

Friday, December 15, 2023

Department of the Prime Minister and Cabinet  
COVID-19 Response Inquiry Panel

## **Ventilation a key health response measure that was overlooked during the COVID-19 pandemic**

[AIRAH](#) and [IAQAA](#) appreciate the opportunity to make this joint submission to the COVID-19 Response Inquiry.

In line with the goals of the inquiry, we believe there are great opportunities to improve Australia's preparedness for future pandemics.

Founded in 1920, AIRAH is a peak body for professionals working in heating, ventilation, air conditioning and refrigeration (HVAC&R) and building services. A major line of work for AIRAH's members is ensuring that buildings are well ventilated so that occupants can enjoy good indoor air quality.

The Indoor Air Quality Association Australia (IAQAA) was incorporated as a membership organisation in Australia in Victoria in 2016. The primary mission of IAQAA is to bring together professionals from various disciplines, such as building science, engineering, industrial hygiene, and environmental health, to address indoor air quality concerns comprehensively.

Both AIRAH and IAQAA are committed to improving indoor air quality in Australian buildings, a topic that came to the fore during the COVID-19 pandemic. As a result, our organisations had an up-close view of issues with the government response. We would like to provide input to the panel under the first two areas in the terms of reference: governance and key health response measures.

From the outbreak of SARS-CoV-2 (the virus that causes COVID-19), it was apparent to the scientific community that the primary route of transmission was through the air. Previous experience with SARS and associated studies highlighted the strong potential of the SARS-CoV-2 to spread through occupied spaces via air currents. But despite calls from scientific leaders and engineers, the Australian government focused on vaccination and human diagnostics as the only measures to combat the disease.

The members of AIRAH and IAQAA are specialists in handling contaminated and clean air. We are ideally positioned to provide a holistic and preventative strategy to improve both the economic and health outcomes in a pandemic. We could have helped government understand the role of ventilation and air filtration, significantly reducing potential risks to Australians. Sadly, insufficient discussion was held with key stakeholders in the ventilation and indoor air quality industries.

The lack of attention given to ventilation led to many avoidable cases of COVID-19. Probably the highest profile example of this was the failed attempt to use hotels as quarantine facilities. But a much greater impact was felt in schools, aged-care centres and other public spaces.

When situations like the COVID-19 pandemic occur, government plays a vital role in disseminating accurate and trustworthy guidance materials to the public. There was a dearth of such guidance during the pandemic.

As expert bodies, AIRAH and IAQAA advocate for improvements to ventilation systems and develop technical resources for monitoring and reducing the spread of airborne infectious diseases and other unwanted microbial pathogens in the built environment, as part of improving overall indoor air quality. We recognise the response of the federal government to date and the creation of the new Australian Centre for Disease Control. Both organisations are keen to contribute advice on control strategies based on the knowledge of our respective members to help guide infection prevention in Australia.

Government can also provide funding to improve ventilation and air filtration systems in buildings. Again, there was a lack of these kinds of initiatives.

It is important to note that good ventilation systems do not just prevent the spread of COVID-19, but also reduce risks significantly across both current and emerging respiratory pathogens. As we see a global rise in infectious airborne diseases, including Mycoplasma pneumonia and tuberculosis, and ongoing COVID-19 outbreaks and deaths, it is paramount that government disseminates the right message. We would argue that this message cannot be accurate without the full information from our experts.

Although we acknowledge the importance of vaccination, human diagnostics and air monitoring, better ventilation is also a key measure against future airborne viruses.

We recommend that the government takes advantage of our members' broad and deep knowledge and invests in a program in Australia focusing on improving the air in our buildings. This is an investment that the government can make now, to better prepare Australia for future pandemics.

At the Clean Air Forum events held at Parliament House in March and August 2023, leaders from a wide variety of disciplines called on the government to take action to improve air quality in Australia's buildings. We support these recommendations and would be happy to contribute the expertise of our members to support efforts to improve ventilation systems in Australia.

If you would like to know more, we would welcome the opportunity to speak to our recommendations.

Regards,

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## About AIRAH

AIRAH is Australia's peak body for professionals working in the heating, ventilation, air conditioning and refrigeration (HVAC&R) and building services industry. This covers all aspects of the sector, from the TAFE apprentice onsite through to university-educated engineers and business leaders; from those involved in manufacturing and importing equipment, to those who maintain and service it.

AIRAH's overarching perspective – and reach to more than 25,000 industry participants – positions the Institute well to develop and promote the most efficient, productive and resilient HVAC&R industry for Australia's future. We are a long-standing and respected voice. Established in 1920, we have represented the industry for more than 100 years. We have a track record of providing expert input for government consultations.

The 21<sup>st</sup>-century imperatives of emissions reduction and energy productivity present our nation with significant challenges and opportunities. More recently, health has also been a focus, as we deal not just with the pandemic, but also issues such as smoke from bushfires, and the impacts of extreme weather events. Stakeholders from the built environment and HVAC&R sector have a key role to play in meeting these challenges and providing a healthy, low-emissions environment.

For more information visit [airah.org.au](http://airah.org.au)

## About IAQAA

The Indoor Air Quality Association Australia (IAQAA) was incorporated as a membership organisation in Australia in Victoria in 2016. The Association was initially supported by IAQA in the US during its set up phase with the intention of making a subsidiary of IAQA global. IAQAA now holds its own membership, set of Rules, Executive Committee and operations, but remains a sister organisation of IAQA supporting each other in our joint vision and mission.

The primary mission of IAQAA is to bring together professionals from various disciplines, such as building science, engineering, industrial hygiene, and environmental health, to address indoor air quality concerns comprehensively. The association aims to:

- **Provide education and training:** IAQAA offers an annual conference and networking for IAQ professionals in Australia, and through our association with IAQA, benefits to members of both organisations.
- **Promote research:** The association supports research initiatives aimed at understanding the complexities of indoor air quality and developing innovative solutions for better air quality in indoor environment by providing a platform for speakers at our annual conference.
- **Advocate for improved IAQ standards:** IAQAA works to establish guidelines and best practice documents, and contributes to groups developing standards for the IAQ industry, while collaborating with other organisations and governmental bodies to promote healthier indoor environments.
- **Support professionals:** IAQAA serves as a platform for networking, professional development, and collaboration among individuals and organisations involved in indoor air quality assessment and remediation.

For more information visit [iaqaustralia.org.au](http://iaqaustralia.org.au)