

# Would We Have Listened to Semmelweis and Snow?



## Tradition vs Progress: Applying New Knowledge Was Slow

When Ignaz Semmelweis revolutionized hospital sanitation by introducing handwashing in Vienna in the 1840s, his peers were skeptical. Despite clear evidence that it prevented infection, the vast majority of doctors resisted the practice for decades.

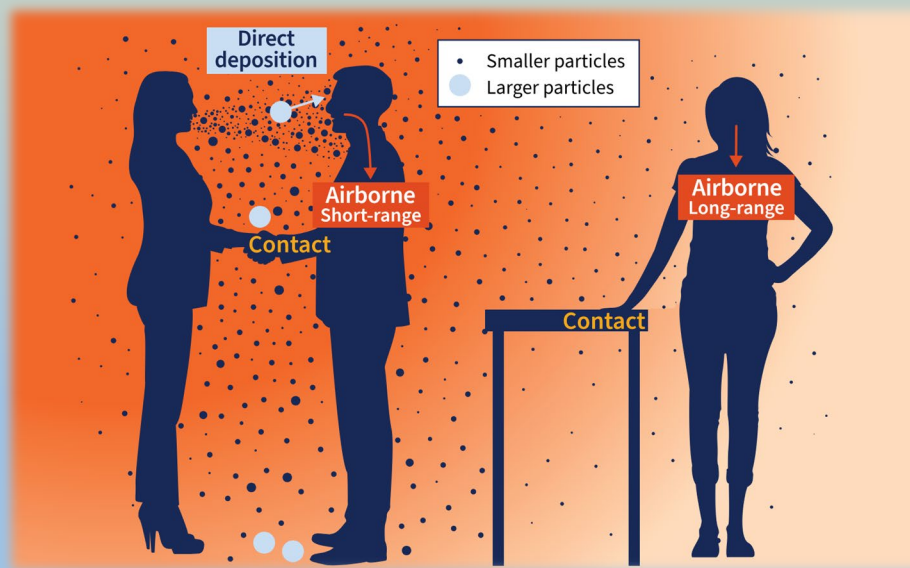
In London, John Snow faced similar challenges in convincing the medical community that cholera was waterborne.

It's easy to judge those doctors of the past, but we are now confronted with a comparable paradigm shift in understanding respiratory disease.

# The Paradigm Shift: Through the Air

For a century, the prevailing public health perspective was that respiratory-borne pathogens are generally transmitted through droplets and surfaces. Not anymore.

The WHO now acknowledges that the primary mode of transmission for all respiratory-borne pathogens, including those causing COVID and flu, is the airborne route.



Graphic Source: WHO [Indoor airborne risk assessment in the context of SARS-CoV-2](#)



WHO Director-General's remarks at the launch of the [through-the-air-transmission report](#) – 18 April 2024

## Targeting Smokelike Aerosols, Not Ballistic Droplets



“This [report] is aimed at improving our understanding of COVID-19 airborne transmission risk in indoor space in order to design and utilise mitigation measures to reduce this risk.”

Quote Source: [WHO Director-General, Dr Tedros Adhanom Ghebreyesus Remarks](#)



# How Swiftly Are We Responding?

This is not just about staying informed but about actively protecting ourselves and those in our care. Standard medical masks are for droplet protection; they do not effectively seal against airborne particles.

<b>Surgical Mask</b> 	<b>Respirator Mask</b> <b>N95/FFP2/KN95/KF94</b> <b>equivalent or better</b> 
Does NOT reliably protect against inhaling the smallest airborne particles and is NOT considered respiratory protection	Filters out at least 94-95% of airborne particles, including large and small particles
Leakage occurs around the edge of the mask	When properly fitted and donned, minimal leakage occurs

## Filters Protect – Time to Breathe Clean Indoor Air

Let us switch to well-fitted respirator masks to protect both ourselves and our patients. Let us advocate for and invest in clean indoor air infrastructure to reduce airborne transmission risks effectively.



## A New Normal

Transmission regularly happens even without symptoms. Breathing clean air – through filters, ventilation and good masks – needs to become the new standard, just like clean hands and clean water. Let's not wait decades again to adapt.

*Thank you for putting patient safety first.*

Learn more at [whn.global/guidelines/masks](https://whn.global/guidelines/masks)

