



APPENDIX 5

**BREATHE LONDON
SCHOOL FACT SHEET
FOR JULY 2019 LAUNCH**



Air quality at your fingertips

Many people know that toxic air causes illness, disease and even death, but few are aware of the complexities of the problem. Invisible air pollution can vary between locations just a few metres apart, and children are especially vulnerable to its harmful effects. Breathe London is a new collaborative project that aims to paint a clearer picture of air quality across the city, including through its network of 100 state-of-the-art sensor “pods” on buildings and schools, which complements and expands upon London’s existing monitoring network. Thanks to your support and participation, Breathe London has been measuring air pollution at Tower Bridge Primary School since October 2018, and we would like to share some initial findings.

Measuring and monitoring

Air quality is improving, but remains a huge challenge for London. For example, millions of Londoners are still exposed to [illegal levels of nitrogen dioxide](#) (NO₂), a harmful pollutant that largely comes from transport.

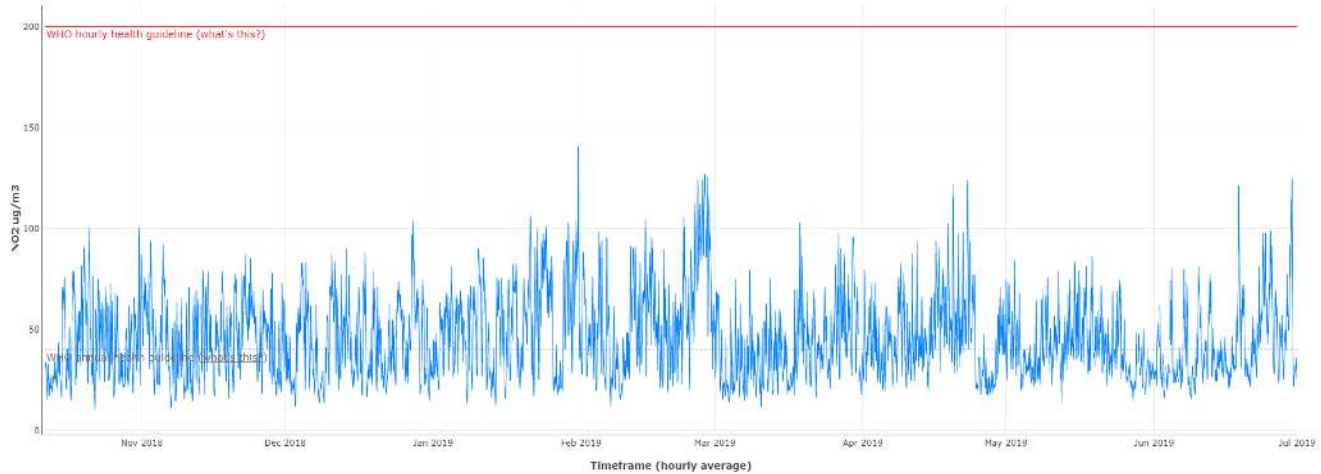
London families need better information on pollutants and their health effects, as well as readily available—and understandable—air pollution data and forecasts. That’s why Breathe London is combining state-of-the-art technology with new data analytics, helping identify pollution “hotspots.”

The Breathe London pods collect data and continuously transmit air quality measurements, including at sensitive locations like schools and hospitals. This type of data collection will help visualize the existing, invisible threat, leading to more effective policies and, ultimately, healthier air.

Managed by Environmental Defense Fund Europe in partnership with the Mayor of London, Breathe London is a year-long, multi-partner project funded by C40 Cities and the Children’s Investment Fund Foundation. The project brings together some of the UK’s top health and scientific experts with leading tech companies.



Nitrogen dioxide (NO₂): Tower Bridge Primary School (Tower Bridge Road)



Your school's info

By clicking on BreatheLondon.org's map, you can select your location or school to get near real-time and past air pollution data. You can also download the data.

These findings are compared to the World Health Organization (WHO) air quality guidelines, the most widely accepted assessment of the health risks of air pollution. According to the WHO, long-term exposures to NO₂ above 40 micrograms per cubic metre (annual average) can worsen symptoms of bronchitis in asthmatic children and adversely impact lung function. In the short-term, exposure to NO₂ levels exceeding 200 micrograms per cubic metre (hourly average) can cause acute health effects, including inflammation of the airways. The WHO guideline for NO₂ is the same as the UK legal limits.

The graph pictured above displays hourly average concentrations of NO₂, taken since October 2018 through June 2019, at Tower Bridge Primary School. During this period, the average NO₂ level was 45.51 µg/m³, which exceeds the annual average level recommended by WHO and the UK legal limit. In the same period, the NO₂ levels at this site did not exceed the WHO and UK short-term (hourly) legal limits of 200 µg/m³.

In addition to NO₂, Breathe London measures carbon dioxide (CO₂), particulate matter (PM₁₀ and PM_{2.5}) and, in some locations, ozone (O₃). These pollutants' measurements will be available on the Breathe London website at a later date.

Data to action

There are small steps you can take in your daily life to reduce pollution like setting up a community carpool to school or work, and promoting no idling zones outside sensitive areas like schools, nurseries and senior centers. The Mayor's office also [provides a toolkit](#) of measures to improve air quality at schools.

But getting to the root of London's air-quality problems requires collective action on a broader scale. Breathe London's granular, local monitoring is essential for identifying the contributing sources, then introducing policies to control and eliminate them.

To make London a safer place for kids and people of all ages to live, the Breathe London data can help:

- Inform air quality plans to help local authorities and schools in the most polluted areas reduce pupils' exposure to hazardous pollution.
- Measure the impact of initiatives – like no idling zones and School Streets street closures – on the levels of pollution immediately outside schools across London.
- Support the development of planning policy to ensure that new schools and other buildings used by vulnerable populations are not located in areas of poor air quality.

The Breathe London data aims to provide knowledge that can generate support for strengthening national clean air policies, such as the upcoming environment bill.

For more information, please contact hello@BreatheLondon.org 0203 310 5912

Partner organisations: Air Monitors UK, C40 Cities, CERC, Children's Investment Fund Foundation, Environmental Defense Fund, Google Earth Outreach, Kings College of London, the Mayor of London, National Physical Laboratory and University of Cambridge.