



Havering

LONDON BOROUGH

Havering's Air Quality Campaign

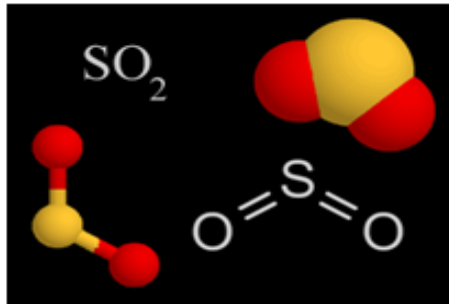
Dr. Louise Dibsdall, Public Health

Marie-Claire Irvine, Public Protection

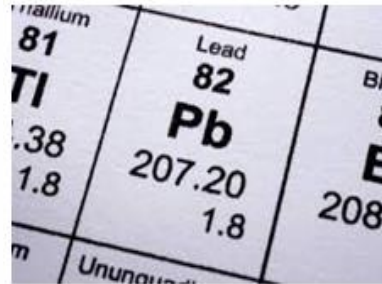


Types of Air Pollutants

Sulphur Dioxide (SO_2)

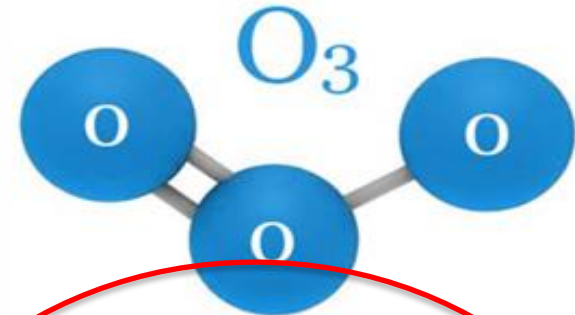


Lead

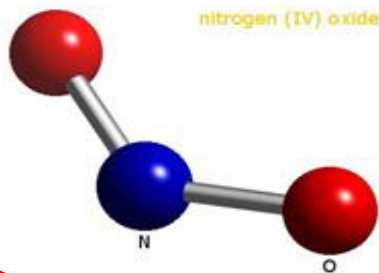


81 Tl 208.9804 3.04	82 Pb 207.2 1.8	83 Bi 208.9804 3.04
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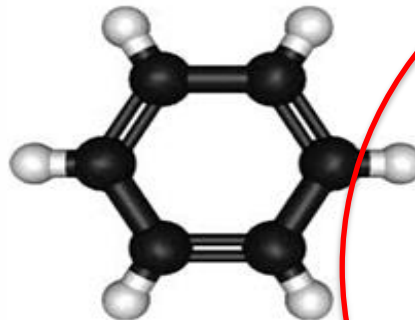
Ozone (O_3)



Nitrogen Dioxide (NO_2)

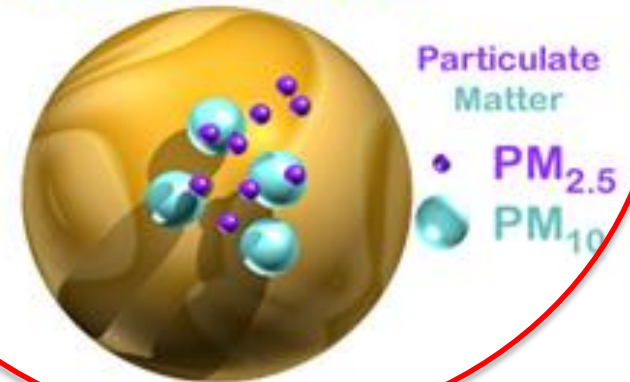


Benzene

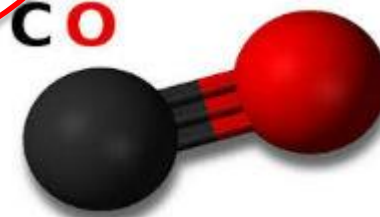


Particulate Matter
($\text{PM}_{2.5}$ & PM_{10})

Beach Sand Grain



Carbon Monoxide (CO)



Health Impacts of Air Pollutants



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Particulate Matter
can cause Strokes

Ultrafine PM, NO₂ and SO₂
irritate the eyes, nose and
throat

Lung Cancer, Asthma,
COPD, Bronchitis

A few hours of PM_{2.5}
can bring on existing
illness or heart
attacks

Ultrafine PM can get
into the body
through the blood

Increased risk of
stomach cancer

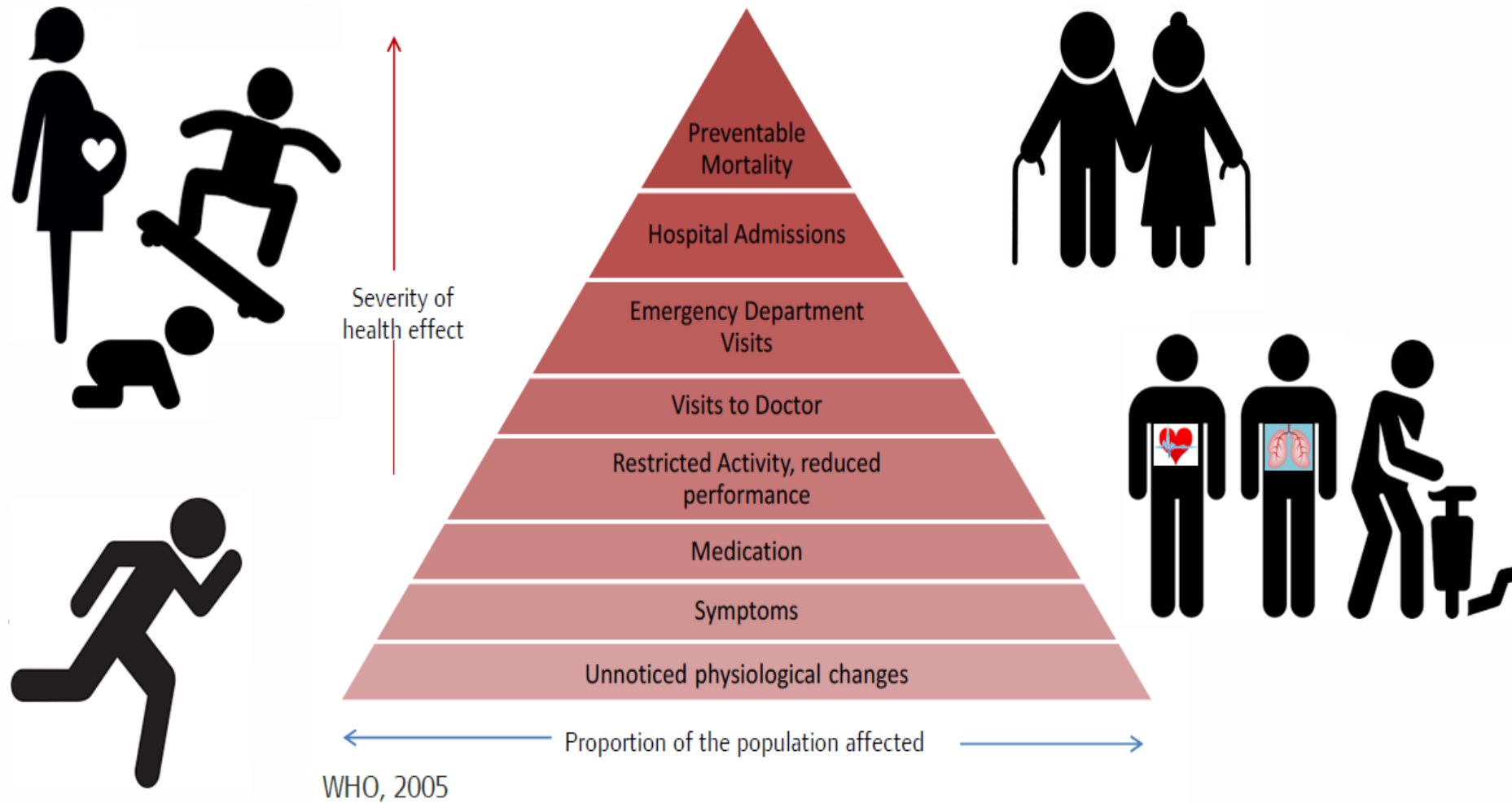
PM_{2.5} and NO₂ has
been linked to bowel
cancer

Air Pollution can
cause kidney cancer

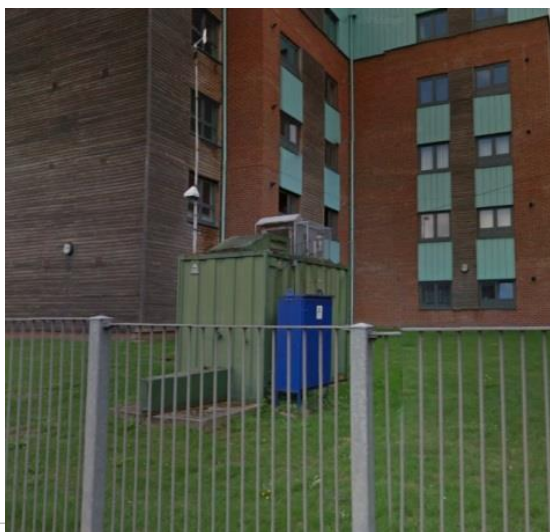
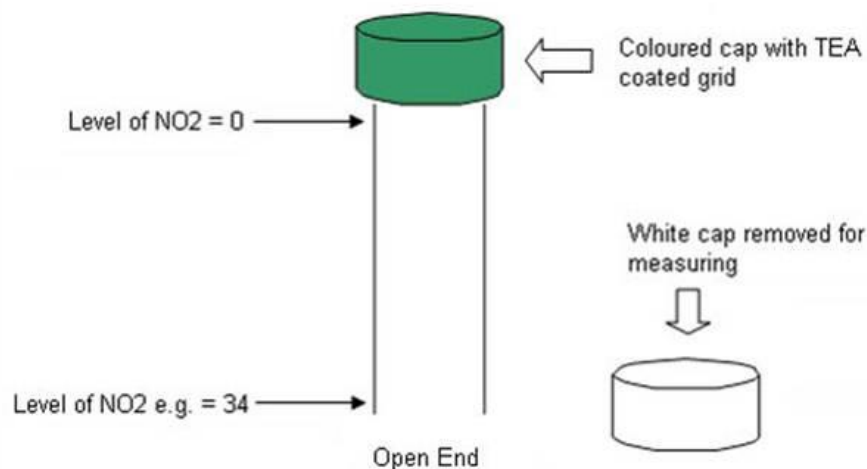
PM has been found in
the reproductive organs
and in unborn children



Who is Most at Risk?

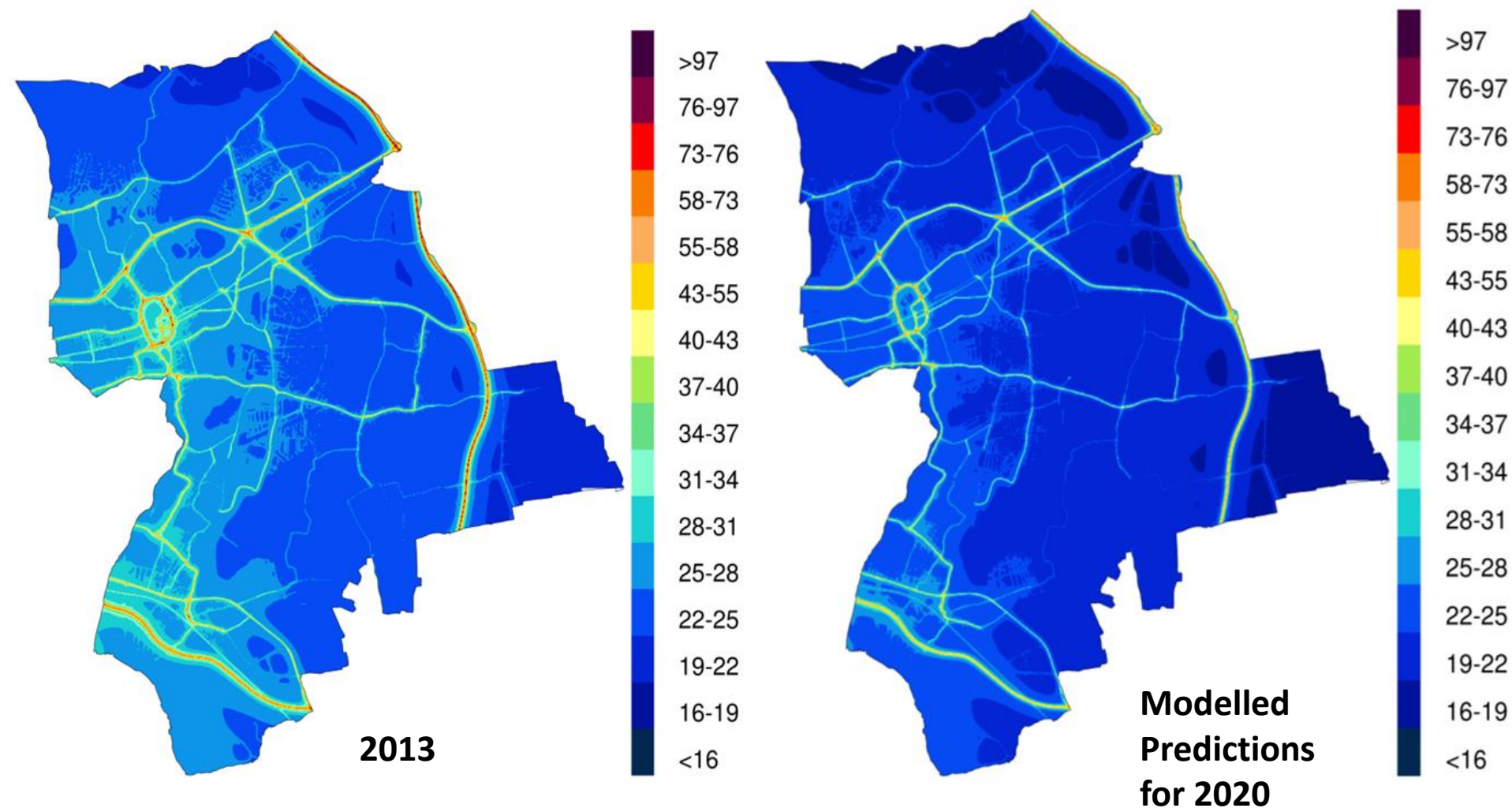


Measuring Air Quality

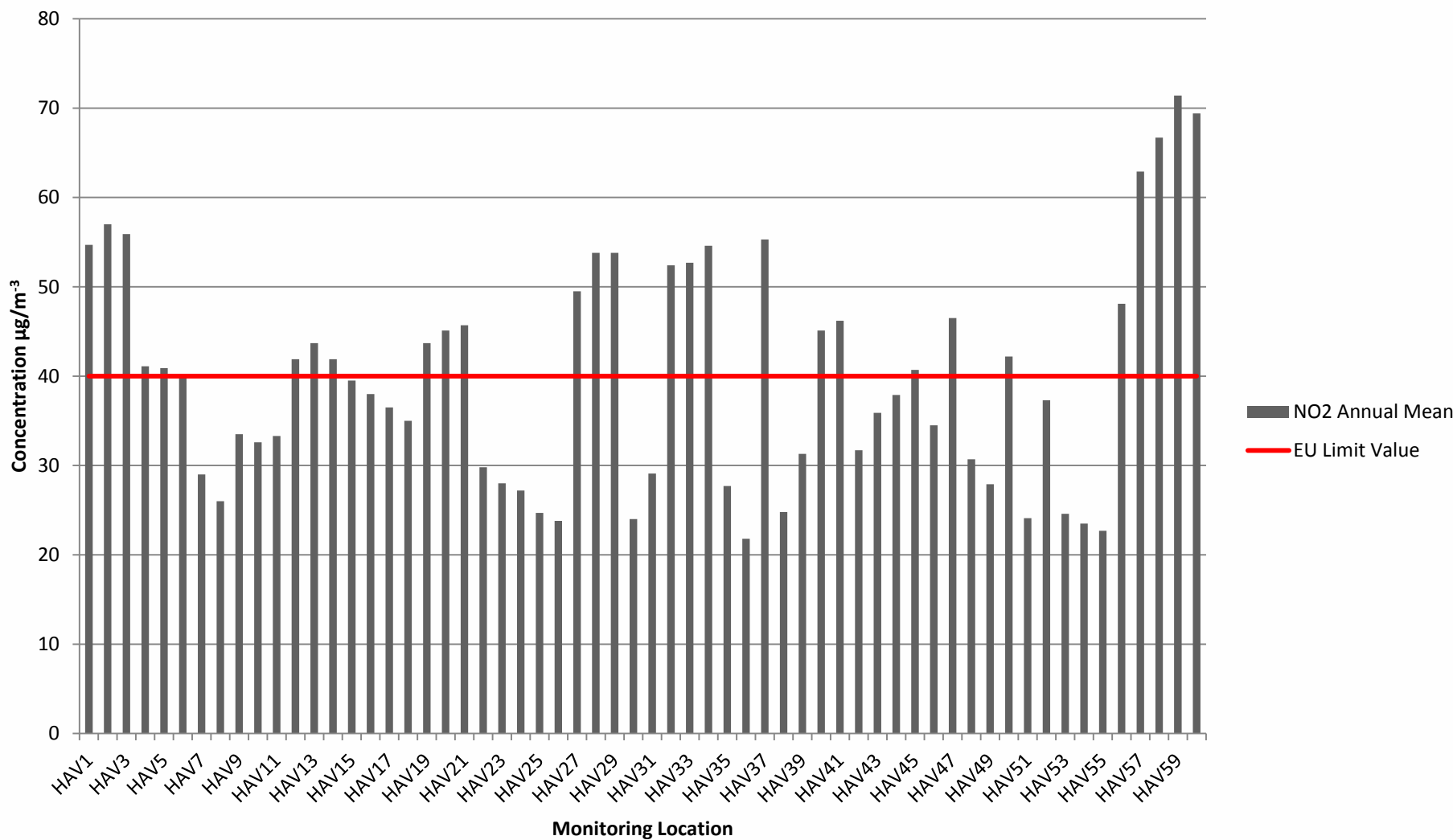


Pollutant	UK Objective	Averaging Period	Date (by which to be achieved and maintained thereafter)
Nitrogen dioxide - NO ₂	200 µg m ⁻³ not to be exceeded more than 18 times a year	1-hour mean	31 Dec 2005
	40 µg m ⁻³	Annual mean	31 Dec 2005
Particles - PM ₁₀	50 µg m ⁻³ not to be exceeded more than 35 times a year	24-hour mean	31 Dec 2004
	40 µg m ⁻³	Annual mean	31 Dec 2004
Particles – PM _{2.5}	25 µg m ⁻³	Annual mean	2020
	Target of 15% (20% EU) reduction in concentration at urban background locations	3 year mean	Between 2010 and 2020

Annual Mean NO₂ Concentrations



LBH Monitoring versus EU Limit Value



Local 'Hotspots' in Havering

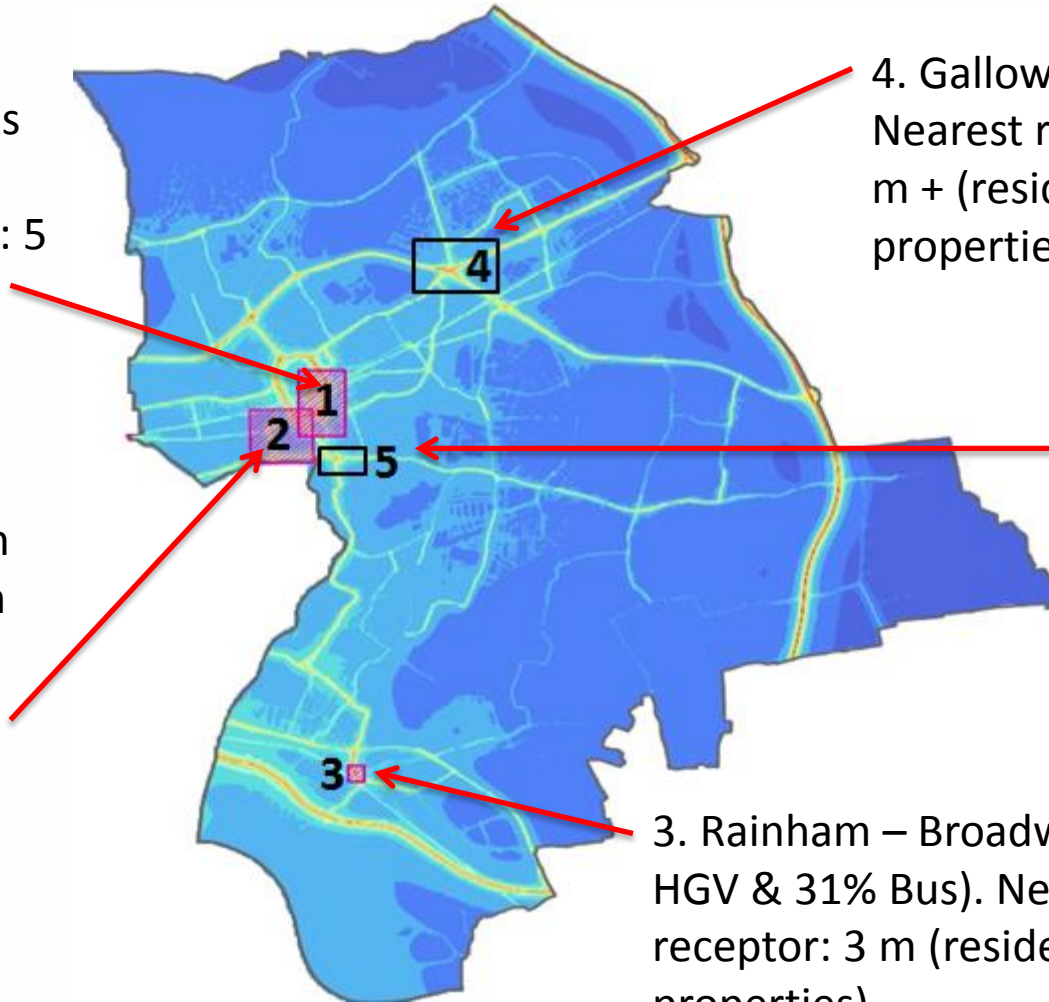
1. Romford Town Centre – Thurloe Gardens (77% bus & 11% cars). Nearest receptor: 5 m (residential properties)

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

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

5. Roneo Corner. Nearest receptor: 5 m (residential properties)

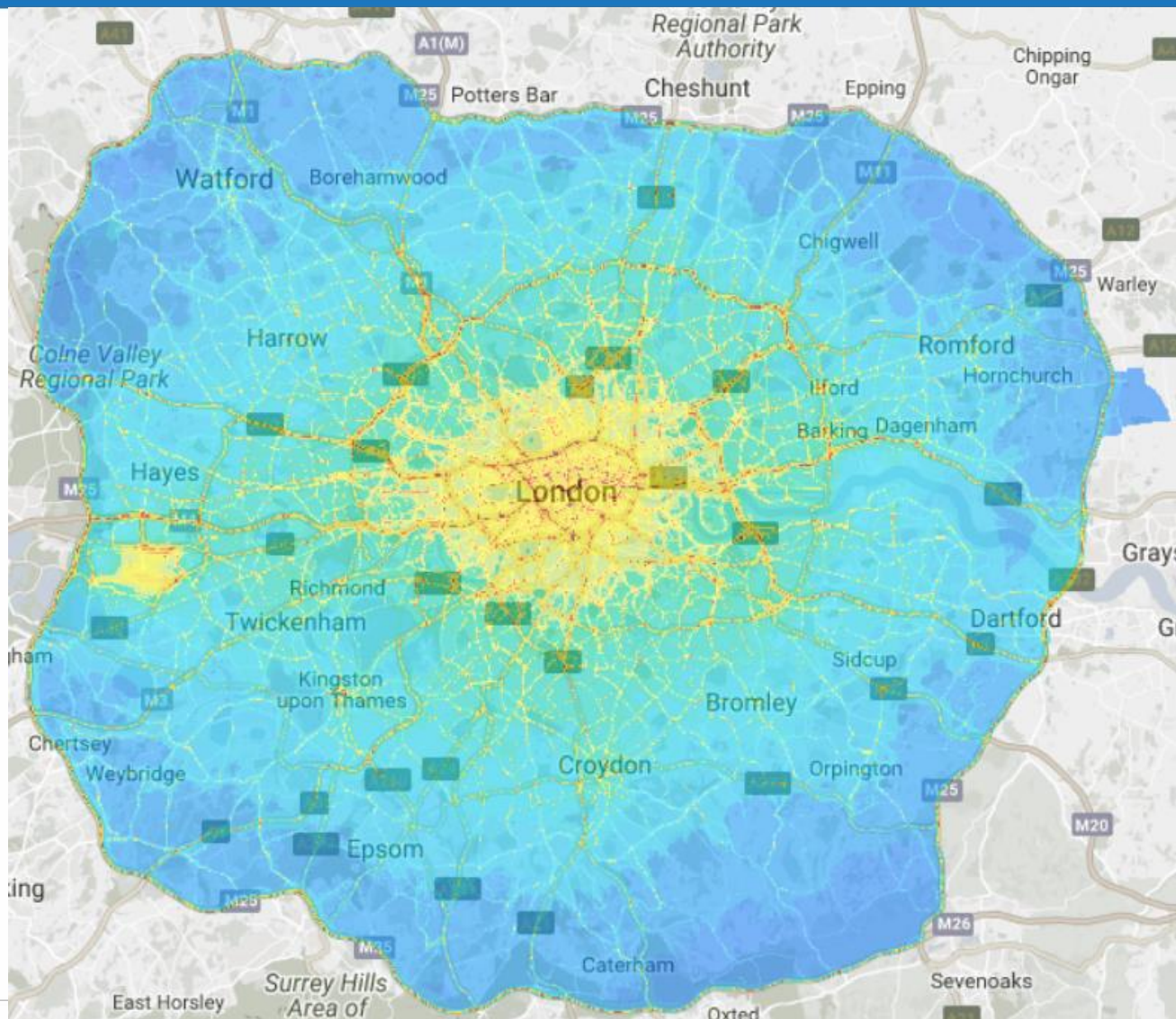
3. Rainham – Broadway (41% HGV & 31% Bus). Nearest receptor: 3 m (residential properties)



Annual Mean NO₂ Concentrations in London 2013



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Why is Air Pollution important to Havering?



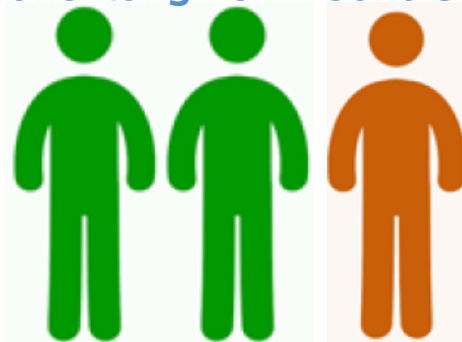
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61.7 per 100,000
deaths from
COPD
(London = 49.9;
England = 52.6)

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

**1 in 3 people have at least
one Long Term Condition**



Household Composition
mainly composed of



Car Ownership



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



**Children in income-
deprived households**



What are we currently doing?

- Public Space Protection Orders (PSPOs)
- Air Quality Monitoring Network
- Promotion of AirTEXT app <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



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



Miles the Mole in Primary Schools



- 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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