

Are Masks Protective Against COVID-19?

Pamela A. Popper, President
Wellness Forum Health

Government workers and health authorities are recommending that people wear masks when leaving their homes, and in some states this is mandated whenever someone is in a public place or even steps outside. The public is told daily that the reason for this and many other rules and mandates is that the "best science" is being used to make these decisions and our rulers (formerly known as elected officials) are only doing what is best for public health. But is this true?

The COVID-19 virus is **0.125 µm** in size, and can penetrate the surgical mask barrier. According to the US National Academy of Sciences, in community settings "face masks are not designed or certified to protect the wearer from exposure to respiratory hazards."¹ Another study showed that surgical masks do not provide protection for aerosols ranging from 0.9-3.1 µm.²

In household settings, surgical masks do not prevent transmission of flu.^{3 4}

According to Dr. Jenny Harries, deputy chief medical officer in England, wearing masks can actually **increase** the risk of contracting the virus because virus can be trapped in the material and cause infection when the person inhales. According to Dr. Harries, members of the public should not wear masks unless they are sick, and only if advised to do so by a healthcare provider.

"What tends to happen is people will have one mask. They won't wear it all the time, they will take it off when they get home, they will put it down on a surface they haven't cleaned," she said. Furthermore, people go out and about and don't wash their hands every time they touch something – they can't – and then touch their mask constantly to drink water or eat, or even communicate, and this becomes a means of infection.⁵

A review of 17 studies concluded, "None of the studies we reviewed established a conclusive relationship between mask/respirator use and protection against influenza infection."⁶

Due to shortages, some people have been advised to make their own masks out of cloth. According to a hospital study in which hospital wards were randomized to medical masks, cloth masks, or a control group which included a high proportion of people who wore some type of mask, the rate of infection was highest in the cloth mask group as compared to the group wearing some type of medical mask. Transmission of viral particles through cloth masks was almost 97% as compared to medical masks at 44%. Reasons cited included moisture retention, reuse of the masks, and poor filtration, all of which actually can increase rather than decrease the risk of infection. The researchers concluded that the results "...could be interpreted as harm caused by cloth masks."⁷

A recent (2020) study in South Korea looked at the efficacy of both surgical and cotton masks for blocking transmission of SARS-CoV-2 from coughing patients. Patients were instructed to cough 5 times while wearing no mask, surgical mask, or cotton mask. The researchers reported that neither surgical nor cotton masks were effective for filtering SARS-CoV-2 from environment or the external mask surface. They also reported that there was greater contamination on the outer rather than the inner surface of the mask, which they said could be due to air leakage around the mask edge, or high-velocity coughing which might cause viral particles to penetrate the mask. They wrote that these results support the importance of hand hygiene after touching outer surfaces of the mask.⁸

Not only are the masks useless, they can also be dangerous. A woman in New Jersey crashed her car into a power pole because she was wearing an N95 mask for several hours, and insufficient oxygen and excessive carbon dioxide intake caused her to pass out, according to the Lincoln Park Police Department. She was not under the influence of drugs or alcohol.⁹

“Maskme” is the name of the condition that develops as a result of wearing useless masks continually. According to Dr. Amer Jaber of Washington Square Dermatology in New York, “When you wear a mask, you seal in your breath. This creates a moist, humid environment as it traps your breath, skin oils and sweat, leading to irritation rashes and acne.” He compares the condition to diaper rash, and also says that the masks themselves may irritate skin just by being in contact with the face for long periods of time. This can further irritate eczema, psoriasis or rosacea. He says, “The longer you wear the mask, the worse it is.”

Jaber recommends taking off the mask whenever possible in order to let the skin breathe, and using lotions, creams and even Vaseline if necessary in order to soothe irritated skin. Masks need to be aired out and dried after use, and washed to remove oils and sweat trapped inside.

As for how to treat acne if it has already developed, Jaber recommends benzoyl peroxide, salicylic acid, or glycolic acid. But he warns people to be careful since topical acne creams can cause further irritation and worsen skin conditions resulting from the constant wearing of masks.¹⁰

In addition to acne and skin disorders, wearing masks can cause headaches, particularly in those who are predisposed. One study concluded, “Shorter duration of face-mask wear may reduce the frequency and severity of these headaches.”¹¹

The orders to wear masks are not evidence-based, and rather based on misinformation, fear, and hysteria.

-
- ¹ Larson EL, Liverman CT, editors. Preventing transmission of pandemic influenza and other viral respiratory diseases: personal protective equipment for healthcare workers: update 2010. Washington: The National Academies Press; 2010.
- ² Oberg T, Brosseau LM. "Surgical mask filter and fit performance." *Am J Infect Control* 2008 May;36(4):276-282
- ³ MacIntyre CR, Cauchemez S, Dwyer DE et al. "Face mask use and control of respiratory virus transmission in households." *Emerg Infect Dis* 2009 Feb;15(2):233-241
- ⁴ Cowling BJ, Chan KH, Fang VJ et al. "Facemasks and hand hygiene to prevent influenza transmission in households: a cluster randomized trial." *Ann Intern Med* 2009 Oct;15(7):437-446
- ⁵ Laguipo ABB. "Wearing masks may increase your risk of coronavirus infection, expert says." *News Medical Life Sciences* Mar 15 2020
- ⁶ Bin-Reza F, Chavarrias VL, Vicoll A, Chamberland ME. "The use of masks and respirators to prevent transmission of influenza: a systematic review of the scientific evidence." *Influenza Other Respir Viruses* 2012 Jul;6(4):257-267
- ⁷ MacIntyre CR, Seale H, Dung TC et al. "A cluster randomised trial of cloth masks compared with medical masks in healthcare workers." *BMJ Open* 2015 Mar;5:e006577
- ⁸ Bae S, Kim MC, Kim JY et al. "Effectiveness of Surgical and Cotton Masks in Blocking SARS-CoV-2: A Controlled Comparison in 4 Patients." *Ann Intern Med* 2020 Apr; DOI: 10.7326/M20-134
- ⁹ Robert Gearty "NJ police say 'excessive wearing' of coronavirus mas contributed to driver passing out, crashing car." *Fox News* April 25 2020
- ¹⁰ Martiromo M. Maskme: Suffering from acne or breakouts under your mask? Here's what to do." *Fox News* May 26 2020
- ¹¹ Lim ECH, Seet RCS, Lee K-H, Wilder-Smith EPV, Chuah BYS, Ong BKC. "Headaches and the N95 Face-Mask Amongst Healthcare Providers." *Acta Neurol Scand* 2006 Mar;113(3):199-202