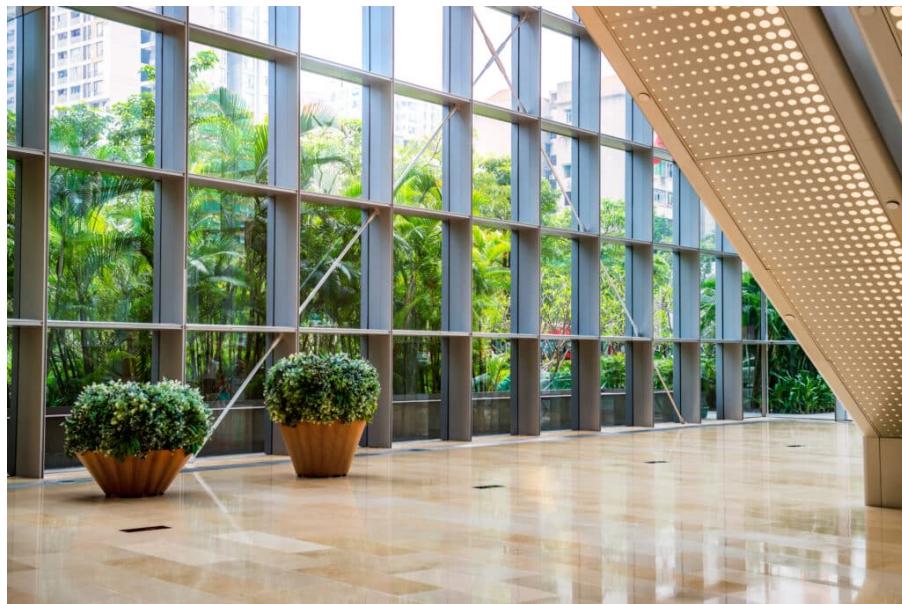


83% of people want to know more about indoor pollution

3 years ago



There is still a wide knowledge gap about indoor air quality (IAQ) in the UK, but more people are starting to ask questions, according to a survey carried out for last week's national [Clean Air Day 2023](#) (CAD).

Experts taking part in an event hosted by the [Building Engineering Services Association](#) (BESA) called for the government to be more ambitious with policy decisions and set tougher targets for minimising indoor particulate pollution.

They reported that more studies had highlighted health problems linked to ultra-fine particulate matter since last year's CAD, and the World Health Organisation (WHO) had identified air pollution as the biggest environmental risk to health – blaming it for around one in every nine deaths annually.

“Although air quality has gradually improved in recent times, air pollutant concentrations still exceed the 2005 WHO air quality guideline levels in many areas,” said Stuart Smith, commercial director of Zehnder Group UK. “This means they are above the levels associated with serious risks to public health.”

He said the building services industry was primarily focused on addressing levels of PM 10 and PM 2.5, but the picture created by measuring ultra-fine particulate matter, down to PM1, was “more frightening” as these tiny particles can enter the blood stream and reach the brain. They also have a larger surface area in proportion to their size so can carry significant amounts of contaminants including plastic and tiny metal fragments into the body.

“We need to make more effort to understand the levels of ultra-fine particles in our air,” added Smith. “Unlike PM2.5, PM1 is unregulated and monitoring technology is limited. We also need more research into the specific harm caused by PM1.”

A survey for CAD carried out by Zehnder found that 83% of respondents wanted to know more about the air quality inside their homes, but while a sixth said they worried about outdoor pollution just one in ten had the same level of concern about the indoor threat.

Celebrities

Adam Taylor, vice chair of [BESA's Indoor Air Quality group](#), urged the government to mount a public awareness campaign similar to those that featured celebrities highlighting the risks posed by car crashes and household fires, which account for fewer deaths than pollution.

"The annual mortality of human-made air pollution in the UK is roughly equivalent to between 28,000 and 36,000 deaths every year," he said. "Globally, household air pollution was responsible for an estimated 3.2 million deaths per year in 2020."

Taylor said lack of public awareness was at least partially due to the way that IAQ information is presented. "We gather lots of data but that has to be translated into actionable insights."

This year's CAD theme was '*Clean up our air to look after your mind*' and encouraged people to consider the impact of poor air quality on mental health just as much as physical well-being. The programme of events promoted emerging scientific evidence about pollution's links to depression, anxiety, and dementia.

[BESA's Indoor Air Quality group](#) has produced a series of guides and has been promoting the concept of the building as a 'Safe Haven' from polluted outside air for several years. The pandemic shone a spotlight on the role of ventilation in making indoor spaces safer and healthier and England's chief medical officer Professor Chris Whitty subsequently called for IAQ monitoring to become "standard practice".

Dan Fraser from ventilation manufacturer Nuaire highlighted the specific problem in schools pointing out that in London alone, over 400 primary schools were in areas that breach WHO guidelines for air pollution (GLA 2018) and that young children were particularly vulnerable.

"Their exposure to high levels of air pollution can lead to behavioural problems, asthma, bronchitis and other respiratory diseases," said Fraser. "Poor IAQ can causes headache, eye irritation, fatigue, dry throat, sinus congestion, dizziness, and nausea."

"Improving air quality in and around schools needs to become a top priority for local authorities," he added.

IAQ group member Peter Dyment from filter manufacturer Camfil explained that air pollution was "a particle problem. All the health issues are linked to airborne particulates, but we continue to focus on measuring carbon dioxide (CO2)."

He called for BESA and its industry partners to work on a guide to retrofitting buildings to improve their ventilation which could form part of the wider national retrofit programme needed to cut carbon emissions and energy costs in line with the government's net zero goals.

IAQ Group chair Nathan Wood ended the day by asking: "Would you pay more to live in an area with better air quality? Because currently, people seem to be doing the opposite by paying higher housing costs to live in the middle of our polluted cities."



#CleanAirDay

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