

## CleanSlate UV - Public Coronavirus Guidance

### Coronavirus Efficacy

There is substantial evidence to prove that CleanSlate UV will kill between 99.97-99.9998% of the coronavirus on smartphones, tablets and other non-porous surfaces.

While veridical testing on the novel coronavirus (SARS-CoV-2) is not yet available to commercial labs, previous studies have analyzed the amount of UV-C light needed to deactivate *Coronaviridae* viruses. These studies show that *C. Difficile* spores are more difficult to kill than the Coronavirus genus.

3rd party lab testing has proven that CleanSlate UV kills 99.97% of *C. Difficile* in just 20 seconds.

We plan to have specific kill rates on Coronavirus in the coming weeks. Until then, our team is confident relying on the underlying body of scientific knowledge as a benchmark for efficacy.

[See link for full manufacturer letter and academic citations.](#)

### N95 Mask Guidance

Due to a significant shortage in N95 face masks, many facilities have inquired about the possibility of sanitizing masks and ensuring they are safe for re-use.

[A major 2018 study](#) published in the American Journal of Infection Control examined the need to reuse masks in the event of an H1N1-like influenza pandemic where person-to-person contact was a major transmission risk. It specifically analyzed UV-C light's capacity to sanitize masks and make them safe for re-use.

This study concluded that:

- UV-C light was capable of sanitizing 12 of 15 brands of N95 face masks. See list below.
- This required 1 J/cm<sup>2</sup> of UV-C light irradiance (the equivalent of five CleanSlate UV cycles).
- The number of re-uses would be limited by strap material degradation upon exposure to UV light, with an upper threshold of 200 re-uses hypothesized.

While this means it is likely that CleanSlate UV devices will be able to sanitize N95 masks, we are still in the process of validating this across specific models. For the time being it is advisable to run at least 5 standard (20 second) cycles to properly sanitize a mask, ensuring the cords and/or straps are not overlapping with the mask itself. We suggest fully reviewing the available science and making an independent evaluation before deciding on the appropriate protocol for your facility.

*N95 Respirator Models Successfully Sanitized with UVGI in 2018 study by D. Mills et al.:*

- 3M 1860
- 3M VFlex 1805
- Alpha Protech 695
- Kimberly-Clark PFR
- Moldex 1512
- Prestige Ameritech
- Sperian HC-NB295F
- U.S. Safety AD4N95

UV Study - [https://www.ajicjournal.org/article/S0196-6553\(18\)30140-8/fulltext](https://www.ajicjournal.org/article/S0196-6553(18)30140-8/fulltext)