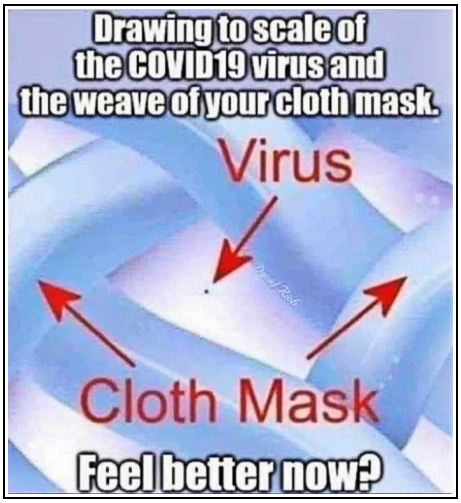


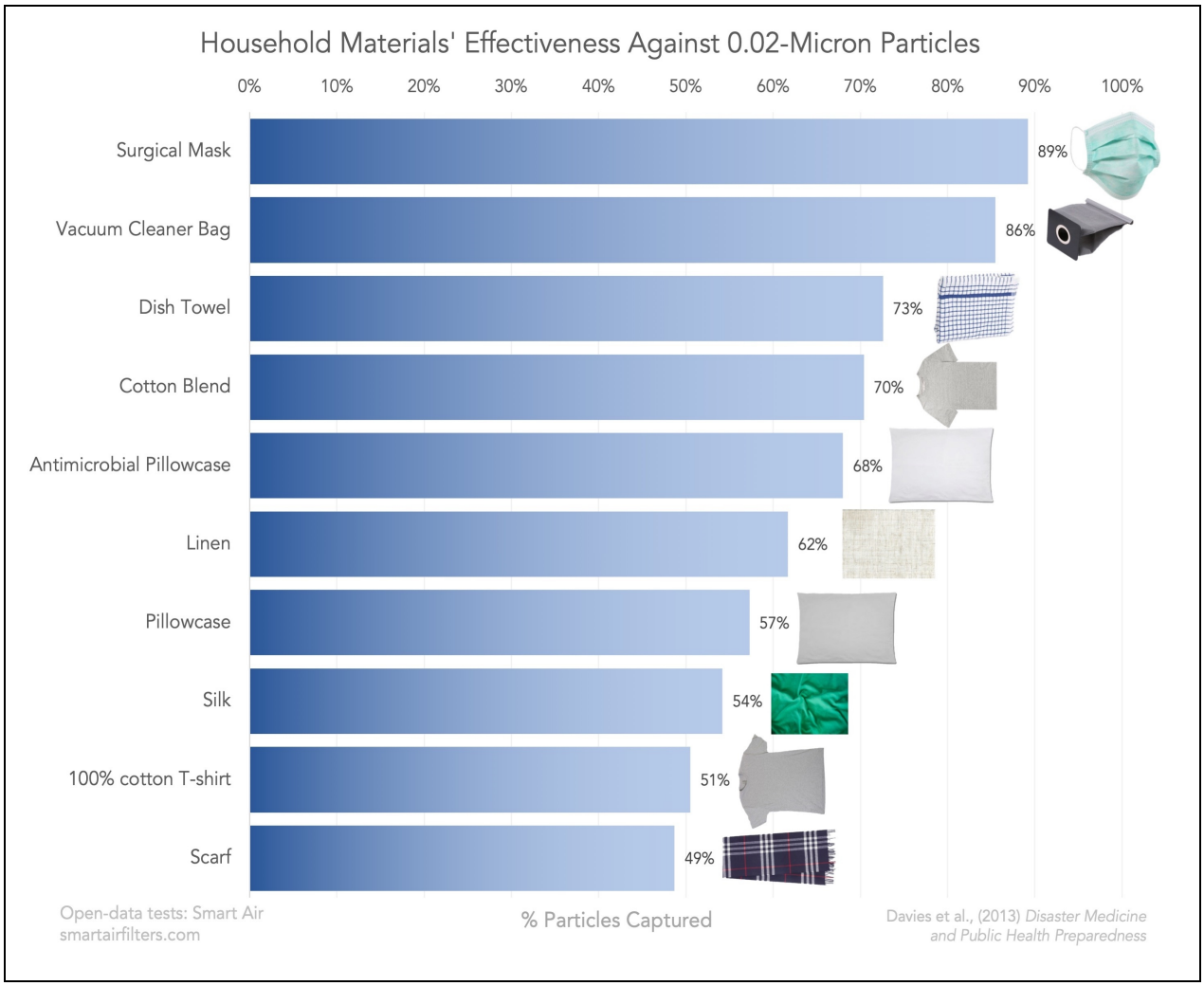
The Right Mask

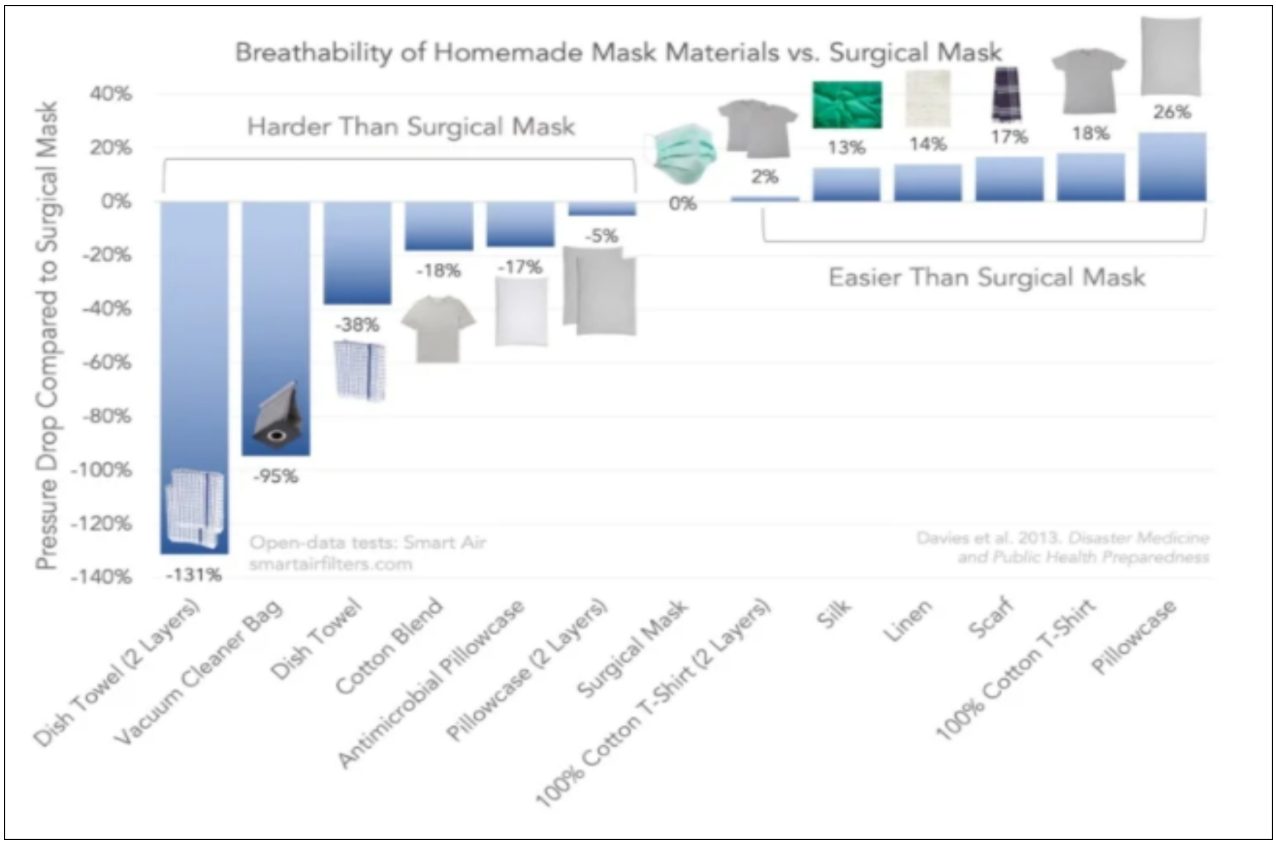
To wear a mask, or not to wear a mask. That is the question. The CDC, FTC, FAA, DBA and MOUSE apparently are having a problem trying to figure out whether to wear a mask, even if after being vaccinated. What seems to be missing is the data that supports the efficacy of different masks made of different materials.

Now obviously, the N-95 mask is the best, BUT the government has redirected all N-95 masks away from civilians and are sending them to hospitals, etc. The reason? The Covid Virus is approximately 0.1 micron, which is really small, but it is not the smallest of some viruses and bacteria. The illustration above is to kind of, sort of, maybe close to how the size of the Covid Virus compares to to the weave of a homemade cloth mask. The point being is that the virus has a pretty good chance of passing right through the mask and into your lungs. So why is the government so persistent in having everyone wear a mask, knowing that the most effective mask is unavailable? MAYBE, just maybe this is why states that didn't have a mask mandate had the same, if not less, Covid infections. Wearing the wrong mask may simply be a false sense of security.

Not all materials are the same when it comes to a DIY mask. A chart is included on the next page that illustrates the effectiveness of various materials. Materials can be doubled up, but then there is a breathability issue. A chart for that is also included.

This information has been available since last year, but I don't think a lot of people were interested. Who knows, maybe the information here has little to no value also. It is what it is. If you are unvaccinated and desire to wear a mask, an efficient mask and cannot buy one, then your option is to make one. How you make it is up to you, but the material is definitely important to consider.


Household Materials' Effectiveness Against 0.02-Micron Particles
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Surgical Mask
89%
Vacuum Cleaner Bag
86%
Dish Towel
73%
Cotton Blend
70%
Antimicrobial Pillowcase
68%
Linen
62%
Pillowcase
57%
Silk
54%
100% cotton T-shirt
51%
Scarf
49%
Open-data tests: Smart Air
smartairfilters.com
% Particles Captured
Davies et al., (2013) Disaster Medicine
and Public Health Preparedness


Breathability of Homemade Mask Materials vs. Surgical Mask
Pressure Drop Compared to Surgical Mask
40%
20%
0%
-20%
-40%
-60%
-80%
-100%
-120%
-140%
Harder Than Surgical Mask
Easier Than Surgical Mask
-131%
-95%
-38%
-18%
-17%
-5%
0%
2%
13%
14%
17%
18%
26%
Open-data tests: Smart Air
smartairfilters.com
Davies et al. 2013. Disaster Medicine
and Public Health Preparedness
Dish Towel (2 Layers)
Vacuum Cleaner Bag
Dish Towel
Cotton Blend
Antimicrobial Pillowcase
Pillowcase (2 Layers)
Surgical Mask
100% Cotton T-Shirt (2 Layers)
Silk
Linen
Scarf
100% Cotton T-Shirt
Pillowcase