COVID-19 Mask Overview

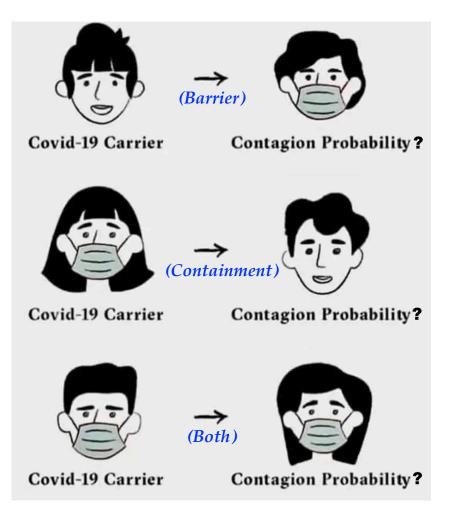
Whether or not to wear masks for COVID-19 has become a contentious issue. Government agencies and medical organizations generally say not only that it is advisable, but that it is often mandatory. On the other hand numerous scientific studies, plus organizations for civil rights, have contested the mask mandates.

Determining who is right comes down to closely examining four mask issues: 1) modality, 2) effectiveness, 3) safety, *and* 4) motivation.

1 - Modality

Mask proponents claim that masks may provide two possible primary medical benefits: **containment** and **barrier**.

Containment is that a mask-wearing COVID-19 infected person, won't pass on the virus to non-infected people. **Barrier** is that a healthy mask-wearing person, will not get the virus from other nearby COVID-19 infected people. Both of these claims are highly theoretical, and based on numerous variables. In short, masks do **not** *contain* the virus, and also do **not** act as a genuine *barrier* to the virus. Put another way, we do not scientifically know the probability answer to ANY of the following three scenarios.



2 - Effectiveness

Whether the justification for mask use is containment or barrier, the scientific question is: *how effective is a mask for either scenario*?

All things being equal, a mask's effectiveness is directly related to its porosity. In general, higher filtration (low porosity) means higher effectiveness. The most effective commercially available higher filtration mask is N-95 — but it is still not very effective against small viral particles. However, CDC regulations allow home-made cloth masks, which can have 100 times the porosity (i.e., be only 1% as effective) as a N-95 mask. For more details on effectiveness, review the many scientific studies found in Chapter 2 of this <u>Report</u>.

3 - Safety

Mask proponents focus on claimed viral safety (containment or barrier) of a mask wearer, but have said almost nothing about other safety concerns for wearing masks. In other words, wearing COVID-19 masks is presented as a one-sided benefit. If that were the case, this whole matter would be much simpler to analyze.

However, dozens of scientific studies have concluded that there can be severe adverse health consequences to mask wearers. These liabilities are dependent on such variables as: age of the mask wearer, length of time a mask is worn, porosity of the mask, how often the mask is replaced, etc. Note that the more effective (less porous) a mask is, the more likely there will be negative health consequences to the wearer. A representative collection of scientific safety studies is found in Chapter 3 of this <u>Report</u>.

4 - Motivation

The underlying argument for mask mandates, is that the government (e.g., CDC) is trying to prevent uninfected citizens from dying from COVID-19. The government's strategy here is to appeal to the fear that most people have of dying.

But is the government genuinely concerned about citizens dying from COVID-19? Consider that they have:

- a) allowed home-made cloth masks to satisfy mask mandates, but statistically they have almost zero effectiveness;
- b) done nothing about emphasizing that the best protection against dying from COVID-19 is for citizens to have a strong immune system; *and*
- c) not publicized and supported <u>scientifically proven treatments</u> (including OTCs) that would save a high percentage of COVID-19 infected people from dying.

What about the assertion that the government wants to prevent healthcare facilities from being overloaded by COVID-19 patients? All of the prior three points also apply to this claim, and also contradict it.

Then what is the government's real rationale behind such measures as mask mandates? The short answer is **politics**.

The Government's motivation for mask mandates appears to be: **a**) virtue signaling [trying to win favor from its technically-challenged citizens, by showing them that it is responding to a problem], *and* **b**) subtly expanding its power and control over citizens.

That medical organizations (e.g., the <u>AMA</u>) go along with this unscientificness, simply indicates that they are also playing politics — i.e., trying to stay in good graces with whoever currently has political power. *Shame on them for abandoning Science!*

From a citizen's perspective, should their decision about whether or not to wear a COVID-19 mask (*when they are given a choice*) be based on fear or Science?

In addition to the <u>Report</u> I've already cited, <u>here</u> is another fine collection of scientific studies on COVID-19 masks that can help in answering that significant question.

john droz, jr. physicist aaprjohn *at* northnet *dot* org 6-28-22