



Benefect Partners,

In response to many requests from our customers across the globe, we have assembled & summarized the following publicly available information from the leading public health agencies regarding COVID-19 to clarify the plethora of information we are all seeing & hearing every day.

The overwhelming message is that COVID-19 is not difficult to kill on surfaces & does not require any special protocol - routine prevention actions & awareness to avoid exposure or spreading are key.

In terms of Disinfection, because the emergence of “novel” viral pathogens such as COVID-19 is unknown & not predictable, no government-registered disinfectant product labels have existing kill claims against these specific novel viruses. Also, the pathogens are often unavailable commercially and standard methods for laboratory testing do not exist.

Some good news is that Coronaviruses such as COVID-19 are enveloped viruses, which are **the easiest viruses to kill**¹. Actually, the easiest of all microorganism categories (see our Efficacy Spectrum Illustration below). The EPA & CDC state that if an antimicrobial product can kill a small, non-enveloped virus it should be able to kill any enveloped virus².

The CDC simply recommends **routine cleaning and disinfection procedures** (e.g., using cleaners and water to pre-clean surfaces prior to applying an **EPA-registered, hospital-grade disinfectant** to frequently touched surfaces or objects for appropriate contact times as indicated on the product’s label) are appropriate for COVID-19 in healthcare settings³

Health Canada simply recommends **to regularly clean and disinfect surfaces that people touch frequently** such as toilets, bedside tables, doorknobs, phones and television remotes with **regular household cleaners** or diluted bleach.⁴

The World Health Organization states that **there are many disinfectants, that are active against enveloped viruses**, such as the COVID-19 virus, including **commonly used hospital disinfectants**.⁵

Benefect Disinfectants & Wipes have not been tested against this specific “novel” Coronavirus strain (like all Disinfectants) but Benefect **Decon 30 does have kill claims against other enveloped viruses** such as: HIV-1, Influenza A and Influenza A Avian & the **much more difficult small, non-enveloped viruses** such as: Norovirus and Rhinovirus (therefore meets all of the criteria to use the voluntary Emerging Viral Pathogen process as well). See our Efficacy Table by Organism Class below. Decon 30 is also a **hospital grade disinfectant** which is what the CDC is most often looking for because they are far more readily available & sufficient to use in protecting the public.



Most importantly, all of these health agencies stress the importance of everyday preventive actions, as with any annual flu season, to help prevent the spread of respiratory diseases, including:

- Avoid close contact with people who are sick.
- Avoid touching your eyes, nose, and mouth.
- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- **Clean and disinfect frequently touched objects and surfaces using a regular household cleaning spray or wipe.**⁶
- Follow CDC's recommendations for using a facemask
- Wash your hands often with soap and water for at least 20 seconds. If soap and water are not readily available, use a hand sanitizer.

¹ <https://www.epa.gov/pesticides/coronavirus-cases-trigger-epa-rapid-response>

² https://www.epa.gov/sites/production/files/2016-09/documents/emerging_viral_pathogen_program_guidance_final_8_19_16_001_0.pdf

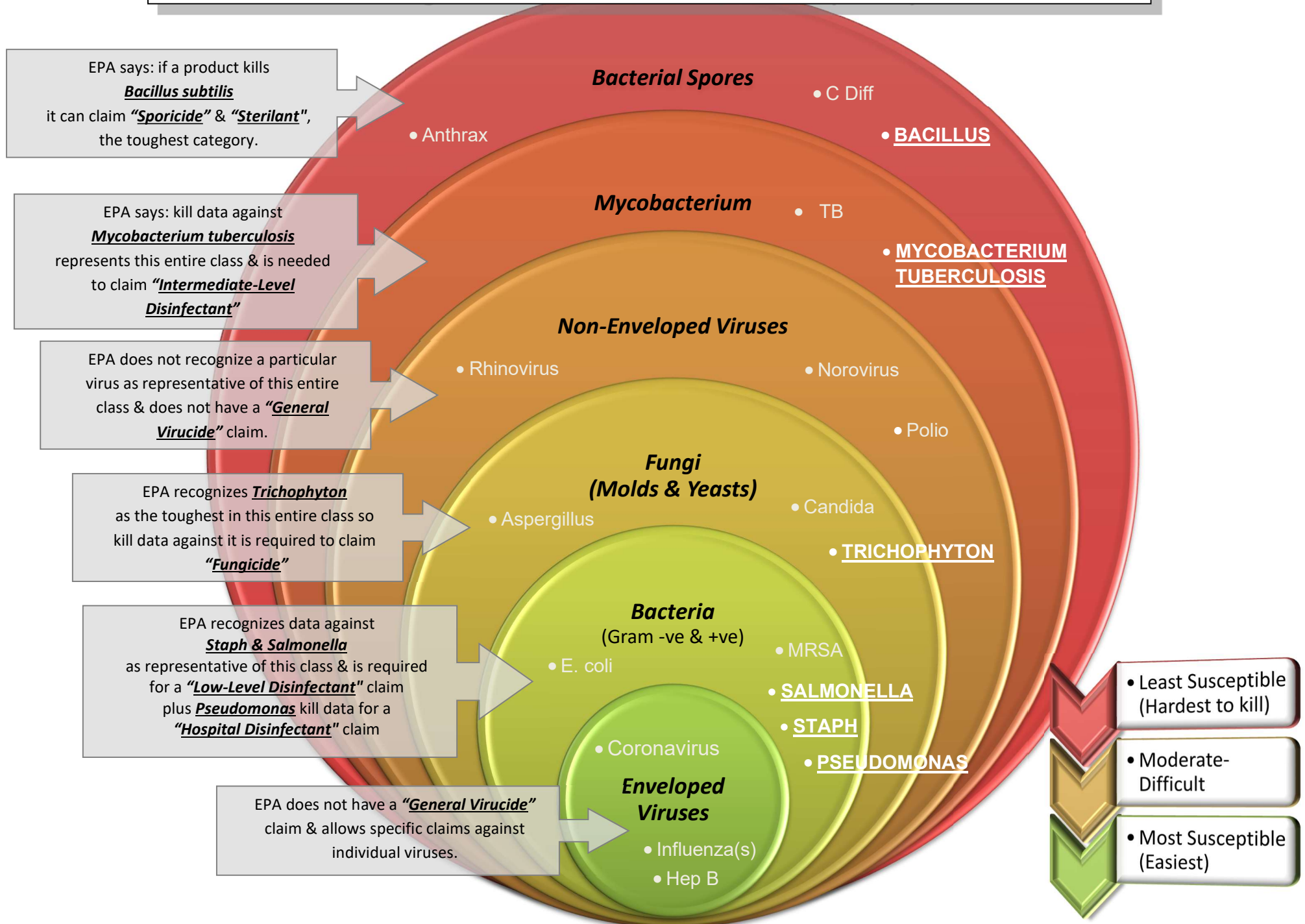
³ <https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html>

⁴ <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/frequently-asked-questions.html>

⁵ <https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19>

⁶ <https://www.cdc.gov/coronavirus/2019-ncov/about/prevention-treatment.html>

Classes of Microorganisms Ranked According to Susceptibility to Disinfectants





Botanical Decon30 Disinfectant: Efficacy By Organism Class

All disinfectants need to be registered by the EPA to make public germ-killing claims. They all must submit successful data showing kills over 99.99% against specific organisms within a standard contact time of 10 minutes. The EPA identifies particular organisms as representatives of their entire class of organism to optimize the testing process & avoid having to test every single organism within a class.

| ORGANISM (CLASS) | REDUCTION | CONTACT TIME | CLAIM (CATEGORY) |
|---|-----------|---|---|
| Norovirus (Non-enveloped Virus) | 99.999+ % | 10 Minutes | Virucidal (against Noro) |
| Rhinovirus type 37 (Non-enveloped Virus) | 99.999+ % | 10 minutes | Virucidal (against Rhino) |
| Trichophyton mentagrophytes (Fungi, spore forming) | 99.999+ % | 10 minutes | General Fungicide |
| Aspergillus niger (Mold, spore forming fungus, human pathogen) | 99.999+ % | No growth for 7 days | Mildewstat (prevents mold growth) |
| Candida albicans (Yeast, spore forming fungus, human pathogen) | 99.999+ % | 10 minutes | Kills Candida (doesn't represent a category) |
| MRSA (Methicillin Resistant Staph aureus Bacteria) | 99.999+ % | 30 Seconds | Kills MRSA (doesn't represent a category) |
| Pseudomonas aeruginosa (Gram +ve Bacteria, human pathogen) | 99.999+ % | 5 minutes | Hospital Disinfectant |
| Staphylococcus aureus (Gram +ve Bacteria) | 99.999+ % | 30 Seconds | General Disinfectant |
| Enterobacter aerogenes (Gram +ve Bacteria) | 99.9+ % | 60 minutes (as per test guidelines) | Carpet Sanitizer |
| Escherichia coli (Gram -ve Bacteria) | 99.999+ % | 30 Seconds | Kills E. coli (doesn't represent a category) |
| Salmonella choleraesuis (Gram -ve Bacteria) | 99.999+ % | 5 minutes | Limited Disinfectant |
| Influenza A (Enveloped Virus) | 99.999+ % | 5 minutes | Virucidal (against Flu) |
| Influenza A Avian (Enveloped Virus) | 99.99+ % | 10 minutes | Virucidal (against Avian Flu) |
| HIV -1 (Enveloped Virus) | 99.999+ % | 10 minutes | Virucidal (against HIV) |

Increasing Difficulty to Kill

NOTE: Benefect Disinfectants are not required, nor recommended, to be rinsed or wiped off after the above Contact Times due to its botanical ingredients and safety profile - "just spray & walk away"™.