

## IAQ monitoring should be 'standard practice' says Whitty

2 years ago



The [Building Engineering Services Association](#) (BESA) has welcomed another intervention by England's chief medical officer in the controversy surrounding poor air quality in buildings.

Professor Chris Whitty has called for offices and public buildings, including schools, supermarkets, and hospitals, to be regularly monitored for indoor air pollutants.

He believes that analysing the indoor air quality (IAQ) of many buildings should be made "standard practice" and that more investment is needed to tackle the problem in homes. He also called for investment in creating "indoor emission inventories" as part of a "roadmap to cleaner indoor air."

This follows his 2022 annual report where he wrote that IAQ should be made a priority as it was becoming "an increasing proportion of the overall problem" with progress being made on tackling outdoor pollution. He also pointed out that most people in developed countries spent more than 80% of their time indoors.

The World Health Organisation (WHO) has established that 3.8 million premature deaths worldwide are linked to poor indoor air every year out of a total of 8.7 million from general air pollution.

"Indoor air pollution hasn't received the same attention [as outdoor air], even though it might cause almost as many deaths globally," Professor Whitty wrote in a co-authored article in the journal *Nature*. "The lack of research makes it hard for governments to target policies and controls, while building owners may be oblivious to the health risks and how to reduce them."

Complex

He added that IAQ was a complex problem because it varies dramatically from one building to another. He

said the level of volatile organic compounds (VOCs) can differ by a factor of 1,000 in identical houses on the same street, because of different occupant behaviour or ventilation systems.

BESA's Nathan Wood said detailed monitoring was a vital first step on the road to producing a more targeted IAQ strategy, adding that the technology was already widely available, affordable, and becoming increasingly accurate.

"The pandemic drew attention to the link between poor ventilation and the transmission of diseases around buildings – this accelerated the adoption of IAQ monitoring," said Wood, who is chair of the Association's [Health & Well-being in Buildings group](#).

"We are now well placed to assess the scale and nature of the challenge, including analysing the cocktail of contaminants that can lead to indoor air being many times more polluted than the outdoors. However, showing someone that they have a problem is only the start. They must then be shown how to address the problem through competent professional advice and the use of proven solutions."

BESA is also supporting the proposed Clean Air (Human Rights) Bill which is currently progressing through Parliament and would introduce specific responsibilities for building operators to meet IAQ targets in line with WHO guidance.

The Bill, which is also known as Ella's Law in memory of Ella Kissi-Debrah, who died 10 years ago this month from a severe asthma attack triggered by air pollution, is being spearheaded by Ella's mother Rosamund who has become a prominent air quality campaigner. She said tackling IAQ was "a great way to give people back power over their own environment and save lives".

"We have to be clear about this...bad IAQ leads directly to deaths," said Rosamund, who is Honorary President of the BESA group.

BESA has produced a series of guides on addressing indoor air quality and building ventilation, which are freely available on its [website here](#). It is also an organiser of the annual [World Ventilation Day](#), which takes place on November 8th.