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Ozone gas found to neutralize coronavirus

By E&T editorial staff

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Low concentrations of ozone could be key to neutralizing the spread of coronavirus in healthcare settings, according to Japanese researchers.

Hospitals can be disinfected using the gas which neutralizes the coronavirus particles in the air, Reuters has reported.

At a news conference, scientists from Fujita Health University told reporters that they had proven that ozone gas in concentrations of 0.05 to 0.1 parts per million (ppm) could kill the virus without causing harm to humans.

To demonstrate its effectiveness, an ozone generator was used in a sealed chamber that was doused with a sample of coronavirus. The results suggested that the virus's potency declined by more than 90 per cent after being subjected to the ozone for 10 hours.

“Transmission of the novel coronavirus may be reduced by continuous, low-concentration ozone treatment, even in environments where people are present, using this kind of system,” said lead researcher Takayuki Murata.

“We found it to be particularly effective in high-humidity conditions.”

Ozone is formed from dioxygen by the action of ultraviolet (UV) light and electrical discharges within the Earth's

atmosphere. It is typically found in the Earth's atmosphere, where it helps to protect humans from the Sun's ultraviolet radiation.

Previous experiments have shown that ozone is capable of inactivating many different pathogens at high concentrations, between 1-6 ppm. However, this level of gas can be potentially toxic to humans.

Fujita Medical University Hospital, in the Aichi prefecture in central Japan, has already installed ozone generators to reduce infection in waiting areas and patient rooms.

Earlier this month, a team of researchers [unveiled a prototype device](#) which can non-invasively detect Covid-19 in the breath of patients.