Safe Air Schools UK
Inclusive Sustainable Equitable Education

Open Letter

Jenny Gilruth, Cabinet Secretary for Education and Skills (Scotland)
Bridget Philipson, Secretary of State for Education (England)
Paul Givan, MLA, Minister of Education (Northern Ireland)
Lynne Neagle, Cabinet Secretary for Education (Wales)

Dear Ministers,

Subject: Urgent Action on Classroom Air Quality to Protect Children and Teachers

Safe Air Schools is a parent-led organisation, supported by experts, working to improve classroom air quality across the UK. Our approach is rooted in inclusion, equity, sustainability, and evidence-based action.

We write to express our deep concern for the health and well-being of teachers and pupils this winter and beyond. The issues, their causes and consequences are evident in schools across the country. We therefore urge ministers in all four UK administrations to use their devolved powers to safeguard the development, health, and well-being of all children, and to uphold teachers' rights to a safe workplace.

In October, the Department for Education confirmed that **illness is the leading cause of school absence** and encouraged schools to use the CO_2 monitors provided to them[1]. Illness is also the leading reason for school absence in all four nations[2], for both pupils and teachers. This has been true for at least 10 years, and rates have risen since lockdowns were lifted[2,3].

The link between classroom air quality and illness cannot be ignored. UK children spend most of their time indoors, averaging 68 minutes outside daily[4]. Exposure to airborne contaminants from both indoors and outside poses a well-documented risk to both immediate and long-term health and development[5].

Inside schools, these include:

1. **Airborne allergens**, e.g dust mite debris, pollen, mould spores and fragments, pet dander;
2. **Airborne pathogens**, such as cold viruses, influenza, COVID-19, RSV, measles and Strep. A;
3. **Airborne particles,** such as dust, smoke, PM2.5, and ultrafine particles, including those released by laser printers and photocopiers, for example.
4. **Gases,** from cleaning products, paints, glues, building materials, photocopiers and printers. Potential carbon monoxide sources include: Bunsen burners in science laboratories; gas ovens and hobs in food technology rooms; kilns in workshops; car parks close to open windows; generators; heaters; and faulty heating appliances (boilers).

The synergistic effects should also be considered.

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We all share the same indoor air, but when it carries contaminants, inside schools, our medically vulnerable teachers and children face the most consequences. Every child deserves an inclusive, equitable education, and when we protect our most vulnerable, we protect everyone.

Ella's Law reminds us of the devastating harm air pollution can inflict on young lungs. Outdoor air pollution does not stop at the classroom door. Measures like closing windows are insufficient, and doing so reduces the ventilation required to reduce CO_2 and the spread of airborne infection[6]. Research shows that around **80% of particulate pollution in classrooms originates from outdoors**[7], meaning that outdoor air quality is a significant factor in what children breathe indoors. Cleaning the air inside classrooms must be prioritised alongside outdoor measures.

Allergy UK states that **allergy** is the underlying cause of asthma in 80% of cases[8] and findings from the National Child Mortality Database indicate that **one child dies from asthma every 4 weeks**[9]. Hospital admissions for childhood asthma and allergies rise sharply after school holidays, linked to high-density, poorly ventilated classrooms[10]. This is not just an education issue, but a **public health emergency.**

In homes affected by damp, mould, or cold, 30% of parents report their children have missed school as a result[11]. Too often, these children return to classrooms compromised by the same hazard. Surveys show that **45% of teachers report mould or damp in their school buildings**[12].

Alongside seasonal infections, **pupils and teachers now face year-round[13] exposure to SARS-CoV-2**. UK surveillance[14] and expert organisations[15] report ongoing transmission because SARS-CoV-2 spreads more easily than other respiratory viruses, immunity is short-lived, vaccine access is limited, and much activity occurs indoors. Current surveillance shows flu cases rising among school-aged children after an early start to the season[16]. National media outlets are already reporting **illness outbreaks and school closures**[17]. Declining paediatric vaccine uptake leaves measles and whooping cough a concern across nations[18]. These infections - many of which **trigger asthma and allergies** - make higher illness-related absence in schools both predictable and foreseeable. Promoting 100% attendance in this context puts pupils and teachers at a higher health risk and is counterproductive during periods of widespread illness. If we accept that school closures are unacceptable, we must invest in preventing them.

Teachers and education staff have been **disproportionately** affected by Long COVID[19], while an estimated **112,000 children**[20] are living with its long-term effects, minimal treatment and no cure. Yet as we learn to live with SARS-CoV-2, a highly contagious airborne virus, the NHS warns that transmission is most likely to occur indoors and in crowded spaces - such as schools.

With 2,796,380 teaching days lost to sickness each year in England, reducing illness would protect health and cut the need for parental leave and supply teachers, who currently account for 3.9% of per-pupil teaching expenditure[21].

Climate change is worsening indoor air quality[22]. Rising temperatures, more frequent heatwaves, and changing humidity help some viruses survive longer and spread more easily indoors[23]. Warmer, more humid conditions also increase dust mites - major triggers for asthma and allergies[24] - while longer, earlier pollen seasons increase children's exposure to allergens at school. More frequent storms and flooding lead to damp and mould, especially in older or poorly ventilated schools. These increases in

damp, mould, dust mites, pollen, and outdoor particulate pollution all **elevate indoor pollutant levels[25], increasing respiratory illness and allergy flare-ups**[26].

Nationwide Solutions

Research consistently shows that improving air quality in schools does more than improve attendance. Cleaner air supports pupils' well-being, sharpens concentration, and strengthens learning outcomes[27,28]. The Royal College of Paediatrics and Child Health warns that exposure to air pollution early in childhood can impair brain development, reduce cognitive function, and weaken attention and memory. These early harms have long-term consequences: children exposed to polluted air are more likely to carry poorer health and reduced resilience into adulthood**. Ensuring good air quality in schools is not simply a measure to minimise short-term illness, but an essential investment in children's life chances and long-term health.**

Safe Air Schools supports both immediate actions to improve indoor air quality and longer-term measures to ensure clean outdoor air across all school settings.

Immediate measures, like opening (or closing) windows, are not enough[6,7].

We welcome the **£67 million investment**[29] in CO_2 monitors UK-wide. We cannot improve what we cannot see. However, barriers to use are well documented[30], many remain unused, and there is currently **no requirement to record or act on readings**[31]**.** Without meaningful use and follow-up, this investment cannot achieve its purpose.

We also welcome the Environmental Improvement Plan 2025 and endorse the Royal College of Paediatrics and Child Health (RCPCH) recommendation on outdoor air quality[32]. We recognise that outdoor pollution can readily infiltrate school buildings, exposing children and staff to harmful indoor contaminants. Evidence shows that exposure to pollutants such as PM2.5, PM10, and NO_2 is associated with impaired executive function, working memory, attention, and reasoning, as well as lower academic achievement and test performance[33]. The RCPCH's key recommendations include:

- Monitoring PM2.5 and NO_2 levels outside schools;
- Empowering local authorities to close or divert roads during high pollution events;
- Rolling out School Streets nationally.

Portable HEPA air filters provide an immediate, effective, and universally applicable way to clean indoor air, reduce illness-related absence, and support equitable access to in-person learning. The DfE offers guidance on purchasing air-cleaning units and on using the units they have supplied. It is outdated. Schools are left without effective support[34] and no funding.

We commend the **London Mayor's Schools Programme**[35] and **Hertfordshire County Council's**[36] **commitment** to supporting air filtration. These examples of local leadership show that following the

science and taking preventative action are both possible and effective. But **clean air should not depend on postcodes**.

At Safe Air Schools, using independent, third-party data, we have demonstrated the running costs of a selection of commercial air filters, on a per-child basis, showing that for the price of a single pizza, a child can breathe safely in class for an entire year. The calculations assume 30 pupils per class, 8 hours of operation per day, and 190 school days per year. They also include one annual filter replacement per unit, with multiple units per classroom as required to achieve six air changes per hour. (Experts recommend a minimum ventilation rate of 10 L/s per person and six air changes per hour, measured under normal occupancy conditions[37]).

We call on the Governments to act urgently and:

1. **Align attendance policy with public health** by ending 100% attendance awards, which disadvantage pupils at higher health risks and are counterproductive during periods of high illness circulation.
2. **Launch a national public health campaign** on the full range of indoor air contaminants to educate the school community.
3. **Update national school guidance (BB101) and make indoor air quality a statutory standard** across all UK nations, with a target of 800ppm[38] CO_2. Require continuous monitoring of indoor air quality, including CO_2, PM2.5 and other key indicators, with results audited, publicly reported, and acted upon. Ensure a duty to install CO alarms compliant with BS EN 50291 (or its modern equivalent) as a basic safety measure.
4. **Provide immediate funding for HEPA air filtration** in classrooms; introduce or update guidance on air filtration.

Safe Air Schools UK is proud to be a founding signatory of the Global Pledge for Healthy Indoor Air, launched at the **United Nations in New York**[39] during the "Healthy Indoor Air: A Global Call to Action" event, convened by the Australian Academy of Science, Burnet Institute, Brown University School of Public Health and The OSLUV Project. **This pledge is a commitment towards healthy indoor air for all**. The UK has led the world in protecting public health before. We now urge ministers in all four UK administrations to show the same leadership again by supporting the pledge[40] and commit to striving towards clean, safe indoor air for every child and teacher in every classroom.

We would welcome your response at your earliest convenience.

Yours sincerely,

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SUPPORTING ORGANISATIONS

Airborne Allergy Action

Allergy UK

Anaphylaxis UK

AVM Consult Ltd

The Benedict Blythe Foundation

The British Society for Allergy & Clinical Immunology

Clean Air Advocacy Ireland

Clean Air Hampshire

Clean Air Where

Clean Indoor Air Toronto

Clinically Vulnerable Families

The Ella Roberta Family Foundation

Freshbreeze Environmental Ltd

GO AQS

HouseFresh

Inclusive New Normal

Liveable Streatham Wells

Long Covid Advocacy

Mothers Rise Up

Natasha Allergy Research Foundation

NASUWT – The Teachers Union

The National Allergy Strategy Group

The National Education Union

Our Kids Climate

The Sadie Bristow Foundation

Societa Italiana Indoor Air Quality

Trade Union Clean Air Network

UK Hazards Campaign

The National Child Mortality Database

Ecole et Families Oubliees

The Corsi-Rosenthal Foundation UK

SUPPORTING SIGNATORIES

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