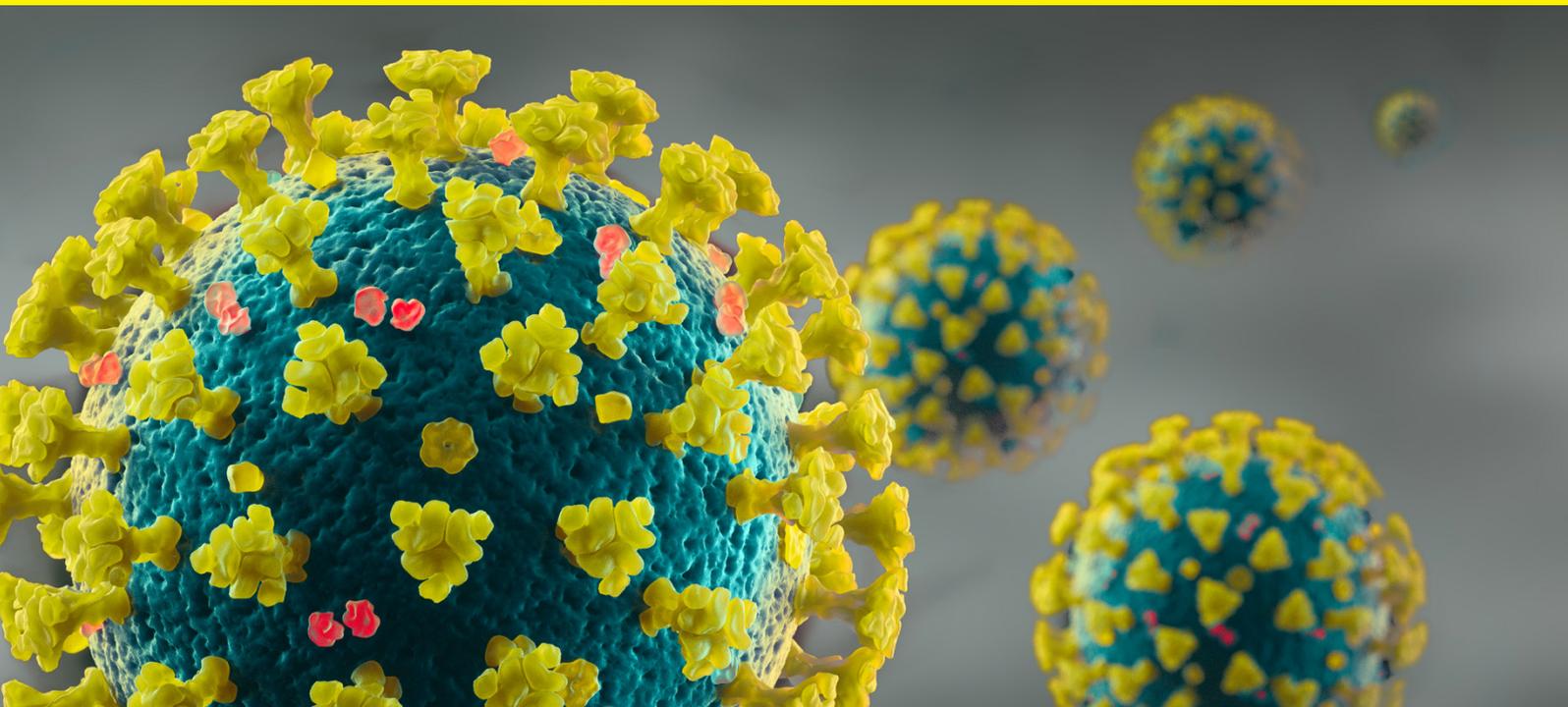


How Safe is the Air Indoors? Surveillance for SARS-CoV-2 Variants

December 09, 2021

SARS-CoV-2 spreads through airborne transmission. Inhalation of aerosols exhaled by an infected person, especially in indoor spaces, is now believed to be the primary route of transmission pathway.¹ It has also been demonstrated that SARS-CoV-2 remains viable in aerosols for a period of 3 hours.²



How Safe is the Air Indoors?

Surveillance for SARS-CoV-2 Variants

New variants containing one or more mutations in the viral genome continue to emerge and are responsible for surges in infection rates. These are designated as variants of interest and other variants of concern .

These variants are discovered and monitored through diagnostic tests – collecting a swab sample from an infected person, extracting the genetic material in the swab and sequencing it.

Alternatively, air sampled from indoor areas with sizeable crowds such as airports, hospitals, schools, malls, offices can be tested to serve as an early warning mechanism.^{3,4} New variants can be identified much faster by screening a wider cross- section of the population through routine air sampling, rather than waiting for an infected person to volunteer to be tested.

Delays in identification of potentially new variants and has an impact on reaction time and the implementation of measures to mitigate risks, such as public health and safety measures and vaccine development or modification.

A combination of testing, air sampling and vaccination is therefore required to bring an end to the pandemic.

Our Solutions:

The Sartorius Gelatine membrane filters have been widely used during the Middle East Respiratory Syndrome (MERS) outbreak in 2012 and during the SARS-CoV-2 pandemic.

Gelatine Membrane Filters

- Retentive properties similar to that of HEPA-filters, trapping the smallest of viruses with the highest efficiency
- Easy recovery - uniquely water-soluble filters. The filters can be dissolved in Cell Culture Media, Viral Transport Media, Phosphate Buffered Saline or any other buffer of choice
- Compatible with viral infectivity studies and rapid detection methods, such as PCR
- The sampled genetic material on the filters are stable for two weeks when stored at -80° C to 60° C

MD8 Air Samplers

- Portable and Static Air Sampler
- Continuous monitoring of indoor air





Learn More:



Addressing Airborne Transmission of COVID



Interview on the Importance of Air Monitoring

References

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