# Some fuel for the COVID skeptics

**Disclaimer**: I am vaccinated, was one of the first people to get vaccinated. Getting the vaccine is good, it should be considered as an act of [charity](https://twitter.com/JoshHochschild/status/1474061845522784259?s=20). However, acts of charity should not be mandated, I oppose measures meant to make life difficult for the unvaccinated. I feel like it is important that there BE a case against the vaccine because as long as there is at least one case, then the mandate is unethical and you are forcing people who could have a reasonable view, to go against their own (reasonable) conscience.

Note that none of these arguments take away from the point that a 10% reduction in transmission rate may aggregate to more than 10% of total cases which Nassim Taleb rightly points. I will not give anti-vaccine arguments per se, I will simply try to point out some measurement issues that seem sufficient for one being uncertain about the state of knowledge, and then highlight relative risks of the vaccinated vs the unvaccinated before finishing with a brief foray into the implicit moral argument.

## 1st Measurement issue: Giving the vaccine an unfair advantage

Take first a basic [fact](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated.html); everyone is only considered as "vaccinated" 2 weeks after taking their shot. If this sounds harmless to you, you may not have thought this through. Let us illustrate with an example:

Suppose that 90 people got the vaccine and 90 people did not. Ignoring deaths from COVID, let us say that the vaccine killed 10 of the 90 people within two weeks and nobody after. In the unvaccinated group, nobody died. If we try to measure the efficacy of the vaccine after a month, will it appear as if it saves people?

Yes! There will be 90 unvaccinated people who are alive, 10 who are dead and hence the unvaccinated have a 10% death rate. The 90 people who were vaccinated and did not die on the other hand are all alive, so being vaccinated has a measured 0% death rate!

The point here is not to say that the vaccine kills or does not kill people. It is to say that given the way we measure things, **even if it did kill people, it can be measured as saving people.**

A little more background: “Vaccine Safety” means we are trying to measure the effect of the vaccine independently from COVID. The reasonable way to do this is to use the date that the vaccine was administered and see how people’s health changes relative to somebody who is not vaccinated. “Vaccine Effectiveness“on the other hand is where we try to measure how good the vaccine is relative to not being vaccinated when it comes to COVID. Since the vaccine is only said to properly kick in after two weeks, this is the reason why we would want to measure effectiveness with such a measure. However, the vaccine effectiveness measurements will bias things in favor of the vaccines unless vaccine safety is 100%.  I still haven’t seen studies that control for this but I have been informed that they do exist.

## 2nd Measurement issue:- Overrating the death rate

The way the stats work is that ANY cause of death within [28 days](https://coronavirus.data.gov.uk/) of being tested positive is counted as a COVID death. To bring this home, if somebody drives to the testing center, gets tested positive for COVID, and then dies in a car crash on the way back home, they are counted as a COVID death.

What does this mean? It means that even if COVID was not lethal, it would be measurably responsible for about 1/12th of ALL deaths by those tested positive. If everyone caught it twice and tested positive both times for it within a year, it would be measured responsible for 1/6th of all deaths. Remember, this is true even if COVID kills nobody[[1]](" \l "_ftn1).

If the mortality rate of COVID was not as low as it is, this kind of bias might not be a big problem. However, as the mortality is below 1%, this effect should be treated as the minimum that can be measured[[2]](" \l "_ftn2). The question to ask is: what proportion of people who die of any cause are tested positive before dying of COVID? The higher is this proportion, the more likely the bias exists.

## 3rd Measurement issue: Excess deaths

We are left with excess mortality as a possible measure. This basically is to just look at the total deaths in the years before COVID and the total deaths during COVID, and take their difference. This exercise actually gets us deaths which are magnitudes lower (depending on the country). But even this measure can be critiqued, for instance, car accidents, suicide, and drug overdoses are all up. It is very possible that these things are the excess deaths, which in turn could be caused by the lockdown policy.

This seems like the easiest thing to debunk of everything I have said here. Normally, I would be informed if there was such a debunk which controls for these effects. But there is so much political pressure to toe the line that all my sources have somehow turned into *yes* men. If you have seen somebody attempt to do this, please let me know.

# On socializing with unvaccinated

## Unvaccinated versus unvaccinated

There is an effect that I am not sure how to quantify, but I have not read anything to help me out. This effect is that it seems like the scientific community claims that the vaccinated have fewer symptoms than the unvaccinated when infected. Does this not mean that conditionally on NOT having symptoms, it could be safer to hang out with an unvaccinated person? Indeed it seems like a person having non-lethal symptoms may be good for reducing transmission, perhaps there is data to counter this, but I have not seen it.  Nevertheless, I will assume this effect is very mild and that an unvaccinated person is still more likely to give you COVID.

It is unclear to me how much Vaccines reduce transmissibility but what IS clear to me is that somebody with a fresh rapid test is not treated in the same way as somebody with a vaccination pass. I find this grossly unfair. I especially noticed that some of my acquaintances don’t want to have tea with somebody, even if they did a rapid test THAT same day. This standard seems to be plainly incoherent to me. It is best to illustrate the relative information a rapid test gives you versus the vaccine with an example.

Let us assume that COVID can be spread for 10 days. Assume you have two buddies, Vaxxy and Unvaxxy that have a 5% and a 10% chance (respectively) of getting infected every day.

Unvaxxy has taken a test two days ago which has a 50% chance of wrongfully indicating that Unvaxxy does not have COVID when he does. The result indicates that Unvaxxy does not have COVID.

Should you have tea with Vaxxy or Unvaxxy today?

Let us work this out. The probability that Vaxxy does not have COVID at the time of the tea is, (0.95)^10 = 60%. This is the probability that he did not catch it during the 10 days prior to seeing you.

On the other hand, the probability that Unvaxxy has covid at the time of the meeting is: 50% \* .9\*.9 + .5\*.90\*^10 = 40.5+17.4% = 57%.That is, 50% chance that the test is accurate which means that it could only have been caught the last two days, and 50% that it is not accurate so it could have been caught anytime in the last 10 days.

So it is safer to hang out with the Unvaxxed with a rapid test (for the less lazy, find the real numbers and compute this again).

## One non-vaccinated versus two vaccinated

Let us take another example. Suppose that, if you hang out with a vaccinated person, you have a 10% chance of catching COVID. When you hang out with an unvaccinated person, you have 15% chance of catching COVID.

Should you hang out with one unvaccinated person or two vaccinated people?

Well… the probability that you won’t catch COVID if you hang out with the unvaccinated person is 85%.

The probability that you won’t catch COVID if you hang out with the two vaccinated people is (1-.90) ^2 = 81%.

In other words, even if the unvaccinated spread COVID 50% more, you may STILL be better off hanging out with an unvaccinated person than two vaccinated people. The math is very similar with the frequency of going out, that is, an unvaccinated person who goes out half as often as a vaccinated person is likely responsible for less spread.

It is crazy to me how there is so much signaling about vaccine status by people who then go on to parties and events! The reason that international flights are somehow still enabled whilst lockdowns are still allowed is that international flights disrupt the life of the elite class whilst lockdowns mostly disrupt the rhythm of the ordinary person.

## What are the ethics of the mandate fans?

Suppose that we measured that straight people were healthier for public health than homosexual people. An example of how we would do this is if we measured that they are better for children in some way or perhaps they spread disease less. We also have good reason to believe that some people are born homosexual. Finally, suppose that there exists a good treatment that can make homosexuals into heterosexuals. Should we force all homosexuals to take the treatment?

I used to think the liberal position implied something like the following:

1) One ought not to hate/create legal distinctions on a condition somebody was born with

2) The unvaccinated were born unvaccinated

=> One ought not to hate/create legal distinctions against the unvaccinated

But now, it seems to me that the utilitarian strand of liberalism is dominant. The utilitarian strand does not focus on the origins of things but on whether things can be changed. So the first premise is then ‘1) One ought not hate/discriminate on conditions that somebody cannot change.’, in which case it is justified to discriminate against the unvaccinated.

I was always perplexed as to why many liberals are so insistent on the fact that gay conversion therapy does not work. I always thought “but even if it did work, should we force people to do it if they don’t want to?”. After COVID, I have my answer: Yes! It is because their world implies that it is acceptable to force groups to abide by such mandates that they are so attached to the empirical content of gay conversion therapy. In other words, their ethics are fragile to what the scientific community espouses.

[[1]](#_ftnref1) This is most evident in Influenza, [where deaths have dropped 97%(700 US deaths in 2020 vs 22,000 in 2019.](https://www.scientificamerican.com/article/flu-has-disappeared-worldwide-during-the-covid-pandemic1/) Of course, part of this reduction is due to the lockdowns but not 97%.

[[2]](#_ftnref2) Note that there is a second way of measuring, which is to control + f death certificates for COVID.