



COVID-19 mythbusting series

Does ultraviolet light actually kill COVID-19?

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Does ultraviolet light kill COVID-19? Let's start with a brief recap on ultraviolet lights, ultraviolet light comes from the sun. The most damaging short wavelengths are called UVC, and these are filtered out by the ozone layer. It's the longer wavelengths, UVA and UVB, that reach the earth surface and contribute to those well-known effects that we all know about skin tanning, aging, burning and cancer. In terms of viruses, all types of ultraviolet lights are known to inactivate viruses, a range of viruses, but UVC is best. And what the ultraviolet light does is it modifies the viral genetic information, reducing their replication capacity.

What do we know about the impact of ultraviolet lights on COVID? Well, there are some studies, that need substantiating, to suggest that COVID-19 may have had its most severe impact in countries experiencing relatively low ultraviolet levels and temperature during the early phase of the pandemic. That leads people suggest that summer in Northern latitudes may help to reduce transmission. And it's probable, even likely, that ultraviolet light does play some role in reducing the risk of transmission of virus outside. However, it's likely and been probable that other factors associated with being outside like social distancing, like the dilution effect of fresh air, it's these that are playing a more significant role in reducing transmission outside. In terms of medical use of UV, artificial UVC has been used and is effective at reducing levels of virus in things like blood and on PPE. However, to my knowledge, there are no examples of its practical use in the indoor medical setting nor therapeutically. Best ways to control COVID-19 transmission, still remain social distancing, disinfection with alcohol and detergent based disinfectants and hand washing. Thank you very much.

For more free COVID-19 resources for veterinary professionals, visit rcvsknowledge.org/covid-19



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