



Biotechnology Jul 07

## A group of 239 scientists says there's growing evidence covid-19 is airborne



**The news:** A group of 239 scientists from 32 countries have written an [open letter](#) to the World Health Organization arguing that covid-19 can be transmitted through the air. You might think we know that already, but most current guidance is based on the idea that covid-19 is transmitted via *droplets* expelled from an infected person's nose or mouth. The thought is that these larger respiratory droplets quickly fall to the floor. That's the position the WHO has taken from early on in the pandemic, and that's why we have been keeping at a distance from one other. However, the signatories of the open letter say the organization is underestimating the role of airborne transmission, where much smaller droplets (called aerosols) stay suspended in the air. These aerosols can travel farther than droplets and linger in an area even when an infected person has left.

**What's the evidence?** The letter says multiple studies "have demonstrated beyond any reasonable doubt that viruses are released during exhalation, talking, and coughing in

microdroplets small enough to remain aloft in air." It says these microdroplets "pose a risk of exposure at distances beyond 1 to 2 m from an infected individual." An early laboratory



aerosols collected at two hospitals in Wuhan, China, according to a study published in [Nature](#) in April. And superspreading events add to the weight of evidence: for example, after [a choir practice in the US](#) nearly 50 people were infected even though they kept a safe distance apart.

**The implications:** If airborne transmission is a route for the spread of the virus, it could lead to changes in the current advice. It would suggest that social distancing may be insufficient, especially indoors. This may place yet more importance on mask-wearing around people who are not part of your household if you meet them indoors, even if you are distancing, and increasing ventilation in enclosed areas. It could make air-filtering systems more important to try to cut down on the recirculation of air. And it might mean health-care workers caring for coronavirus patients need the highest grade of mask—N95—to filter out the smallest droplets.

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who have caught the disease and recovered. The study: Researchers at King's College London repeatedly tested 96 patients and health-care workers at Guy's and St Thomas' NHS Foundation Trust for antibodies between March and June. All the participants were...

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Airborne transmission would mean there are certain solutions we really need to focus on.



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