

Here is one of the better articles I've seen on the general public use of face masks. It is not a Medical Journal article, but does summarize a lot of professional literature and provides some links. Whether you should wear one while out in public remains controversial, but the CDC appears to be shifting their position. We will see.

<https://www.theatlantic.com/health/archive/2020/04/coronavirus-pandemic-airborne-go-outside-masks/609235/>

An N95 mask, properly fitted, filters out the most, both of what you inhale and exhale. Other "respirator" type masks can do this, like those used to prevent Hanta virus infection when cleaning areas where deer mice have been. Roughly, surgical masks would be next best, and may filter out >80% of most particles, depending on how you wear it, particle size, and design.

Surgical masks used to be cloth, which brings us to the topic of homemade masks. They obviously are not as effective as a modern surgical mask, but there is certainly literature to indicate they are better than nothing. The goal is to reduce whatever particular contaminates you might exhale or inhale.

The effectiveness of a homemade mask is going to depend on a lot of factors, but they are not worthless. Some health care organizations provide specifications. <https://www.owensborohealth.org/news-events/news-media/2020/fabric-surgical-masks-information/>

If you want to make your own mask, then here is another link with some information. They discuss materials, tests, fit, and probability of effectiveness. It looks credible, but I cannot say that their results are validated elsewhere. <https://smartairfilters.com/en/blog/category/masks/>

Some of the older literature for cloth masks indicates that a close fit (bendable mold) across the nose is important and as close as possible on the cheeks and under the chin. One article indicated that a pleated mask may be better.

Some people (like my office receptionist) put a high grade furnace filter between two pieces of cotton for their mask. This seems like a sound idea, but I am aware of no testing.

The mask may not have to filter things as small as a virus to have some effectiveness. Just diminishing the number of larger droplets a virus may travel on could have some benefit. How much benefit filtering some of those droplets has, is one of the unknowns. You can launder a cloth mask or soak it in alcohol (70% – 90%) to clean it. One of the links above discusses cleaning masks.

After you take a mask off wash your hands.

Cons of a mask:

- If the mask makes you touch your face more, or you put your finger under the mask to scratch or adjust then you may as well not use it, since you just defeated its purpose. You may also have spread whatever was on the outside of the mask to your hand and the area around your mouth and nostrils.
- Don't allow the mask to give you a false sense of security and ruin your social distancing.
- Of course, do not share masks.

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