Q&A on COVID-19 Vaccines
with Brian Rees, MD, MPH, Colonel (ret)

Dear Friends,

This Q&A originated when someone sent me a brief, out-of-context video clip of Dr. Rochelle Walensky, Director of the CDC, commenting that there was "increased risk of severe disease among those vaccinated early." When I asked the sender what she thought Dr. Walensky's comment meant, she replied with a series of questions. Her questions and my responses are below.

Dr. Brian Rees

Question: I thought Dr. Walensky was explaining that the vaccine doesn't work. Or maybe just proving the point that others have repeatedly said, that the vaccine is what is causing the virus to mutate?

Dr. Rees: No. Dr. Walensky was referring to the data showing waning immunity in those who were first administered the vaccine in late 2020 or early 2021, thus the current recommendation that people who were vaccinated early receive a booster eight months after their second injection.

This waning of immunity was expected. Ideally, a more sustained response could have been obtained by spreading out the first two shots, but at the cost of the vaccinated remaining unprotected until after the second shot.

The most recent data from Israel, where over 1.5 million people have received the booster thus far, show the booster robustly increases immunity to the virus, and cases are starting to decrease significantly as a result. The latest data from the Israeli Ministry of Health shows that the booster increases immunity to COVID-19 around 10-fold compared to the first two doses.

Regarding the contention that the vaccines don't work, this is unequivocally disproved by all the data on vaccine efficacy thus far. For example, newly released (8/24/21) data from the CDC from Los Angeles County show that unvaccinated people were five times as likely to become infected with COVID-19 and 29 times as likely to be hospitalized as people who were fully immunized. According to the report, "It is the latest evidence that vaccines continue to reduce significantly the risk of severe illness — their fundamental purpose — despite the spread of the more contagious Delta variant."

Regarding the issue of viral mutations, Dr. Walensky was not saying, and there is no evidence to support, the contention that the vaccine is causing the virus to mutate. The main cause of mutations is unchecked spread and ongoing replication of the virus, which is mostly happening among the unvaccinated. This is what is giving rise to new variants, not the vaccines.

The Delta variant first emerged in India at a time when virtually no one there had been vaccinated. It spread rapidly throughout the unvaccinated population, resulting in hundreds of thousands of deaths (unofficial reports say several million).

Q: Have you listened to any of the extensive interviews with any of the other doctors? Or looked at any of the studies they cited? (See the other posts, for example, on alternatives to vaccination.)

Dr. Rees: Yes, I have listened and read and, over the last 20 months, gone down too many rabbit holes to count. And I have found no peer-reviewed, randomized, controlled study showing that ivermectin (or zinc or hydroxychloroquine or any other "cure of the day," aside from steroids and monoclonal antibodies) is effective in treating COVID-19, nor in preventing COVID-19. If I have missed such a study, please cite it for me.

Q: Have you seen or read the reports from individuals and family members of people who have been permanently damaged or died as an immediate and *direct* result of the vaccine?

Dr. Rees: Studies have shown that the incidence of serious adverse effects (SAEs) from the COVID-19 vaccines is exceedingly low. For example, a clinical safety trial of the Pfizer vaccine with 44,000 subjects demonstrated SAEs of 0.6% percent, compared to 0.5% in the placebo group, and more deaths in the placebo group than in the vaccine group. By contrast, in addition to the significant risk of death from infection, "long COVID" affects up to one-third of those infected. The benefit of vaccination far outweighs the risk.

Regarding the claim of widespread serious adverse effects from vaccination, anecdotes are not evidence. A temporal relationship does not prove causality. "A happened before B, therefore A caused B" is the "false cause" logical fallacy, one of the most common fallacies. Anecdotes can raise questions to be investigated. These questions have been investigated, and to date, significant morbidity or mortality due to the vaccines is exceedingly rare.

We can expect hundreds of thousands of vaccinated Americans to die this year, and millions more to have all manner of disorders (subdural hemorrhages, arrhythmias, pericardial and pleural effusions, strokes, etc.). That's because millions of Americans die and many millions more get sick every year, and many millions of Americans have been vaccinated, including a lot of older people,

many of whom were destined to die this year. The question is, “Are there excess deaths due to the vaccine?” The answer is, “No.”

High crime rates and ice cream consumption are correlated, but one does not cause the other. So while we will see a temporal relationship (obviously, anyone who receives the vaccine will get it before death, not after), there is no evidence of the vaccines causing significant morbidity or mortality.

Q: Do you understand why people with conditions that are known to be exacerbated by the vaccine do not want to take it?

Dr. Rees: Anyone who has an allergy to the vaccine or any of its contents, and anyone with a known contraindication to the vaccine, should not take the vaccine. These situations are rare.

Q: Or why people who have already had the virus and have high levels of antibodies do not want to take it?

Dr. Rees: The data show that previously infected persons who *are not* subsequently vaccinated are more than twice as likely to get re-infected with COVID-19 as previously infected persons who *are* vaccinated. And vaccination is almost miraculously effective at preventing hospitalization and death due to COVID-19.

Unlike the immune response to vaccination, the response to COVID-19 infection is very highly variable. It may be that someone who was infected and had severe disease may have a more robust response than someone who had mild disease, but even that is variable. For these reasons, it is recommended that people who’ve had previous COVID-19 infection get vaccinated.

Regarding testing for antibodies following infection, currently available antibody tests do not measure whether one’s immune response is adequate to prevent future COVID-19 infection (even with the Alpha, much less the Delta, variant).

Precise quantitative evaluation of antibody levels and overall immune response to COVID-19 is only available in research settings.

Q: Does it not make sense that the vast majority of health care workers (not to mention most of the population) likely have already been exposed and have immunity, and therefore do not want to take it?

Dr. Rees: There is no evidence that the vast majority of the general population or health care workers have been exposed. That’s why we have been masking and distancing all this time. That’s why I wore the uncomfortable N95 mask and PPE for hours at a time while performing nasopharyngeal and mid-turbinate swabs/testing for months before the vaccines became available. And as

explained above, even among those people who have been exposed, that does not mean they are immune.

Q: If people who have already received the vaccine can still be carriers and still fall ill, why should someone with antibodies take it?

Dr. Rees: Because the vaccinated are much less likely to become infected at all, or to have serious disease. This has been well documented. In reviewing the recent data on the Delta variant, Medscape reported, "The current crush of U.S. cases — well over 100,000 per day — has hit the unvaccinated by far the hardest, leaving them at greater risk of serious illness or death." See above for the most recent data from the CDC on rates of infection and hospitalization in unvaccinated vs. vaccinated individuals in Los Angeles County.

The data show that, other conditions being similar (community prevalence, frequency of interactions indoors, etc.), the proportion of vaccinated persons who become infected is very much smaller than the proportion of *unvaccinated* persons who become infected.

If that much smaller subset of vaccinated persons contract a breakthrough infection, and if they are symptomatic, they may transmit infection as readily as infected symptomatic unvaccinated persons. *However*, the data suggest that vaccinated individuals are infectious for a significantly shorter period of time.

Being much less likely to become infected, and if infected, being contagious for a shorter period of time, make vaccinated persons, overall, much less likely to transmit the disease than unvaccinated infected individuals. These are all important reasons to get vaccinated.

Q: Additionally, as you must know, a drug cannot be FDA-approved unless no known therapeutic is available.

Dr. Rees: That is not correct.

Q: I believe that is why it is only on an emergency distribution and not yet approved. I also believe that is why there are strong forces attempting to disprove the therapeutics.

Dr. Rees: Of course, you are welcome to your opinion, but those beliefs assume "facts not in evidence."

The Pfizer vaccine has now been fully approved (as of Monday, August 23). Within hours of that approval, the Department of Defense announced mandatory vaccination for its 1.4 million active-duty members. Many other organizations are expected to follow suit in the coming days.

Q: Pfizer and Moderna are sitting on huge piles of the vaccine that are not being used. It must also cost a lot to keep them stored at below freezing temperatures. And I also believe they hope to make even more money by the boosters.

Dr. Rees: No doubt there is a lot of money changing hands. That is all the more reason to value legitimate science and disregard unfounded conspiracy theories, no matter their origin.

The fact that profit is involved in bringing a successful product to market does not invalidate the effectiveness of the product. In fact, the profitability of the vaccines was an important factor in Operation Warp Speed, which greatly accelerated the development of the vaccines.

Q: I believe they wanted to keep it as an emergency vaccine [use authorization] so that they would not have to list the side effects on an informed consent form and hand those over to every recipient before they were vaccinated.

Dr. Rees: Again, the Pfizer vaccine has now been fully authorized, and others are likely to follow soon. I have personally administered hundreds of these vaccination injections. My colleagues and I followed standard widespread protocol and were always sure to inform the patient of possible side effects and have the patient sign an informed consent form. The most common side effects are mild and transient: fatigue, low-grade fever, pain at the injection site, and flu-like symptoms.

Q: As far as there being no correlation between vaccination rates and infection rates, are you familiar with the most recent reports that in Israel, where they had one of the highest rates of vaccination, they now have one of the highest rates of infection?

Dr. Rees: Israel was ahead of just about every other nation, including the United States, in getting its population vaccinated. They had recently experienced rising levels of infection. This is largely due to two phenomena: the emergence of the Delta variant, which is much more readily transmitted, and the waning of immunity from the vaccines that were administered eight or more months ago.

This is what Dr. Walensky was referring to in the video you posted of her, and why the current recommendation is for a booster at eight months. As mentioned above, now that more than 1.5 million Israelis have received a booster (third) dose, infection rates are decreasing significantly. The Israel Ministry of Health is reporting that the booster shot is increasing immunity to COVID-19 10-fold, and they expect infection rates to return to the low pre-Delta levels once 5 million individuals have received the booster.

Q: As for side effects, why do you think those who are advocating this vaccine haven't done any investigating about the COVID-19 vaccine-related deaths and injuries?

Dr. Rees: Your question includes an erroneous assumption. The performance of the vaccine and the occurrence of possible adverse effects are monitored continuously. You are welcome to check the Morbidity and Mortality Weekly Report (MMWR), if you want to keep track. Data on injury are available through the FDA, the CDC, the MMWR, online medical databases, and many local and state health departments.

Q: [I believe] *no one* should mandate any medication for any reason. Period. Everybody is different. Any medical doctor who believes in vaccine mandates of any kind should lose their license because they do not respect the human physiology.

Dr. Rees: You are welcome to your opinion, but it is not congruent with reality. George Washington required all his soldiers to be vaccinated because smallpox was decimating his army. Every place I've ever worked for decades has required that I be vaccinated against hepatitis B and get an annual flu shot.

School systems nationwide require extensive childhood vaccinations, including polio, diphtheria, tetanus, pertussis, rubella, measles, mumps, and others.

Employers are at liberty to determine the requirements for holding a position in their company, including measures to protect their employees and clientele against the spread of disease, such as, requiring vaccines.

Q: Don't you still wonder why their employees [of Pfizer, Moderna, etc.] refused [to be vaccinated] so far? I do.

Dr. Rees: Please cite your source for this statement. I suspect the proportion of their employees not yet vaccinated is very small. But whatever it is, I suspect the hesitancy was induced by fear due to the tsunami of misinformation that has become associated with the pandemic, generally, and these safe and effective vaccines, specifically. The politicization of public health measures and the dissemination of this false and misleading information has been a disservice to us all, resulting in a significant amount of needless suffering and death.

Q: The COVID-19 situation is a pharmaceutical financial bonanza. There are no peer-reviewed studies of the vaccines, are there? Where are they? There is no science in the rollout of these vaccines.

Dr. Rees: That is incorrect. There are literally *thousands* of peer-reviewed studies of the vaccines. I looked at the National Library of Medicine database this morning (August 23, 2021), searched for "COVID vaccines," and found 16,572

articles. Almost every peer-reviewed journal on Earth that deals with medicine, immunology, virology, infectious disease, etc. has each published dozens of articles on COVID-19 vaccines. This is one of the most investigated, reviewed, and published about phenomena in the history of medicine.

Q: I read some early statistics on Moderna, and they were massaging the test subjects so they could get an adequately good result. This is true.

Dr. Rees: It may be true that you read something, but there is no evidence that Moderna has falsified their data. If you have evidence, please produce it.

Q: [This question was regarding a video posted online, making claims about the vaccine.]

Dr. Rees: A virtually unlimited number of unscrupulous or misguided persons post or propagate falsehoods online or on YouTube, etc. However, [the speaker in this particular video] is an unreliable source.

In the video you posted, he claims that the spike protein from the vaccine circulates in the blood, lands in organs, and causes disease; injures and crosses the blood brain barrier; and causes brain damage, etc. All of those assertions are demonstrably false. The authors of the studies he cites have said that he is mistaken and is misrepresenting their findings.

But this brings up a larger point. All of us are subject to “confirmation bias,” the tendency to believe information that confirms what we already believe, and to disregard new information that makes us challenge or even change our beliefs. It’s human nature. And, unfortunately, our information age and the Internet can supply us with plenty of misinformation that will reaffirm our errant beliefs.

But we must guard against this. I try to look at new information in order to find new data that might change my thinking, might make me realize I had been dealing with incomplete knowledge. I am open to changing my mind.

All of us need to apply our best critical thinking skills to ferret out good information and cast aside misinformation. This can be difficult if one doesn’t have the expertise, by training or experience, to so discriminate. (For example, when it comes to quantum physics, agriculture, or architecture, I must defer to those who live and work in those fields.)

[posted 9/3/2021 by Victor Schoenbach with permission from Dr. Rees]