

More evidence that masks help shield you from coronavirus

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Here's some reassuring news for those who wonder whether face masks really work: New research shows a face covering can block 99.9% of respiratory droplets when a person speaks or coughs, significantly lowering the risk of coronavirus transmission.

Researchers at the University of Edinburgh in the United Kingdom conducted tests with people and with a life-sized human model connected to a machine that simulates coughs and speech.

"The simple message from our research is that face [masks](#) work. Wearing a face covering will reduce the probability that someone unknowingly infected with the virus will pass it on," said study co-author Paul Digard, a professor at the university's Roslin Institute.

To come to that conclusion, the team compared the number of [droplets](#) that landed on a surface in front of a person coughing and speaking without and with a surgical mask or a basic cotton face

covering.

The tests showed that a person standing 2 meters (6.5 feet) from a coughing person without a mask is exposed to 10,000 times more droplets than someone half a meter (1.6 feet) from a coughing person who is wearing one.

Even a single-layer cotton mask reduced the number of droplets by more than 1,000 times, according to the study published Aug. 17 on the preprint server *medRxiv*. Such research hasn't been peer-reviewed.

The findings could have implications for social distancing measures, according to the research team led by Ignazio Maria Viola.

"We knew [face masks](#) of various materials are effective to a different extent in filtering small droplets," said Viola, of the university's School of Engineering.

"However, when we looked specifically at those larger droplets that are thought to be the most dangerous, we discovered that even the simplest handmade single-layer cotton mask is tremendously effective," Viola said in a university news release. "Therefore, wearing a face mask can really make a difference."

More information: The U.S. Centers for Disease Control and Prevention has more on [coronavirus protection](#).

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