

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

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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 00:04
It looks like we've kind of gotten to the peak and now starting on the decline, but it's very uneven.

N Narrator 00:12
There are reports that show a drop in cases to the Omicron variant. But will this dip in infections and hospitalizations change the overall course of the pandemic? And what about new variants?

D Dr. Gregory Poland 00:23
Coming right on its heels is a sublineage of Omicron. Some have called it Stealth Omicron, or BA.2 is its sublineage name scientifically, which appears to be about 1.5 times more infectious than Omicron.

D Dr. Halena Gazelka 00:43
Wow. Welcome everyone to Mayo Clinic Q&A. I'm your host, Dr. Halena Gazelka. We're recording this podcast and Monday, January the 31st, 2022. The numbers across the U.S. are uneven in regards to COVID cases and Omicron cases. But now is not the time to let your guard

down according to Mayo Clinic experts. One such Mayo Clinic expert is Dr. Greg Poland, virologist and vaccine expert, who is here with us again today to give us our updates. Hi, Greg.

D Dr. Gregory Poland 01:15
Good morning, Halena.

D Dr. Halena Gazelka 01:17
Welcome. Thank you for being here.

D Dr. Gregory Poland 01:18
Yes, it's always a pleasure.

D Dr. Halena Gazelka 01:20
Tell us what's going on with Omicron.

D Dr. Gregory Poland 01:23
Lots of things happening. I mean, in between these podcasts so much happens. But briefly, what's happening is when you look at as a nation, it looks like we've kind of gotten to the peak and now starting on the decline. But it's very uneven. That's a great description for what's happening in some of the big northeast cities, and maybe in L.A., for example, but if you look in the rest of the nation, it's not clear that they peaked yet. Coming right on its heels is a sublineage of Omicron, some have called it Stealth Omicron, or BA.2 is its sublineage name scientifically, which appears to be about 1.5 times more infectious than Omicron. It does not appear to be more severe, although it's very early. And we've seen in some places, for example Denmark, which had very high immunization rates, despite that they've had about 40% of their cases now be this BA.2. Here in the U.S., it's in about half of our states, though a low number of cases. So, my guess, this is speculation, is that what we're gonna see is as Omicron declines, we may see more and more Omicron sublineage called BA.2.

D Dr. Halena Gazelka 02:57
Okay, so it is not time to let our guard down yet.

D Dr. Gregory Poland 03:00
No, not at all. And I would really push back scientifically on any notion that says, you know what, we're just going to go back to normal now. In some ways, you could probably get away with that with young, healthy people. But with adults, and older adults in particular, you're

asking for levels of illness, and hospitalization, and death that I don't think are defensible. So, the idea of no longer wearing a mask, or not recommending or prioritizing vaccine is, in my opinion, disastrous.

D Dr. Halena Gazelka 03:46

I feel like I hardly remember what normal was. I actually feel almost like something's missing if I go in a store or anywhere without my mask on. I'm just so used to wearing it now. And it's so cold in Minnesota, it's kind of helpful.

D Dr. Gregory Poland 04:02

Yeah, no question. Exactly. I feel the same way.

D Dr. Halena Gazelka 04:05

Well, tell us about effectiveness of boosters and Omicron, and if anything is known about the new variant.

D Dr. Gregory Poland 04:14

Well, you know, this is an area where we do have some data, it's early data, but if you look at, and let me try to give you a number. So, if we take 50 to 64-year-olds who are unvaccinated, their rate of getting infected is about 78 per 100,000. If you look at people who are vaccinated, it goes from 78 per 100,000 to four. If you look at people who are vaccinated and boosted, it goes from 78 to four to two. Now, those are not cases, those are cases severe enough to end up in the hospital. If we look at those same numbers among people aged 65 and older, which is why I said this is disastrous for older people, the unvaccinated were getting hospitalized at a rate of 239 per 100,000, the vaccinated about 27, and the people who are vaccinated and boosted, not quite five per 100,000. So, it shows you in real world data the effectiveness of these boosters. Again, and I really want to stress this because people have massive misconceptions about this. If you have a normal immune system and you get two doses of vaccine and a booster, I'm talking about the mRNA vaccines, and you wear a mask, you've done everything you can to protect yourself, and therefore those who will be around you from infection. Those are not iron shields. There is no perfection here. But you've dramatically reduced the risk of Omicron and of its complications, so well, well worth doing. In fact, as we've gone over before the unvaccinated are in the category of if they get it, they're highly likely to end up with symptomatic disease, moderate to severe disease, in some cases end up in the hospital on mechanical ventilation, or even dying. Whereas people who have been vaccinated and boosted are way on the other side. They are very likely to have mild disease or asymptomatic trivial disease. So, it's that spectrum that we're concerned about.

D Dr. Halena Gazelka 06:49

Okay, Greg, it's time to open the listener mailbag again.

D Dr. Gregory Poland 06:52
Okay.

D Dr. Halena Gazelka 06:53
Both my hands together.

D Dr. Gregory Poland 06:54
These are always challenging.

D Dr. Halena Gazelka 06:56
They are. I always like to give you these little challenges from our listeners. What do we know about the durability of full vaccination with a booster versus the durability of protection from having had an infection with COVID?

D Dr. Gregory Poland 07:10
Okay, but let me start with just another piece of data because I think it's helpful, and this is in regards to Omicron now. So, this is Omicron specific data, again real world effectiveness data. Remember that initially the data showed on average that if you got two doses of, and this happens to be Pfizer vaccine these data, you were at about 95% protection against symptomatic disease. In the face of Omicron, those two doses dropped to about 70% efficacy against severe disease, and about 33% or so efficacy against a symptomatic infection. So, quite a drop in the face of Omicron. If you got that third dose, you then went to about 86, or you fell from 95% to 86% effectiveness, so a small drop, and about 75% against any symptomatic infection. So, the power of a booster even in the face of Omicron, while not as good as the preceding variants, is still very good. On par with a lot of our other vaccines. So, what about durability? Well, what we saw, and this is really hard to tease out, is people who had two doses, time moved on, a new variant Omicron showed up, and the efficacy decreased. Was it waning immunity? Yes. Was it new variant? Yes. It's both of those. It's the combination. So, if we don't see a new variant, other than the BA.2 that we talked about, which I don't think is going to be significant in terms of evading vaccine immunity, then the likelihood is you are protected against severe disease. The question will be, how long are you protected against very mild trivial or asymptomatic disease? We don't know yet. It just hasn't been long enough. I'm going to guess that it will be at least on the order of three, four, to six months, something like that. So, I expect what we're going to see, particularly for people vaccinated and boosted, is that very quickly Omicron is going to peak, they will really not be at risk. We've got a lot of people immunized now in the U.S., so we'll see it fall back down to kind of baseline levels. Let me make the point, we're not going to get rid of this virus. It's too late based on how we acted. It's too late. So, we're going to get down to some baseline level only to see it surge again, either with a new variant or as we go back into the fall time.

D

Dr. Halena Gazelka 10:16

So, Greg how does that the durability of the vaccine compare to someone who was infected and their risk of getting it?

D

Dr. Gregory Poland 10:24

Well, this is interesting. The risk of reinfection, so in other words you've gotten infected once, the risk of reinfection with Omicron compared to Delta is almost five and a half times higher. The point being that infection is no more of an iron shield than vaccine is. Again, massive misperceptions about that among the general public. Now, there is a paper out arguing that in fact so-called hybrid immunity, illness induced immunity plus vaccine induced immunity is probably the strongest immunity. I have no argument against that. I think that is probably proper immunologic reasoning. But what about infection only or vaccine only? It varies by which variant we're talking about. But it is clear that people who have been previously infected do get reinfected over time.

D

Dr. Halena Gazelka 11:30

And unfortunately have a risk. If you're counting on a reinfection, just get it now and get it over with, you have the risk that you could have fairly significant disease.

D

Dr. Gregory Poland 11:39

I was mentioning to you just offhand right before we started Halena, the last six cases of COVID that I've been consulted on, one of them resolved very quickly and did fine. The other five are disasters. They are disasters. They are heartbreaking disasters, and unfortunately it just seems like it has to happen in each neighborhood, each family before people get it and realize the significance of this. They mistranslate milder from Delta to "Oh mild and I don't have to worry about it". It is not the case. Do you realize that we have a higher peak of deaths per day in the U.S. from Omicron than we did last year with Delta? The death rate is higher, not because it's more severe of a disease, but if, let's just say X percent of a small number of Delta infections, those deaths occurred, now take 10 times that with Omicron, and you have more deaths, more hospitalizations as a result. And again, this is lost on the public.

D

Dr. Halena Gazelka 12:59

All right. Next question. With the Omicron variant, is there still an assumed "grace period" after which if you get infected and recover you will be highly unlikely to contract COVID again within 90 days, or is that untrue because it is so highly transmissible?

D

Dr. Gregory Poland 13:19

So, I think what the listener is asking is, if I were to get infected is there a period of time that I

know I'm protected? In general, the answer to that is yes, but it is so variable person to person. There are people who have gotten reinfected in as short a time period as 30 days. For the vast majority of people, it's probably 90 or more days, would be my guess, but not permanent by any means. And it really depends on your risk factors.

D

Dr. Halena Gazelka 13:55

Do we know, Greg, how Omicron is behaving in terms of people developing long COVID syndrome yet?

D

Dr. Gregory Poland 14:02

It definitely does occur. One of the interesting things, and let me say that we have far less information and data on long COVID than I would like, but the early indicators, so subject to change as we get more data, is that long COVID symptoms are occurring even in people with very mild, almost trivial symptomatic Omicron disease. There's a lot of theories about this. One of them being it may be due to end organ damage due to micro clots, another being that it's actually chronic viral infection. We've seen some evidence for that in an excellent paper in terms of infection of brain cells. And then another that it may be an auto-immune type reaction that's occurring. So, the point is that I think we've generally felt that the more severe the disease the greater the risk. But we're beginning to see indicators that even with mild, and as I say sometimes trivial disease, that long COVID symptoms can result. Now, in what proportion and magnitude? I don't think we have clarity on that yet.

D

Dr. Halena Gazelka 15:19

All right. Now we've all seen in the news that the government is allowing for the distribution of N95 masks to individuals throughout the country. And our next listener wants to know can that mask be reused and for how long?

D

Dr. Gregory Poland 15:37

Again, our listeners ask very practical, very good questions. So, let me answer it this way. The CDC guidance to health care providers is that that mask be used no longer than a typical work week, which let's just say 40 hours. Now having said that, all of us as healthcare providers are working far more than 40 hours right now. But let's just take a typical work week 40 hours. I think that's reasonable. For most of us in the general public you're wearing a mask for the hour, hour and a half you are in church or when you go into the grocery store or something like that. The difference is, if your mask is visibly dirty, if the straps aren't tight, if it gets wet, or a hole or torn, discard it. But I think you can safely wear it over the course of about a week before having to replace it. I think we're going to start seeing surgical masks and KN95s used more and more in the winter in regards to prevention of influenza. When you look at the data showing a doubling in the risk of heart attack and stroke in older people who get influenza, once people understand that and recall that last year when we were wearing masks, there was no influenza. Think of the misery that causes. In 2017. I think it was, we had almost 80,000 deaths and almost 900,000 hospitalizations, all of which is preventable.

D Dr. Halena Gazelka 17:21

One last listener question for you, Greg. When will those of us who are fully vaccinated need to receive another vaccination dose? Do you think that we will need a series of doses every year, or will it come down to one shot like the flu shot eventually?

D Dr. Gregory Poland 17:38

Yeah, both Pfizer and Moderna have announced the development of an Omicron focused variant booster. They expect to have that out in March. So, what I think will happen is that if Omicron, or the Omicron sublineage BA.2 continues, then I think we'll see recommendations for the use, perhaps people aged 60 and older, or immunocompromised, or those wishing to further enhance their immunity. The ideal would be, just as you're proposing Halena, that we move toward an annual fall vaccine against influenza and its strains, and Coronavirus and its strains combined together. That would be the ideal, and there's several companies working on that. In years to come they hope to add the third respiratory pathogen which causes so much illness, which is called RSV or respiratory syncytial virus. But I think next year, we're very likely to see a combined dual flu/Coronavirus vaccine.

D Dr. Halena Gazelka 17:40

Wonderful.

D Dr. Gregory Poland 18:43

I do, I think it's just not, you know, unless we saw a really virulent variant, I just don't think it's sustainable nor feasible to roll out booster after booster, vaccine after vaccine. We're going to have to, as I say the reality of it, there's some amount of this we're going to have to live with. And I think when we reflect back, you know, where we are zooming toward almost a million deaths in the U.S. due to this awful disease. And I think that's going to cause a lot of reflection on what we did and what we didn't do. And I think the idea of people not being immunized who are otherwise eligible, and not wearing masks who are otherwise capable, I think will be a difficult one for people to reconcile with.

D Dr. Halena Gazelka 19:49

Greg, I have a follow-up question on what you just said earlier about how it might not be feasible or practical to follow-up on every variant with a booster.

D Dr. Gregory Poland 19:59

Yeah.

D Dr. Halena Gazelka 19:59

But explain how is that different than the flu vaccine? My understanding of the flu vaccine has always been that you include the most prevalent strains each year, and so the flu vaccine varies every year.

D Dr. Gregory Poland 20:12

No, you're right. And I didn't mean the annual idea. I meant two or three times within a year or more trying to roll out new boosters or new variant boosters. Annually I think that's fine, and obviously if a new variant were to arise that was highly virulent and transmissible, that would be a reason to roll out yet another vaccine. We've only done that one or two times in the U.S. in modern history, and it's very difficult to do. And we have unfortunately a growing, I would call it, rejection of science and hesitancy toward vaccines, making the public health consequence of these highly transmissible diseases very, very difficult to handle. And, as I say for me as a physician and a clinician, I don't know what to say other than it is truly heartbreaking to watch these totally preventable things happening.

D Dr. Halena Gazelka 21:21

Can't argue with that.

D Dr. Gregory Poland 21:23

I said to one person, maybe it was unkind, but after two years of watching this happen, this person happened to be unvaccinated and rejecting vaccines, I said, what risks would you be willing to take to raise your baby daughter? And I think that reached him to some degree to say, yeah wait a minute, what am I thinking and doing here? So.

D Dr. Halena Gazelka 21:59

Yeah, well that would do it. We're closing the mailbag, Greg. Any last words of wisdom for our listeners?

D Dr. Gregory Poland 22:06

You know, I think I just want to lean into and press on the point that you made early on Halena, because I think it was such a good point you made. And that is, despite what you might hear from celebrities or various politicians, the idea that the pandemic is over is in no way supported by the actual data and the actual facts. The actual data, the actual facts for those of us, particularly this is clear for those of us who are adults, is get two doses of an mRNA vaccine and your booster. If you've got the J&J vaccine, get a dose of mRNA booster, and wear a mask when you're indoors. That is the safest thing that you can do to protect yourself, your family, and your community.

D Dr. Halena Gazelka 23:00
Pretty much what you've been saying for the past two years, Greg.

D Dr. Gregory Poland 23:03
It is.

D Dr. Halena Gazelka 23:05
Thank you, Greg, for being here today. I know how busy you are, and we appreciate time out of your schedule.

D Dr. Gregory Poland 23:10
My pleasure.

D Dr. Halena Gazelka 23:11
Our thanks to Dr. Greg Poland, Mayo Clinic expert, for being here with us today to give us our COVID updates. I hope that you learned something. I know that I did. And we wish each of you a wonderful day.

N Narrator 23:23
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