Havering’s Air Quality Campaign

Dr. Louise Dibsdall, Public Health
Marie-Claire Irvine, Public Protection
Types of Air Pollutants

- Sulphur Dioxide (SO₂)
- Lead
- Ozone (O₃)
- Nitrogen Dioxide (NO₂)
- Benzene
- Carbon Monoxide (CO)
- Particulate Matter (PM₂.₅ & PM₁₀)

www.havering.gov.uk
Particulate Matter

- can cause Strokes

Lung Cancer, Asthma, COPD, Bronchitis

Ultrafine PM can get into the body through the blood

PM$_{2.5}$ and NO$_2$ has been linked to bowel cancer

Ultrafine PM, NO$_2$ and SO$_2$ irritate the eyes, nose and throat

A few hours of PM$_{2.5}$ can bring on existing illness or heart attacks

Increased risk of stomach cancer

Air Pollution can cause kidney cancer

PM has been found in the reproductive organs and in unborn children
Who is Most at Risk?

- Preventable Mortality
- Hospital Admissions
- Emergency Department Visits
- Visits to Doctor
- Restricted Activity, reduced performance
- Medication
- Symptoms
- Unnoticed physiological changes

Severity of health effect

Proportion of the population affected

WHO, 2005

Havering London Borough

Making a Greater London
Measuring Air Quality

[Image of test tubes and equipment for measuring air quality]

Level of NO2 = 0

Level of NO2 e.g. = 34

Coloured cap with TEA coated grid

White cap removed for measuring

Open End
<table>
<thead>
<tr>
<th>Pollutant</th>
<th>UK Objective</th>
<th>Averaging Period</th>
<th>Date (by which to be achieved and maintained thereafter)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen dioxide - NO₂</td>
<td>200 μg m⁻³ not to be exceeded more than 18 times a year</td>
<td>1-hour mean</td>
<td>31 Dec 2005</td>
</tr>
<tr>
<td></td>
<td>40 μg m⁻³</td>
<td>Annual mean</td>
<td>31 Dec 2005</td>
</tr>
<tr>
<td>Particles - PM₁₀</td>
<td>50 μg m⁻³ not to be exceeded more than 35 times a year</td>
<td>24-hour mean</td>
<td>31 Dec 2004</td>
</tr>
<tr>
<td></td>
<td>40 μg m⁻³</td>
<td>Annual mean</td>
<td>31 Dec 2004</td>
</tr>
<tr>
<td>Particles – PM₂.₅</td>
<td>25 μg m⁻³</td>
<td>Annual mean</td>
<td>2020</td>
</tr>
<tr>
<td></td>
<td>Target of 15% (20% EU) reduction in concentration at urban background locations</td>
<td>3 year mean</td>
<td>Between 2010 and 2020</td>
</tr>
</tbody>
</table>
Annual Mean NO$_2$ Concentrations

2013

Modelled Predictions for 2020

Havering
Making a Greater London

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LBH Monitoring versus EU Limit Value

Monitoring Location

Concentration µg/m³

NO2 Annual Mean
EU Limit Value
1. Romford Town Centre – Thurloe Gardens (77% bus & 11% cars). Nearest receptor: 5 m (residential properties)

2. Romford/ Rush Green A124 Rush Green Road and Rom Valley Way (36% Bus & 37% HGV). Nearest receptor: 8 m (residential properties)

3. Rainham – Broadway (41% HGV & 31% Bus). Nearest receptor: 3 m (residential properties)

4. Gallows Corner. Nearest receptor: 20 m + (residential properties)

5. Roneo Corner. Nearest receptor: 5 m (residential properties)
1 in 3 people have at least one Long Term Condition

61.7 per 100,000 deaths from COPD
(London = 49.9; England = 52.6)

5.1% of all-cause mortality attributable to pollution
(London = 5.6%; England = 4.7%)

Why is Air Pollution important to Havering?

Child Poverty
30-33% of children live in poverty*

Areas in the most deprived quintile
- Gooshays
- Heaton
- Brooklands

(*after housing costs)

Children in income-deprived households

Car Ownership
70% households have at least one car / van

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What are we currently doing?

- Public Space Protection Orders (PSPOs)
- Air Quality Monitoring Network
- Promotion of AirTEXT app [http://www.airtext.info/signup](http://www.airtext.info/signup)
- Delivery of Air Quality initiatives in schools (Smarter Travel)
- ‘Clean-up’ of Havering’s fleet vehicles
- Inclusion of Air Quality Projects within the Youth Travel Ambassador Scheme
- Air Quality Policies included in Local Plan
- Air Quality Awareness and Behaviour Change Campaign
  - Miles the Mole “Do your Share & Let’s Clear the Air”
  - Accompanied by live performance and lesson plans
Miles the Mole Air Quality Campaign

Do your share & let’s clear the air!

1. Switch off your engine whenever possible to reduce pollution
2. Walk and cycle more to improve your health and the environment
3. Get into greening: plant and grow more trees and flowers
4. Enjoy the outdoors in Havering’s beautiful parks and open spaces
5. Sign up for air alerts
   www.airtext.info/signup

For further advice, visit
www.havering.gov.uk/airquality

Help Miles the Mole!

NATIONAL AIR QUALITY Conference & Awards Finalist 2017

www.havering.gov.uk
Future Air Quality Actions?

- We need to take a variety of action across the council to improve air quality. Examples include:
  - Deliver schemes that provide options for people to travel sustainably
  - Promote walking, cycling, use of public transport and STARS accredited travel planning programme
  - Lobby TfL to invest in improved public transport in Havering, such as cross-borough transport e.g. Rainham to Romford
  - Consider energy usage and provision of sustainable transport in all growth and development projects
  - Assess the Council’s own fleet vehicles and sustainable travel policies and practices
  - Monitoring & modelling to ensure we have intelligence on air quality hotspots
  - Greater cross-departmental working, e.g. with planning, regeneration, transport planning, housing & economic development
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