

Clean Air in London builds on Aphekom's work to increase public understanding of air pollution

CAL increased understanding among policy makers, the general public and others of the dangers of air pollution to the health of children in homes and schools near busy roads in London

By Simon Birkett, Founder and Director of Clean Air in London

Immediately after the Aphekom project released its findings in March 2011, Clean Air in London (CAL) launched a multipronged effort to obtain relevant and actionable local information on air pollution and to raise awareness of the project's findings among multiple audiences in London.

These efforts included informing policy makers in Parliament and the London Assembly; and reaching the general public and others through the media.

Each effort produced significant results that extended the impact of Aphekom's work.

Obtaining information on school children's exposure to air pollution in London

One of the Aphekom project's main aims was to quantify the impact of air pollution on populations living near busy roads. After its workshop in the spring of 2011, Aphekom's worrying findings inspired CAL to alert leading politicians and the general public to the dangers of air pollution to children. CAL is a not-for-profit company that campaigns for full compliance throughout London and elsewhere with World Health Organization guidelines for air quality.

Immediately after Aphekom released its findings in March 2011, CAL asked Transport for London (TfL), which manages London's transport network, to provide the number of London schools near roads carrying over 10,000 vehicles per day on average, a level analyzed by the Aphekom project.

On 6 April 2011, TfL replied identifying 1,148 and 2,270 schools and other educational places located respectively within 150 and 400 metres of such roads.

Raising awareness among policy makers of the dangers to school children

CAL was concerned about the impact on children's health identified by Aphekom. To raise awareness of this impact among policy makers and leading politicians, CAL submitted the list of schools provided by TfL to Parliament's Environmental Audit Committee on 30 May 2011. CAL also presented it at a cross-party 'Air pollution and health' seminar organised by Darren Johnson, a London Assembly representative of the Green Party, on 20 June 2011.

As a result of these initiatives, Parliament's Environmental Audit Committee highlighted the Aphekom results, and the Mayor of London approved a London Plan that included many of the legal protections CAL had been seeking for vulnerable populations.

Building public understanding of the dangers to school children

To reach a broader population of concerned individuals, CAL also sent the list of schools, together with a draft media release, to its contacts at BBC London television and the Evening Standard newspaper. The impact was extraordinary.

‘Schools and traffic do not mix in health stakes’ was the top item on BBC London television news from 6.30 am to 10.30 pm on 21 June 2011. The story also appeared on BBC online as ‘Pupils’ health ‘at risk’ from London road pollution’ and in the Evening Standard the same day in an article titled, ‘Children are at risk from pollution as schools are close to busy roads’. The BBC video included an interview with the head teacher at one of the schools near the busiest roads and with a pupil. Over subsequent months, many of London’s local newspapers carried the story on their front page.

For CAL, this effort produced one of its most powerful news stories ever with millions of people likely to have seen it. We would also like to feel it contributed to air pollution being the top environmental issue during the Mayoral election in London in May 2012 less than a year later.

Other findings of the Aphekom project

The Aphekom team did not just highlight the dangers of air pollution to the general population. It estimated that air pollution from roads carrying on average over 10,000 vehicles per day could be responsible for some 15 to 30 % of all new cases of asthma in children and of COPD (chronic obstructive pulmonary disease) and CHD (coronary heart disease) in adults 65 years of age and older in Europe.

Subsequent work on air pollution near busy roads in London

CAL’s groundbreaking work highlighting the Aphekom project’s importance has been taken forward by others such as Policy Exchange, which is the UK’s leading think tank.

In July 2012, Policy Exchange published a report titled ‘Something in the Air: The forgotten crisis of Britain’s poor air quality’. With help from CAL, it found that more than 320,000 children (including more than 180,000 under the age of 11) in London attend the 1,098 schools within 150 metres of roads that carry more than 10,000 vehicles per day on average. (TfL’s number of 1,148 schools included a small amount of duplication and several higher-education establishments not attended by children.)

Policy Exchange also found inequality to be a serious concern. In the 10 % of London with the highest concentrations of dangerous airborne particles (PM₁₀), 5-10 year old children are 41 % more likely than the London average to be eligible for school meals, and residents are 27 % more likely than the London average to be on income support. The same pattern was seen in the 10 % of London with the highest concentrations of nitrogen dioxide (NO₂).

Previously CAL had highlighted some 4,075 deaths attributable to short-term exposure to air pollution in London in the Great Smog of 1952, when we knew nothing about the health impact of long-term exposure to air pollution. Six decades later, in June 2010 the Mayor of

London was able to report 4,267 deaths attributable to long-term exposure to PM_{2.5} alone in London in 2008.

While levels of air pollution have declined in the last 60 years, recent research by Aphekom, the UK's Committee on the Medical Effects of Air Pollutants (COMEAP) and others has shown that its effects on the young and adults are much greater than we ever thought. Air pollution thus continues to be the biggest risk to public health after smoking.

Turning science into action: Lessons from the Aphekom project

There are many important lessons to be learned from Aphekom.

First, it is important that leading scientists, such as Professor Künzli, Dr Sylvia Medina and Professor Kelly (Chair of COMEAP), highlight concerns and ground-breaking scientific research to stakeholders who need to know.

Second, it is important that scientists determine what information should best be communicated and how it should be communicated to build public understanding of the issues. It's also important to define what mitigation, adaptation and policy actions are needed.

Third, thorough follow-up can achieve major benefits for public health. As one example, the London Plan published in July 2011 included specific provisions to protect vulnerable people from air pollution. Concerted communication efforts meant that it took just a few months for major advances in scientific research to make headlines and contribute to achieving greater public-health protection in London through tighter planning laws.

European Year of Air in 2013

EU Environment Commissioner Janez Potočnik has announced that 2013 will be the "European Year of Air", during which the European Commission will review EU policy on air quality.

To further improve protection against air pollution, in 2013 the Aphekom project will continue to inform the European Commission about its work.

CAL has communicated to the European Commission that exhaust emissions from traffic should be regulated near schools and/or vulnerable populations until it can be shown that they no longer pose a risk to public health.

CAL wants the European Year of Air to build public understanding of the dangers of air pollution across Europe, with advice for people on protecting themselves (through adaptation) and reducing pollution for themselves and others (through mitigation). The year's activities should also include: robust enforcement of existing air-pollution laws; new legislation to reduce harmful emissions at source (e.g., non-road mobile machinery); and ensure continuity and the further tightening of health and legal protections.

CAL is convinced that by tackling air pollution successfully through a mixture of technology, behavioural change and political will, Europe can show the world how to address wider sustainability issues.

About CAL

Clean Air in London (CAL) is a not-for-profit organisation that aims to achieve urgently and sustainably full compliance with World Health Organisation guidelines for air quality throughout London. It is responsible for the cross-party campaign of the same name that was established in 2006.

Simon Birkett, Founder and Director of CAL, has been presented with a London 2012 Sustainability Ambassadors Award for his outstanding contribution to achieving a truly sustainable Olympic and Paralympic Games, in particular for his focused commitment to tackling air quality, climate change and sustainability issues.

To learn more about CAL please visit <http://cleanairinlondon.org>.

About Aphekom

The Aphekom project, coordinated by the French Institute for Public Health Surveillance (InVS), investigated and reported on the health impacts of air pollution in 25 cities across Europe.

The project showed that life expectancy and monetary benefits increase significantly when levels of fine particles are reduced further in European cities. It revealed that living near busy roads substantially increases the total burden of disease attributable to air pollution. And its work underscored the benefits from regulating pollution near busy roads beyond the achievements of current EU legislation.

The Aphekom project, which ran from July 2008 to March 2011, was co-funded by the European Commission's Programme on Community Action in the Field of Public Health (2003-2008) under Grant Agreement No. 2007105, and by the many national and local institutions that dedicated resources to fulfilling this project.

To learn more about the Aphekom project, its methods and findings, please visit www.aphekom.org.

Useful links

Schools and traffic do not mix in the health stakes: <http://www.bbc.co.uk/news/uk-england-london-13863502>

Pupils' health 'at risk' from London road pollution: <http://www.bbc.co.uk/news/uk-england-london-13847843>

Children are at risk from pollution as schools are close to busy roads:

<http://www.standard.co.uk/news/children-at-risk-from-pollution-as-schools-are-close-to-busy-roads-6413516.html>

Map of educational sites and the most polluted roads:

<http://www.jennyforlondon.org/schools/>

Mayor of London's London Plan:

<http://www.london.gov.uk/priorities/planning/londonplan>

Environmental Audit Committee – Air quality: a follow up report:

<http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenvaud/1024/1024.pdf>

Diesel engine exhaust is carcinogenic to humans: http://press.iarc.fr/pr213_E.pdf

Something in the Air: The forgotten crisis of Britain's poor air quality:

<http://www.policyexchange.org.uk/publications/category/item/something-in-the-air-the-forgotten-crisis-of-britain-s-poor-air-quality>