

UV Germicidal Cabinet FAQ

Questions about UV light for disinfection

- **How does UV light work** - UV cabinets use the UV-C range of light because of its germicidal capabilities. In this range (253.7nm) the light will break molecular bonds in the DNA of viruses and bacteria, rendering them unable to reproduce and effectively killing them.
- **How long does it take to be effective** - The effectiveness of germicidal UV depends on the length of time a microorganism is exposed to UV, the intensity and wavelength of the UV radiation and other factors? In general, 30 minutes should be more than sufficient exposure to kill 99% of germs, bacteria and viruses according to multiple sources.
- **Do germicidal lamps kill viruses** - Yes -germicidal UV-C lamps kill up to 99% of most viruses, airborne bacteria and mold spores.
- **Is UV light Safe** - Prolonged, direct exposure to UV-C light can cause temporary skin redness and eye irritation. We suggest keeping the door of the cabinet closed to avoid direct contact. Many UV light cabinets will automatically turn off when the door is opened.
- **Can UV light penetrate surfaces** - Germicidal UV-C light only sterilizes what it comes into contact with. We recommend placing items so they are directly exposed to the light. Many UV light cabinets have reflective interiors to maximize the surface contact of the items placed inside.
- **What does UV light disinfect** – UV-C light will disinfect most surfaces it comes into contact with. Phones, toothbrushes, baby bottles and face masks (FFRs) are just a few items where Germicidal UV-C light has been considered to be safe and effective.

SOURCE FOR INFORMATION

Our sources for this information and more can be found at the following.

- https://www.researchgate.net/post/How_much_UV-light_exposure_time_is_required_to_disinfect_a_laminar_flow_hood
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2781738/>
- https://en.wikipedia.org/wiki/Ultraviolet_germicidal_irradiation
- <https://nymag.com/strategist/article/does-uv-light-kill-germs-best-sterilizer.html>
- <https://www.americanultraviolet.com/uv-germicidal-solutions/faq-germicidal.cfm>
- <https://www.ara.com/news/ara-research-mitigate-shortage-respiratory-protection-devices-during-public-health-emergencies>