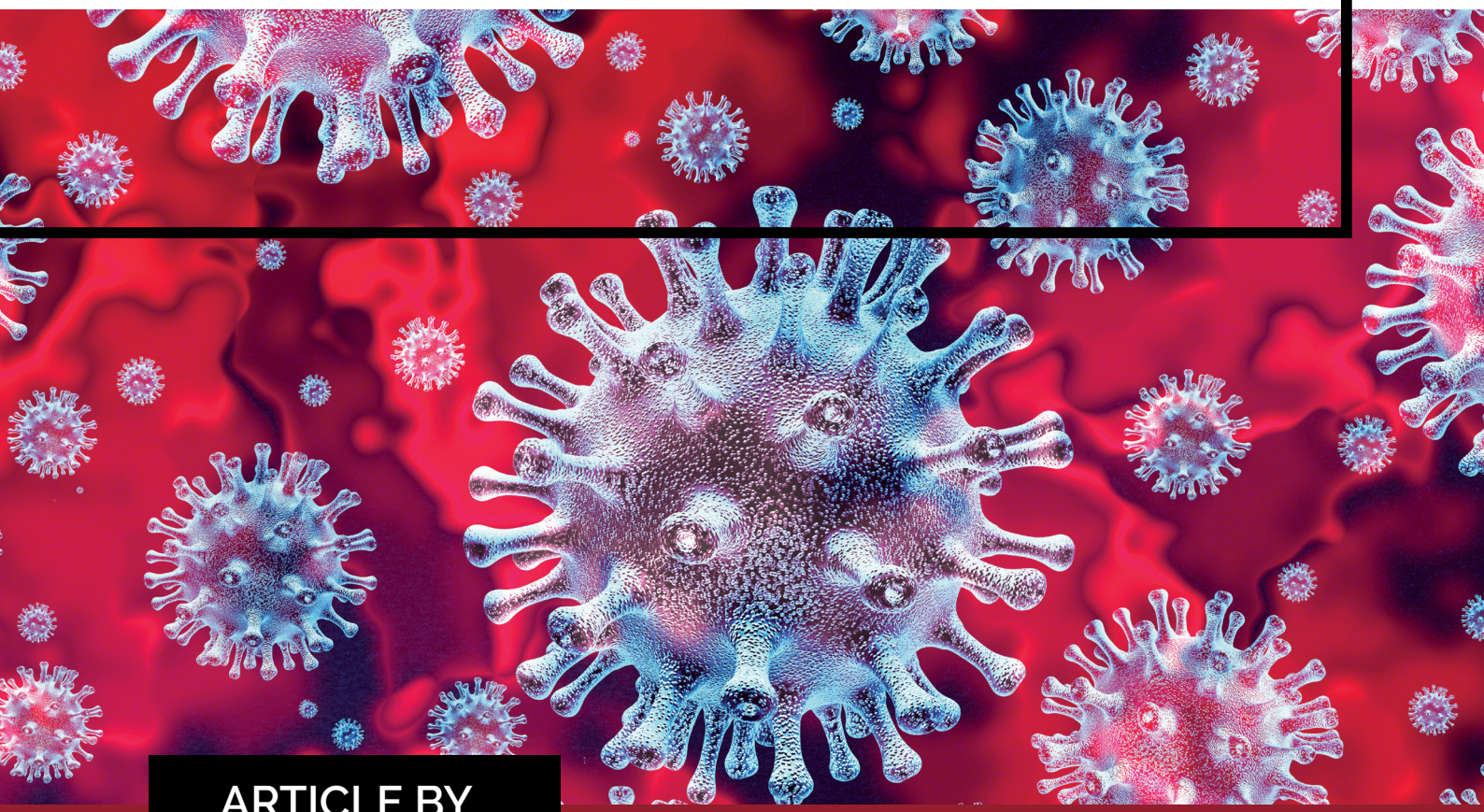
Coronavirus and Airdri



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CORONAVIRUS AND AIRDRI

Airdri have seen a significant increase in enquiries about Coronavirus particularly in respect to the current COVID-19 epidemic.

The virus now named “Severe Acute Respiratory Syndrome coronavirus 2” (SARS-CoV-2), initially transmitted from animals (probably bats) to humans at a seafood market in Wuhan, human to human transmission has now been confirmed, and SARS-CoV-2 has been shown to be spread in the air as virus-infected droplets and aerosols generated by coughing and sneezing. Another route of transmission is contact with surfaces contaminated by coronaviruses and subsequently touching mouth, nose or eyes; coronaviruses have been shown to survive up to 9 days on surfaces.

Prevention of transmission is limited to the widespread use of surgical masks/respirators and frequent hand-washing. A surgical mask is designed to protect the environment and other people from the wearer, trapping large droplets and some aerosol transmission. The World Health Organization recommends the use of surgical masks for general patient care and N95 respirators for aerosol-generating procedures only.

Airdri units have been shown to kill a wide range of microbes that are more difficult to eradicate than viruses, including bacterial species that produce endospores *(Clostridium difficile, Geobacillus stearothermophilus)*, Gram-positive bacteria *(Staphylococcus aureus, MRSA, S. epidermidis, Listeria monocytogenes and L. innocua)*, Gram-negative bacteria *(Escherichia coli* and *Pseudomonas aeruginosa)*, and moulds *(Aspergillus fumigatus)* in both the air and/or on surfaces.

Airdri technology has been tested against MS-2 coliphage (a surrogate for Norovirus), and achieved significant reductions in counts in both air samples and on surfaces. MS-2 is a non-enveloped virus which is more difficult to kill than the lipid-enveloped SARS-CoV-2.

SARS-CoV-2 belongs to the same group of viruses that cause colds and influenza. The use of Airdri units in call centres and offices at an NHS Trust has been shown to reduce the incidence of illness-related absences; particularly reported cases of colds, coughs and influenza, as well as reducing other chest and respiratory problems.

Without testing Airdri against SARS-CoV-2 (or a suitable surrogate) we cannot categorically state that we can kill this coronavirus: however there is a great deal of scientific evidence that this technology can kill a wide range of other microbes that are much more difficult to eradicate than SARS-CoV-2