

Study summarizes effectiveness of cloth masks in protecting clinicians from COVID-19

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A rapid, evidence-based review summarizes the effectiveness of cloth masks in protecting health care clinicians from respiratory viral infections, such as COVID-19. Nine studies were included in the review, and all but one were conducted prior to the COVID-19 pandemic.

The only randomized trial of cloth face masks published at the time of this review compared the infection rates of influenza-like illness among groups of health care professionals who wore cloth masks, medical masks, or inconsistent mask use in the hospital setting.

That study reported wide-ranging confidence intervals when comparing groups, but overall, they conclude that cloth mask use was associated with significantly higher viral infections than the exclusive use of medical masks.

A majority of studies were conducted in laboratory settings and evaluated either cloth face mask fit and airflow when compared to other kinds of mask or the filtration abilities of cloth material and masks. All filtration studies tested aerosolized particles including noncoronavirus, bacteria, and simulated biologic particles, and results were highly variable but suggested some level of particulate filtration.

Notably, available filtration studies did not specifically test COVID-19 transmission or respiratory droplet transmission. The lab studies all conclude that cloth masks provided an inferior fit and were less effective at filtering viral particles compared to standard medical or N95 masks.

Conclusions of this qualitative review align with current Center for Disease Control and Prevention guidelines that recommend the use of an N95 respirator for the care of patients with COVID-19.

The authors also recommend that for health care professionals without access to medical masks, a cloth mask should be paired with the plastic face shield,

with frequent cloth mask changes to reduce the risk of moisture retention.

Source:

American Academy of Family Physicians

Journal reference:

Daoud, A. K., *et al.* (2021) The Potential for Cloth Masks to Protect Health Care Clinicians From SARS-CoV-2: A Rapid Review. *Annals of Family Medicine*. doi.org/10.1370/afm.2640.
