

How to choose an air purifying system

Make sure your system stops the risk of airborne aerosol transmission

At the start of the COVID-19 pandemic, official guidelines from the World Health Organization (WHO) focused on addressing droplet transmission. It is known that when people sneeze, cough or talk they expel particles, which contain droplets and aerosols. Droplets are heavy and fall to the ground, or onto other surfaces, within seconds – they don't travel far. As a result, experts advised us to focus on surface cleaning and hand washing to mitigate the spread of the virus.

Now, scientists have evidence that airborne aerosols can transmit the virus. Aerosol particles are smaller, lighter and can linger in the air for hours and drift further, particularly indoors, causing potential transmission of the SARS-CoV-2 coronavirus. In a recent video, the WHO recommends good room ventilation or, where that is not possible, air purification devices that use high-efficiency particulate air (HEPA) filters.

A paper on the role of ventilation by the Environmental and Modelling Group (EMG), under the UK Government, presented to the Scientific Group for Emergencies (SAGE), highlighted that ventilation should be integral to the COVID-19 mitigation strategy in multi-occupant spaces. *The Guardian*, *The Times* and *The Daily Telegraph* have all published extensive articles on the risk of COVID-19 airborne transmission. They report growing evidence, showing that COVID-19 spreads through the air, where the virus can linger for hours indoors.

Other organisations have also championed air purification. Autumnna has launched the SAFE (symptom assessment for everyone) initiative. Two of their top criteria are air filtration and purification.

It is clear that mitigating airborne aerosol transmission through proper air purification is a priority for all managements looking to protect their employees and visitors.

To be effective, an air purification system needs proper engineering. It is not enough for the air purifier to capture the virus. To efficiently clean the air, it must also kill viruses and other pathogens. Most air filters are based on a filtration system only and, while HEPA filters capture viruses and bacteria, they do not kill them. To do this, ultraviolet C (UVC) radiation is necessary.

The importance of UVC light is supported by Thomas J Walsh, MD, PhD, and Vidmantas Petraitis, MD – infectious disease experts at the Infectious Diseases Translational Research Laboratory, Weill Cornell Medicine, Cornell University. They reveal, in their March 2020 report, that ultraviolet light can destroy the DNA of viruses.

Rensair, a patented hospital-grade air purification system, uses a

powerful fan that draws air through a HEPA13 filter, trapping bacteria and viruses, and exposes them to UVC light. This unique patented solution not only captures, but also kills, bacteria and viruses, including the coronavirus family of pathogens. This makes Rensair a superior solution when compared with most air purification devices in the market.

Testing by leading laboratories, including Eurofins, Norconsult and Oslo University Hospital, has shown that Rensair is more than 99.97% effective at destroying airborne impurities, such as viruses and bacteria, and that it is as effective when placed in a corner of a room as it is when placed in the centre.

Rensair is quiet, compact, and on wheels for portability. This affordable option requires no retrofitting of current filtration systems, as it needs only an electrical outlet to operate. Once it is plugged into a power supply, Rensair gets to work, purifying the air.

Scandinavian hospitals, institutions, and care homes have used Rensair for more than a decade. Now the UK National Health Service (NHS), dentists, hotels, offices and other public spaces in the UK use Rensair.

Rensair is supplied and maintained by Amtronix (Pty) Ltd.



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youtu.be/BZe21Nfdy_4

Links to the following supporting documentation can be obtained either from Rensair or Amtronix:

EMG ventilation report

Dental guidelines

The Guardian

The Times

The Daily Telegraph

Science Magazine

El Pais

[2020 COVID-19 Coronavirus Susceptibility](#)

[UV-C light is effective for killing COVID-19 on N95s, study demonstrates](#)