



The Economic Club of New York

115th Year
646th Meeting

Dr. Jennifer Nuzzo
Senior Scholar and Associate Professor
Johns Hopkins Bloomberg School of Public Health
Center for Health Security

March 2, 2022

Webinar

Moderator: Hilary Brueck
Health Correspondent, Business Insider

Introduction

President Barbara Van Allen

Good afternoon and welcome to the 646th meeting of The Economic Club of New York.

I'm Barbara Van Allen, President and CEO of the Club. And it's an honor to be here with everyone in what is a milestone year for us. It's the 115th anniversary of the Economic Club. So we've come a long way during that time.

The Economic Club of New York is the nation's leading nonpartisan forum for discussions on economic, social and political issues. And today, of course, we'll be focusing in on healthcare and Covid. A special welcome to members of the ECNY 2022 Class of Fellows – a diverse group of rising, next-gen business thought leaders. We also have joining us today grad students from Rutgers University. So welcome to all of you.

It's a pleasure for me to welcome our guest today, Dr. Jennifer Nuzzo. Jennifer, thank you for being here. She's a Senior Scholar at Johns Hopkins Center for Health Security and Associate Professor in the Department of Environmental Health and Engineering, and the Department of Epidemiology at Johns Hopkins Bloomberg School of Public Health, and Senior Fellow for Global Health at the Council on Foreign Relations.

An epidemiologist by training, Dr. Nuzzo's work focuses on global health security with a focus on pandemic preparedness, outbreak detection and response, health systems as they relate to global health security, biosurveillance, and infectious disease diagnostics. She directs the Outbreak Observatory, which conducts, in partnership with frontline public health practitioners, operational research to improve outbreak preparedness and response.

Today's program is going to be a conversation, and we're fortunate to have Business Insider Health Correspondent, Hilary Brueck, as our moderator. We're going to end promptly at 1:45. Please feel free to add questions to the chat box and Hilary may use those, time available. So we're going to go ahead and get started. As a reminder for everyone, this conversation is on the record and we do have media joining us today. Without further ado, Hilary, the mike is yours.

Conversation with Dr. Jennifer Nuzzo

HILARY BRUECK: Thanks so much, Barbara, and welcome, Jennifer. I'm really excited for this conversation. It feels super timely right now. It feels like the Covid guidance is changing from day to day and minute to minute. So I wanted to start out with kind of where we're at right now. I mean just the most recent example is the White House today released what it's calling its National Covid19 Preparedness Plan. And so the Biden

administration is calling this kind of a roadmap and they said, "As we begin to get back to our more normal routines," which people perhaps haven't been doing over the past two years.

And specifically in the roadmap, you know, there's like four pillars in there, but specifically one of them is to prevent economic and educational shutdowns. And I thought that could be a relevant starting point for our conversation. You know, they mentioned testing, and there's an idea in there for some paid sick leave. Of course, that would require some action by Congress. But I'm wondering what you think of this plan and what you think are the most important components of preventing future shutdowns.

DR. JENNIFER NUZZO: Yes, thank you, Hilary. First of all, let me thank you and the Economic Club and Barbara Van Allen for the invitation to participate in this webinar. It's a real honor. I'm particularly heartened that some fellow alumni from Rutgers University are participating. Hello to you all. And really I'm also quite heartened that people still want to hear and learn about Covid – it's been such a part of our lives for now going on three years – that people are still interested in it. It really encourages me in terms of where we have to head and also just kind of the spirit of civic engagement that's been so important in navigating our way out of this pandemic.

But in terms of the President's plan, you know, I think it's largely an important one. And

it's important, both in terms of its breadth, its comprehensiveness, as well as sort of the overarching strategic vision for where we have to head. You know, we are no doubt in a different phase of the pandemic than we were, certainly in 2020, but definitely even including where we were in 2021. And, you know, a few things have changed.

First, the virus itself has changed and, you know, we saw this happen as a result of the Omicron surge that was incredibly challenging in many ways. I don't want to diminish how challenging it was. It was a terrible sort of flash flood of infections that happened over a very short period of time. And that's a very difficult thing for our health systems and our public health response to handle. But the fact of the matter is that a smaller percentage of the infections resulted in severe illness, which is largely a good thing.

And that is, in part, because of the virus, but also in part because of the amount of immunity that we've built in our population. Some through natural infection, but also through vaccination. And that alone, I think, changes the situation where looking ahead, as we're seeing that it is still possible for people to get infected, it is still possible for people to get reinfected. With immunity especially established through vaccination, we are helping to kind of blunt, I think, severe illness going forward.

Now, I have to put an appropriate pause there and say things could change. This is a dynamic situation. We are very much looking at the data. And if new forms of this virus

emerge, then we will have to change, you know, it's very possible that we will have to change plans. But given where we are now, it is different than where we were before, and I think it warrants a different approach. And where I think we're headed is one where we're using less blunt tools, like broad mandates and shutdowns, and more precision tools, trying to target our resources to include people who are most vulnerable from severe infection in particular. And I think that point, focusing on severe infection and death, I think is really key because if this virus could never have put people in the hospital, most people would have never heard of it.

And so, you know, I think the work that goes forward, I think is, in part, focused on that, but it's also focused on the fact that other viral pathogens are coming back. We were fortunate enough to have not much of a serious flu season this year, but many people predict that we will have a serious flu season, if not next year, then perhaps the next year. We don't know exactly when but it will happen. We've already seen respiratory syncytial virus, RSV, surge last summer and it surged at the same time that our Delta wave occurred. And that really put a strain on hospitals. So I think another aspect of the President's plan that makes sense is not just looking at Covid but looking at Covid as one of a number of serious respiratory pathogens that we also have to try to prevent from causing serious illness and prevent from overwhelming our hospitals.

HILARY BRUECK: I guess one of the big things I'm wondering about that is like how

ready are we to react. It sounds like what you're saying is, you know, we need to move into this sort of new phase where we're able to ride future waves of Covid or whatever it may be more successfully than we have to date. I mean what does that take? And what does it look like? And are we capable of being nimble basically?

DR. JENNIFER NUZZO: Yes, I mean, well, I think it takes a lot of different things. First of all, it takes government, it takes individual behaviors, it takes social supports, it takes the private sector. I mean it takes all of society really. I think when people ask that question, one of the first questions that they have is will we know that we are in the new phase? And I think that's a reasonable question to ask, and I think there are still places where we very much need to improve our data to understand what's going on.

There was a lot of attention as of late to new guidance from CDC about masking. Many of the headlines about that guidance described it as CDC loosening its masking guidelines. That's not quite accurate. Although that's sort of, in fact, what happened, that's not what they set out to do. What they set out to do was to redefine how we assess community-level risk, or in the case of what CDC was able to do was really county-level risk. And they set up to kind of redefine it in part because, as I mentioned before, the virus has changed. It's sending a smaller percentage of people to the hospital and that does change the game.

But also the data have changed. And so you had mentioned home tests and testing. As we are increasingly relying on testing that's done outside of the healthcare system, the metrics that CDC previously relied upon to assess risk, it was largely test positivity and case numbers, those two numbers are less reliable, and frankly less meaningful than they once were. So it made sense to look for other data. They're still looking at cases, but they're also considering the proportion of cases that's winding up in a hospital or frankly how ready hospitals are to be able to handle a surge of patients because we know that, you know, with treatments it may be a survivable illness, but if the hospitals are overwhelmed, they can't provide the level of care that they could do otherwise.

So I think it made sense to look for other data sources. Are there other ones out there that we should potentially be looking at? I do believe the answer is yes. One thing that I would wish we would take into greater consideration is vaccine uptake. Because if we're trying to prevent deaths, that's the single most important thing that we could do. And not just, you know, what percentage of the population is vaccinated, but have we reached, in particular, the people who are most vulnerable to severe illness? And, you know, some data has come out that we've only given third doses, booster doses, to about probably just a little more than half of the over-65 population. And we know that that dose in particular, if anyone is going to get it, it's for people over the age of 65 and people who are immunocompromised. And so we have to make sure that we're doing as much as we can to eliminate risks within our community, and I think that's a key area

where we need to do more. So I think a lot of people are looking at the data and I agree they're not perfect, but frankly they've never been perfect.

In terms of readiness, I think sometimes when people also ask that question, it's partially about personal readiness. And I think that it's important to think about this next phase as one being not so much like we're not doing those things anymore. Not that we are no longer using masks, but that it just may not be a law anymore. It may not be the case where, you know, if somebody walks into a Starbucks, a barista has to yell at an unmasked person and possibly call the police on them. But masks are still an important tool and people can and should still avail themselves of it, particularly if they are at residual risk of illness.

And, you know, I think that is going to be the case going forward where people's, you know, sort of personal risk calculations, as well as community risk calculations. I mean, you know, the CDC put out guidance that's meant to tell me if I would benefit, in particular, from wearing a mask, or for individuals to help them make them decisions for themselves. But no government document absolves us of our need to protect the people that we, you know, our friends and neighbors.

And so I think, you know, one of the reasons why I still wear masks in public spaces is not because I'm particularly worried about developing a serious illness where I contract

Covid, but because I don't really know who I'm around and the infection levels are still kind of high and I don't want to risk spreading it to someone who may not do as well as I will. And I think that that kind of social contract with each other is always going to be in place. And I hope that, you know, people continue to seek to protect our neighbors.

HILARY BRUECK: How do you think about that kind of a social contract when you are thinking about, you know, what we're talking about here today, which is sort of like organizations or businesses who might be reconsidering how they configure either masks at work or vaccines at work? How do you calculate the best approach to that?

DR. JENNIFER NUZZO: Yes, so I've talked to a lot of businesses that are going through those calculations and they're wondering, you know, should I bring my employees back? Should I require that my employees come back? Should we mandate masks? Should we mandate testing? Should we mandate vaccines? All of these things. I can tell you what the sort of epidemiologic benefits of all of those measures are. But I think one thing that employers are always going to have to do is talk to their employees and understand what their values and fears frankly are. I don't believe that simply mandating things is going to ensure full and happy compliance and that conversations have to happen.

So what I often tell employers is if your workforce is completely vaccinated, then there's

a fair amount of protection. Are there residual risks that people will transmit the virus within the workplace? Yes. And whether that's consequential will depend on who your employees are. If you have a lot of employees who perhaps have kids who are too young to be vaccinated or immunocompromised relatives living with them or a variety of other things, then, you know, you may want to titrate your plans accordingly, which may include continuing to mask so that you reduce risks to those employees or allowing those employees to continue to work remotely for a period of time. I think it's never going to; policy is never going to supplant engagement.

And I think one of the great lessons we've learned with vaccine rollouts, it shouldn't have been a lesson that we learned. I think it's been a fairly obvious lesson in terms of public health. It was always clear that we were going to have a hard time getting people to want to get vaccinated. And part of it was that we started late, the conversations about our values and the risks and benefits and all of those things that need to happen to people to make decisions about how best to protect themselves and each other.

HILARY BRUECK: Yes, it's interesting, thinking about the ways that, sort of like the vaccine rollout could have gone a little differently in the early days, before vaccines were available. But I guess, you know, given where we are today, you know, there's a lot of companies that are already undergoing some policy shifts. Just to give a big

example, Google dropped its vaccine mandate and is lifting mask requirements and they're bringing back the massages and the fitness centers and all the lovely hands-on perks that their employees used to have. What do you think about that kind of approach where, you know, before they did have a vaccine mandate so you assume that a good portion of the staff is now vaccinated, you know, they're loosening things up?

DR. JENNIFER NUZZO: So I will tell you vaccines remain our thickest layer of protection. And I do not, in any way, want to see a de-emphasis of vaccines as an important tool to keep us all safe and to keep our economy open. That said, I've always been a little bit worried about mandates, in part because of all of the conversations I've had, I mean thousands of conversations, with vaccine – I will call them people who are not yet convinced of the value of vaccines. And the reason why I was worried about mandates is that there is a process that people have to go through of understanding the vaccines, the disease, what they mean, debunking a lot of the, frankly lies, that they have seen online. You know, they may try to do their own research, but they're doing their research in an information environment that's been completely poisoned by mis- and dis-information.

So there is an engagement process that has to happen for people to get to the point where they choose to avail themselves of the benefits of vaccines. And the worry that I had was that if we didn't do that work, that we weren't going to shortcut getting people

to a state of willingness simply by mandates. Now I have always thought that employers have to operate, they have to do what they need to do in order to operate. And if mandates are how they are best positioned to operate safely, than I fully expect that that's what they're going to do and I think that that makes sense.

But I think, you know, I think if companies are planning to change policies on that front, particularly change policies in terms of no longer requiring mandates, I mean I think they have to have a hard conversation with themselves about why. Is it because they would have to fire too many of their employees because they're not getting vaccinated? Is it because they're no longer worried about infected people coming to the office? Vaccine mandates don't, they maybe help a little bit, but they don't really help that. Or is it that they're worried about having employees get terribly sick and be absent for quite some time from the workforce? So I really think that they have to sort of state what the goals of these vaccination policies are, in part because if they don't I think there will be cynicism and skepticism that will possibly backfire in ways that are just not helpful to controlling Covid and possibly not helpful for sort of workplace camaraderie.

HILARY BRUECK: Yes. Really interesting. Another piece of that, of course, in addition to the way that companies are handling this is the way that states and cities are handling this. And I'm thinking of, you know here where I am in New York, of course there's a lot of talk about the mayor lifting the vaccine mandate for people who go to

businesses, but I feel like the part that isn't as often mentioned is that there's still a mandate for private employers. Like, you know, people who work, places still have to be vaccinated. For example, you know, Kyrie Irving from the Brooklyn Nets. And one thing that struck me that Mayor Adams said, he said he wasn't going to make an exception for Kyrie. And he said, we're here right now opening our city because of vaccine mandates. I mean what do you think about this sort of like interesting strategy that New York has right now where, you know, they're allowing more people who are either vaccinated or not back into businesses, but they're not letting go of the mandate for private employers? How does that resonate with you? Does it make sense? And what does it mean for the rest of the country, if anything?

DR. JENNIFER NUZZO: Well, I would say my top principle is that I do not want us to undermine the progress that we've made towards increasing vaccinations. And if it's thought that ending vaccine mandates are going to do that, I think we have to try to justify what the benefits of easing vaccine mandates are. That said, you know, I think, in my earlier points about how we're shifting our strategy and we're in this new phase of the pandemic, but that doesn't mean when we stop enforcing things by way of mandate, you know, broad measures, that that means that those measures are no longer necessary. But it might mean that there is more done by way of encouragement, incentives, and possibly more limited mandates.

So, for instance, if certain businesses say, you know, we just don't really want to have a workforce that's unvaccinated because it is too possibly risky in terms of having workforce absenteeism, that perhaps, you know, we want to continue to require our patrons to wear masks or whatever, I mean I think businesses get to set those choices. And I would hope that the business community would sort of coordinate itself and sort of make decisions collectively in terms of what policies are best for their businesses to remain open, to avoid future shutdowns, to protect their employees and their customers. I think that's really key.

I will tell you, from an epidemiologic standpoint, the idea of mandating vaccines and then like a few months later lifting the mandates, like I just don't really fully understand the strategy of that. I think vaccines are incredibly important for protecting us and for keeping us out of the hospital, first and foremost. They also likely reduce transmission, but they don't take off the table the idea of transmission. And so I also think that we're going to have to see, as all of these kind of broad measures are lifted, and that includes masks and possibly mandates, whether it meaningfully changes the trajectory of the pandemic and be open to the fact that if the trajectory changes in the direction that is looking like we could be headed towards closures and other things again, then we have to change course. Because I think nobody wants to go back to the state of closure.

HILARY BRUECK: And thinking about, as you were talking about, there's some thought

that, you know, vaccines can help prevent transmission. Certainly you're not infectious for as long if you're vaccinated. But there's also some new studies about long Covid that suggest that maybe, you know, I mean I think that becomes an important part of the conversation now as well when you're talking about the CDC changing its guidance and saying, like, well, the risk of hospitalization across the nation seems lower than it was so you have to think about the other risks. And it seems like the risks of long Covid to a vaccinated person are somewhat less based on what we've been able to observe so far.

DR. JENNIFER NUZZO: Yes. I mean the best thing we can do to prevent long Covid is to vaccinate people. Obviously, avoiding infection is also good too. It's just going to be really hard. And let me say that saying that there's a difference between trying to avoid infection for now versus avoiding infection for the rest of your life. I think there are benefits for trying to avoid infection now, in part, that we make discoveries about new treatments and new ways of protecting ourselves, maybe better vaccines. Who knows? There's a lot that could change between now and the future. That said, I have to be clear, this virus is not going away. It is not going away. It's going to continue to circulate. And it is highly likely that we are going to encounter it in our lives at one point or another, possibly multiple times.

And I think that's also important to point out because I know a lot of people who have

not left their house. They are wearing N95 masks even among their family members or if they have relatives over. They're unvaccinated. And it's not that they're not worried about Covid. They are worried about Covid. But they're also residually worried about the vaccines in a way that we have to address. But part of them, I think, think that they can just ride out the storm, that they can just keep protecting themselves until the virus is gone. And I have to be clear, the virus is not going away.

So I think in terms of long Covid, we have to vaccinate as many people as possible, and I think that's something that we need to do a lot more of. In fact, I just saw some data today about vaccine uptake among New York City schoolchildren. And unsurprisingly, the uptake is lower in the neighborhoods of lower socioeconomic demographics. It's going to take all of us to help fix that. And so that's the work that we need to do. That is one of the most important things we can do to prevent long Covid. We also need treatments to help people, etc.

But I do think that one of the things that employers should be considering when they're setting vaccine policies for their workforce is will it affect employee availability? And vaccines do affect employee availability. Will it prevent employees from going out on either short-term or long-term disability? It will. So I think that we have to consider the social and economic benefits of vaccines beyond just like we're in a surge and this is how we're going to try to control it.

HILARY BRUECK: Yes. I think that's really an important point. And one of the other things I was thinking about when you were talking about, you know, people trying to kind of ride it out and stay home until it's over, is I was chatting briefly with Barbara before we started about how they used to do a lot of large in-person events at the Club and obviously, you know, there's benefits to seeing people in real life. And I was also thinking about sort of the same idea last night watching the State of the Union where, you know, a lot of those, a lot of people weren't wearing masks and greeting each other, hugs, handshakes and all of that. How are you thinking about getting together in 2022 and particularly large gatherings? Is that something that's going to be safe? How do you make that calculus?

DR. JENNIFER NUZZO: So I think, first of all, as an epidemiologist I'm probably contractually obligated never to use the word "safe." We tend to talk about "safer." I will tell you; bottom line is that I think that for some time being and possibly forever, I think we have to build some more flexibility into our large gatherings. I think Covid changed us in a lot of ways. There are still people who are going to be residually concerned about getting together in large gatherings, perhaps because of underlying health issues, their kids aren't vaccinated, a whole lot of reasons. And I'm not sure, you know, stomping your feet and demanding that they come is just helpful. It just isn't in any way helpful.

So I think providing flexibility. Once people have gained flexibility, it's hard to go back from that. So I think creating flexibility that there's going to always be some form of hybrid models. And it may not always be because of disease considerations. It may be because, you know, some people are like I don't feel like I need to fly across the country or around the world for a one-day or two-day meeting anymore. It's bad for the climate. I don't feel well after I do it. It's disruptive to my family. I would much rather attend virtually. Some people are just like, oh my God, get me out of the house, I need to go to these meetings. So I think we have to assume that flexibility is going to be part of our future.

That said, I personally feel, as a fully vaccinated, third dosed person, I feel perfectly comfortable getting together in large groups. I will travel, I have traveled, I will travel. Do I expect that there's a possibility that I could contract Covid during those activities? Yes. I avail myself of other tools. I usually kind of test myself when I come back so I don't spread it to my family if possible. I think there are tools that we can use to make those gatherings safer, but I personally feel comfortable. But again I am somebody who is privileged in the sense that I don't have underlying health conditions. I don't live with people who are particularly vulnerable. And if I did, that would be a different calculation for me.

HILARY BRUECK: Yes, great. And sort of connected to that, you know, there's been some recent study, the Institute for Health Metrics and Evaluation, for example, estimating 75% of the country is immune to Omicron in some way right now, whether they've been vaccinated, boosted, had an infection, had two infections. What do you think about that kind of calculation? Does that change how you operate?

DR. JENNIFER NUZZO: No. I mean, so first of all, I wouldn't call it immune. I would say there's some evidence. And the CDC just had a study out – the problem with those surveys is you get different estimates depending on different populations that you look at – the CDC found that probably about 40% of the country had been infected previously. That's useful to know, but it doesn't actually fundamentally change things because we know that people can become reinfected. We're continuing to see that, including people who have been vaccinated.

So, no, it doesn't change it. Does it make me feel that perhaps we are headed towards future where this virus will become less severe? Not the virus itself, but its impacts on society because of the immunity that continues to mount, both through vaccination and natural infection. Yes. Could that change with a variant? Also possible. So I have to again put an asterisk and say, you know, stay tuned, because we have to continue to look at the data. I mean I think many people didn't expect – myself included – I mean I knew that there could be a new variant, and I knew that it could result in increased

transmission. Did I expect to see a million cases a day during Omicron? Absolutely not. That was really extraordinary.

And it doesn't change my personal risk calculation, because again I haven't gotten it. I can still get it. I could probably get it multiple times. So it doesn't change things for me. But it does make me believe that there's been a tremendous amount of transmission so far and there's probably going to be a lot of transmission in the future and that stopping transmission – I would love to decrease transmission – but the idea of stopping transmission just doesn't seem possible to me.

HILARY BRUECK: That kind of gets into the other piece of the chat that I wanted to have here, and of course if anyone has questions, feel free to drop them in the chat. But I wanted to talk about, you know, surveillance. Like what does that look like going forward? What metrics? You talked about how one metric that isn't paid attention to as much as it perhaps should be is vaccination rates and vaccination rates by various demographics and age groups. So what metrics, you know, when you wake up in the morning, what are you looking at to see, like how's Covid doing?

DR. JENNIFER NUZZO: So I still look at cases, even though I said before that they're becoming less useful and less reliable, and that's true. I still look at it. And I look at it less to see the numbers, but more to see the trends. So if it suddenly starts going up

again, I look at that because I want to understand why. Why is that happening? Is it because we just lifted our mask mandates? Is it because we're no longer checking vaccine certificates at restaurant doors? When we see changes in the data, we need to understand why and we need to do investigations in order to figure it out.

It is my great hope that as the case numbers have come down, we can finally start doing some of the surveillance that the U.S. has largely failed to do throughout this entire pandemic and do more kind of targeted, active surveillance approaches where we're not just trying to count everybody, but we're doing more representative samples to try to understand questions like how many infections or what percentage of the population is getting infected now? Who are the demographic groups that aren't getting infected? Has that changed from before? And if so, why? What is driving transmission? I mean I think it is the absolute, most frustrating thing in the world that I cannot tell you where people are getting sick from Covid. I cannot. I cannot.

And so the earlier question about mask mandates, I mean, you know, I know there are a lot of dire predictions about what will happen if we suddenly stop wearing masks. And again, I don't, I hope that we don't suddenly stop wearing masks. I think they remain important tools even if they are no longer legally required, such that you have to go to jail or pay a fine when you're not wearing it. But what will the impact on the overall trajectory of the pandemic be? I can't tell you, in part because I look to places like Hong

Kong and South Korea that have been very aggressive in their public health measures. They have a high degree of compliance with masks and they are in the midst of their Omicron surge that looks nothing like their prior waves. I mean just huge spikes in cases. I can't tell you why that's happening but it's happening.

And so I think we have to do more investigations to understand what is driving transmission. Mask mandates make a whole lot of sense if a lot of people are getting sick in public spaces, particularly encountering people that they don't know, either in the workplace – well, they know people in the workplace – but if it's happening in the workplace or if it's happening in grocery stores. They don't make a lot of sense if people are getting sick at family gatherings because chances are nobody's wearing a mask at that family gathering. And even if they are, the mask mandate won't reach it. It doesn't make a lot of sense if people are getting sick in bars where everybody takes off their masks to drink and yell at each other over the loud music.

And so I take a slightly, like more kind of nuanced approach about masks than maybe some other people do in the sense that I really wish we had better data to say this is where transmission is happening, so that we know how best to make those places safer or if necessary stop the activities, but hopefully find ways to make it safer. And now with declining case numbers and a shift to look at kind of, you know, other potential data sources, this is the time now to be launching those investigations so that we can better

understand risk going forward. Not just for Covid, but future pandemics.

My biggest fear in this situation is that whenever we decide that this thing is over, and again I said this virus is always going to be with us, so at some point we're just going to have to decide that we don't care as much as we once did, whenever that is, my fear is that people will kind of wipe their brow and say, well, that was bad, but we're good for the next 100 years. And it's simply not true. We live in an age of pandemic threats. The conditions of the globe encourage the emergence of new pathogens, and when they do emerge, the spread.

And it's sort of like, you know, after a hurricane in Florida, if you were living there, you wouldn't conclude that you're never going to have another hurricane again. But I fear that the same thing is going to happen with pandemic threats and we'll not make the kind of long-term investments and societal changes that we need to diminish our vulnerability to these pandemic threats that are frankly just a part of our lives going forward.

HILARY BRUECK: Right. But I'm struck, as you're talking there, about how difficult it really is to know how people are getting infected with Covid. I mean traditional contact tracing is like irrelevant.

DR. JENNIFER NUZZO: Well, so it's not an intractable problem. I think traditional contact tracing was challenging and particularly challenging for this pathogen because usually contract tracing is done when you have some hope of being able to interrupt generations of cases. When you have, at most, a five-day, on average a five-day window between generations, and for Omicron and Delta closer to two or three days, it's very hard to do that. And it's very hard to do that when the case numbers are huge.

Contact tracing in institutions is incredibly important. You know, in colleges, in nursing homes, congregate settings, incredibly important. And that can inform us. But it can be done, but we never had a strategy for doing those investigations. We also didn't have the workforce to do the investigations. And those are both fixable problems. I mean we went into this pandemic with a skeletal public health workforce. And when we tried to scale up contact tracing, which maybe wasn't even the right approach, we had no choice but to hire contractors. We also, by the way, had no paid leave policies so that if anybody did get identified as a contact of a case, they didn't have a disincentive to stay home. And so those social support structures that frankly other countries had in place, the United States did not, and that really hindered us.

But separate from that, with an adequate workforce, with a strategy, we could very easily do the kind of investigations that are necessary, that we used to do before, you know, when public health wasn't as decimated as it is now in terms of workforce, when

we were much more familiar with routine infectious disease outbreaks. We used to do that all the time to try to understand how to stop it from happening. And we've fallen of practice, in part because of the scarcity.

HILARY BRUECK: Right, yes. I guess I'm just struck by how hard it is, even from places like Hong Kong where they have very, you know, stringent sort of ways of trying to track things.

DR. JENNIFER NUZZO: Well, it's not aggregating at, like all of the cases. It's doing like limited investigations in a subset to try to understand. Japan did this much better than we did. Singapore did this much better than we did. South Korea did this much better. I mean we were seeing studies coming out of South Korea that were, like it turns out hot yoga is really bad for spreading Covid, more so than the treadmill. It was just really interesting. And that would have been really useful information so that we didn't have to just shut down gyms. Maybe we could figure out how to make them safer. I think the goal going forward is just not to shut things down, but to take a more, kind of precision approach, you know, a harm reduction approach, so that we can help people live their lives as safely as they can.

HILARY BRUECK: Totally. Well, we just have a few minutes left, but I did want to get to a question we had in the chat from Thomas Luddy who asked when do you think we

can drop masks on planes. That was something that the administration said they were not going to do.

DR. JENNIFER NUZZO: I don't know what their decision-making is on that. I will tell you; I don't love masks at all. I don't love masks at all. That's probably one place where I'll keep wearing masks longer. And I'm less concerned about it on planes than I am in airports. You know, I think about where the places are that feel riskiest to me, and airports are not great. Planes, I feel a little bit more comfortable because of the level of filtration on the planes, although when the plane is taxiing and the exhaust system isn't functioning fully, there are some risks there. And planes I don't think are as much of an infectious disease risk as a lot of people have pointed out. That's that, like anecdotally, don't you always get sick when you go traveling? So it may not be even the plane, it may just be from exhaustion. But that's probably one place where I'll continue to wear masks.

HILARY BRUECK: Yes, and as part of what you're thinking about there, that you just have people from all over the country and all over the world getting together, and just whatever is around, is around?

DR. JENNIFER NUZZO: Yes, I mean, travel, when people always ask me, like is it safe to travel? It's like travel, like moving your body from one place to another is not

inherently dangerous. What does change for people is that it exposes them to new social networks and new social networks, networks of people that they come in contact with that may not have the same level, you know, if you see the same people day in and day out in your life, the likelihood that a new pathogen is going to come in is smaller. But once you go into a new place, you don't know, you know, the infection status of those people. You also come in contact with a lot more people than you do usually in the course of your daily life. And so that's really where, I think, the risk of traveling comes in. So again, it's not the moving around the planet necessarily that's risky. It's just coming into contact with new groups who may have infections that you don't know about and just the numbers of people that you encounter.

PRESIDENT BARBARA VAN ALLEN: Well, thank you both. That was just a great conversation, and you actually answered a lot of questions that were in my mind, just thinking about the Club and going forward with our meetings. So both, Jennifer and Hilary, thank you. We really appreciate you all giving us your time today.

So we're pleased to report that we have some additional events coming up on the calendar. We have our March 7th Women in Business Conference which is an annual conference we do with the Consul Generals of Canada and France. And it's a half-day so there are several different Zooms, and we're really looking forward to that. On the 14th, we continue our Crypto Series, and that will be an in-person/hybrid event with

Michael Saylor, the Chairman and CEO of MicroStrategy. March 22nd, we bring back, maybe for the third or fourth time over the last couple of years, Glenn Hubbard, Former Dean at Columbia Business School, together with Larry Summers up at Harvard. And they will be talking about the developments in monetary policy. So that will also be a timely conversation. On April 4th, Roger Lowenstein, the author of *Ways and Means, Lincoln and His Cabinet and the Financing of the Civil War*, will be in a conversation with Greg Mankiw, the Robert Beren Professor of Economics at Harvard, and also a member of our board. And then April 11th, we have Thasunda Brown Duckett, the President and CEO of TIAA, is going to join us again for an in-person/hybrid event and talk about access to financing and financial services for businesses and individuals of all backgrounds, including traditionally underrepresented groups. So thank you again for joining us.

I also always like to take a moment to thank our members of the Centennial Society joining us today as their contributions continue to be the financial backbone of the Club and enable us to do our programming. So thanks all. Have a wonderful week and stay healthy and safe. Thank you.