Coming up on Mayo Clinic Q&A:

Dr. Gregory Poland 00:04
Until you get that second dose, you're not fully protected.

Narrator 00:08
And if you don't receive the recommended second dose of either the Pfizer or Moderna COVID vaccines, your immunity may wear off sooner and leave you vulnerable to new variants.

Dr. Gregory Poland 00:18
There's already some level of decreased protection due to these variants. And newer variants are on the way because of people not being vaccinated. So the sooner you get two doses, the sooner you're protected.
Welcome, everyone to Mayo Clinic Q&A. I'm Dr. Halena Gazelka. We're recording this podcast on Monday, April the 26th 2021. Well, it certainly is difficult to keep up on the ever-changing news about vaccines, and about COVID itself. But we are doing our best to keep you updated. Here today. Again, it's Dr. Greg Poland, fire ologists and vaccine and infectious disease expert at Mayo Clinic. Hi, Greg.

Good morning. How are you today?

Happy Monday. Good to see you.

Yes, Happy Monday.

Now Greg, we decided to wear our black leather today, because we’re getting tough on COVID.

I like that.

We actually were chatting and found out we both had a black leather jacket. So we thought well, goodness sakes, we’ve got to get those on the air.

You know, it symbolizes to me, if you ride a motorcycle you put on leather to protect your body from any kind of injury. Well, COVID vaccines are like that. They’re a protection against bodily injury. So it makes sense.
Dr. Halena Gazelka 01:40
I like that. And I thought it might just be because you were in the witness protection program there.

Dr. Gregory Poland 01:45
Again?

Dr. Halena Gazelka 01:48
We can tell you've changed location today.

Dr. Gregory Poland 01:51
Yes, there was too much noise where I normally sit, so we tried this.

Dr. Halena Gazelka 01:56
Alright. Well, Greg, let's jump right in. I want to ask you first about the Johnson and Johnson vaccine. The vaccine advisory panel met Friday, if I am not mistaken. What's the latest?

Dr. Gregory Poland 02:08
Yeah, I attended all six hours of that, and basically it came down to understanding did we have the data so that we truly understood the risk? Have we had time to educate women, the public? And have we had time to educate physicians about this peculiar syndrome? The answer to all three of those was reasonably yes. And so, they voted to reinstate. Now it was 10 for it, four against and one abstention. So, by virtue of that vote then, on that day, CDC said, you can go ahead now and immunize with the proviso that we want to continue educating and make women aware of the risks and the benefits.

Dr. Halena Gazelka 03:00
I just want to say, Greg, thanks for sitting through six hours of that. It sounds a little like watching paint dry to me. But I'm sure it's fascinating to a vaccine expert.

Dr. Gregory Poland 03:09
Dr. Halena Gazelka  03:11
Well, our next vaccine question, Where are we with emergency use authorization for teenagers say ages 12 to 15?

Dr. Gregory Poland  03:20
Yeah. Halena, that’s a great question. Actually, the ninth of April, Pfizer submitted their EUA request to the FDA, for individuals for 12 to 15 years of age. And now what they’re doing is they’re marching down by age band and plan to go all the way to six months. The reason for that, and that that catches a lot of people by surprise. The reason for that is if we look back a year, we would say probably not necessary. Kids were not getting sick at the rate that other people were and if they had infection, it was basically asymptomatic. That is no longer true with these new variants. In effect, we’re seeing a different disease and a different disease process. So, now it does become necessary to protect children. Moderna is also doing those studies. So, I expect, and I hope before Fall time, before school, that those EUA’s certainly be granted before that, but I’m hoping the supply is such that children will be able to get immunized before going to school, so that they can safely go to school and live the lives children should by all rights be living.

Dr. Halena Gazelka  04:41
Greg, we have noted that not only are people at times lacking confidence in the vaccine, but some people are not getting their second dose now. How important is it to get the second dose of the vaccine? Why are some choosing not to.

Dr. Gregory Poland  04:56
This is really important. About To 8% of people who got their first dose have not yet returned for their second dose, and yet should have. This is concerning when you’re getting close to one in 10. Miss thinking that I don’t need a second dose, or that the risks are too high of a second dose, neither of those would be true. It’s true that when you measure in the short term, one dose in a healthy person offers about 80% protection. But that’s not 95% or 100% protection, like you get after two doses. The other thing is we would expect immunity after one dose to wear off much more quickly than after two doses. And this is really important, you know, we’ve been able to verify about 21,000 people who have documented infection after getting just one dose, but not both doses. And that has a lot of implications. It has implications for continuing infection,
continuing development of new variants, and of course, for those individual people's health and well-being.

Dr. Halena Gazelka   06:17
So Greg, have the recommendations on the length of time between the two vaccines changed at all since you and I talked about it months ago?

Dr. Gregory Poland   06:25
It really has not what has changed is research being carried out in the US and the UK and other places, looking at changing the interval and mixing and matching different types of vaccines.

Dr. Halena Gazelka   06:39
Yeah. Can you do that?

Dr. Gregory Poland   06:41
Yeah, well, those studies are still in progress, I expect that we reasonably will be able to do both. The tension here is if you got one mRNA, could you get a different mRNA vaccine? I'm expecting the answer to that is going to be yes. The question is if you get an mRNA, and then an adenovirus vector vaccine, is that the same as getting two doses of either one of the vaccines? We don't know yet. In terms of interval, I will be shocked if we don't find out that you can expand that interval. The question is at this point, is there any reason to do that? And I would say no. And the reason that I would say that is until you get that second dose, as we just talked about, you're not fully protected. There's already some level of decreased protection due to these variants. And newer variants are on the way because of people not being vaccinated. So, the sooner you get two doses, the sooner you're protected.

Dr. Halena Gazelka   07:53
Okay, sage advice, get your second dose, and your first dose if you haven't yet. Greg, there's just been tragic news coming out of India and the issues there with COVID. Can you tell us a little bit about what is causing that dramatic rise?
Dr. Gregory Poland  08:11
Yeah, well this is something I’ve paid a lot of attention to, because what tends to happen in other areas, tends to be a risk factor for happening in our own country. India is a little different of a situation. But think of it this way, think of all of the difficulties we’ve had here in the most developed and educated nation in the history of the world. Now transport that to nations that don’t have the same level of economic and educational development that we have. Take a government in India that was warned, just like we were with the first wave, and thought we’re through it, we don’t have to worry about it. That has certainly not been the case. In addition, they’ve had, both because of elections and for religious holidays, they’ve had truly mass gatherings. That is like putting gasoline on the fire we call the pandemic. And then lastly, they are being subjected to variants just like we are and in particular, it’s a terrible name for it, it’s a misnomer, but you’ll hear the press calling it the double mute. Well, every variant virus has mutations in this case, in the Indian strain, what’s been called the B1617 variant. There are two critical mutations along with 11 other mutations. So, this is what happens when people don’t wear a mask and don’t get vaccinated. That virus will just continue to transmit and multiply and gain new mutations, making it more difficult to protect all of us. And so, they’ve experienced that. And two of the mutations in that Indian variant are particularly critical mutations. So, we will see that variant here in the US as we have every variant, and I want to make an important point here, we are now entering the most dangerous phase of the pandemic. For people that have not been immunized or who are not fully immunized. This is the most dangerous point compared to any time in the pandemic. And the reason for it is, that we are now facing these highly transmissible variants that have viral loads 4, 5, 6 times higher than the variant that circulated a year ago. So, this is really critical for nations and for people to get sort of fixed and straight in their mind, so that they can take the appropriate steps and protect themselves, their families and their communities.

Dr. Halena Gazelka  11:09
So the vaccine efforts need to go on.

Dr. Gregory Poland  11:12
Absolutely, and expand and we’re doing really well, that’s good news. In the US, we’re doing really well with that. I mean, it’s incredible how many people have gotten vaccinated. The other side of that coin is the people who are not confident who are hesitant in vaccines. And it’s really a shame, because in their particular case, unless there’s a medical contraindication, like anaphylaxis, they’re operating on fear about the vaccine, and diminishing the true risk of the disease. And as you and I, as healthcare workers have seen one tragic family story after another, where, you know, the conclusion is, I guess we
didn't take this seriously, or this is what I hear over and over again, we didn't know it could lead to this. And so all we can do is plead with people get good information. I hear people say all the time, well, I don't know what to believe. Here's a stress test on that. Go to any credible Medical Center website in the world. And you will find the same information, the same plea for people to get vaccinated.

Dr. Halena Gazelka 12:33
That's an interesting way to think about it. Hey, Greg, I want to get back to talking about, you talked about India a little bit, but we are aware there are other hotspots, including I think, Brazil, Japan, etc. Are they having their own mutations such as what's been found in India?

Dr. Gregory Poland 12:53
Yeah, they do tend to see more of them because of international travel. And oftentimes, and less restrictions, governments less prepared to deal with it. You know, again, you look at India, less than .01% of people have been vaccinated. So, all we need to do when we say what can the variant do to me? Look at India, where people have not been vaccinated, and you'll see. They are literally sending SOSs for oxygen. They have no more ICU beds. We're seeing the same thing happen in Michigan, in our own country, 38 states now are in 9, 10 weeks of straight declines, are now starting back up that surge line. So, these variants, and the lack of masking and full immunization are responsible. There's nowhere else to lay the blame.

Dr. Halena Gazelka 13:52
Sure. All right. Here's another question from a listener. We have a household of seven, and in a few weeks five of us will be fully vaccinated, but the other two are under the age of 16. What does that mean for our family? Can we operate as if we are a fully vaccinated household? Or do we need to continue to operate as an unvaccinated household until the kids become eligible for the vaccine?

Dr. Gregory Poland 14:15
That's a great question, and actually a really practical one that many, many families are facing. So, there's a little bit of a nuance here. If everybody in that family is otherwise healthy, then they can get together and they can be indoors, and they don't need to wear masks. If the individuals who are unprotected, are immunocompromised, then everybody wears masks. If the five members that have been immunized, if there's somebody there
who's immunocompromised, that person should wear a mask. So, slightly different recommendations, depending on the nuance of the situation. But if everybody's healthy, they can get together.

Dr. Halena Gazelka 15:01
Okay. That's great. Any last words to share today? That's all the questions I have for you, Greg.

Dr. Gregory Poland 15:08
You know, I took some notes, because I wanted to be sure to mention a couple of things. Number one is the CDC did release a statement saying, okay, pregnant women get the vaccine. We've got enough data now, it's safe. We haven't seen any medical problems. Number two is we talked about the CDC reaffirmed the use of the Johnson & Johnson vaccine. There is a slight risk, predominantly to women below the age of about 50 years of age, more so below the age of 40. But that risk is outweighed by the risk of getting COVID. And I think as you said, we're seeing the rise of additional variants. For example, in Brazil, in India, in New York, in California. The vaccines seem to protect against those, though, with a slightly lesser efficacy. So, this is you know, I liken it to a fire burning. We want to take steps now, while the fire could be controlled by getting people immunized rather than wait till the disaster we saw in Michigan, India, Japan, Brazil, and South Africa.

Dr. Halena Gazelka 16:24
All right, thank you. Go get your vaccine.

Dr. Gregory Poland 16:28
Hands, face, space and vaccinate as we always say.

Dr. Halena Gazelka 16:32
That's right. Thank you, Greg.

Dr. Gregory Poland 16:34
My pleasure.
Dr. Halena Gazelka 16:35
Our thanks to Dr. Greg Poland for being here with us today to give us our COVID-19 and vaccine update. I hope that you learn something today. I know that I did. And we wish each of you a very wonderful day.

Narrator 16:49
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