

Customer Information Notice CIN109

trophon® efficacy against coronavirus, including SARS-CoV-2

A recent outbreak of a novel strain of coronavirus (SARS-CoV-2) has been reported leading the WHO to declare a Global Health Emergency. Coronaviruses have been the etiological agents of two major outbreaks in the past including severe acute respiratory syndrome (SARS-CoV-2) and Middle East respiratory syndrome (MERS). Symptoms can include fever, cough and shortness of breath. There are ongoing investigations on transmissibility, severity and other features of SARS-CoV-2.¹

Susceptibility to disinfectants

Coronaviruses are enveloped viruses.² According to the Spaulding classification, enveloped viruses are the most sensitive group of pathogens to inactivation by disinfectants.^{2,3} Vegetative bacteria, fungi, non-enveloped viruses, mycobacteria and bacterial spores all show sequentially increasing resistance to disinfectants and are harder to inactivate than the enveloped viruses.³

Susceptibility to high level disinfection

The trophon family includes the FDA cleared trophon EPR and trophon2 high level disinfection devices, which share the same core technology of sonically-activated hydrogen peroxide. trophon is an automated medical device for the high level disinfection of ultrasound probes.

While trophon has not been tested directly against SARS-CoV-2, coronaviruses fall into the category of enveloped viruses.

By definition, high level disinfectants inactivate⁴⁻⁶

- enveloped and non-enveloped viruses
- vegetative bacteria
- fungi
- mycobacteria

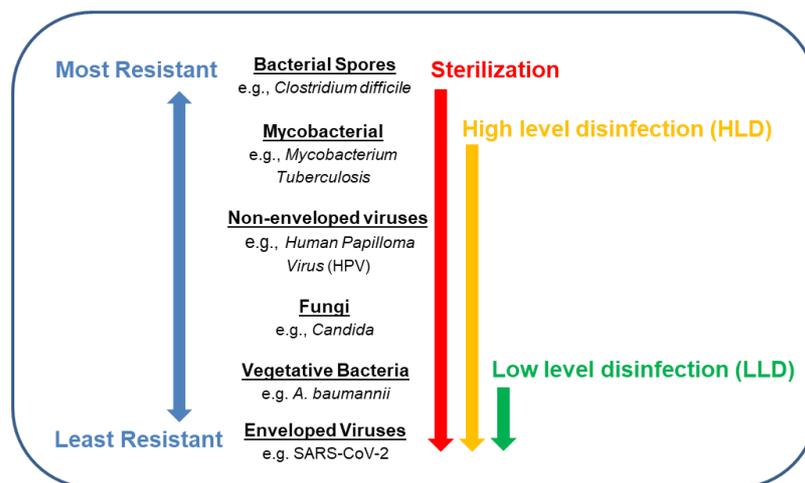


Figure 1. The hierarchy of microbial susceptibility to disinfectants. Adapted from the CDC 2008 Guideline for Disinfection and Sterilization in Healthcare facilities.³

References

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