

Measures to inhibit new coronavirus (COVID-19) by OZONE generator “Airness”

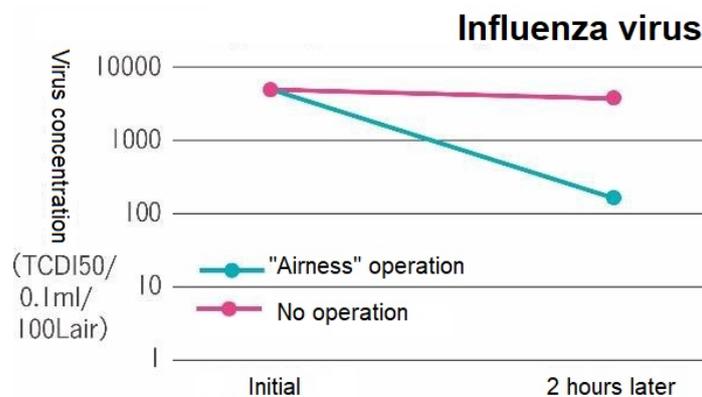
We, Ship Healthcare Group have been marketing series of Low concentration ozone generators “Airness” since 2016, that can kill bacteria, viruses and odors.

So far, we are not in a position to obtain the new coronavirus or actually test its effectiveness, However, the effect of killing various viruses has been confirmed. And some universities and institutes have disclosed research reports one after another that ozone is also effective in inactivating the new coronavirus.

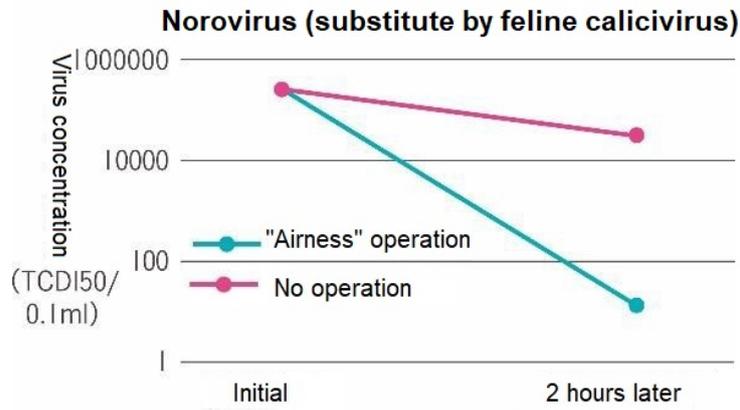


Viruses are composed of nucleic acids (DNA or RNA) and the outer shell proteins that enclose it. Inactivation of the virus by ozone is due to the decomposition of this protein by ozone. The virus inhibition effect of “Airness” has been confirmed by testing with the third-party laboratory institute (Shoku-Kan-Ken, Inc.)

Test with influenza virus



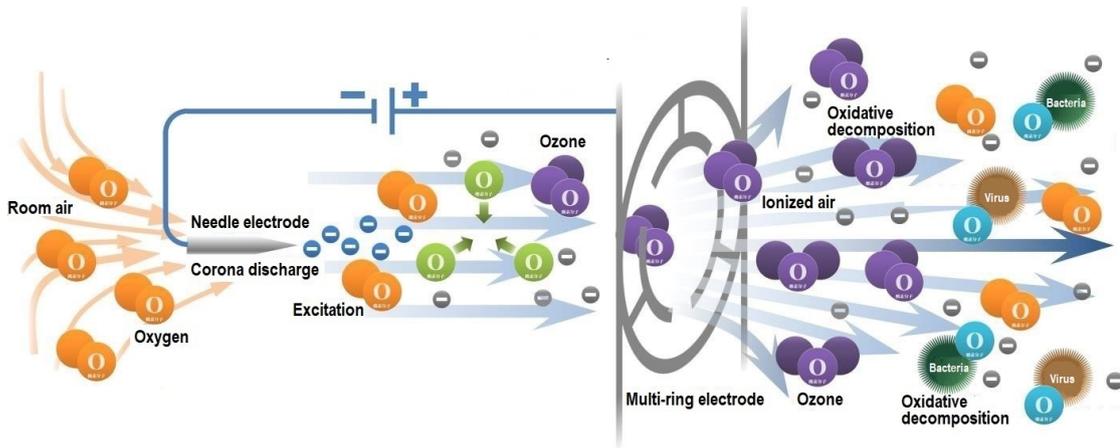
Test with norovirus (substitute by feline calicivirus)



Virus inactivation test was carried out in tightly closed space that is 1m³.

The virus concentration (TCID50/0.1ml) was measured for 2 hours with or without “Airness” operation.

“Airness” series is equipped with the patented technology "multi-ring corona discharge system" by which low-concentration ozone (O₃) is generated and diffused as well as negative ions via contact with ambient air containing oxygen (O₂) and water vapor (H₂O.)



--Ozone generated by corona discharge from multi-ring electrode-- --Ozone diffused along with negative ion flow--

Ozone is a highly reactive oxygen allotrope and has been used for deodorization and sterilization because it decomposes organic substances due to its strong oxidizing power. Since some universities and institutes disclosed research reports on new coronavirus inactivation by ozone, and the demand for ozone generators has been rapidly expanding.

By utilizing ozone generated from “Airness”, we will optimize the air environment by sterilizing the space, inhibiting bacteria, odor and viruses.

