

Mayo Clinic Q & A - Dr. Gregory Poland COVID-19 Update 01 03...

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SPEAKERS

Dr. Halena Gazelka, Dr. Gregory Poland, Narrator

N Narrator 00:01
Coming up on Mayo Clinic Q&A,

D Dr. Gregory Poland 00:03
We are not in a good position facing such a highly infective variant.

N Narrator 00:11
The Omicron variant is spreading at an alarming rate. Right now, the United States is averaging approximately 400,000 new cases a day.

D Dr. Gregory Poland 00:20
If you are immunized and boosted, and you have a healthy immune system, Omicron is highly likely to be a trivial illness. Now, that doesn't mean you can't transmit it to somebody else, where it won't be a trivial illness. But getting immunized is basically a weapon against this virus, such that the whole disease part of it is no longer an issue for you.

D Dr. Halena Gazelka 00:48
Welcome, everyone to Mayo Clinic Q&A. I'm Dr. Halena Gazelka. I hope you were on the nice list this year and are looking forward to 2022. We're here for our first podcast of the year with Dr. Greg Poland, virologist, infectious disease and vaccine expert, and our resident COVID-19 expert. Welcome back, Greg.

D Dr. Gregory Poland 01:09
Thank you, Halena. I do want to clarify, I was on the good list.

D Dr. Halena Gazelka 01:13
Oh good. I'm glad. Well, as I told you earlier, we're sitting here without Omicron. So, we are onto something.

D Dr. Gregory Poland 01:20
I know you were because I got a peek at Santa's list being a special appointee to the North Pole.

D Dr. Halena Gazelka 01:26
That's right. That's wonderful. Well, let's jump right in Greg.

D Dr. Gregory Poland 01:30
Sure.

D Dr. Halena Gazelka 01:31
The news is full of Omicron. It seems to be spreading quickly. What's the scoop?

D Dr. Gregory Poland 01:36
Yeah, well, you're exactly right. I mean, this is spreading unlike anything we've seen in the U.S. over the last seven days. We're now averaging about 400,000 or so new cases a day. So, when we last talked, it has more than doubled. And the thing that's concerning is that hospitalization has increased by about a third. The death rate has not increased, and that's a mercy. And I hope that will hold up. I think that reflects we better know how to treat it than we did, you know, a year, two years ago. And I think, in general, I've got to be really careful about this, in general, for an otherwise healthy person, Omicron appears to be mild or that is a decreased risk, not a zero risk. And people misunderstand that, a decreased risk of severe disease and death. The unfortunate thing is children. So, if you look in this past week ending, there have been about 200,000 children now infected with COVID. That's a 60% increase. And there's been an increase in hospitalization of children.

D Dr. Halena Gazelka 03:03

Why is that?

D Dr. Gregory Poland 03:04

Now that that one's a little tougher. And I just want to caution about that. Definitely children are getting sick with COVID and hospitalized due to COVID. There's another segment of that though, it is a little harder to parse out. In most hospitals, if a child is admitted for any reason, they will test them against COVID. And in some locations, 20 to 30% of those kids are testing positive for COVID. So, they're being hospitalized, a portion of them, not because of COVID but with COVID.

D Dr. Halena Gazelka 03:44

Okay.

D Dr. Gregory Poland 03:45

So, we have got to be a little careful in discerning and parsing that out.

D Dr. Halena Gazelka 03:50

How does that affect kids going back to school and all of our college students going back?

D Dr. Gregory Poland 03:55

Yeah, that's a real concern. I mean, just as we predicted we would have a major surge right after the holidays because of travel and people getting together and not adhering to masking and immunization guidelines, now what will happen as you take all of those exposed millions of people and put them in congregate settings like college dormitories and school classrooms, and of course, we're going to see more cases. There's just no question about it. Now, some schools are taking what I think is a really rational approach to this. They're saying, well, our first week or two of school is going to be online. In other words, if you're asymptomatic or symptomatic you will have resolved that infection before you come back to school and/or testing to stay or start in school. So, those I think are rational ways of dealing with it. It's important that kids be in school, no question. Let's do it right. And let's not forget that there really aren't school aged kids that cannot be immunized at this point. And that's a really important factor to remember. You know, when we get these vaccines against COVID-19, you're taking a disease that has a propensity for long COVID complications, hospitalization, and death, and converting it to, for the most part a very mild or asymptomatic disease. Why would you not do that?

D Dr. Halena Gazelka 05:32

Yeah. Speaking on that topic of vaccinations, the FDA has spoken today, Greg, on the topic of boosters.

D

Dr. Gregory Poland 05:42

Yeah, I'm really pleased about this. So, for the 12 to 15-year-olds, they can now get boosted, and they lowered that interval from the second dose from six months to five months. So, 12 to 15-year-olds, five months after their second dose can now get boosted. Importantly, five to 11-year-olds who are immunocompromised can get a third dose, just like older adolescents and adults. Immunocompromised like an organ transplant, or you know, severely to moderately immunocompromised, they get that third dose two months after their second dose.

D

Dr. Halena Gazelka 06:26

Greg, how is Omicron affecting the treatments that we have for COVID? So, I've been reading that some of the monoclonal antibodies are different.

D

Dr. Gregory Poland 06:37

Yeah, this is, you know, this is kind of one of the sad storylines in this. The extraordinary mutation of the Omicron variant has caused us to lose two sets of monoclonal antibodies, leaving us with one monoclonal antibody for treatments, Sotrovimab, and that's in limited supply. And when I talk to people, whether it's at church or, you know, that you meet in the store, they have this idea, Oh well if I get sick, I'll get monoclonal antibodies. Well, I'll tell you, the day after Christmas my phone started blowing up and getting calls from people I know, acquaintances, colleagues who have been exposed or who tested positive after holiday parties, and they were very surprised. They can't just walk in and get monoclonal antibodies. They are in limited supply. The other counter to that is that the FDA did approve both the Merck and Pfizer oral antiviral drugs, but they come with limited distribution and limited use because of contra-indications. So, you know, this is another case where prevention is far better than trying to catch up with cure.

D

Dr. Halena Gazelka 08:00

Greg, what are you anticipating? Some other countries have seen a rapid rise and then a rapid decrement or a decrease in cases. Is that what we're looking forward to in the United States?

D

Dr. Gregory Poland 08:10

Really hard to know, Halena. You know, where you're primarily seeing that is in Republic of South Africa, but that's a very different epidemiologic context. They had very little in the way of vaccination. And so, a lot of previous infection which modified the chance of getting infected or of having severe disease, so they did not see major rises in hospitalization. They had a big blip and then a rapid fall off. Might we see that in some large cities, possibly, but I think what we're gonna see is a pretty substantial way of Omicron across the nation and then periodic blips as we have super spreader events in different geographic locations. The question is, what will Omicron do from here? And again, I caution we have seen five, inside of a year and a half,

we've seen five variants of concern. Now in New York City, 60 different times, 60, they have detected a further set of mutations in Omicron that could make it as severe in disease as Delta. We don't know yet, but that's the early indication. So, will that take off? I don't know. When you look at our five to 11-year-olds, only 15% of them have been vaccinated. When you get to 12 to 17-year-olds, we're at about a 50% rate. When you get to adults, you know, you're talking about 60-65%, and only a third of those have gotten boosted. So, we are not in a good position facing such a highly infective variant.

D Dr. Halena Gazelka 10:06

Greg, here comes the fun part of our podcast where I get to ask you some questions from our wonderful listeners.

D Dr. Gregory Poland 10:12

Oh, good. Okay.

D Dr. Halena Gazelka 10:13

This always keeps your mind working when we do this part.

D Dr. Gregory Poland 10:17

Indeed.

D Dr. Halena Gazelka 10:18

Alright, number one, is it concerning that the Omicron variant has developed with characteristics of the common cold? All of my life I have heard the many comments on no cure for the common cold and how amazing it would be if someone came up with one. Does that mean the Omicron variant is potentially not treatable?

D Dr. Gregory Poland 10:37

So, the questioner is kind of confusing two separate concepts. In general, it is a positive when a respiratory virus like Coronavirus changes or evolves to be more like a seasonal respiratory virus. In general, not always, we've seen five exceptions already. In general, it will mutate or evolve to be contagious as we're seeing, but less severe for people who have otherwise normal immune systems. I keep saying that because I want people to understand that if you don't have a normal immune system, if you're elderly, if you have any of a variety of medical conditions, you don't fit into that category and may be at substantial risk, even with Omicron infection. So, we have to pay attention to that. It doesn't mean that there is no treatment, right? We just talked about one set of monoclonal that is still effective, two antivirals. There's an infusible

antiviral called Remdesivir, and there's now a set of monoclonal antibodies that can be given pre-exposure. So, this would be optimal for immunocompromised people or people who genuinely have a medical contraindication to getting vaccination. We can now protect them.

D Dr. Halena Gazelka 12:09

Greg, our next listener would like a little better understanding about the correlation between how transmissible a virus is, and how serious or deadly the virus is.

D Dr. Gregory Poland 12:20

Sure.

D Dr. Halena Gazelka 12:21

So, in general we've heard that the more that it's transmitted, kind of like the common cold, the less intense the effects of it.

D Dr. Gregory Poland 12:29

Yeah, you know, you hear the kind of old saw that what a virus wants to do, and it's true is infect you but not make you so sick that you're in bed, because the virus wants you to go to the store, it wants you to go to holiday parties, it wants you to go to school, because it will be transmitted from one person to another, as we've seen for two years. But that's not a linear association. For example, Ebola is quite contagious, but very lethal. Smallpox is fairly contagious and can cause serious disease. Measles is the most contagious infectious disease that we know, and it can cause serious disease and death. So, it's not a one-to-one correlation. But in general, and we are seeing this with the Omicron variant. We've seen an increase by about double of infectivity, but a drop in otherwise normal people in severity, in general. That's a generalization.

D Dr. Halena Gazelka 13:39

All right, Greg. Here's the big question of the day from one of our listeners. How does the pandemic end? Please prognosticate.

D Dr. Gregory Poland 13:50

Well, prognostication is hazardous, right? So, I'll be tentative here. You and I have really worked hard at saying where we have data and are confident, and where we're speculating. So, this fits into speculation. One of two ways probably. One way is that yet another mutation or variant of concern that now more completely evades immunity occurs, and we start all over. That's a warning to us to get to the level of herd immunity.

D Dr. Halena Gazelka 14:30
I don't like that choice, Greg.

D Dr. Gregory Poland 14:32
I don't either. I don't like that choice. But, you know, if we don't act rationally, that is a non-trivial probability. The second is, what we're tending to see thus far is evasion of some level of immunity, increased infectivity, but lower pathology or severity and that's what's thus far happened with Omicron. Now, I want to make a point here because people think, oh Omicron it's no big deal. It is a big deal. If you're not vaccinated Omicron is a big deal for you. Why is it not for the majority of us who have been vaccinated and boosted? This is where T cells come in. If you've been vaccinated and boosted, or had previously gotten COVID and then got your vaccine series, you have a level of T cell immunity that if you're otherwise normal, basically operates at extremely high levels to prevent you from developing even moderate to severe disease. It would be very unlikely that you would die or end up on a ventilator. If you're not vaccinated, just the opposite. You have a probability of having severe disease, getting hospitalized, ending up on a ventilator or dying because you don't have T cell immunity. So, by getting vaccines, what we have done is we have basically said, okay the severe disease part we have now blocked. We don't really have any vaccines that block infection. So, you're seeing people who are vaccinated get infected but having trivial illness, if they have any symptoms at all. That's a win. And we have to realize that. I hear people say, Oh well, you know, he was vaccinated and got the disease anyway, why should I get it? Because he had a trivial illness because he got vaccine. And if you're unvaccinated, wow, that is Russian roulette.

D Dr. Halena Gazelka 16:49
Greg, explain what it means for a pathogen to become, or a virus to become endemic.

D Dr. Gregory Poland 16:58
So, endemic means that it will always be present in the population. Influenza, RSV Rhinovirus, those are the three big, and there's others too, but those are the three big respiratory viruses that we can easily identify that circulate around the world, and we see seasonal outbreaks of that. And that's what will happen. That's what slowly seems to be happening with Coronaviruses. It will change and become endemic. Now what that means is it can also mutate at some point in the future. So, I've mentioned it before, and I think it surprises people. If you got your flu vaccine this fall, and I hope you did, then you got vaccinated against a variant of influenza that first showed up in 1918. So, 100 plus years later, we're still vaccinating against that. One hundred years from now, our great, great, whatever that will be, great grandchildren will be getting immunized against Coronavirus.

D Dr. Halena Gazelka 18:09
All right. Well, thank you so much, Greg. That ends our questions for today. Do you have any last words of wisdom you'd like to share with our listeners?

Just words of wisdom you'd like to share with our listeners.

D Dr. Gregory Poland 18:16

You know, again, I think because I just want to emphasize for any of our listeners who are not immunized, Omicron is not a trivial virus to you. If you are immunized and boosted, and you have a healthy immune system, Omicron is highly likely to be a trivial illness. Now, that doesn't mean you can't transmit it to somebody else where it won't be a trivial illness. And there will always be a small percentage because of their inherent genetics that will end up with more severe disease. But getting immunized is basically a weapon against this virus, such that the whole disease part of it is no longer an issue for you. It's more the minor illness part of it. If you are not vaccinated and boosted, just the opposite. You've got the whole disease component that is a risk for you and the infection component. So, you know, there's really no reason in this country, vaccines are widely available, unlike the treatments for disease. Anybody age five and older can now get immunized. And as we mentioned earlier, kids 12 and older can get boosted. And you know one other point about that because with the mRNA vaccines in the older children and young adults we were seeing concerns over myocarditis and pericarditis. We're not seeing that in the younger children. It's very much rarer in the younger children. So again, be immunized, be boosted.

D Dr. Halena Gazelka 20:02

And probably we should put a plug in for masks, Greg.

D Dr. Gregory Poland 20:05

Absolutely.

D Dr. Halena Gazelka 20:05

I was amazed. My husband and I went to a Christmas Eve service at church, and it was packed, and we were one of the only two individuals in the entire auditorium wearing a mask. And that sort of surprised me.

D Dr. Gregory Poland 20:18

It's very sad. It's a rejection of science and data. It's a false epistemology, that is a way of knowing truth, and it just continues to propagate that. That same church that you're talking about, which I happen to be a member of was unable to conduct Sunday services because they had so many staff sick with COVID. I mean, you can reject science, but the virus could care less. The virus will seek you out if you are not vaccinated and masked in public.

D Dr. Halena Gazelka 20:56

Well, thank you Greg for being here today.

D Dr. Gregory Poland 20:58
My pleasure.

D Dr. Halena Gazelka 21:00
Our thanks to Dr. Greg Poland for being here today to give us our COVID-19 updates. I hope that you learned something. I know that I did. We wish each of you a wonderful day and a wonderful start to 2022.

N Narrator 21:13
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