a community led project addressing the issue of air pollution in the neighbourhood around Marners Primary School.

4. COMMENTS OF THE CHIEF FINANCE OFFICER

4.1 The recommendations in this report cover a number of areas across the Council with resourcing considerations if the priorities were to be implemented. Each recommendation would need to be assessed individually for cost and other implications and would likely require further approval through the Council's relevant decision making processes.

5. LEGAL COMMENTS

- 5.1 The Council has statutory obligations to fulfil the requirements of the Local Air Quality Management (LAQM) process as set out in Part IV of the Environment Act 1995. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas and to determine whether or not the air quality objectives are likely to be achieved.
- 5.2 The air quality objectives application to LAQM in England is set out in the UK Air Quality Strategy. The objectives are shown in units of microgrammes per cubic metre and specify the number of exceedances in each year which are permitted.
- 5.3 Where exceedances are considered likely the local authority must declare an Air Quality Management Action Plan and prepare an Air Quality Action Plan, setting out the measures it intends to put in place in pursuit of the objectives.
- 5.4 As detailed in the report, air quality in Tower Hamlets exceeds the limit values contained within the European Union's Ambient Air Quality Directive and therefore the Council is required to implement measures to reduce air pollution. The measures recommend in the report will assist the Council in reducing the impact on health of poor air quality and will contribute to the achievement of the statutory obligations.

6. ONE TOWER HAMLETS CONSIDERATIONS

- 6.1 Air pollution contributes to widening health inequalities as levels of particulate matter and NO₂ are higher on the most heavily trafficked roads which are used more by disadvantaged people as places where they live, work and shop. There is also evidence that these same people are more susceptible to the adverse health impacts of air pollution^x.
- 6.2 The main presentation outlines research which shows that poor air quality causes a reduction in lung development that is permanent so is an important consideration if the councils wants to meet the 'give every child the best start in life' priority.

7. BEST VALUE (BV) IMPLICATIONS

- 7.1 Not applicable.

8. SUSTAINABLE ACTION FOR A GREENER ENVIRONMENT

- 8.1 Much of the air pollution arises from use of both petrol and particular diesel internal combustion engines and action to reduce these emissions are likely to have a beneficial effect on both people and the environment including a reduction in the burning of fossil fuels.

9. RISK MANAGEMENT IMPLICATIONS

9.1 Not applicable.

10. CRIME AND DISORDER REDUCTION IMPLICATIONS

10.1 Not applicable.

Linked Reports, Appendices and Background Documents

Linked Report

- NONE

Appendices

- NONE

Local Government Act, 1972 Section 100D (As amended)

List of “Background Papers” used in the preparation of this report

List any background documents not already in the public domain including officer contact information.

- NONE

Officer contact details for documents:

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References

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- ⁱ Improving the health of Londoners. Transport action plan. (2014) Transport for London
<http://www.tfl.gov.uk/cdn/static/cms/documents/improving-the-health-of-londoners-transport-action-plan.pdf>
- ⁱⁱ Royal Colleges of Physicians and Paediatric Child Health, 2016, Every breath we take: the lifelong impact of air pollution
<https://www.rcplondon.ac.uk/file/2912/download?token=EAp84pJk>
- ⁱⁱⁱ Public Health Outcomes Framework, data on indicator 3.01 Fraction of mortality attributable to particulate air pollution for 2012 for those aged 30+ <http://www.phoutcomes.info/>
- ^{iv} Improving the health of Londoners. Transport action plan. (2014) Transport for London
<http://www.tfl.gov.uk/cdn/static/cms/documents/improving-the-health-of-londoners-transport-action-plan.pdf>
- ^v Public Health Outcomes Framework, data on indicator 3.01 Fraction of mortality attributable to particulate air pollution for 2012 for those aged 30+ <http://www.phoutcomes.info/>
- ^{vi} Deguen S and Denis Zmirou-Navier D, Social inequalities resulting from health risks related to ambient air quality—A European review. (2010) The European Journal of Public Health 20(1)27-35.
- ^{vii} Walton H, Dajnak D, Beevers S, Williams M, Watkiss P and Hunt A, 2015, Understanding the Health Impacts of Air Pollution in London, King’s College London
https://www.london.gov.uk/sites/default/files/HIAinLondon_KingsReport_14072015_final_0.pdf
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<https://www.rcplondon.ac.uk/file/2912/download?token=EAp84pJk>
- ^{ix} Griffiths CJ et al 2013, European Respiratory Society Annual Congress 2013
http://erj.ersjournals.com/content/42/Suppl_57/P3621.full.pdf
- ^x Deguen S and Denis Zmirou-Navier D, Social inequalities resulting from health risks related to ambient air quality—A European review. (2010) The European Journal of Public Health 20(1)27-35.