

Joint Committee on Health

The role of ventilation in achieving better health outcomes with particular reference to the Covid-19 virus.

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Opening Statement

Chairman, Committee Members,

Thank you for the opportunity to attend this session today.

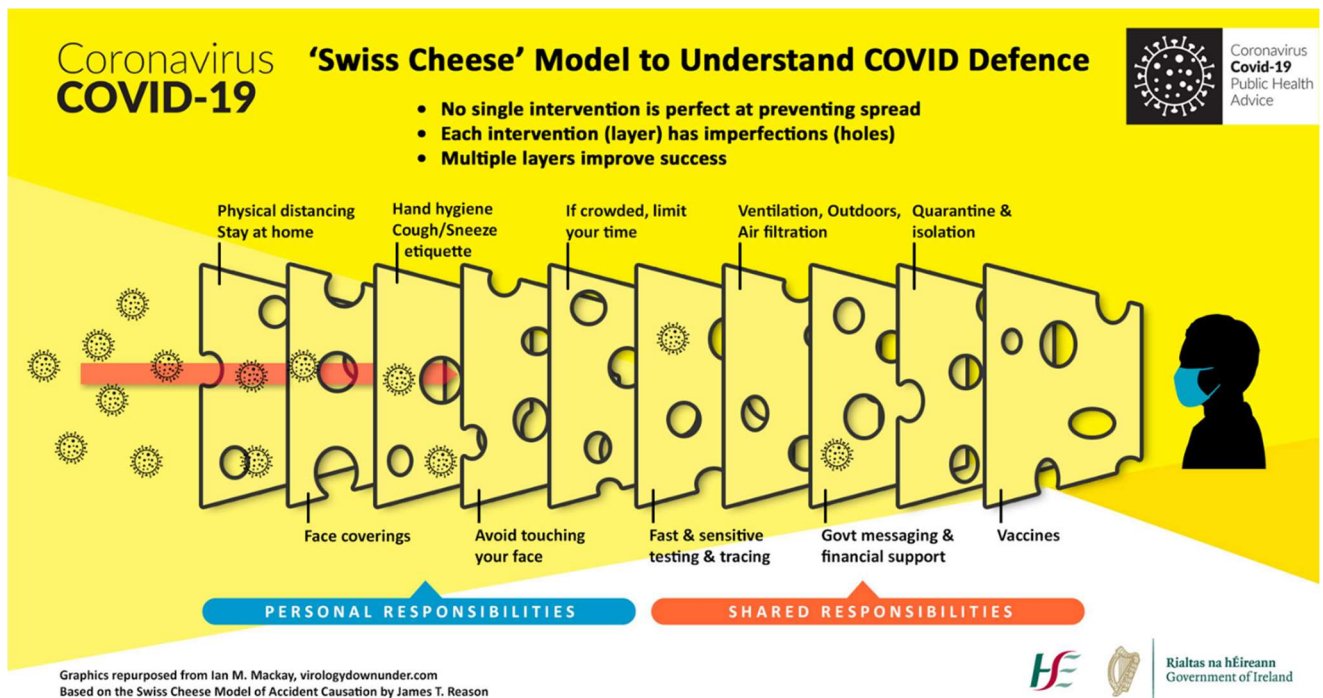
Over the last 150 years the link between science, the development of interventions, and organization of public authorities has increased the success and public understanding of public health. In my view, its time ventilation, and its impact on air quality be seen through a similar lens.

We spend up to 90% of our time indoors and this pandemic is a disease of buildings. Regardless of where you see the balance between fomite, close or long-range transmission, the impact on health of our indoor environment has been thrust into focus.

Ventilation is a critical factor in reducing the risk of long-range airborne transmission, particularly in enclosed spaces.

Often simple strategies that ensure adequate ventilation can help to reduce the spread of COVID-19 in many settings, including homes, schools, workplaces, public buildings and vehicles. Moreover, these strategies can also reduce the risk of superspreading events where many people become infected at the same time.

It's an important part of a layered strategy to reduce transmission and should of course be used in conjunction with other measures.



As the science and our understanding of this disease has developed, **ventilation is increasingly recognised as a critical factor in this multi layered approach.**

It's an important component of any building but ventilation sits within a rapidly changing landscape.

- The Climate emergency is driving changes in regulations and fundamentally how our buildings are being asked to perform.
- We are about to undertake a wholesale upgrade of our existing building stock, that will have dramatic impacts on the performance of every building we occupy.
- Our lifestyles and how we spend our time indoors continues to change.
- Technology is rapidly evolving, giving us more insight into how our buildings perform and how we manage them.
- The science around indoor air quality continues to evolve and its impact on our health and wellbeing deepen.

My point is that ventilation in buildings and how it impacts our health and, in this case, COVID-19 is **not a field of absolutes**. And we must not let perfection be the enemy of the good.

We already know many of our buildings do not perform as intended, we all have experience of them. And poor indoor air quality already costs us every day.

According to the EPA, 300 cases of Lung Cancer per year in Ireland can be linked to Radon in our homes and workplaces.

According to the Asthma society 380,000 people currently live with asthma in Ireland, a disease we know is significantly exacerbated by poor indoor environments, such as damp and dusty homes. Every 4 minutes someone is admitted to hospital with asthma. This disease alone cost the state 472 Million Euro per year.

Ventilation impacts in **a very real way** our **health and wellbeing**, the **learning outcomes of our children** in school, **lost days at work**, **lost rent and income** to landlords and the state through disrepair and vacant properties as result of condensation and damp and so it goes on and on and on.

And now this Pandemic has brought into stark perspective the impacts ventilation can have in **disease control**.

It's time for a significant shift in how we as a society and state view the air we breathe and start to value it the same way we value the water we drink and the food we consume.

I would argue that the role of ventilation in fighting this pandemic and the additional benefits it brings must be brought further forward in our strategies and communication.

We need to mobilize professionals and provide **signposts and advice** for every building owner to access **consistent and technically correct information on ventilation**, information which is already available. This would enable them to work with and get the best out of what they have and develop strategies to improve their buildings over time, not just for COVID-19 now and into next winter but for all the other benefits it brings.

We need better enforcement of regulations on ventilation in our new buildings and development of better standards and guidance for our existing ones.

Ventilation in buildings needs to be at the centre of not just this pandemic but in everything we do in buildings. It's a subject matter that has an impact on all Government departments from Education to Health, from Energy to Environment. The dividends of getting this right will repay our effort many times over.

Thanks you.