

## **COVID-19 Updates and Insights with Dr. Zieg – March 11, 2021 Questions**

### **Have you heard of coronaphobia? Opinion?**

I hadn't heard of it but looked it up. Interesting and disheartening at the same time. Looks like the medical community is still figuring this out.

### **What is it in the vaccine that is causing allergic reactions?**

The ingredient I was trying to think of is polyethylene glycol, which is what is thought to trigger allergic reactions in those who are allergic. You can read more at the CDC website...<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/Pfizer-BioNTech.html>

### **Knowing that the vaccine is designed for COVID, but have you heard or is it possible for this vaccine to help other viruses or issues that humans may already have?**

I have not heard that the vaccines for COVID protect against viruses other than SARS-CoV-2 or that they help with other conditions.

### **Has any information or research been released involving the risk of catching one variant after having caught a different variant?**

We covered this on the call.

### **I am wondering when it will be safe to go back to the gym if I have had both my vaccine shots? What else is safe to do after you have the vaccine?**

We covered this on the call.

### **What period of time should elapse between receiving other shots (shingles final shot) and the Covid vaccine?**

We covered this on the call.

### **I am thinking of getting the J&J vaccine because I think I will be able to get it more quickly than the other brands. I have heard that the J&J vaccine actually improves its efficiency over time. Have you heard anything about this?**

We covered this on the call.

**Based on the slide data of ~526K number of COVID related deaths, vs the nearly ~29M number of cases, that points to a fatality rate of around 1.8% or inversely a recovery rate of 98.2%; if this is correct, what is the typical fatality rate of recent flu H1N1 or H2N3, etc... or something else like SARS, which seemed to have higher fatality %? Have you seen these comparisons being drawn and what is the considered wisdom here in comparison or any recent reduction in Flu spread due to the COVID precautions being taken? Also have you seen any studies which draw any suggestions as to blood type susceptibility more or less than another? Believe that there was an initial Chinese study in early COVID spread, Apr-May 20, but imagine that somewhere in those ~29M cases, that some data has been captured which may or may not point to more recent comparisons to susceptibility / association. There are many ways to look at mortality rates so it's difficult to compare apples to apples here. In hospitalized patients though, a more recent study revealed that the death rate among COVID-19**

patients was 18.5%, while it was 5.3% for those hospitalized with the flu. Yes, both the southern and northern hemispheres saw significant reductions (almost none actually) in flu cases likely driven by mitigation measures to limit the spread of SARS-CoV-2. Yes, I've recently seen a lab study (not "real world") that SARS-CoV-2 had a strong preference for binding to blood group A found on respiratory cells. I've also seen that those with blood type O and Rh- may have a lower risk of severe disease. The real-world data is really just anecdotal at this point.

**Is there a concern with the population refusing to take the vaccine?**

Yes...hopefully we will see more and more people accept the vaccine as we have more experience and time.

**Can someone who is vaccinated still spread covid to others?**

We don't know yet.

**Vaccine for kids: What ages should and should not get vaccinated; is it safe and available to grade school age?**

We covered this on the call.

**Kids are now back to school, how susceptible are they and how would that affect the recovery?**

Kids appear to be less susceptible to spreading the virus and are less likely to develop more severe disease, but it does occur.

**Is there any data that shows how likely a vaccinated person can spread Covid-19?**

Some data (from Israel regarding mRNA vaccines) so far suggests that it's not too likely that vaccinated people can spread the virus, but we need more time and data to confirm.

**I have heard that breathing based techniques have shown dramatically quick recovery times in respiratory virus such as COVID. These techniques have claim reduction in "Long-haul" symptoms. Can you comment on the validity of these assertions please?**

We covered this on the call.

**If someone I know had COVID, should they still receive the vaccine?**

We covered this on the call.

**Are there any updates on Pregnant women getting vaccinated?**

We covered this on the call.

**There is a rare disease happening in children called MIS-C, what do you know about it?**

Thankfully it isn't common. The CDC has some good information here:

<https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/children/mis-c.html> Multisystem inflammatory syndrome in children (MIS-C) is a condition where different body parts can become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs.

**My 2nd injection of Pfizer shot is 4 weeks -vs- recommended 3 wks. Does the extra week delay make the vaccine less effective?**

We covered this on the call.

**Is there scientific data to support pregnant women, nursing mothers, and young children (infants and toddlers) getting vaccinated?**

Not yet...there are currently vaccination trials going on with pregnant women and children 12 and older in the study groups.

**Mercury's cost for covid testing is quite high. If a person is two weeks after their final vaccine, could that person be excluded from the weekly testing. Jerry McCoy (I'm coming in late to this session so he may have answered this already**

Mercury is looking at this and giving it consideration.

**Is safe to travel by air after getting 2nd dose of vaccine?**

We covered this on the call.

**My wife is being advised not to get the vaccine because she has a drug allergy, namely sulfa. What's your take on that?**

Might recommend getting another opinion. CDC has some great info on vaccination in those with a history of allergies: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/specific-groups/allergies.html>

**Can you comment on the reports of blindness and deafness from the UK after people receiving the vaccine? Are there reports of this in the US?** I have heard of reports of hearing loss and tinnitus (ringing in the ears) but not blindness. Have not seen case reports of hearing loss in the US.

**Do you expect this vaccine to be an annual event, like the flu vaccine?**

Time will tell, but my own suspicion is yes, expect we will need to get annual (or some other interval) COVID vaccination for some time.

**Is it true that vaccine side effects are more common in women and that the ingredient causing the side effects exists in female products (makeup, etc) which might explain this?**

I have seen a variety of reports that show that side effects are more common in women as well as allergic reactions. I've heard several theories but it's likely to be the result of multiple factors. It is believed that women may have a more robust immune system than men that might be related to hormone differences as well as the fact that immune related genes are found on the X chromosome (which women have two, men have one). I have not heard about a relation to makeup etc.

**How long for each of these vaccines to remain effective. Will we need a booster? When will we know?** It's still unclear as to how long immunity will last with the vaccines...but we'll learn as we go through the year. I've seen some suggest that it should last a year or longer, but clearly, we don't have good data to support this claim yet. There are a variety of additional unknowns too regarding variants etc. It is likely we will need a booster at some interval, it may be annual or some other interval. I don't think we'll know about duration of immunity and the need for boosters until late 2021 at the earliest.

**Can you take ibuprofen for vaccine symptoms? Why do they ask if you're taking blood thinners prior to vaccination?**

Ibuprofen or Tylenol are commonly used to treat side effects, if they do occur, after vaccinations. CDC advises not to take these medications before getting the vaccine as it is theorized that they may hamper the immune response to the vaccine. Instead, they should be used only when/if side effects develop and they warrant taking medication. Regarding the question about blood thinners, the COVID vaccines are given into the muscle of the upper arm...which is very vascular. People on blood thinners or with bleeding disorders are at greater risk of bleeding into the muscle at the site of injection, so to limit this, vaccinators sometimes use smaller needles followed by firm pressure to reduce the risk. If you have questions/concerns about your own health condition, you should discuss with your provider.

**Are any of the vaccines effective on the new Covid variants?**

All of the vaccines appear to be quite effective against the most common variant, the B.1.1.7 first seen in the UK, which will likely be the dominant variant in the US soon. Other variants are still being studied but may be able to evade some of the immune response (resulting in partial immunity) but it's not yet understood how this might look.

**Can you get vaccinated twice? Like to theoretically be "double" immune...**

Getting vaccinated more than the recommended schedule would not likely result in more immunity and potentially could be harmful. I will note though that the Johnson & Johnson vaccine is currently being studied as a two-dose regimen, but the individual doses may not be the same as the dose in the single dose regimen. Long story short, it would be wise to stick only to what is recommended.

**So if you have a history of severe allergies what precautions should one do before getting the vaccine? Especially when one is already under steroidal medication and is having side effects such as hair loss and skin dryness?**

The CDC has good information about COVID vaccines in people with a history of allergies here...<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/specific-groups/allergies.html>

**How long after a blood donation should you wait before receiving a vaccine? 2 weeks? 2 months?**

You should check with your provider before you get vaccinated. I am not aware of any guidance in this regard.

**Are the side effects (and severity of them) the same for all three vaccines?**

From what I have seen to date, side effects (frequency and severity) are very similar across all three vaccines being used in the US currently.

**Since the US will be fully supplied with vaccines for Moderna, Pfizer, and J & J for the entire population, does this reduce the chances of emergency use authorization by the FDA for other completed trials such as UK phase III completed trials w/ great data?** Good question...I would think it

would make it less likely the US would approve a 4th vaccine under EUA. But, I'd say it's certainly possible.

**As a family with young children, even once the parents are vaccinated, the majority of us don't yet have approved vaccines. Does this mean our family will not be able to truly "return to normal" activities until 2022, when vaccines for young children may become available?** Some level of herd immunity in the US may be reached even before children under 16 are vaccinated. If this happens, we could see the pandemic under control and return to "more normal" before the vaccine is available to those under 16. There are a lot of unknowns though, so will just have to push on and see how it turns out.

**Are the 2nd round shots exactly the same as the first shots...just the same again, or is there an actual difference?** If you are referring to the mRNA vaccines, it's the same vaccine (formula) and volume...no difference. Side effects may be more likely or severe after second dose though because the second shot is "boosting" an already existing immune response.

**My name is Antonio Alcazar. My wife is a principal at an elementary school. A kid got virus and passed it on to the school nurse who had been fully vaccinated for about a month. Are we thinking we are immune after vaccination when we are really not?**

There are cases of infection after vaccination, though the data says these are rare.

**Is there any guidance about when people might need to be re-vaccinated? 3 months, 1 year?** Not yet.

**If you full vaccinated and you going to travel do you have to quarantine after you come back to work?**

Mercury is considering its travel and return to work procedures regarding quarantine. If someone is fully vaccinated, the CDC says that person does not need to quarantine after an exposure.

**Doctor, I am curious about testing of water. News reports have mentioned only broadly of public health studies finding COVID-19. Presumably that means somewhere through sewage treatment process. Concentration load and risk of exposure to presence in water are extremely low, I would guess. (By the way, I just happen to live in a city with reclaimed water processing plant, destined only to irrigate parks and plazas. Other places have promoted so-called toilet-to-tap water recycling, though.)** Yes, testing waste/sewage water for SARS-CoV-2 has been a surveillance practice for a while now, commonly used in college dorms and other situations where there is a concentration of people etc. I don't know the sensitivity/concentrations required to pick up the virus with this sort of testing.

**Since variant on going, do we expect to get the third dose of vaccine in the coming future?**

Time will tell. COVID booster shots are likely though, but the interval is unknown.

**Of the now 3 approved vaccines for COVID-19 is there one that is being recommended over the other for a family that has immune-sensitive or immune-compromised family members? Or is this more of a ask my doctor question?** I would recommend talking with your provider.