

Most of London's NHS facilities exceed legal air pollution limits

New analysis suggests air around London's NHS facilities is highly polluted, harming both patients and staff

Some of London's biggest teaching hospitals were found to be located in areas with air pollution levels well above legal limits

Researchers call for "a series of hard-hitting measures" in London and further analysis in other urban areas

Air pollution at most of London's NHS facilities, including hospitals and GP surgeries, is well above legal limits, according to new data from King's College London and the UK Health Alliance on Climate Change. It provides additional proof that London's air is toxic and harms the most vulnerable in society, including children, older adults and people with pre-existing conditions who need to travel regularly to health centres.

The results are published as an interactive map by **The BMJ** today to mark the UK's first ever **National Clean Air Day** - alongside an interview with London's Mayor, Sadiq Khan, and an editorial about the 40,000 air pollution related deaths figure co-authored by the chair of the Royal College of General Practitioners, Dr Helen Stokes-Lampard, and the chair of the Royal College of Physicians Working Party on air pollution, Professor Stephen Holgate.

A selection of articles discuss other evidence around air quality and its links to ill health.

There is robust scientific evidence linking poor air quality to the increased rates of heart disease, chronic lung disease (COPD), asthma and lung cancer. Emerging evidence also suggests links between exposure to air pollution and type 2 diabetes, obesity and dementia. In particular, air pollution affects infants' and children's health as their hearts and lungs develop.

Commenting on the findings, Professor Neena Modi, President of the Royal College of Pediatrics and Child Health and Professor of Neonatal Medicine at Imperial College London, said:

"London's air is adding to the city's health burden and disproportionately affecting children. Exposure to air pollutants during pregnancy affects babies' development before they are born. Children are also particularly vulnerable so action to reduce air

pollution is urgently needed to protect their health and help prevent illnesses such as asthma and pneumonia.”

Researchers at King’s College’s Environmental Research Group worked with the UK Health Alliance on Climate Change, which represents 600,000 health professionals working in NHS trusts and health centers across the country, to map air quality of 2,200 medical facilities including London’s major hospitals, several GP centres, clinics, and general health facilities.

Overall, a distinct majority (74%) of medical facilities in inner London were located in areas with illegal levels of nitrogen dioxide (NO₂). On National Clean Air Day, the UK government will close its consultation on its revised Air Quality plan aimed to reduce levels of nitrogen dioxide across the country as 38 out of 43 UK areas still exceed legal limits.

This analysis is “additional proof that London’s air is toxic and harms the most vulnerable of us,” say the authors, and the findings “reinforce the message that we need a series of hard-hitting measures in London.” They call for an urgent rethink on the current transport model across the country and further analysis of air pollution around health facilities in other urban areas.

London’s Mayor, Sadiq Khan believes that cleaning up London’s air “will help London become a more open, vibrant and healthy city.”

In an interview with Fiona Godlee, The BMJ’s editor in chief, he says he wants to see more electric buses and more space given to people who want to walk and cycle - and he argues that the government’s current Air Quality plan “is nowhere near far-reaching enough to tackle the issue.”

[Ends]

Note to Editors:

The Big Picture: Most London hospitals and clinics exceed air pollution limits

<http://www.bmj.com/content/357/bmj.j2855>

Interactive map: The air we breathe (in London’s health centres) <http://bmj.co/hospAir>

Interview with Sadiq Khan <http://www.bmj.com/content/357/bmj.j2842>

Editorial: Air pollution - a wicked problem <http://www.bmj.com/content/357/bmj.j2814>

Analysis: Air pollution - new ways to solve an old problem <http://www.bmj.com/content/357/bmj.j2713>