

Note: Opinions expressed here are my own, are provided for information purposes, and do not represent recommendations by Congregation Beth David or its Board of Directors. I have no financial incentive or personal benefit from any of the products or links. – Elizabeth Menkin, MD

Why get yet another mask?

Cloth masks, especially homemade ones, were supposed to be a stopgap measure. There are better possibilities now.

I have a supply of cloth masks. Why would I want to get disposable ones?

There are now many high-filtration masks available that fit better, give more protection, and are easier to breathe in than most cloth masks or double-masking. And your glasses will fog up less! Reusable? See page 3.

What is a "high filtration mask?"

- Unlike surgical masks or cloth masks, they are designed to seal tightly around the face and protect the wearer from inhaling particles. (Cloth masks were originally recommended to protect others from the wearer, and surgical masks to also protect the wearer from fluids such as blood splashing onto them.)
- High filtration masks are certified to different standards in different countries: N95 in the USA, FFP2 in Europe, KF94 in South Korea, and KN95 in China are all basically equivalent in terms of defined filtration efficiency, but vary in the compliance with those standards.

Why wear a high filtration mask?

- **High filtration masks protect you really well, and protect others too.** There is ample evidence by some of the world's leading aerosol scientists ([Linsey Marr](#), [Don Milton](#)) who study infectious disease that covid is airborne. High Filtration masks can provide excellent protection to the wearer by filtering out other people's respiratory droplet's that contain COVID. They also do a great job of filtering out your own respiratory droplets so they provide excellent protection to others.
- **They breathe easier than cloth masks** and other double-mask solutions. That's right, most KF94/KN95/FFP2/N95's will be easier to breathe in than many "good" cloth masks or double-mask combinations.

I've been vaccinated. Why would I want to upgrade my mask now?

- **The vaccines do not provide 100% protection.** Although the vaccines are incredibly effective (and were nothing short of amazing in terms of turnaround), they only offer 94% to 95% protection. There's no way to tell who the 5% will be who don't respond to the vaccine and will still be at risk for COVID-19. In comparison, the [measles vaccine](#) is 97% effective after two doses. The vaccination program began in the U.S. in 1963, but the disease wasn't considered [eliminated](#) until 2000!

- **Those who have been vaccinated might be asymptomatic spreaders.** Getting vaccinated means you're much less likely to get sick and develop symptoms yourself, but more research is needed to determine if the vaccines also prevent transmission. Experts are concerned that vaccinated people can still become infected without symptoms and then spread it to others. Since the pandemic unfolded nearly a year ago, experts have worried about silent spreaders, aka those who are infected but don't show symptoms. If vaccinated people don't continue to wear a face mask, they could cause the virus to keep circulating.
- **High filtration masks are an important part of the battle against spreading the many emerging new variants.** These masks decrease transmission both by reducing the number of infectious particles spread by a mask wearer (known as "source control") and by reducing the amount that a mask wearer inhales. The cloth masks do a good job at source control, but High filtration masks do a much better job of protecting the wearer and dampening transmission. The fewer people who harbor the virus, with or without symptoms, the less chance of developing more new variants.

Unfortunately, the on-line marketplace is swamped with fraudulent medical-grade masks, (especially KN95's) some of which are less than 20% effective.

Where can I find reliable high-filtration masks for general-public use?

1. Aaron Collins* reports of tests of various masks for general public use:

- Latest updated recommendations: <https://youtu.be/WE5Uo3F2TdU>

Kids Masks - [1:54](#)

- Blue 3D Kids Mask KF94 - <https://behealthyusa.net/collections/...>
- BOTN Kids Mask KF94 Source 1 - <https://behealthyusa.net/collections/...> Source 2- <https://kollekteusa.com/collections/b...>
- Bluna Kids Mask KF94 Source 1 - <https://behealthyusa.net/products/fac...> Source 2 - <https://kollekteusa.com/collections/b...>
- Goodday Happylife Youth KF94 (Black) <https://kollekteusa.com/collections/h...>
- Powecom Black KN95 may fit smaller faces too (pre-teen and young teen).
White: <https://bonafidemasks.com/Powecom-kn-95/> Black:
<https://bonafidemasks.com/Black-Powec...>

Adult KF Masks (listed ~ smaller-to-larger) - [5:12](#)

- BOTN Medium KF94 Source 1 - <https://behealthyusa.net/collections/...> Source 2 (choose 10 pc) - <https://kollekteusa.com/collections/b...>
- Dr. Puri Medium KF94 <https://behealthyusa.net/collections/...>
- Bluna FaceFit KF94 Source 1- <https://behealthyusa.net/collections/...> Source 2 - <https://kollekteusa.com/collections/b...>
- CleanTop Evergreen KF94 <https://kollekteusa.com/collections/e...>
- MaskLab FFP2 (beautiful prints) <https://masklab.hk> USA Site - <https://masklab.us>
- Cleanwell KF94 (colors) <https://beautyboxkorea.com/product/cleanwell...>
- BOTN Black Large KF94 Source 1 - <https://behealthyusa.net/collections/...> Source 2- <https://kollekteusa.com/collections/b...>
- LG Airwasher Style Black KF94 <https://www.everydaybeautylab.com/lg-...>

Adult KN Style Masks - [10:43](#)

- Powecom Black KN95 ear loop <https://bonafidemasks.com/Black-Powecom-Black-KN95-ear-loop/>
Headband style: <https://bonafidemasks.com/Powecom-kn-95/>
- Arun External Nose Clip KN95 <https://longanmerch.com/products/arun-external-nose-clip-kn95/> *NOTE TO SELECT EXTERNAL NOSE CLIP*

3M 9502+ NIOSH Source 1 - <https://kn95respiratormasksforsale.com/3m-9502-n95/> Source 2 - <https://www.magidglove.com/3m-9502-n95/>

3M 9502+ KN95 <https://kn95respiratormasksforsale.com/3m-9502-kn95/>

- [Raw data of Aaron Collins' tests](#) and mask measurements are available.

2. Better-than-Amazon places to shop online for masks:

- <https://behealthyusa.net> for BOTN (for large faces), Bluna FaceFit (for smaller faces) et al; sometimes has mix-and-match specials. Baseline prices ca \$3.50 (\$35 for 10) but they run specials and coupons, eg “ONLY4OYOU” (or is it “ONLY40YOU”?) gets one-time per customer 40% off. Prices posted include shipping
- <https://bonafidemasks.com/face-masks/> Best source for authentic Powecom KN95, ear loop or headband folded-cone-styles. Free domestic shipping.
- <https://kollekteusa.com> Often cheaper (despite shipping charges starting at \$6.90) than Behealthyusa for BOTN and Bluna FaceFit.
- <https://masklab.us> (for fewer than 4 boxes), and <https://masklab.hk> (if buying 5+ boxes or seeking the newest styles) for really beautiful FFP2 (European equivalent of N95) masks that fit a variety of faces. Masklab models run a bit larger than Bluna FaceFit, but not as big as BOTN. The Hong Kong prices are lower, but shipping higher, cheaper per mask if you are ordering ≥ 5 boxes to order from HK (eg group order).
- <https://www.everydaybeautylab.com/ppe> can buy one mask at a time for \$2-\$2.50, basic shipping is \$5.00 but you can get \$5 off one time by signing up for their mailing list. They also have a [sampler](#) of kids masks
- <https://wellbefore.com/collections/niosh-n95> Reliable but expensive source for N95 masks

How long can you reuse a ‘non-reusable’ mask?

Re-using a ‘disposable’ mask in a community-use setting is less problematic than the risks of re-use in a health care setting. Virus that might have logged in your mask will dry and become inactivated in a couple of days. Hang the mask or place it in a breathable bag where it does not touch your hands or other masks for a few days before re-using it. The elastic loops may stretch out after repeated on-and-off of the mask and may need fit adjustment. Also, store the mask where it will not become deformed and degrade the nose-bridge fit. Re-testing of a mask after 40 hours of cumulative wear in a clean (office) environment showed only a few % degradation in filtering efficiency. https://youtu.be/_In-nBP6WkQ

References/Resources:

Improve the Fit and Filtration of Your Mask to Reduce the Spread of COVID-19
<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/mask-fit-and-filtration.html> Recommends mask fitters too.

Mask Fitters: [Badger Seal](#) and [Fix The Mask](#) (Contact me if you want a Badger Seal)

Why aren't we wearing better masks?

<https://www.theatlantic.com/health/archive/2021/01/why-arent-we-wearing-better-masks/617656/> (Read this in “reader view” to avoid the slew of cloth mask ads.)

Five reasons to continue wearing a mask, even after you're vaccinated

<https://health.clevelandclinic.org/already-vaccinated-heres-why-you-shouldnt-stop-wearing-your-face-mask-yet/>

* Who is Aaron Collins, what are his qualifications? https://youtu.be/4JFed_ofCwM
00:00 Intro (Dec 15th, 2020)

01:05 Who is this nerd? (He worked in developing Condensation Particle Counters (CPC's) obtained this equipment at public auction pre-pandemic as hobby),

04:05 Apparatus: TSI-3025a CPC w/ TSI 8026 aerosol generator using 16% NaCL solution, 20-second average concentration measurements as fitted. Generates COMPARISONS one mask to another, on the same face (his)

Good masks (good filter and good fit) make a huge reduction in infection risk (100-fold more so than increasing ventilation indoors (a 4-fold reduction).

“Strategies to minimize SARS-CoV-2 transmission in classroom settings: Combined impacts of ventilation and mask effective filtration efficiency” (preprint)

<https://www.medrxiv.org/content/10.1101/2020.12.31.20249101v1.full>

Recommended Guidance for Extended Use and Limited Reuse of N95 Filtering Facepiece Respirators in Healthcare Settings

<https://www.cdc.gov/niosh/topics/hewcontrols/recommendedguidanceextuse.html>

On May 7, the FDA banned the use of KN95 masks from more than 60 manufacturers in China. <https://www.nytimes.com/2020/05/07/health/masks-banned...> (Guangzhou Powecom Labor Insurance Supplies Co., LTD, manufacturer of Powecom ear loop and headband style, is one of those approved)

Almost 70% Of Chinese KN95 Masks Don't Meet Minimum Safety Standards (9/2020)

<https://www.forbes.com/sites/robertglatter/2020/09/25/...>

You can reach me at esmenkin@gmail.com