

Are face masks useful for limiting the spread of COVID-19?

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To the Editor—Coronavirus disease 2019 (COVID-19) is primarily spread through respiratory droplets or close contact.¹ Healthcare workers are advised to wear surgical masks and other personal protective equipment to prevent the spread of COVID-19. The World Health Organization recommends that the public need to wear a mask only when caring for a person with suspected COVID-19,² and emphasises frequent handwashing and social distancing (avoiding close contact within 1 to 2 m) in order to save the limited supply of available masks for carers and healthcare workers who rely on them.³ Further to these recommendations, some Asian countries such as China, Japan, South Korea and Thailand, and also Hong Kong, face masks are also recommended in crowded places or on public transport. Although there is limited evidence that face masks are effective in protecting the wearer from infection, wearing face masks can prevent transmission from an infected person, including those who may be asymptomatic or presymptomatic.⁴

Recently, researchers from The University of Hong Kong have found the ability of surgical masks to reduce seasonal coronavirus in respiratory droplets and aerosols.⁵

Some international studies have also demonstrated the efficacy of surgical masks in preventing respiratory virus transmission. For example, in 2008, a randomised, controlled clinical trial study from Australia showed that surgical masks had efficacious protective efficacy of over 80% against the transmission of respiratory viruses.⁶ In 2011, Jefferson et al⁷ found that wearing a mask or N95 respirator might reduce respiratory virus infection. More recently, researchers from South Korea studied four patients infected with COVID-19 and found that surgical masks helped prevent the spread of severe acute respiratory syndrome coronavirus 2 and reduced the viral load of a cough.⁸

On 3 April, the Centers for Disease Control and Prevention of the United States suggested wearing cloth face-coverings in a public area, in addition to social distancing, to prevent transmission in the community.⁹

Face mask wearing can prevent transmission of COVID-19 in the general population by limiting the spread from infected individuals, including those who are asymptomatic or pre-symptomatic.

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All authors contributed to the concept of the study, acquisition

and analysis of the data, drafting of the manuscript, and critical revision of the manuscript for important intellectual content. All authors had full access to the data, contributed to the study, approved the final version for publication, and take responsibility for its accuracy and integrity.

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