



Coronavirus can be transiently air-borne; but COVID-19 preventive measures can keep you safe



Collection of air samples from hospitals

CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad and CSIR-Institute of Microbial Technology (IMTech), Chandigarh have released their data on the air-borne nature of coronavirus, SARS-CoV-2. Scientists have worked with hospitals, 3 in Hyderabad and 3 in Chandigarh to find if the virus particles can be found in air samples in the hospital wards. They used an air sampler that can collect the virus particles, and then looked for their presence using RT-PCR.

In this study, the virus was found in air samples from COVID-19 wards from hospitals but not from non-COVID-19 wards. This suggests that the demarcation of hospital zones has been an effective strategy. The study also showed the chances of picking up SARS-CoV-2 in air is directly related to number of COVID-19 positive cases in the room, their symptomatic status and the duration of exposure. When COVID-19 individuals spent longer hours in a room, the virus is found in air for more than 2 hours even farther than 2 metres from their seating places. But for asymptomatic cases, they showed the virus does not spread farther from them when they are seated in a room without perceived air flow due to a fan or AC.

“Till the vaccines are available, social vaccine i.e. wearing mask is the best prevention” said Dr Sanjeev Khosla, Director, IMTech. “All these findings do show that the coronavirus can stay in air for some time. But they also strengthen the importance of COVID-19 preventive guidelines that we already have in place to curb this pandemic. If we ensure that we follow hygiene protocols such as regular handwashing, using masks effectively and preventing symptomatic people from public mixing, we can start getting back to normalcy more comfortably. Detecting and isolating the positive cases early on can help prevent the spread among other family members in a home setting too”, comments Dr Rakesh Mishra, Director, CCMB and also the corresponding author on this study. The study is now available on preprint server [MedRxiv](https://www.medrxiv.org/) and is yet to be peer-reviewed.