

## COVID Update, August 26, 2021

Dr. Tim Babinchak

⇒ Dr. Tim Babinchak (00:00:00): Good morning. Thank you, Bob. Thank you again for the kind words and thank you everyone, once again, for joining. I do appreciate your continued interest and your continued support in getting through and doing all of these things. As I've always said, this is an evolving situation. And so at least on a quarterly basis, I think it's very prudent to make sure that we have the opportunity to have these discussions. And with the increasing circulation of now variants with a total approval for at least the Pfizer vaccine for adults and for now the return to school and the mask and vaccine type mandates. I think it's important to continue to have these discussions. Particularly, I know a lot of the questions that you've already sent in that Bob's provided to me are concerning any changes or things that we need to do differently because of Delta in this situation.

⇒ Dr. Tim Babinchak (00:01:21): That's really what I want to concentrate on first here. And I think that'll go a long way towards answering a lot of your questions or giving you a better understanding. And as always, what my pledge has been to you is that this isn't Dr. Babinchak's opinion, this isn't motivated by a vaccine manufacturer or anything else. I try and give the broadest science available that is global in nature but try and make that understandable and relevant to what our local circumstances really are. So that being said, let me launch into that because I want to leave plenty of time for your questions as always. So, Bob, give you bring up the first slide.

⇒ Dr. Tim Babinchak (00:02:21): There we go. Okay. So this is, as always, as I try to be data driven in these reports. The first thing that I wanted to address is how these variants are behaving other as opposed to what the original virus from 2019 and early 2020 were concerned. And that you will always see as they be 1170 quote wild type. And so what I'm trying to show you here is a study that was done in Germany, looking at two of the variants, the Delta variant, which is the 117, and then another one of the other variants that has circulated widely in Europe, which is the UK variant, the 1351 variant there as compared to what the wild type virus is. And the first set of tables and graphs here that you're looking at are in how the virus behaves in the environment. And it is how the virus is neutralized on the top one there by ethanol, which is easily part of all of our cleaning solutions in b) just plain soap and water and in c) heat inactivation.

⇒ Dr. Tim Babinchak (00:04:06): The heat inactivation is more from a laboratory standpoint. What I'd like you to just concentrate on are the line graphs on the far right-hand side. The dotted line represents the wild virus, the virus that we dealt with in 2020. And the other lines represent the variants. And the key thing that I want to point out here is that in every case, whether we look at it with cleaning, with ethanol, or just plain soap and water. The Delta variants, these variants actually are more susceptible to the environmental things that we've done in the past. The importance of that means that you're disinfecting activities. The way that you've handled your services, the way that you've handled your church cleaning, the way that we've talked about all of those things that are important to keeping a safe environment still hold true.

⇒ Dr. Tim Babinchak (00:05:25): Delta is not more prevalent because of a failure of our other risk mitigation activities. So our cleaning protocols don't need to be changed. The hand washing activity doesn't need to be changed. It needs to continue. It still needs to continue, but the variants are not resistant to, or somehow acting in a way different than the original virus from that standpoint. Okay? That's the first part. If you switch to the next one, Bob. Perfect. Now, and this is sort of the same activity, but I'd like you to look at the bottom two panels because a lot of you have questions around the masking activities. And again, what this represents is the dotted lines going across the middle are the original virus. In other words, that's how the original virus behaves. And then the circles represent the surgical mask and then a high the equivalent of an N95 mask or the FFP2 mask.

⇒ Dr. Tim Babinchak (00:06:55): And again, what you see is essentially the same level of activity and protection for the Delta variants and these variants as was present for the original virus. Bottom line here is the things that we were doing in the past are still effective with these Delta variants, all right? I'm trying to put the good news out here. And whether you look at it at a minute, an hour, whenever as this moves through, the things that we've done in the past are still effective. They need to be continued though. So the obvious question then becomes, so why are we seeing all of these increased hospitalizations? Why is this Delta variant? And the issue with the variant is the mutation that allows the virus to be more transmissible. And by transmissible, it means that it likely infects more people. All right?

⇒ Dr. Tim Babinchak (00:08:20): So in all of epidemiology, we have what's called an R number. And the R number is the number of people that one individual is likely to infect. For the original virus, that was somewhere around between 0.3 and 0.7. And we just rounded it for ease of communication to 0.5. The Delta variant mutation has an increased R number. That means that the R number for the Delta variant is probably somewhere between 0.8 and 0.1.2. And that's nearly double what we saw with the original. It's not a failure of our hand washing activity. It is the ability of one person to infect more people. And that's why you're seeing this increased transmission. And that's also why you're seeing the increased transmission even in areas that have a vaccination rate. And it gets a little technical.

⇒ Dr. Tim Babinchak (00:09:44): I mean, we all thought we were over the hump once the vaccines came in. If we could get to 70%, we could start to open up, we could do things. And that was true, but that was based on the assumptions with the original the wild type virus, the original virus, and an R of 0.5. When the virus mutated, that 70% number has to go up because now you have more people that are susceptible. And therefore the percentage of the population that we need to have vaccinated has to go upwards of 85% at this point for these Delta variants, for this to start to be contained. The other issue that is important to understand is that vaccination, and I've said this in every one of these, vaccination doesn't prevent transmission. Vaccination is designed to limit the severity of the disease and to reduce hospitalizations.

⇒ Dr. Tim Babinchak (00:11:00): That's the major activity for vaccine and that's the real benefit. Doesn't mean that you don't get infected. It just means that if you're infected, you're less likely to develop severe disease. And unfortunately, because you're less likely to develop severe disease, you can have people who are infected, but asymptomatic and don't know it. And that's part of what helps to propagate this. So all that being said, where are we? A lot of the questions are, do we need to make changes because of Delta, et cetera. My position, and I think the science supports this from what I just showed you, is that the measures that we've already taken within our worship services, the social distancing, the masking requirements that we have, the cleaning activities that we have, all of those are good. And from the science that we have so far, should remain in place. And they're going to need to remain in place for the foreseeable future. So all that begs the next question of, all right, that foreseeable future.

⇒ Dr. Tim Babinchak (00:12:33): Now the crystal ball activity, when is this going to start to potentially get better? And the ability to contain this, as I alluded to just a few minutes ago, is based upon how much immunity we can get in our entire community, not just in the adult population. The adults are the most vulnerable from a disease aspect, and that was the primary drive for early vaccination. But until we can get the large percentage of our population that are children, basically school age five to 12, until we can start to get vaccines into that population, that's my foreseeable future. So how long we're going to have to continue this, we're going to have to continue this until we can start to get those children vaccinated at that same rate, because we need to have everyone available that we can to try and decrease this transmission. All right? So I use that as a relatively brief introduction, because I know you have a lot of questions out there. And really this is always better as a conversation. So, Bob, the order of the questions that you want to bring in.

⇒ Bob Fisher (00:14:08): One that just comes to mind based on what you were saying. I like the chart that showed the surgical masks and the N95 type masks being as effective as they were. Is that true of the cloth masks we all started making and sharing? Are they close in effectiveness to a surgical mask?

⇒ Dr. Tim Babinchak (00:14:35): Yes, absolutely. Absolutely. And the surgical mask that they're talking about are essentially those loose fitting ones, the blue ones that you see a lot of people on. And the important part of, and there are a couple of caveats. And even though it's data, I always say in these types of studies, it's a controlled situation. So these researchers are actually taking known quantities of virus and putting them on the masks in order to see what their effectiveness is. And that means that they're able to measure exactly how much is going on here. It's a little bit of an artificial situation, but it's actually a conservative artificial situation, because they can put far more virus on those masks than potentially would be coming out. So the short answer to the question, Bob, is absolutely.

⇒ Dr. Tim Babinchak (00:15:49): The point I want to bring out whether we're talking surgical masks, you don't have to go to more expensive or more exotic type masking activities for the general use of the population. Now absolutely. When I'm in the hospital, when you see the pictures in the hospital, yes, people are gowned and we're using far more exotic and sophisticated activities, but that's because that environment is packed full of virus. And that is

a continual process that we're undergoing day after day after day. And so that's just the difference between the things you see on TV with medical personnel versus what is appropriate for the community.

⇒ Bob Fisher (00:16:45): Okay. And there's one question that came in advance. I just want to read this because it's nicely worded. Based on the success of current efforts to contain the coronavirus in the US and globally, the efficacy of the available vaccines and the growing COVID fatigue that we're all experiencing that's resulting in increasing reluctance to implement and comply with infection prevention guidelines. Realistically, how many of our familiar Advent/Christmas events do you think we'll be able to do this year?

⇒ Dr. Tim Babinchak (00:17:23): And that is a very important one, but that's also why I alluded to the activities with the children. Because many of those involve children, especially through the Advent season. Is it going to be as it was before? No. It shouldn't be that. Is it going to be as restrictive as we were last year before vaccines? No. I don't think it needs to be to that degree either. The basic recommendation that I would have is, and this is the same from the last quarter that we did it, for vaccinated individuals. All right?

⇒ Dr. Tim Babinchak (00:18:22): That for vaccinated individuals, we have the opportunity to engage in those activities as we have in the past, all right? Where unvaccinated individuals are either children or self-identified, then we need to adhere to the things that we just went through. We need to maintain social distance. We need to continue to wear masks, and we need to continue to do the hand washing and cleaning procedures in those contexts. So the short answer, those Advent activities that are amenable to social distancing, that are amenable to those can go on as we have.

⇒ Dr. Tim Babinchak (00:19:17): We may need to revise those or be creative in understanding now, how do we deal with this? And this is you and I have talked about this. This is an important aspect, because this isn't a pandemic that is going to go away. This is a world with COVID. We're now into our second season with that. Our second school year with that. And we've adjusted school, we've adjusted buses, we've adjusted public transportation. We have to adjust the activity to the situation of another infectious disease within our midst.

⇒ Dr. Tim Babinchak (00:20:04): The good news is it's also going to help with influenza. It's also going to help with all of the other things, but we need to start to be creative as to how we deliver those Advent experiences, given the need, the continuing need at this point for various amounts of precautions in these situations. I'm going to take the other one right off. And it's always the singing in the music. I know Lutherans, we love our singing and our music. And on that recommendation still hasn't changed. Okay. Choirs, the activities... please put the other chart on that we did last time where I show what singing actually does as far as the transmission of virus is concerned. That is still a very hazardous and risky activity within our churches.

⇒ Questioner (00:21:31): That statement, do you mean masked or unmasked singing or it doesn't matter either way. Singing is still very concerning.

⇒ Dr. Tim Babinchak (00:21:42): Singing is still very concerning. Okay? And it depends upon the level of vaccination that you have within your parishes. The most vulnerable is the least vaccinated. And as long as that is there, we have the opportunity for transmission in that. Soft singing, yes. Choirs, I still don't recommend choir activity. That's still difficult. But again, putting in family units socially distanced within our churches for a short period of time with quiet singing, we've been doing it. That's why I say I don't see a need, Tom, to take it higher, a greater level. And I know what we've been doing in our church in particular, but it's no more dangerous than it was. We just have to keep that vigilance level up. Okay? We have to continue to do the things that we were doing.

⇒ Bob Fisher (00:23:06): And one of the things that I think we need to think about is that we had this period starting, I think in May, when we felt like cases were down, we could let off the gas a little bit. And when you're talking about these familiar precautions, you are referring to sort of how it was prior to May.

⇒ Dr. Tim Babinchak (00:23:31): I would put it as to we've let off of the precautions. It's not as draconian as we were before where we were saying, don't do any of these things. What I've tried to show is what we've done through the summer has not... The precautions haven't failed us. All right? The conditions of the virus are different. So the precautions that we've used can remain stable at that. It's not a matter of increasing the masking. That's not the issue. The issue is still getting people vaccinated and continuing the level of precaution that we have.

⇒ Dr. Tim Babinchak (00:24:23): I know one of the questions was, are the numbers that we see in our county still, are those valid as far as the way that the precautions could go as we see more widespread activity? And yes, those are still the valid numbers. That's still where we need to see and where we need to be. And school is going to be a little bit of an issue as kids go back to school, because I don't know that transmission is actually going to go up, but it's not. It's going to take longer to go down again.

⇒ Dr. Tim Babinchak (00:25:00): And so that's why continuing the levels of precautions that we currently have, I think is prudent. Not going back to draconian early 2020 pre-vaccine era, but where we were in May, what we've done.

⇒ Bob Fisher (00:25:21): That's very helpful. Thank you. I know one of the conversations this group has continually is sort of the tension. Some folks look at those figures and kind of go week to week, whether we can do certain things based on the figures. And other folks have said, we're just going to say, for the foreseeable future, we're going to do this. And we'll look and see when there's a trend. And in terms of setting expectations for our congregations, without having the crystal ball, which we realize you don't, how would you suggest we try to set those expectations for people of when we can let our foot off the gas again?

⇒ Dr. Tim Babinchak (00:26:07): Always important. And I've been fairly consistent through all of this. My timeline is actually six months, and you've heard me say this before. My timeline is where are we today compared to where we were six months ago? So if I just use that as an example, currently, as of today, we have a fully approved vaccine for adults that is available to us that we didn't have six months ago. Six months ago, we were just starting these vaccinations and we were learning and we were seeing that decrease just as you talked about. Six months ago, we'll just call it September and make that night. We were in March. Now, when we started this in March and we were starting to relax these things. So are we better off now than we were then? Yes, we are. We have a fully approved vaccine. That removes some of the barriers that have been in place, because the vaccine didn't have full approval and their barriers at multiple levels.

⇒ Dr. Tim Babinchak (00:27:23): Are we better off with understanding how the virus is transmitted? Yes. That's the information that I try to help to provide today to answer the questions of, what could I be doing differently? Do I have to do something differently just

because of Delta? And the disease that we're seeing, the transmission that we're seeing is still over 90% of what's happening is in the unvaccinated community. So the vaccination efforts are still the most key to that. Now, specifically to your question though, is how we should communicate that out to the congregations? Just about everyone does a monthly newsletter, at least if not weekly or more frequently. Quite frankly, while my timeline is a six month, because that's where I can easily show the differences as we've done here. And what my commitment has been. I still say quarterly, because that's about the pace that we're going to be able to be able to provide information that is new and potentially impactful in that regard. So outside of something new or significant occurring, I think a quarterly communication process is still the best.

⇒ Bob Fisher (00:29:01): Okay. And perhaps another way of saying that is that we can kind of look at being in the situation where we are now for another couple of months?

⇒ Dr. Tim Babinchak (00:29:10): Yeah. We're going to be, as I said, my foreseeable future is until we get approval for the younger children age group. All right? So this is going to go through Christmas at this point. And that's just based on a very prudent FDA at this point and the way that they're looking the smaller children. It's important to understand that children are not just smaller adults. There are very significant differences in their metabolism and their immune systems, et cetera, that require a little... And the big thing is they're changing. So your five-year-old's not even the same as your 12-year-old. Those of you who have children or deal with children you know what it's like. Sunday school for the five-year-old is not Sunday school for the 12-year-olds for a host of different reasons. And that just makes the data that needs to be reviewed on dosing and safety, et cetera, requires a little more scrutiny and a little more follow-up. And that's why it's going to take a little bit longer for the kids than it has for the adults. And that's the foreseeable future for me.

⇒ Bob Fisher (00:30:39): Okay. Thank you. I know with children it's interesting. I know some people who are adults who work with children and their focus has changed. Last year, the worry was are we all going to get this virus? And the worry now is I'm vaccinated, but I really don't want to have it on my conscience to give it to a child in my care. I think that's where we've been changing.

⇒ Dr. Tim Babinchak (00:31:06): Yeah. And that's what's driving me to continue to recommend the... and not a relaxation of these measures because as we have returned to church activities, as those activities involve children, that's why the masking is important. And that's why in each of our settings, we have to look at the way that we're doing things and saying, how can we creatively work to make these activities still available, but in as safe a manner as possible? We can't take the risk away totally, but we can do things in as safe a manner as possible.

⇒ Bob Fisher (00:31:56): Amen. That do no harm. So I noticed in the chat, John Baskin had a couple of questions and rather than my try to read it, John, would you mind unmuting and asking whatever's still unanswered of your questions.

⇒ Questioner (00:32:13): Can you hear me okay, Bob?

⇒ Bob Fisher (00:32:15): I can hear you.

⇒ Questioner (00:32:16): Good, good and Dr. Babinchak can as well. In all fairness, Dr. Babinchak, I come from a 38-year career in public health, and I've had my share of epidemiology classes. But you're the tops. I will admit that you got some good stuff. I'm going to go in reverse order. I'm going to ask the most recent question. At one time, we were told that the ideal is to reach herd immunity or 80% vaccination rate. As the vaccines keep coming, does that goal even matter any longer?

⇒ Dr. Tim Babinchak (00:32:45): Yes, the goal matters. Okay? What doesn't matter is the number. Okay? You've done the epidemiology, the math. The lower the R rate, the lower the threshold for herd immunity. But as that R rate goes up, those of us that are old enough to remember polio, okay? Polio was extraordinarily contagious. You have to have everybody vaccinated. And that's why we all took the vaccine as little babies in order to be able to control polio. And so in all of the discussions and all of the things where I've advocated, it is let's stop trying to give people numbers and just get as many... The answer should be as many people as we possibly can need to be vaccinated. And we have to address everybody's concerns and understand where that hesitancy or fatigue starts to come from. And they're justified, they're valid. They're valid questions. And the communication needs to be based

upon answering what those valid situations are, whether it's a fear of side effects, whether it's a fear of long-term effects. All of those are valid reasons that that require a discussion.

⇒ Questioner (00:34:15): That goes back to what I was thinking earlier when I asked the very first question, because, yeah, I got my polio shot when I was a little child. But I said to Bob perhaps we've done a poor job explaining how vaccines work. One would think you have full immunity, like the old days or something, when in fact this is not the case with the current vaccines here for Coronavirus.

⇒ Dr. Tim Babinchak (00:34:39): Yeah. You're absolutely correct there. So I'm going to temper this a bit. Has the communication been poor? I think the communication has been inconsistent. All right? And part of the reason for that inconsistency is the knowledge level. All right? And so polio is a virus. Corona is a virus. But so is influenza. And we know that what works for certain viruses that provides lifelong protection against disease doesn't work for other viruses.

⇒ Dr. Tim Babinchak (00:35:19): Using polio and influenza as sort of the two bookmarks. All right? One, we need to get a shot every year in order to be protected from severe disease and hospitalization. And the other, that initial series that we got a kid is probably good enough. Okay? Corona virus is somewhere in the middle, but we didn't know and we're still not sure of what that is. And so you you see, there's still an inconsistent message where the Pfizer and Madonna and others are saying, yeah, boosters for our most vulnerable. And that's just based on numbers, we're just measuring antibody levels.

⇒ Dr. Tim Babinchak (00:36:09): And to some extent, the experience that we've seen in Israel, which I've always said is a good bellwether because they were about three months ahead of us in getting the majority of their population vaccinated at a similar level of medical care and social interaction. All right? And so that's why that's a very good place to sort of watch what's happening. So is it poor communication? I think it's inconsistent communication. And that's why I do my best to provide data rather than opinion and try and make this as consistent a communication as possible. And why I answered your first question the way that I did, I'm not going to give you a number. My number is as many people as possible because the more people that we have vaccinated, the fewer people we're going to

have to potentially see in the hospital or that we're going to have to do services because they've passed.

⇒ Speaker 4 (00:37:18): Yeah. One last question. I've been around long enough to know about county and state health departments requiring mandatory reporting. I'm not sure whether Coronavirus is on one of those lists or any longer. I'm not in touch with it so I wouldn't know, I would think so. But knowing that and knowing the Sentinel system that's in place by CDC and I pointed out to Bob that we know from history that most viruses moved from the far east to the west coast and the world is much smaller a place. So it doesn't come, take months or years. It comes within days.

⇒ Dr. Tim Babinchak (00:37:54): Every airplane.

⇒ Speaker 4 (00:37:55): Knowing, yeah. Knowing that, should CDC improve not only the reporting system, but the vigilance to be ready for these other variants as they come down or is the system put in place already good enough?

⇒ Dr. Tim Babinchak (00:38:08): So I'll answer that. The system that is in place will detect the major activities. Yes. But I am confident in the surveillance system that we do have in place. But you do bring out another important point. And that is the point that I've always made is we're only going to be as safe as our most vulnerable population. So even if we get to this, even if we get to these areas. Until the rest of the world gets there, the virus is going to continue to circulate, okay? We're not going to have a world without Coronavirus. We now have to live in a world with Coronavirus and learn how to live in that world. It is just another one of the respiratory diseases that we're going to have to deal with. The remarkable thing is that a year ago, okay? My six month intervals. A year ago, where we were and what we were seeing and the ability to have an effective vaccine, not only for the original, but for these variants is extraordinary. And that's why my drum beat continues. Please, everyone, everything that we can do to get vaccines to these individuals.

⇒ Speaker 4 (00:39:41): Thank you. Thank you very much.

⇒ Bob Fisher (00:39:41): Thank you. And there's another question in that chat, of course. Again, a music question. Is it okay to have a small group of fully vaccinated cantors to lead singing?

⇒ Dr. Tim Babinchak (00:39:55): Yes. Yep. Yes.

⇒ Bob Fisher (00:39:55): Masked or not?

⇒ Dr. Tim Babinchak (00:40:05): For the time being, and this is where I don't have the science or trying to balance the science with the activity. So the short answer is the safest possible thing is masked. If you mask, you reduce the risk. If you separate them by six feet, you reduce the risk. And the main reason that I'm saying this now is because of what I said earlier, the vaccine isn't designed to keep us from becoming infected. It's designed to keep us from becoming sick and going into the hospital. What that means is you can have fully vaccinated individuals who are still infected and potentially capable of spreading the virus. So my personal part here is that where you have vulnerable people in the audience, it's probably better to still be masked.

⇒ Bob Fisher (00:41:13): Okay. Great. I haven't seen more questions in the chat. What questions do you have for Dr. Babinchak?

⇒ Bob Fisher (00:41:39): No more questions. Okay.

⇒ Questioner (00:41:41): Here's the question-

⇒ Dr. Tim Babinchak (00:41:42): Doing better.

⇒ Questioner (00:41:43): Here's a question I think you answered, but I just wanted to be really clear about it. You hear all across the nation rise in cases, but I thought I heard you say that the data underneath that is those rising cases is significantly the unvaccinated.

⇒ Dr. Tim Babinchak (00:42:01): Yes, absolutely. Over 90% of these cases are the unvaccinated.

⇒ Speaker 3 (00:42:09): Which I think people are rightfully becoming concerned and fearful, but to understand, wait a minute, that's in the unvaccinated population. It's not rampantly as much of a problem in the vaccinated population.

⇒ Dr. Tim Babinchak (00:42:24): Right. And that's why I hesitate when the question comes. If you have a fully vaccinated group of canters in a small group, okay, your risks of infection in those individuals is somewhere between 10 and 20%, not the 90%. And it's still a wide window for me because the vaccinated aren't being tested because they're asymptomatic,

right? So we're only getting those vaccinated individuals who are being tested for other reasons as showing up as positives. But we do know that even vaccinated individuals can transmit that. They can transmit the disease because we're seeing that within households where there are mixtures of vaccinated and unvaccinated individuals.

⇒ Questioner (00:43:20): I have a question or maybe more of a concern within my neighborhood within two blocks. I have mentioned before three cases of people who tested positive who are fully vaccinated. One gentleman was in the hospital for about eight days. His wife initially tested negative and then positive. She was hospitalized overnight. And the third person tested positive after attending and serving a small party of people. It was a birthday party for her aunt. She was 95 years old. The husband and wife that were hospitalized, I believe they're in their late seventies, early eighties. My husband's aunt was concerned because they all were vaccinated the same day, first shot, and second shot at the same place. And they were fully vaccinated by the end of March. So to have that type of outbreak situation in my community for people who were vaccinated, not just vaccinated people with no symptoms that could be passing it on, but vaccinated people who got sick and were hospitalized.

⇒ Dr. Tim Babinchak (00:44:53): Absolutely. One of my colleagues has said, the vaccine is not a force field. It doesn't prevent everything even the best before Delta. The effectiveness of this is about 90/95%. So that means that 5% of individuals fully vaccinated, fully healthy individuals can still get sick. Now you add on to that the other medical conditions, and this is where we've seen it in the population. Those individuals that have other medical conditions, heart disease, diabetes, especially the older age, the cancer survivors, et cetera, they are less able even with the vaccine to stay asymptomatic. So while 90% of the disease that we're seeing is in the unvaccinated, that still means that 10% of the disease is in the vaccinated groups that we're seeing. And those that are doing the worst are the ones that have the other underlying problems.

⇒ Dr. Tim Babinchak (00:46:17): And it's the underlying problems that they have, their high blood pressure, their kidney disease, et cetera, that makes them more vulnerable in that regard. And that's why you hear the activity that we've talked about before, around what booster shots are going to look like. And whether booster shots are going to be helpful. And

that community and those individuals that you just talked about are the ones that we as the medical community are most concerned about. And just as we would make sure they get their influenza shots, they should be getting their COVID shots again. They're six months out. So it's March, by the end of September here, they should be in line raising their hand to get their booster shots.

⇒ Questioner (00:47:14): One of the ladies, I think, was actually in line at six o'clock and had to wait for three hours to get her shot. I have not gone back to church either inside or outside, but whenever I go to the grocery store or the pharmacist, I'm still wearing my mask. Is that still to protect other people opposed to protecting myself?

⇒ Dr. Tim Babinchak (00:47:43): Yep, absolutely. The mask is to protect other people. Does it help you to some extent? Yes. But the the big aspect of it is to protect other people. That's why in surgery, the only person wearing the mask is the surgeon. We don't put a mask on the patient. The surgeon wears the mask and that's to protect the patient. You wear the mask to protect others.

⇒ Questioner (00:48:12): Thank you. Just two questions for me, which I'm just going to ask together and you can answer them however you like. One is, we talk about the underlying medical conditions. Many of our churches have a large elderly population who are, in some cases, the ones who most want to come out to worship. Is there a correlation between age and the seriousness of breakthrough infections if they happen? And the second is, some people are concerned about the long-term side effect, the long COVID things we don't know that are happening. And I realized it's too soon to know what that might have to do with breakthrough infections. But I'm wondering if you know what the history has been of folks who are asymptomatic then developing those long-term?

⇒ Dr. Tim Babinchak (00:49:17): So the first one is easy. Age is one of the risk factors, and that's primarily why I continue to stress. We still need to keep up these social distancing. And that's the reason that we're still doing this in our parishes, because we're doing it to protect those who are most vulnerable, not just the children because they're unvaccinated, but those who even are vaccinated that are vulnerable. And in order, I can't take the risk away totally. But in order to minimize that, we have to look at the things that we do and the population of people that we have, and our use of these mitigation activities has to be proportionate to what

those worshipers and what that worship looks like. And we talked about this last time.

Vacation Bible School outside in the beginning of summer with the kids running around is a very different situation than a closed indoor Bible study group of primarily older individuals in the middle of winter.

⇒ Dr. Tim Babinchak (00:50:39): Okay? Outside those kids masking and stuff, not as much of an issue. Inside, that's a much bigger issue. The second part though, is you're exactly right. We are learning. There are a small percentage of individuals who have lasting symptoms from the Coronavirus. And that is because this is still a very difficult virus. It causes significant lung disease. It can cause significant disease and further weaken your underlying conditions. So your kidney disease gets worse. Your heart disease gets worse. Things that the virus takes its toll on these individuals. And these are the long haul or the long haul COVID individuals. They suffer fatigue. They suffer memory difficulties, especially those who have been on ventilators. And that is something that we know, we're studying and we're hoping to be able to help to improve in the future.

⇒ Dr. Tim Babinchak (00:51:49): Again, the best way to improve on that is to never have to get there in the first place. And the best way to prevent that, again, it all comes back to my mantra. And please, if you have the opportunity, get the vaccine or talk to your healthcare professionals about what your concerns are about not being vaccinated. That's where those questions should go.

⇒ Questioner (00:52:13): I have a question. I was fully vaccinated by the end of April, any way to tell if I ever had COVID and also can individuals catch it more than one time?

⇒ Dr. Tim Babinchak (00:52:31): So the short answer is, is there any way to tell? Yes. But it doesn't make a difference. So my question back is what are you going to do with the information, okay? When people say, I want to know what happened, and I asked them, what are you going to do with the information? If the information is just for your intellectual curiosity, my plea to you is can the medical system concentrate on those that haven't been vaccinated and the people that we need to get taken care of, rather than those who are actually well and curious in that regard.

⇒ Dr. Tim Babinchak (00:53:15): Can you get it more than once? Yes. Because the variants are slightly different in this. But that's also a very important question is if I've had the disease, do I need to get vaccinated? And the answer to that is yes. Because the disease that you had is not as protective as the vaccine. The vaccine is actually better at creating the immunity that you need to fight these variants. So if you were infected by that wild type that I showed you, you could be infected by Delta because you didn't mount a response to the Delta virus. But if you've been vaccinated, we've been able to show that the vaccine works both against the original as well as these variants so far.

⇒ Questioner (00:54:06): I'm going to think that I never had the vaccine. Well, I never had the COVID. I did get the vaccine because I didn't have any symptoms if I had it and pass it on. I don't know anybody that was close to me that was sick. And if they had it, I guess they also didn't have the symptoms.

⇒ Dr. Tim Babinchak (00:54:31): Right. Because we're asymptomatic, that's why we wear the masks regardless. That's why I wear my masks as well.

⇒ Questioner (00:54:39): And at one point I was wearing two masks or a mask with a shield.

⇒ Dr. Tim Babinchak (00:54:45): One's good. That's what I tried to show you today. Okay?

⇒ Bob Fisher (00:54:51): There was a follow-up in the chat to the age question, which is, do we have a handle on what age a higher risk age kicks in?

⇒ Dr. Tim Babinchak (00:55:03): So the answer to that is it's on a continuum. Okay? So the older you are, your risk goes up because it's not just the age, it's those other underlying conditions that we have. So I can have a 25-year-old who has type one diabetes, is already suffering from kidney disease. They are far more vulnerable than their otherwise healthy parents in that regard. So it's a total situation. It's not just age, it's sort of like the shingles vaccine or the other vaccines that we have. Okay? We have a threshold that the FDA sets, but that's just because that's where the studies were done. All right? There's no magic number between 54 and 55. All right? It all depends on those circumstances. So older is always at greater risk and anybody define what older is, because for me, older keeps moving up further and further.

⇒ Bob Fisher (00:56:14): You're not alone.

⇒ Questioner (00:56:15): Hey, Bob.

⇒ Bob Fisher (00:56:17): Yeah.

⇒ Questioner (00:56:18): I was wondering if he could address the asymptomatic aspect of this whole disease right from the get-go. Seems to me to be the most problem part of it, because it seems as if, and this is just an observation it's not based on any science, but it's just appears as though there's a lot more people who are asymptomatic with COVID compared to other diseases. Is that true? I mean, in a room of 90 vaccinated people, could it be 80 of them they're asymptomatic? Is that possible? You don't know who has it.

⇒ Dr. Tim Babinchak (00:56:58): You're absolutely correct. But this goes back to that R number. No. Okay? So the short answer is no. It's not that that there are more asymptomatic individuals. Okay? And that's that R number. There are more Delta individuals, but not necessarily. So this still remains. The context that I put it in for people is the same as the common cold. All right? Because they're essentially the same. COVID is a distant virus that's related to cold viruses. So just as you can't tell who's got a cold in a room, you can't tell who these people are. Is it more? No. We don't have any evidence that it's more. That's why the distancing and the other aspects, the hand-washing, that's why all that stuff works just as well. For those other diseases, but not more.

⇒ Questioner (00:58:09): Okay. Okay. Because it just seems like when people have the mumps, for example. There aren't a whole lot of people carrying around the mumps but you know it. You either have the mumps or you don't have the mumps. But it does seem as if there's an awful lot of people that could be carrying COVID that have no idea that they ever did have it.

⇒ Dr. Tim Babinchak (00:58:31): And that's why earlier, I framed it between, you got polio on one side where you didn't have asymptomatic polio, you had paralysis. And you have influenza on the other side where you got lots of people who walk around and spread influenza. They don't go to the doctor. Don't even know they really have it in those situations. But when it gets into somebody that's vulnerable, that's where you have the problems.

⇒ Questioner (00:59:06): Thank you.

⇒ Bob Fisher (00:59:10): I need to remember to unmute myself. So my question is we know now that aerosols which travel through the air and stay in the air for some time are a major vector of transmission for this. And so we talk about distancing and I remember a year, eight months ago, we were talking about six feet or three feet. Really with aerosols, what distancing are we talking about?

⇒ Dr. Tim Babinchak (00:59:47): That's still the same. So the distancing, if you can get six feet between people, between family groups, et cetera, that's the best. Again, using our six month interval, even the last quarterly update that we gave were a lot better. Opening the church windows, getting the ventilation systems up to speed makes that a lot better. That helps with the distancing. And so that's why I've continually urged everyone to get their HVAC systems checked out, get that air circulation changing. That's really the bigger activity. And the fortunate thing for worship, most worship activities are an hour or less. And that's why putting out the aerosol thing from the last meeting with my other slides this time, I think is still important because it's the time, the number of people and the size of the space that you're in.

⇒ Dr. Tim Babinchak (01:00:57): And for short periods of time with limited numbers of people that are adequately spaced, the risk is as minimal as we can get it. You add Eric's changes. You add all of those other things. All of those things are additional layers to lower the risk in those situations. And that's why I say coming up on Advent, those activities, how do we change those activities in a way that allows us to conduct the activity, but we're doing it in a safer manner? Maybe we're not in small classrooms, maybe we're doing it in the larger congregational setting that way so that we can maintain the distances. We just have to be creative in those ways.

⇒ Bob Fisher (01:01:46): Okay. Thank you. Are there any other questions?

⇒ Questioner (01:01:55): Yeah. Sometimes this whole situation seems extremely serious. I have to stay prayed up, but if I went say to a church and walked into a church lobby and someone coughed or sneezed, didn't have a mask on, and I didn't know it. Five minutes later, I walk in and they don't have the full air exchange. Am I walking into those vapors?

⇒ Dr. Tim Babinchak (01:02:30): Very minimally. Okay? Very minimal. All right? This goes away. This goes away very quickly. So in public spaces, that's not the concern. Okay? What I wouldn't recommend is going into Bible study in a small room with that individual for an hour. Then I'd be uncomfortable. But, no, in public spaces, in your churches, in your grocery stores, in your drug stores, in the places that we need to interact, that's not a concern. And we've shown even in restaurants where people have to eat unmasked, we're not seeing those particular areas as being the situations where this transmission is occurring.

⇒ Questioner (01:03:26): Dr. Babinchak, much like NMR, do you see a possibility of a moly level of vaccine, including flu and COVID vaccines at the same time?

⇒ Dr. Tim Babinchak (01:03:35): At the same time? Yes. That they won't necessarily be comingled in the same vaccine. You'll get two shots just because of production. They're produced very differently. MRNA vaccines are very different in that regard. And the information that we have, and this is extraordinarily important. And that is the information that we have so far is that there is no reactions or inactivation of either flu or COVID if they are administered at the same time. We don't have any evidence of that to this point. Okay? Now that's limited because we've just started getting the influenza vaccine out. So the next quarterly report, as I say in my six month interval, I'll have more information on that. But it is key for me. My plea is if you're going to get your influenza vaccine, please get your influenza vaccine. And because you are eligible for influenza, those are the people who should be getting their COVID boosters at the same time, or as close as possible to that same time.

⇒ Bob Fisher (01:05:03): So we're at the season where, I just got an announcement today of a church having a picnic in the coming weeks. And we're also in this lovely weather where we can do worship outdoors or we can sit around together in a Bible study outdoors. What of these precautions are necessary at this point outdoors?

⇒ Dr. Tim Babinchak (01:05:26): Outdoors. As I've said, outdoors, I don't have any qualms or restrictions, okay? With one caveat. And that is those who aren't vaccinated, should continue to wear masks and should continue to social distance if they self identify themselves in that regard. Outside, these are dispersed in such a way that outdoor activities have not ever been the major concern provided that you can maintain the space. All right? And that's the other activity. Yes, you can be outside, but if you're outside in a concert with 10,000 other people

packed together, that's a concern. But for most of the picnic activities, the things where you can spread out outside is the best place to conduct these activities, worship. Otherwise. Absolutely.