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SUMMARY KEYWORDS

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SPEAKERS

Dr. Halena Gazelka, Dr. Gregory Poland, Narrator

So, we are by no means out of the woods.

- Narrator 00:00
 Coming up on Mayo Clinic Q&A,
- Dr. Gregory Poland 00:02

 This is a good example of a coming surge that indeed is happening. We're now hitting about 80,000 new cases a day. We were down in the 12,000 or so. We're also seeing an increase in hospitalizations to about 20,000 new hospitalizations a day, about 400 ish or so deaths a day.
- Narrator 00:30

 Even though many people in the U.S. have some protection from COVID-19 from a combination of vaccinations, boosters and mask wearing, new sub variants can change a person's ability to fight off infections.
- Dr. Gregory Poland 00:42

 We've moved from Omicron to BA.2 and BA.2 sub variants, and those are hyper contagious.

 Right now in the U.S., about 60% or so of all of our new cases are BA.2, and almost 40% of that is BA.2.12.1, which is as I say, a hyper contagious variant, so if you're not wearing a mask, if you're not boosted, if you're not distancing, and you're exposed to somebody with this, you're gonna get infected.
- Dr. Halena Gazelka 01:17

Welcome, everyone to Mayo Clinic Q&A. I'm your host, Dr. Halena Gazelka. We're recording this podcast on Friday, May the 13th, 2022. Cases of COVID-19 are on the rise again as the Omicron sub variants have spread across the United States. But thankfully, deaths due to COVID are not rising at the same rate thanks to vaccinations and available treatments. Here with us to give us our COVID-19 update is vaccine and virology expert, Dr. Greg Poland from Mayo Clinic. Welcome, Greg.

- Dr. Gregory Poland 01:50 Good morning. Halena.
- Dr. Halena Gazelka 01:52
 Wonderful to see you again. It's been a little bit since we talked.
- Dr. Gregory Poland 01:56
 Yeah, we're doing these about every two weeks or so now.
- Dr. Halena Gazelka 01:59
 Well, since I mentioned it, Greg, tell us a little bit about this rapid rise in new cases and hospitalizations in the U.S.
- Dr. Gregory Poland 02:06

So, this is interesting, Helena. I went back and checked on our predictions on this podcast over the last three months. We have nailed it every time. And we have warned our audience. And this is a good example of a coming surge that indeed is happening. We have, today's Friday, May 13, as you mentioned, and we're now hitting about 80,000 new cases a day. We were down in the 12,000 or so. So, these have more than quadrupled. We're also seeing an increase in hospitalizations to about 20,000 new hospitalizations a day, about 400 ish or so deaths a day. So, we are by no means out of the woods. And what's driving this, as we've mentioned in past shows, is people pretending that the pandemic is over and not wearing masks. That's one thing. The second is waning immunity from our vaccines. So, those who are eligible for a booster should get a booster and far less than half who are eligible have done that. And finally, the third piece of all this is that we're experiencing new variants, which is what happens when people don't wear masks and get infected.

Dr. Halena Gazelka 03:31 You have predicted that too, Greg. Dr. Gregory Poland 03:33

The virus will mutate. That's what these RNA viruses do. And so, we've moved from Omicron to BA.2 and BA.2 sub variants. And those are hyper contagious. Right now, in the U.S. about 60% or so of all of our new cases are BA.2, and almost 40% of that is BA.2.12.1, which is, as I say, a hyper contagious variant. So, if you're not wearing a mask, if you're not boosted, if you're not distancing, and you're, you know, exposed to somebody with this, you're gonna get infected.

Dr. Halena Gazelka 04:16
Greg, what about other coming variants?

Dr. Gregory Poland 04:19

Well, so one of them that we're really concerned about and keeping a sharp eye on is what's happening in South Africa. Here they had low immunization rates, but after Delta and then Omicron, very high case rates. So, you would think there would be a lot of population immunity. BA.4 and BA.5 escape, not entirely but very efficiently escape that immunity. And so, they're having a major surge with BA.4 and BA.5 driving up cases, hospitalizations, deaths. We can expect that just like Omicron started in South Africa, we can expect that will come on the heels of these BA.2 sub variants.

Dr. Halena Gazelka 05:06

Greg, you talked about milestones, and we reached a terrible milestone this week. In fact, yesterday President Biden ordered flags lowered to half-staff because of the deaths.

Dr. Gregory Poland 05:20

It's tragic, Halena. I think of the cases that I've seen, I think of the deaths, you literally could sit down and cry to say, how do we get this message across? You know, the estimate is that at least, at least a third, and I'm gonna guess closer to a half of those deaths were entirely preventable. But when people believe, contrary to the data, that masks don't work, or that you don't need to wear them, or that vaccines don't work. These tragedies happen, seemingly one family after another. And, you know, I don't know about you, but the cases I've seen every single time I hear the same thing. Well, I never thought it could be this bad. I ever thought it would result in, you know, fill in the blank for a complication. And yet, you know, I feel like you and I have talked nonstop about the need for these mitigation measures. So, it's a very difficult and sad milestone to be at.

Dr. Halena Gazelka 06:31

Greg, when you talk about numbers, I'm curious about something. There are a lot of people doing testing at home now, including Mayo Clinic employees, if they suspect infection. And so, reporting is less as well. So, how does that affect our understanding of the COVID infectious

Dr. Gregory Poland 06:50

Yeah, that's a keen and insightful question that you asked Halena, which is no doubt why you asked it, but it materially degrades our situational awareness. So, you know, I can't tell you for a given community, for a given state. I used to be able to, but I can't tell you now, because the majority of the testing being done, as you point out, is testing at home, or some people not bothering to test at all because they don't want to quarantine, or they don't want to know, or they don't want anybody else to know, and this is problematic. In addition, it means that we lose our ability to understand what's called genetic epidemiology, the ability to trace how these variants are moving, how fast they're moving, and whether they're changing and evolving into yet different sub variants or new variants. We've lost that ability now.

Dr. Halena Gazelka 07:51

Wow. Tell me Greg, about what we know now about long COVID and the consequences of having had a COVID infection.

Dr. Gregory Poland 08:01

This is something that, again we've talked about, and we predicted that following these large waves we would see, if you will, a pandemic of complications. We've seen that on the mental health side. You know, having COVID that lands you in the hospital, the effect on your brain, a recent paper I thought put it well is the equivalent of aging 20 years, even with mild COVID. A very excellent study showing 2 to 4% shrinkage of the gray matter, a startling increase in cardiovascular complications, a 40% increase in diabetes. And so, you know, if we lump all that into long COVID, we're seeing estimates, and the best point estimate I've seen is that about 45% of people who have COVID severe enough to end up in the hospital, end up with long COVID. bout 30 to 35% of people even who have mild COVID end up with end-organ complications or symptoms that plagued them for as long as a year or two out. And that's as far as we can look right now. So, we don't know how long it will last. And these are life altering changes for some of these people. It's devastating to watch this happen.

Dr. Halena Gazelka 09:31

I feel as though I've talked to many fellow employees of Mayo Clinic and also just friends, colleagues who have had COVID and have been profoundly fatigued afterward is one of the primary things that I've heard, that and prolonged loss of sense of smell and taste. Now those are not as significant as what you were talking about, but they certainly affect your life.

Dr. Gregory Poland 09:58

They still, yeah, they still degrade the quality of your life. And you're right that the profound fatigue, what people described as brain fog, you know that inhibits your enjoyment of life,

pernaps your ability to work depending on now severe it is. These are consequential consequences of catching COVID and of not being protected against it. In this regard I grieve, I grieve over the state of masking in the U.S. You know, as we all know, that became a political symbol. It's gone, but it is profoundly affecting individuals and families. As you know, you've probably flown to some of our professional meetings as I have. You know, myself and other Mayo physicians are the only ones on the airplane wearing a mask, which it just shocks me that that could be the case. I mean, how do you break through that sort of lack of knowledge or deliberate I don't want to know, I don't want to, you know, wear it, and trade for a long-term complication of COVID? No, thank you.

Dr. Halena Gazelka 11:15

I mean, I've kind of joked with people, but I wasn't really joking that even on an airplane before COVID, I don't like to sit that close to people and breathe the same air unnecessarily. So, now it's like the habit of wearing a mask in that situation.

Dr. Gregory Poland 11:30

There's some very nice papers out showing that any indoor activity like that where you're gathering in groups is a hazard because of this. So, you know, until we take this seriously, people are going to continue very unfortunately, to get sick, to be hospitalized and even die until we take this seriously, and we put mask back on and we get vaccines.

- Dr. Halena Gazelka 11:59
 Okay, let's talk about that. Boosters, getting a fourth booster, Greg, what's the latest on that?
 And what should the timing be?
- Dr. Gregory Poland 12:07

 So, anybody over the age of 12, who's moderately to severely immunocompromised can get a booster, and all adults over the age of 50 can get a booster. And the optimal timing of that is
- Dr. Halena Gazelka 12:25 Okay.

four months or so after your last dose.

Dr. Gregory Poland 12:26

You know, I know people and their experience is probably like mine. I didn't have much reaction to the first dose, had a moderate reaction to the second dose, pretty mild for the third dose. I'm due now for my booster, because I'm just barely over the age of 50, and people describe very little in the way of reactogenicity to that. So, definitely getting that booster is a help. Now, so

people don't misunderstand, and we have been very transparent in talking about this, when you look at the data in Israel people over age 60 who got a fourth dose, they were protected against death and severe disease by three and a half-fold better protection than people who did not get the booster. They only looked over six weeks, but it lasted that six weeks. The protection against mild infection only lasted about eight weeks. So, these rapidly wane in the face of these new variants, but it does offer protection and very likely Halena, I'll make a go out on a limb here and make a prediction, I think by sometime summer, fall time, we're going to see a variant focused booster, and it will be a big push to again convince people you need to get this.

Dr. Halena Gazelka 14:00

Interesting. What about kids under five? What's the latest on vaccines?

Dr. Gregory Poland 14:04

And that one is really a frustration, isn't it? Especially for those of us that have grandkids, that have children. So, above five, they can of course get the Pfizer vaccine. Moderna has put in their application for an EUA to immunize younger. Pfizer is holding off on that because the two doses did not protect well enough. And so, they've given, in that trial, a third dose, and it will be probably late summer, early fall before we have the results of that trial. So, you know the manufacturers are working hard on developing the data. On the other hand, I am glad, I'm not surprised, FDA is holding a firm line here. You need to show efficacy, and you need to show safety before we're going to allow you to immunize these children. I think they will meet those goals. And that will be important.

- Dr. Halena Gazelka 14:07
 It is. Well, I will be looking forward to that because I have grandchildren in that category.
- Dr. Gregory Poland 15:08
 Same with me.
- Dr. Halena Gazelka 15:11

Greg, I want to ask you something on a kind of a different topic, but related. What's the latest and the import of the bird or avian flu? And if it weren't for COVID distracting us from such topics, would it be a bigger deal?

Dr. Gregory Poland 15:26

I don't think so Halena, in this regard. So, the import of avian flu right now is, if you will, agriculture and economic. So, in the US, this has affected birds in 34 states, and about 37

million poultry have had to be destroyed. I'm talking about now in the U.S. Remember that we went through this in 2015, and about 50 million birds were destroyed. So, this may be our largest, highly pathogenic avian influenza outbreak yet. Now, what about on the human side. There's been one person confirmed in Colorado who developed this and survived, one person in the UK. The concern is a potential one. This virus can mutate just like other viruses. Will it mutate to more easily be transmitted to humans? That would be a disaster on top of COVID. That has not happened yet. And so, the advice at this point is no need for fear or panic, but would not handle sick wildlife. By the way, foxes have also gotten infected and died from this and really a shame because of the dramatic comeback has been that it's affecting bald eagles too. And eagles don't survive this very well. So, certainly, you know, don't handle wild birds, don't handle excrement from birds if you're cleaning up, or try to feed them out of your hand, or anything like that. It doesn't have an effect on consumption as long as you cook it properly. And so, that's why FDA and USDA inspect these poultry producers, and that's why they've had to destroy so many birds.

- Dr. Halena Gazelka 17:27
 - Okay. I'm curious though, Greg, is avian flu something you would routinely test someone for if they came in ill? So, how would you know there was only one case in Colorado and one case in the UK?
- Dr. Gregory Poland 17:38

That's a good point, and it raises the concern that probably that's an underestimate. The only reason that individual got tested is because they were slaughtering the birds who were sick, and then this man got sick. And so, you know, they sent the specimen to USDA and CDC and got it tested.

- Dr. Halena Gazelka 18:03
 Oh, that makes good sense. The rest of the story.
- Dr. Gregory Poland 18:06
 Yeah, the rest of the story. Stay tuned.
- Dr. Halena Gazelka 18:10
 Well Greg, any last words you'd like to share with our listeners today?
- Dr. Gregory Poland 18:14
 I really want to make the point, and I know I sound like a broken record here. But you know, I've gotten three to five calls a day. It seems like everybody you know is getting COVID. Wearing a

proper mask properly, being up-to-date and boosted, maintaining social distancing, which doesn't mean you can't enjoy life and do things with people. Better outdoors, and we're in a weather pattern right now where we can do that. But, you know, my plea would be you don't want to be a statistic here. Wear your masks. Wear them properly. For goodness sakes, indoors and on airplanes, please wear a mask and get boosted. That's the only way if we do this, if all of us take it as our civil responsibility to do this around the world, we will get a handle on this. But you know, we're facing a fifth surge. We're into the third year of this. We've got to take this seriously.

Dr. Halena Gazelka 19:23

And we mentioned earlier the number of deaths. I think it hit a million in the United States this week, and 15 million worldwide, the World Health Organization said.

Dr. Gregory Poland 19:31

That's a good point, you know that those numbers are almost certainly an underestimate. I think they're pretty close. In the U.S. they're probably a little greater than 1 million but, you know, we have a robust system that captures that. That's not true globally. And so, the WHO made a good faith estimate that that true number is probably somewhere in the 10 to 25 million range with a point estimate of 15 million. That's a lot of lives lost. That's a lot of benefits this world has lost by losing these people to a disease we can prevent, at least in the U.S. with free vaccine and a 50-cent mask.

- Dr. Halena Gazelka 20:22

 Good point. Well thank you Greg, for being here today to update us.
- Dr. Gregory Poland 20:27
 My pleasure.
- Dr. Halena Gazelka 20:28

Our thanks to Dr. Greg Poland, virology and vaccine expert at Mayo Clinic, for being here with us today to provide us with COVID-19 updates. I hope that you learned something. I know that I did, and we wish each of you a wonderful day.

Narrator 20:43

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