Submission to COVID-19 Response Inquiry

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29 December 2023. Updated MS version 8/1/24

My submission is focused on the most basic problem of the health response to the pandemic, which was, and continues to be, the failure to follow aerosol science by identifying and addressing airborne transmission as the primary way that COVID-19 spreads - and the failure to fully communicate that fact to the public.

In March 2020, like most people, I accepted as fact the advice about 'droplets within two metres' and to sanitise hands and surfaces rigorously. But even then, China was saying that the virus was carried further in the air. There was the mysterious spreading of the virus on cruise ships even though passengers were confined to their cabins. Then, on Twitter, I saw a Japanese report featuring the President of the Japanese Association for Infectious Disease who explained that the virus can be carried not only in the large droplets which fall to the ground, but also in much smaller particles. The video showed that the particles can be carried in indoor air currents throughout poorly ventilated rooms for hours, and are likely to be inhaled by people there. [1]

Soon after, I read similar studies by Korean, and American aerosol scientists. By tracking directions of air flow in a restaurant, the Chinese explained why some diners had been infected but others had not.

I did not question the 2-metre/sanitising advice - but I was also thinking of the possibility of greater airborne risk when, in May 2020, I donned an N-95 mask before boarding a plane to return to Australia from NZ. I did not remove that mask until I was in my room in a quarantine hotel.

At the hotel, the air conditioning in my room was extremely cold. It turned out to be broken but led to my speaking with the air-con maintenance man, who explained that air was not exchanged between rooms. However, I wondered about the safety of hall air and did not open the door any longer than necessary. In the months that followed, the unsuitability of high-rise hotels for quarantine was revealed, particularly because of exchange of air across hallways.

I have no scientific background, I was simply an individual trying to learn about the situation. I did not know that one of Australia's most eminent scientists, Professor [redacted], together with many other aerosol scientists, had tried to let the World Health Organisation know about the actual danger of Covid's fully airborne transmission via respiratory particles of all sizes. [2] But the WHO was unwilling to listen and did not warn the public of the real airborne danger. Since then it has made more effort to obscure its mistake than to correct it.

For many decades, it seems that an incorrect theory of "droplet/fomite" transmission of respiratory diseases has dominated the medical world, which continues to exclude aerosol scientists from infection control policies. [3] This means that medical staff often do not have an up-to-date scientific understanding of how airborne transmission occurs, resulting in reluctance to mask, even in hospitals and other medical settings. When staff do mask, it is too often with loose-fitting surgical masks that let in air at the edges, rather than using close-fitting respirators such as N-95s. Visitors too, are not required to mask. Thus medical settings have become places of dirty air; entering them

means the risk of breathing Covid-contaminated air and of getting infected with this potentially chronic and deadly disease.

It is difficult for individuals to protect themselves in these circumstances as one-way masking is less effective than universal masking by everyone able to do so.

We stopped cholera epidemics in 19th Century cities by getting a clean water supply. Now that we have more knowledge of airborne pathogens, we need to have clean indoor air, especially within shared public spaces. Our aerosol scientists and aerosol engineers have the knowledge and technology required, using ventilation, air purifying, and UV air sanitising measures. It is well within Australia's ability to do this, costing far less than the rapidly increasing disabilities caused by Covid, particularly to previously healthy working-age people and children.

In this submission, I have explained how I, as a member of the public, learned about how infectious respiratory particles are breathed out, can travel tens of metres indoors, and then be breathed in by other people. I've explained the circumstances in which it is most likely to occur, and measures that can be taken to reduce that transmission. It was no more difficult to understand those basic concepts than it has been to outline them on this page.

Admittedly, I was not weighed down by years of indoctrination with an erroneous theory about the primacy of droplets. Nor do I need to extricate myself from its tangle of misapplied terminology; the dogma having hijacked scientific terms such as 'droplet', 'aerosol', and even 'airborne' and given them its own jargonistic meanings, thus impeding communication between disciplines.

It astonishes me that four years into the continuing Covid pandemic, aerosol science is still not widely utilised to counter Covid's airborne transmission, particularly to make safer the key public spaces that many people are obliged to go to, such as hospitals and schools.

There remains an urgent need to fully inform and educate the public about Covid's airborne spread - and about the need for clean indoor air to restrict airborne transmission of current and future pathogens.

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