Customer Information Notice CIN112

Information for healthcare professionals only

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) 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 trophon EPR and trophon2 high level disinfection devices, which share the same core technology of sonically-activated hydrogen peroxide. trophon is listed on the Australian Register of Therapeutic Goods (ARTG) as 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 inactivate[4-7]

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

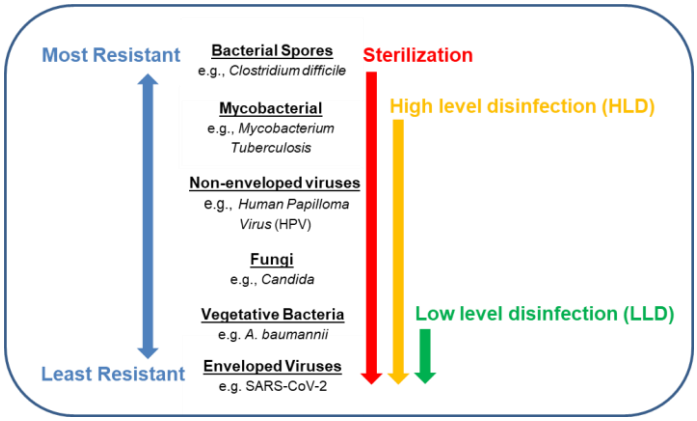

Figure 1. The hierarchy of microbial susceptibility to disinfectants. Adapted from the CDC 2008 Guideline for Disinfection and Sterilization in Healthcare facilities.[3]

References

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