

Mayo Clinic Q & A - Dr. Gregory Poland - COVID-19 Update - 1...

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SUMMARY KEYWORDS

booster, greg, vaccines, pandemic, people, dose, cases, hospitalization, mayo clinic, disease, antibody levels, vaccinated, therapy, question, rural areas, pfizer, unvaccinated, spectacularly, risk, immunized

SPEAKERS

Dr. Halena Gazelka, Dr. Gregory Poland, Narrator

N Narrator 00:00
Coming up on Mayo Clinic Q&A, we're talking boosters, who's eligible, and will a booster really provide more protection against COVID-19.

D Dr. Gregory Poland 00:09
All of the boosters would dramatically boost your antibody response. And people are kind of focused on that because that's what we report. We report that because that's what we can measure. But it's only one part of the story. I would make the decision about a booster based on how did you respond to whatever you got originally? And are there any unique risk factors that you have?

N Narrator 00:37
The Food and Drug Administration has updated its authorizations to allow medical providers to boost eligible people with a vaccine other than the one that they initially received. This is also known as mix and match. But given the choice, is one better than another?

D Dr. Gregory Poland 00:52
There's no magic in it at all. There's not one that you can say, wow, that's the one to get. All of them do spectacularly well in protecting against severe disease, hospitalization, death, even moderate disease.

D Dr. Halena Gazelka 01:08
Welcome, everyone. Mayo Clinic Q&A. I'm Dr. Halena Gazelka. We're recording this podcast on Tuesday, October the 26th, 2021. I'm here welcoming back Dr. Greg Poland, who's here to give us our latest updates on COVID and vaccines. Welcome back Greg.

vaccines. welcome back, Greg.

D Dr. Gregory Poland 01:26
Thank you, Halena.

D Dr. Halena Gazelka 01:28
I'm thrown a little bit because we're doing this on Tuesday. And typically, you and I record together on Mondays.

D Dr. Gregory Poland 01:33
Yes, a little different, but you know, here we sit in chilly Rochester.

D Dr. Halena Gazelka 01:38
That's right. That's right. It is turning to fall. That is for sure.

D Dr. Gregory Poland 01:41
No question.

D Dr. Halena Gazelka 01:43
Well, Greg, give us the latest on infection rates and vaccination rates in the U.S. and around the world too.

D Dr. Gregory Poland 01:49
Yeah, well, you know, there's good news and bad news, kind of mixed news, if you will, in that regard. Cases are falling. No question about that.

D Dr. Halena Gazelka 01:58
That's good news.

D Dr. Gregory Poland 01:58
Yeah, whereas we were bumping up against 200,000 cases a day. On average over the last week, we've been at about 73,000 cases a day. So, it's not like nothing, but dramatically decreased. We're down to about 1700 Americans dying each day from COVID. Still way too much. About 58 percent of the U.S. population is fully vaccinated. But, we have about 90 percent of U.S. counties that still have high or substantial transmission. So, we have a ways to go. But and I really want to stress this Halena, we have an opportunity. Cases have fallen down. We've seen this happen

three times before, four times really. And then what happens is we begin to pretend the pandemic is over. We begin to loosen all of the restrictions, and we have another surge. There is a lot of concern about this possibility of a surge with Thanksgiving, winter, Christmas, and what to call it, COVID fatigue. So, if we're bigger than those things, and we say no, you've got to wear a mask indoors, you've got to be vaccinated, if it's appropriate for you to get a booster. Those are things that may get us through the winter in addition to a topic I'm sure we're going to talk about, which is kids and immunization, if we get them immunized. I think we have an opportunity that we've had few of during this pandemic. The question is, will we embrace that opportunity? Or will we once again pretend the pandemic is over?

D Dr. Halena Gazelka 02:02

Two of the things that you said really struck me, Greg. One was 58% of Americans, that doesn't sound that high to me.

D Dr. Gregory Poland 03:40

I know.

D Dr. Halena Gazelka 03:40

It sounds lower than I would have liked for you to have said.

D Dr. Gregory Poland 04:05

Yes, of course.

D Dr. Halena Gazelka 04:07

And the other thing is that you said people act like the pandemic is over. Well, if you have flown on an airplane recently, it is crowded in the airports.

D Dr. Gregory Poland 04:17

Yeah.

D Dr. Halena Gazelka 04:17

And you would think that the pandemic was over by how many people are traveling and how tightly packed those airplanes are.

D Dr. Gregory Poland 04:24

Yeah, you're absolutely right. And kind of the more discouraging thing, at least on an airplane, you're mandated to wear a mask right. but trvina to aet people to wear masks in other indoor venues. and aaain. with the holidays

coming which for the most part are going to be indoors, this is a potential looming, yet again, another surge.

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Dr. Halena Gazelka 04:49

So Greg, last week, one of the big pieces of news was about these mix and match boosters being recommended by the CDC. What does that mean and what are the implications?

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Dr. Gregory Poland 04:58

Yeah. So, just to be a little careful about this, what mix and match means is that regardless of what you got for your primary series, you could get any of the other three vaccines available for use in the U.S. as your booster if you're eligible for a booster. Now, these results are coming from an NIH study, a relatively small study showing both safety and a boost in antibody levels. As we've talked about in this show, that's only one part of the story. It did not measure, and we don't know about T cells, just antibody levels. So, the point is, they're following what happened in Israel, that with time, they saw an increasing number of breakthrough cases, embarked on a booster program, dramatically suppressed and decreased those breakthrough cases. The key there is what kind of cases are we talking about? Are they severe, death, hospitalization, or asymptomatic and mild cases? And there's not as much science as I would like to see around this whole idea of boosters and third doses in the case of mRNA vaccines. But nonetheless, that recommendation was made.

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Dr. Halena Gazelka 06:21

And so, who is eligible for a booster at this time, Greg?

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Dr. Gregory Poland 06:24

So, anybody who is 65 and older, anybody 18 and older living in a long term-care setting, or with underlying medical problems that put them at risk for severe disease, or like you and I that live or work in a setting where we are exposed more often and run higher risks of disease. So, medical professionals, if you live in a group home setting, a prison, you know, anything like that where you're congregated in large numbers. One other thing Halena about the boosters that bear saying is that these are for people 18 and older who meet the criteria for a booster. The J&J booster can be given any time two months or longer after the first dose. For the two mRNA vaccines, Pfizer and Moderna, those are generally given six or more months after the primary series. The other thing is that for all of these, the dose for the booster is the same, with the exception of Moderna, which will be half the dose that you received as your primary doses.

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Dr. Halena Gazelka 07:39

Greg, so we have our savvy listeners asking you questions about the boosters now. And they want to know, how do people know which booster to get. For instance, a listener asked, will one of the boosters give me a higher antibody level than the others? Why are Pfizer and J&J the same dose, but Moderna's booster is half dose?

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Dr. Gregory Poland 08:00

Yeah, those are good questions. So, all of the boosters would dramatically boost your antibody response. And people

mean, these are good questions. So, all of the boosters would dramatically boost your antibody response. And people are kind of focused on that because that's what we report. We report that because that's what we can measure. But it's only one part of the story. And you know, the nature of Americans is that more is always better. We don't know that. Presumably, that's true. But we don't know that there's an advantage to having your antibody increase 35-fold versus 70-fold. Who says that that's better, particularly in view of B and T cell activity? So, I wouldn't get too hung up on that. Rather, I would make the decision about a booster based on how did you respond to whatever you got originally? And are there any unique risk factors that you have, for example, because of the very, very rare chance of this TTS, this blood clotting disorder in younger women, I would prefer not to use the J&J booster. If you had some other side-effect or reaction to one of the other vaccines, you might say, well, I'm going to use a different vaccine. So, honestly there's no magic in it at all. There's not one that you can say, wow, that's the one to get. All of them do spectacularly well in protecting against severe disease, hospitalization, death, even moderate disease. So, you're then talking about, well, does one better prevent asymptomatic or mild disease than the other? We don't have that much science to know that. So, there's nothing we can say really about that that would be solid scientifically.

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Dr. Halena Gazelka 09:55

You alluded earlier to the fact you were going to talk about kids and vaccines. So, could you give us an update, Greg, on where are we? A decision is forthcoming soon, I think?

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Dr. Gregory Poland 10:05

Well, in fact Halena, today is an exciting day because the FDA advisory committee is going to meet and talk about this very issue. My prediction, they have not yet met. I don't think they start till nine o'clock or so. My prediction is that they will approve it for Pfizer. And the reason for that is that they have presented data showing spectacularly good immune responses, not surprisingly, in these young kids to a dose that's one-third the adult dose. So, instead of 30 micrograms, they'll get 10 micrograms.

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Dr. Halena Gazelka 10:43

They'll get two shots, Greg?

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Dr. Gregory Poland 10:46

Yes. I saw no particular safety concerns at all. So, my understanding, and my own guess is that they will likely approve that today, it will then go to CDC for approval, and I would not be surprised to see kids starting to get immunized in the latter part of the first week of November. So, this is exciting news. These kids are at risk. As you know, they can spread disease, and they represent a large block of the U.S. population that, of course, is unvaccinated. And it's an opportunity, I was just thinking it sounds like a pun, I didn't mean it that way, for a shot at a more normal kid's life. You know? So, I'm excited about that.

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Dr. Halena Gazelka 11:38

And what ages will this be, Greg?

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Dr. Grearoy Poland 11:39

This will be five to 11-year-olds. Now studies are being done that will go down to age six months with lower and lower doses. Because again, you know, those are healthy kids, their immune systems are our Ferraris compared to our Chevrolet or, you know, our slower immune systems.

D Dr. Halena Gazelka 12:02

Alright, Greg. Another listener wonders about booster shots for those younger than 65 who don't fall into the current risk categories. They thought it would be nice with the holidays coming and people being closer together, that more individuals could get boosters who are six months out from their original series and be protected. When will all of us be eligible for boosters?

D Dr. Gregory Poland 12:24

It's a good question. It's unclear. There's no meeting at this point scheduled for that at any of the advisory committees. I don't disagree with that sentiment. Several countries, Israel being the first one, I think they're down to 18, maybe or 30. I can't remember, for routine boosters. So, why do it? Well, on the one hand, they're not really at risk for severe disease, death, or hospitalization. That would be very rare if they otherwise had a primary series. But you are still having breakthrough cases. And when you have a breakthrough case, you increase the opportunity of spreading that, transmitting that disease to those who are unvaccinated or have weaker immune systems. So, I actually think it's a good idea. I think that's what we will come to learn is that full immunization against Coronavirus, COVID-19, is to priming doses and a booster dose.

D Dr. Halena Gazelka 13:30

Right. Well, thank you, Greg. Any last words for us today?

D Dr. Gregory Poland 13:34

You know, I think a couple of things. One of the phenomena that's being seen nationwide, it's true here in Minnesota too, is that we are beginning to recognize quite a discrepancy between those who live in the more rural areas and those who live in the more urban areas. In fact, the risk of death due to COVID in the rural areas is twice that, even within the same state, twice that of the urban areas. And that has to do with I think one, a generally older population living in the rural area, and not necessarily understanding or rejecting the need for these vaccines and for boosters. So, I know we have many listeners from actually all over the world. Getting vaccinated is your singularly best strategy, augment it by wearing a mask. I know not everybody shares that belief. But this is not about beliefs. This is what does the science show? What did the data show? And in fact, let me make one other observation. When you look at the highest immunization rates and the lowest infection rates, it's among the most highly educated, the more wealthy, the people who live in more urban areas rather than rural areas. So, if you don't fit one of those three categories, you have to stop and think, what do they know that I don't know? Why are they all getting vaccine and not getting sick, but we are? And maybe that's one avenue into opening that door to rethink your position if you're not wearing masks and haven't gotten a vaccine or a booster. This is really important. We're going on two years now of this pandemic. And yet we have all the tools we need to end this pandemic, and we just have not been able to bring ourselves as a nation to do it.

D Dr. Halena Gazelka 15:43

Very good points, Greg. I had seen an article in one of the major news networks yesterday about that there are physicians who are unaware of treatment options for early COVID. So, before hospitalization, and I'm thinking specifically of monoclonal antibody therapy.

D Dr. Gregory Poland 16:00

Yes.

D Dr. Halena Gazelka 16:01

And I thought, well, how tragic that would be if people were not able to receive appropriate care as well.

D Dr. Gregory Poland 16:07

You're exactly right Halena. I mean, compared to a year and half ago, it is miraculous, the therapies that we have developed in this amount of time, monoclonal antibodies being primary among them along with antivirals. In fact, the Merck oral anti-viral is being reviewed now in Europe, and I think soon in the U.S. too, but definitely avail yourself of those therapies where appropriate under the guidance of your health care provider, and don't hesitate to ask about them. Now, I know that there are some areas that have very, very high rates of disease still, where it's sometimes hard to find them, and they run out of them. Again, no need for that, get a vaccine and not wait for, you know, an expensive, more difficult therapy after infection and complications have happened.

D Dr. Halena Gazelka 17:05

Sage advice. Thank you, Greg.

D Dr. Gregory Poland 17:08

Pleasure.

D Dr. Halena Gazelka 17:09

Our thanks to Dr. Greg Poland, vaccine, infectious disease, and virology expert from the Mayo Clinic for being with us here again today to give us our COVID-19 updates. I hope that you learned something. I know that I did. And we wish each of you a wonderful day.

N Narrator 17:26

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