

COVID-19
Resource



The Facts about Face Masks

Evidence-based Advice for the General Public

The COMBINATION of fit and filtration is the most important when wearing a mask!

04/08/2020



On April 3rd, 2020, the CDC began recommending that consumers wear cloth face masks in public. ¹Face masks may be helpful when it's hard to maintain physical distance, like when shopping in the grocery store or pharmacy. (This is an addition to other social distancing measures.)

Most of us have never experienced a pandemic. The coronavirus is spreading. People want to make informed decisions. There is a lot of confusing information available. The Helene Fuld Health Trust National Institute for Evidence-based Practice in Nursing and Healthcare is here to help. We are collecting fact-based resources at go.osu.edu/ebpcovid19.

FREQUENTLY ASKED QUESTIONS ABOUT FACE MASKS

What kinds of masks are common?

There are three types of masks discussed in relation to COVID-19: N95 respirators, surgical masks and homemade cloth masks.

What affects the filtering action and performance of face masks?

There are two things that affect how a face mask works:

1. Filtration (material and how it filters particles)
2. Fit (size and seal)

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What are the differences between the three most common types of masks?

Different types of masks are used by different people for different reasons. Healthcare workers wear N95 respirators and surgical masks.

N95 Respirator

- Protects wearer from breathing in infectious droplets or particles from respiratory illnesses ^{2,3}
- Provides adults with 25 times the protection of a surgical mask and 50 times the protection of a homemade cloth mask ⁴



Surgical mask

- Prevents the spread of infections from the wearer's respiratory droplets to others and/or protects the wearer from body fluids splashed or sprayed ^{2,3,5}
- Offers about two times the protection of homemade cloth masks ⁴



Homemade cloth mask

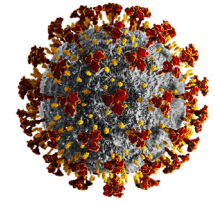
- Provides the wearer with some protection from particles in the environment



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What is the size of the COVID-19 virus?

The COVID-19 virus is a relatively small particle. Small particles pass through any mask more easily than large particles.



In the community, who should wear a mask?

There are mixed recommendations about face masks for the general public. ⁶

- Because evidence suggests that people can spread the COVID-19 virus before symptoms show, the public spread might be less if everyone wore face masks if they need to leave home for any reason. ⁶ In the current pandemic, from a public health point of view, any type of general face mask can decrease the spread of the virus. ⁴
- For low-risk people living at home in a non-crowded setting, experts do not recommend wearing a mask. ⁷
- For high-risk people (working in a crowded setting like public transport, with pre-existing illness, pregnancy, or older age), the first choice of mask type is a surgical mask ⁷, the second choice is a homemade cloth mask if nothing else is available. ⁷

What makes a person more likely to wear a face mask?

People are more likely to wear a face mask if they believe that they are at risk of getting sick and they see the benefits of wearing a mask. ⁸ On the other hand, barriers to wearing a face mask are personal discomfort or feeling embarrassed. ⁸



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What affects the performance of homemade cloth masks?

- **More layers** make the mask filter out more particles. ⁸
- **Fineness** of fabric improves filtering. ⁸
- **Moisture** decreases filtering, so once a mask is damp, remove it and put on a dry mask. ⁸
- **Distance** traveled by the droplets. ⁸ The mask's ability to filter particles gets worse the closer you are to the spray from a cough or sneeze.
- **Mask design**
 - **Size:** The mask should cover your nose and mouth and extend back on your cheeks and under your chin.
 - **Shape:** Mask shapes have different effectiveness. A tetrahedral shape is better than a rectangular shaped mask.
 - **Seal:** Any mask is better when the seal of the mask is tight to the face. ⁹
- **Mask Handling**
 - Above all else, make sure to wash your hands before putting on a mask and after taking one off to limit the virus getting from hands to face and mask. Continue to practice good hand washing and do not touch your face. ¹¹



Cloth Mask1

Tetrahedral shape mask image ¹⁰

Will a homemade cloth mask help protect kids from being exposed?

Children are less protected from exposure to particles than adults when wearing a mask, possibly due to poor mask fit. Ensure that your child's mask fits snugly on the face. ⁴ Remind your kids to 1) keep their hands off their face and 2) wash their hands frequently.

Is there a gender difference in mask protection (men versus women)?

No. There was no difference between men and women in the degree of protection from wearing a mask. ⁴



We hope this pamphlet has helped answer some of the questions you may be having about the use of face masks during the COVID-19 pandemic. Please check out the repository for more evidence-based resources to support you.

We believe that evidence is an especially powerful tool in a time like this. We hope that putting these evidence-based resources into your hands will help you make the best decisions possible during the COVID-19 pandemic.

Help this information get to the people who need it. Please consider sharing through social media and other online communication portals and follow us on our social media to be notified of updates and new resources.



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**Helene Fuld Health Trust National Institute for
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In 2016, The Ohio State University College of Nursing received a \$6.5 million gift from the Helene Fuld National Health Trust to create the Helene Fuld Health Trust National Institute for Evidence-based Practice in Nursing and Healthcare. The Fuld Institute for EBP is a national hub for the formation, teaching and dissemination of best practices to improve healthcare quality, safety, costs and patient outcomes. Its cores include transdisciplinary clinical practice, academics, consumer education, and EBP implementation science.

Mission

We dream, discover and deliver a healthier world through transdisciplinary education, research, and policy focused on evidence-based decision making.

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