

Mayo Clinic Q & A - Dr. Poland - 08 30 21 - YouTube Audio

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SPEAKERS

Dr. Halena Gazelka, Dr. Gregory Poland, Narrator

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- N** Narrator 00:00
Coming up on Mayo Clinic Q&A,
 - D** Dr. Gregory Poland 00:02
We have over 101,000 Americans in the hospital with COVID, many of them fighting for their lives in ICU and on ventilators. The vast majority of those are occurring and people who are unvaccinated. So, this is an argument, a continuing argument, for the immense importance of getting fully vaccinated to prevent this carnage.
 - N** Narrator 00:31
While the vaccines for COVID-19 have been proven safe and effective, there are still those who are unsure, misinformed, or just don't believe in them. What could this hesitancy mean for our future protection against COVID and its variants?
 - D** Dr. Gregory Poland 00:45
What I think is going to happen is that we're going to be plagued with this. It's impossible to speculate how many more variants might arise and kind of torture us like this for the

next year or two or longer until, we think, it settles down into a more seasonal type of infection. So, our failure to contain this means that we're going to be immunizing against it through the rest of our lives and our children's lives, and the generation after that.

- D** Dr. Halena Gazelka 01:23
Welcome, everyone to Mayo Clinic Q&A. I'm Dr. Halena Gazelka. We're recording this podcast on Monday, August the 30th, 2021. The fight against the Delta variant continues as hospital systems in many parts of the country are strained with caring for patients with COVID-19. It still holds true that nearly all of the people who are being hospitalized however, have not been vaccinated. Well, here with us to discuss the latest is Dr. Greg Poland, our weekly visitor and expert on all things virology, vaccine, and infectious disease. Welcome back, Greg.
- D** Dr. Gregory Poland 01:59
Thank you Halena. You know, after more than a year of this, we're not visitors, we're family.
- D** Dr. Halena Gazelka 02:04
That's right. That's right. And Greg, I see that you are back in your natural habitat today. That gives me a little bit of comfort.
- D** Dr. Gregory Poland 02:11
A little bit of moving around. Hard to believe we are touching right on September already.
- D** Dr. Halena Gazelka 02:17
Isn't that something? Here in Rochester, you know, Greg, a lot of the kids are going back to school today. I think they've staggered it some for different ages. But there was a crisp chill in the air this morning, and I thought it really is Fall.
- D** Dr. Gregory Poland 02:33
Yeah, it's Fall.

D Dr. Halena Gazelka 02:34
Pretty amazing. Well, tell us what is happening in the world of COVID-19, Greg.

D Dr. Gregory Poland 02:40
Well, you know, again, as we as we have predicted, is exactly happening. We have over 101,000 Americans in the hospital with COVID, many of them fighting for their lives in ICUs and on ventilators. We're having over 160,000 new cases a day, and just below 1,000 deaths per day. And as you mentioned, the vast majority of those are occurring and people who were unvaccinated, and occasionally and people who were vaccinated, but who either genetically or because of other medical issues they have didn't respond well to the vaccine. So, this is an argument, a continuing argument, for the immense importance of getting fully vaccinated to prevent this carnage.

D Dr. Halena Gazelka 03:39
Greg, how are the numbers for vaccination in the United States? And what about number of individuals who are eligible to have a third dose at this point?

D Dr. Gregory Poland 03:49
Yeah, we don't know how many have taken advantage of getting a third dose at this point. It's just for immunocompromised individuals. That's a group that generally has been very highly motivated, for obvious reasons, and I think we will have very high rates of compliance there. We have about 50% of 12 to 17-year-olds that have gotten vaccinated, where about 53% of the entire U.S. population. So, that's everybody, and obviously people below the age of 12 can't get vaccinated. And if you look at adults who have gotten at least one dose, we're at about 71-72%. So, those are numbers that are nowhere near herd immunity. So, for the people that have gotten vaccinated good on them, they have substantially protected themselves, including against the Delta variant. For those that are unvaccinated, there is grave concern. In fact, if you look at the latest model in the next three months, the model suggests that another 100,000 Americans are likely to die of COVID.

D Dr. Halena Gazelka 05:08
Greg, I've been a little dismayed by the lower numbers of vaccination in teenagers who are eligible to be vaccinated. And I admit that I'm not familiar with the social media pressures or what might go into the pressures on teenagers as they're making that decision. I know that you and I have been contacted by a number of parents and

grandparents saying, I don't want, you know, I'm letting my child make this decision. And what do you think of where we are with vaccinations in teenagers compared with older adults?

D Dr. Gregory Poland 05:46

Yeah, yeah, it's a very mixed bag, as you're suggesting. Part of it is the limited number of vaccine choices. So, that I hope will improve shortly. But you know, like any important life decision, you would hope that parents are influencing their children and giving them proper information. The dilemma occurs for a child or a younger person like that, who may well know something about the data and is inclined to get a vaccine, and yet may have a parent or parents voicing anti-vaccine sentiment or vaccine hesitancy. That puts a child in a big dilemma. And yet, we have seen a sharp, sharp increase in the number of cases among kids, the number of hospitalizations in people 18 to 30-years-old. So, this is serious business. This isn't, oh, I wonder if I should get a vaccine or not. This is your health, your well-being. And so, I hope that younger teenagers will take advantage of getting a vaccine.

D Dr. Halena Gazelka 07:04

Greg, I have often wondered whether there's a lack of understanding at times of what it looks like to be a patient hospitalized with COVID-19, and what actually that process is like and how ill these patients sometimes are, in that people are refusing vaccines who could end up in that situation themselves. It reminds me a little bit of, I think it was the 1980's, when they had these anti-smoking campaigns where they would show terrible pictures of people who were deformed after having surgeries, laryngectomies, etc., for lung cancer. And I thought, you know, it's really hard to comprehend. I think sometimes when you're young, and you feel sort of...

D Dr. Gregory Poland 07:46

Invincible.

D Dr. Halena Gazelka 07:46

...very strong, and that things like this could happen to you.

D Dr. Gregory Poland 07:50

Yeah, you're right, Halena. I wish in many ways that we could take cameras, we can't

because of patient privacy, but I wish we could take cameras in and allow people to see what happens, what it's like to have a plastic tube down your throat, and IVs in you with no privacy, what it's like to be in the hospital on oxygen, and feel miserable, you feel like you're going to die. We just had in our own family, in our extended family, a member of our family fully vaccinated, who nonetheless did get infected, did not have to be hospitalized. But you know, this person is quarantined for the next 10 days out of any family activities, feels miserable, and it's a real disruption in life. And of course, that's not accounting for possible long COVID symptoms that would occur. So, you know, somehow we've got to reach people, and if that means reaching them emotionally, by seeing pictures of reality when somebody is infected, I'm for it.

D Dr. Halena Gazelka 09:06

Say, Greg, now that the FDA has granted full approval to the Pfizer vaccine, what future do you see for Moderna and Johnson & Johnson who are under emergency use authorization at this point?

D Dr. Gregory Poland 09:19

Yeah, I think that the Moderna data has been submitted to the FDA. So, I believe very shortly, in the next weeks, we'll see that one also be approved. Johnson & Johnson, remember got their EUA much later than the other two, is submitting their data, they'll be delayed past Moderna. The other thing is that I hope yet in the next few months, we'll have approval down to age 12 and an EUA down to age six, which we really need. I mean, it's quite obvious as people have gone back to school, particularly where there's not distancing and masking. Like we didn't already know that was going to happen, and profound numbers getting infected, getting hospitalized. Probably some people are aware of the recent news report of an unmasked, unvaccinated teacher who spread COVID to half her class. That's no surprise. That is exactly what this virus does.

D Dr. Halena Gazelka 10:29

Speaking of boosters, as we have in Johnson & Johnson, when do you think, or what is the future of a booster for the Johnson & Johnson vaccine?

D Dr. Gregory Poland 10:38

Yeah, we don't know yet. They have released some preliminary data showing that after the second dose, antibody levels were boosted nine-fold, which is pretty impressive. The real question surrounding boosters is yes, we know that we can raise antibody levels.

What is not as clear is does that lead to increased protection, which really is winding back to the question of, are we seeing increased rates of infection, because of the amount of time that has elapsed since the second dose of vaccine or because of a much more contagious variant, the Delta variant, or some combination of the two. And when we focus on antibody levels, we're really ignoring a major and important arm of immunity, which is cellular immunity, which is a very powerful arm of immunity. And I think that's why what we're seeing is exactly what you said Halena, we're not seeing people who have been fully vaccinated, otherwise healthy, get severe disease or die, that is extremely rare. Do they get asymptomatic, mild, and even moderate disease and a small percent be hospitalized? Yes. But we always see breakthrough disease, we always see waning antibody levels with every vaccine we have. So, none of that's a surprise. So, the real issue going forward is, do we need boosters? When do we need them? And how do we best administer them? All of that discussion is happening now. There's been sort of a pre-planned implementation date of the 20th of September, some voices saying that may be moved up, some saying it may be moved back. I think they're still in discussions over these very controversial areas.

D Dr. Halena Gazelka 12:49
More to come on that.

D Dr. Gregory Poland 12:50
Indeed.

D Dr. Halena Gazelka 12:52
I saw a very disturbing news article that I wanted to ask you about, Greg, because it was about ivermectin being given to individuals, I can't remember if it was to treat COVID or to prevent COVID. Tell us about that.

D Dr. Gregory Poland 13:11
Yeah, people are using it for both reasons. You know, this is a remarkable thing, Halena. If I said to you, you know what, instead of an FDA approved vaccine that's been tested in hundreds of 1000's of people. Instead, let's take a drug that's used to treat parasites. And many people are buying it over the counter in an animal treatment preparation that hasn't been studied for this, which makes people sick, can cause hallucinations, coma, and if you take it when you're pregnant, can cause birth defects, and let's use that instead. And people are flocking to it.

D Dr. Halena Gazelka 14:00
It astounds me.

D Dr. Gregory Poland 14:01
It is astounding. This is not approved, not advised by the FDA. It is not an antiviral drug. It's an anti-parasitic drug that has its proper uses at proper times. There have been some reports of effectiveness, these have been very poorly conducted trials, the Cochrane Collaboration which has a very strict set of criteria by which they judge studies have said there's no data here to suggest that this is effective. In fact, what's interesting is that the manufacturer of the drug released a statement saying, in fact, there is "no meaningful evidence for prevention or efficacy" here. And despite that, here's a stunning piece of information I came across when you look back a year or two ago, so, at the proper use of ivermectin, there were about 3,600 prescriptions written in the U.S. per week. If you look at the last week of August, there were 88,000 prescriptions being written per week. So, this is one of those, you can't even believe that you're seeing and hearing this. You can't believe the number of calls to poison control centers as people take this drug unregulated, often taking the animal preparation, which is not FDA regulated, has other ingredients in it that human forms of the drug do not have, and they're getting sick, and no benefit. It's hard to explain.

D Dr. Halena Gazelka 15:54
It boggles the mind.

D Dr. Gregory Poland 15:56
It really does.

D Dr. Halena Gazelka 15:58
Greg, we receive many, many listener questions about the safety of the COVID vaccines, and I'm wondering if you could give a little update on what we know now, because we've talked before about the data that is being kept regarding reactions, adverse events, etc., to the vaccines. What is known now about the COVID vaccines versus other very familiar vaccines to us?

D Dr. Gregory Poland 16:25

You know, maybe the easiest way that I can put it is these vaccines are more reactogenic than something people are very familiar with flu vaccines. They are about as reactogenic as the shingles vaccine. So, that would give people kind of a measure who have taken either of those vaccines. So, very typically, we'll see a sore arm, low grade headache, low grade fever, muscle aches, maybe swelling at the site of immunization. Those are all transient, they resolve on their own. I think what people are concerned about are some of the side-effects that can occur, Guillane-Barre syndrome, which has occurred in association with the Johnson & Johnson vaccine. That's a transient self-limiting ascending paralysis that can occur. So, you know, pretty scary if something like that happens. We've seen evidence of inflammation of the heart or of the lining of the heart called myocarditis, and pericarditis respectively, those occur at very small rates. In fact, I'll give some numbers in a while, because you have to balance all of this with the risk of COVID. And we've talked about this before, but I want to emphasize it again. If you get a vaccine, there are certain risks that you take by getting any vaccine. The key is, do those, are those risks outweighed by the considerable benefits of getting the vaccine and the risks of not getting vaccinated and getting the disease? So, you know, we've got some up-to-date numbers that we can look at. This comes from a study that was just published in the New England Journal. It's a very large study where they enrolled almost a million vaccinated and a million unvaccinated. Okay, so these are called real world effectiveness type studies. If you look at the risk of myocarditis, after getting the vaccine, that vaccine risk was about 2.7. Let's just call it 3 per 100,000 people. Okay, so 3 per 100,000, if you get the vaccine. Well, what if you don't get the vaccine, and you get infected with COVID? Well, that same risk of heart inflammation goes from 3 per 100,000 to 16 per 100,000.

D

Dr. Halena Gazelka 16:31

Oh, my goodness.

D

Dr. Gregory Poland 16:45

So, which risks do you want? In addition, if you get infected, there are other risks that you don't run if you get vaccinated. Heart arrhythmia 166 per 100,000. Acute kidney injury 125 per 100,000. How about a pulmonary embolus 62 per 100,000. Bleeding into your brain 8 per 100,000. So, there's this long written list of risks if you get COVID, and this teeny short list of risks if you get the vaccine to prevent COVID. And again, that's where I think wisdom comes in. People are emotionally swayed I think by saying, oh, there's a risk of heart inflammation if I get the vaccine, and they never stopped to consider, but what's that same risk of heart inflammation if I don't get vaccinated? And again, this is true with every vaccine, there are risks and benefits just as there is for every single activity we undertake as human beings. And the balance is what's important and where you hope people make

reasoned decisions rather than emotional ones.

D

Dr. Halena Gazelka 20:35

I'm glad that you specifically addressed the myocarditis. I actually had a colleague ask me that just late last week regarding her teenage son, should he be vaccinated? Because of that risk, and I didn't know what the numbers were. I knew that's what you would say about getting vaccinated, but I wasn't sure what the numeric data were.

D

Dr. Gregory Poland 20:57

Yeah, they're very small, and fortunately, they are almost always short-term, transient, resolve on their own. What we don't know is could there be, in a very teeny fraction of cases, any more serious consequence of that. So far, other than perhaps a transient arrhythmia, nothing else. But that needs to be watched long-term. That risk, if it's there, will logically be far higher in people who get COVID.

D

Dr. Halena Gazelka 21:34

I've also seen in the news, and I've had several people send me articles about someone who died. In fact, there was an obituary that someone sent to my attention saying that the individual had died as a result of receiving the COVID vaccine. What is your response to that?

D

Dr. Gregory Poland 21:50

Yeah, again, you know, let's look at the numbers. So, and this gets to some complicated issues that that lay people might not think of, so let's just spend a minute on that. There have been 363 million doses of COVID vaccine given in the U.S. There have been reported to VAERS 6,968 deaths, so a death rate of 0.0019%. Okay, and CDC has you look at those, let's just call it an even 7,000 deaths. They have not found any causal relationship between getting a vaccine against COVID and death, except in the small handful of cases of people who got the J&J vaccine, developed a significant clot and then bleeding in the brain, so, that association, which led them to death as a consequence of that side-effect. But this idea that, and you hear it all the time, well, a bunch of people in a nursing home, got the vaccine and two people died. Well, the reason for that is if you look on any given day in the US, about 8,000 to 10,000 people die every day in the U.S. When you are doing a mass vaccination program. And you're giving right now between a half a million to 800,000 doses of vaccine a day in the U.S. By chance alone, those 10,000 that are going to die today, and the 600-800,000 people you're giving the vaccine to, by chance alone,

that's going to happen in the same timing. The trick is to look to see is there any common pathophysiology? Is there any evidence that the vaccine caused the death? And we do not have evidence like that.

D Dr. Halena Gazelka 24:09
So, it's just natural overlap.

D Dr. Gregory Poland 24:11
Yes. And whatever they were going to die of, was what they were going to die of. And the vaccine didn't have anything to do with that.

D Dr. Halena Gazelka 24:21
A member of our extended family who chose not to be vaccinated and developed COVID a couple of weeks ago, contacted me late last week saying, I was getting so much better, and now I'm very, very sick again. I had no idea that this would go on so long.

D Dr. Gregory Poland 24:37
Yeah.

D Dr. Halena Gazelka 24:38
And you mentioned the concept of long haulers earlier. Now we are a year out and more from some of the initial infections and know that individuals can have difficulty even at a year.

D Dr. Gregory Poland 24:54
Absolutely Halena. And this is something very much undervalued by people. They'll say, well, you know, my friend got COVID, and they didn't die, they didn't get hospitalized. We don't know the long-term consequences of that. We've got about a year to a year and a half of data. If you look at a recent report that came out of China, 1/3 of those people still have symptoms a year later.

D Dr. Halena Gazelka 25:24
Oh, my goodness.

D Dr. Gregory Poland 25:25

Often fatigue, shortness of breath, what people have been calling brain fog, inability to work at the same levels they were, pulmonary scarring, cardiac scarring, a host of side-effects that, you know, they never thought of. They thought, well, it's an issue of, am I going to die or not. But there's far more at stake than that.

D Dr. Halena Gazelka 25:51

So, what do you see in the future? Greg, I've been wanting to ask you this question because a colleague and I were philosophizing in the clinic between patients last week, and talking about will we ever be rid of COVID-19? And when will we move from this being a pandemic, to endemic perhaps, and is that what will happen?

D Dr. Gregory Poland 26:13

You know, I think most of us that study this are now of the opinion that we gave up the opportunity to eradicate this. We could have if we had used appropriate lockdown measures, masking, and distancing, and then very soon the introduction of vaccines. That did not happen. Instead, in the United States, one out of every 500 people have now died of COVID. And as we mentioned, the estimate is in the next three months, about one out of every 3,300 people are going to die of COVID as a result of this unmitigated transmission, and this lack of mask wearing, which is just inconceivable to me in the face of a respiratory threat like this. We've had many mutations arise where we've gone from Alpha variant to Delta, we have Beta, Gamma. Lambda is coming up, another mutant called B1621 that doesn't even have a Greek letter yet that is very concerning, now causing about 10% or so of the cases in Miami. So, what I think is going to happen is that we're going to be plagued with this. It's impossible to speculate how many more variants might arise and kind of torture us like this for the next year or two, or longer, until we think settles down into a more seasonal type of infection. Let me just make the point because I think it helps people to understand, the 1918 influenza pandemic. We are still immunizing against aspects of that 100 years later. So, our failure to contain this means that we're going to be immunizing against it through the rest of our lives and our children's lives, and the generation after that. That's the consequence of not controlling a highly transmissible variant like this.

D Dr. Halena Gazelka 28:39

It is really interesting to me, Greg, because someone had said to me very recently, well,

we just need to do what we did in the Spanish Flu of 1918, where everybody just kind of gave up and let it burn itself out and then we went on with life.

D Dr. Gregory Poland 28:57

That's not going to happen here and clearly has not happened. Even though the estimate is that over one out of eight Americans has probably been infected, look at the number of cases we have. And as you develop new variants that escape previous infection induced immunity, you just keep continuing the cycle. And it raises the question, and I maybe leave this as a question that is now being asked. At what point given the tremendous medical impact, the tremendous psychological and economic impact, at what point do you say this is silly, and we will use masks, and we will vaccinate? Because to do otherwise and to keep entertaining crazy theories that are put up as disinformation on social media and which scare people away from doing the right things, how long do you tolerate that? And at what cost?

D Dr. Halena Gazelka 30:13

Well, you're always good for provoking thought for us, Greg. Any last words?

D Dr. Gregory Poland 30:19

Well, it's a backwards plea to say please be wise and use masks, and be immunized. You know, nothing has been studied at the level that these vaccines have been studied. And it's really remarkable. If you can't find your way to a vaccine in the midst of this, I'm sorry, but you're going to have a lot of difficulties with making good medical decisions about a lot of things. And instead, we see people engaging in what psychologists call magical or fantasy thinking. It was hydroxychloroquine, it was azithromycin, it was bleach, it was UV light, it was ivermectin, and it's just garlic, it's vitamin D. It's just one thing after another. It doesn't work folks.

D Dr. Halena Gazelka 31:16

Quick fixes.

D Dr. Gregory Poland 31:17

It just doesn't work. Vaccine works. Masks work. Distancing works.

- D** Dr. Halena Gazelka 31:26
What is that saying if it sounds too good to be true it probably is?
- D** Dr. Gregory Poland 31:31
It is too good to be true.
- D** Dr. Halena Gazelka 31:33
And that get rich quick schemes don't work. So, probably get rid of virus quick schemes don't work either.
- D** Dr. Gregory Poland 31:42
It doesn't work.
- D** Dr. Halena Gazelka 31:44
Thanks for being here today, Greg. Any last words for our listeners?
- D** Dr. Gregory Poland 31:47
It was my pleasure. You know, we're going, as we have talked about, into a very dangerous phase for the unvaccinated. This will be accelerated, unfortunately, by school districts that do not mandate masking. We have seen ample evidence of that. Parents, please protect your precious children.
- D** Dr. Halena Gazelka 32:10
Thanks, Greg, for being here today.
- D** Dr. Gregory Poland 32:12
Okay. My pleasure.
- D** Dr. Halena Gazelka 32:14
And thanks to you too, for listening in today. Please mask up and vaccinate. I hope that you learned something today. I know that I did. And we wish each of you a very wonderful

day.



Narrator 32:25

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