

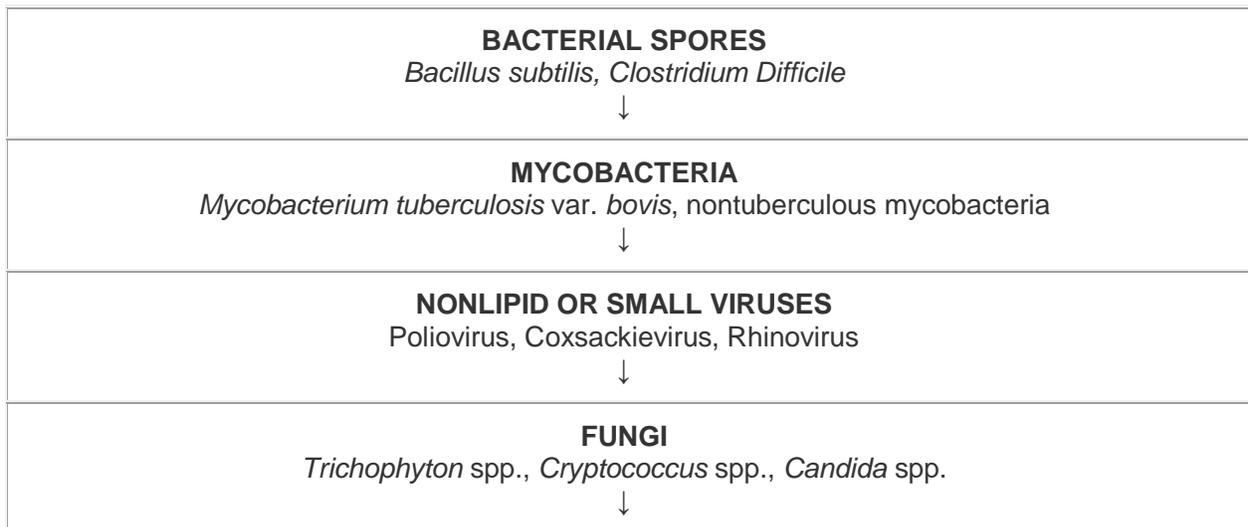
SANOSIL HALO DISINFECTION SYSTEM AND EBOLA VIRUS

EBOLA VIRUS

Ebola Hemorrhagic Fever or Ebola Virus Disease is caused by the Ebola Virus. The Ebola Virus was first discovered in The Republic of Congo near the Ebola River in 1976. The Ebola Virus can be spread by humans or animals, but the primary vector is the fruit bat, which is not affected by the virus. The virus is spread by contact with body fluids of infected animals or humans. The virus is not considered to be airborne, but it can be aerosolized as an infectious agent in laboratory conditions. A patient that survives an Ebola infection and demonstrates no overt symptoms can still transmit the virus via sexual contact for up to 40 days. The virus can live outside the host for several days. Symptoms generally appear within 2-21 days after exposure with up to a 90% mortality rate. At the moment there is no known cure or vaccines; however, there are some experimental drugs currently being tested that show promise.

PATHOGEN SUSCEPTIBILITY TO THE HALO DISINFECTION SYSTEM

DESCENDING ORDER OF MICROORGANISM RESISTANCE TO THE HALO DISINFECTION SYSTEM



VEGETATIVE BACTERIA

Pseudomonas aeruginosa, Staphylococcus aureus, Salmonella choleraesuis, Enterococci



LIPID ENVELOPED OR MEDIUM-SIZE VIRUSES

Herpes simplex virus, cytomegalovirus, respiratory syncytial virus, hepatitis B virus (HBV), hepatitis C virus (HCV), human immunodeficiency virus (HIV), Hantavirus, Ebola virus

As noted in the chart above, the hardest microorganisms to kill are spore forming bacteria such as Clostridium Difficile (C-Diff). The easiest microorganisms to kill are lipid enveloped viruses, which also noted above, includes the Ebola Virus. A **virus isn't a cell** and doesn't have any cellular parts. A virus has no internal cellular structure, no cell wall, or cell membrane. Viruses consist only of a protein coat that holds a coiled string of nucleic acid. Viruses do not form spores.

The Sanosil Halo Disinfection System is **EPA Registered under EPA # 84526-6** to produce a > 6 log kill or 99.9999% on C-Diff spores, the very hardest class of microorganism to kill. The 99.9999% kill is considered by many pundits to be sterilization, as the > 6 log C-Diff biological testing indicators showed **ZERO** growth when incubated at the EPA approved third party testing laboratory.

The Sanosil Halo Disinfection System is also **EPA registered under EPA #84526-1** to kill the following viruses:

- Norovirus(Norwalk Virus)
- Human Immunodeficiency Virus Type 1, HIV
- Influenza Flu Virus A, H5N1
- Influenza Flu Virus A, H1N1
- Influenza Flu Virus, Hong Cong Strain
- Rhinovirus Type 37
- Minute Virus of Mice, Parvovirus (MVM)

SUMMARY

Spore forming bacteria are the **hardest** class of microorganisms to kill. Lipid enveloped viruses are the **easiest** class of microorganisms to kill. Although Sanosil does not have a direct kill validation on the Ebola Virus because of the virulent nature of the organism, a virus is a virus is a virus, and a lipid enveloped virus noted in the chart above, which includes the Ebola Virus, is the **easiest** class of pathogen to kill. Because a virus has no cell structure to contend with, and do not form spores, it is highly likely that the Ebola virus will be readily killed by the Sanosil Halo Disinfection System.