Dr. Ashish Jha:
The good news is we have learned a ton about this virus in the last two years. If the question is, how do we manage this moving forward, I want infections to be at such a level that our health care system isn't overwhelmed. I want to make sure that for businesses and schools, you can get back to having in-person full-time schools and not worry about large outbreaks in schools that will send everybody home. We're not going to get to zero infections and that's not the goal, but the goal is let's do the things that are really important to us in our society and do it in a way that doesn't cause deaths to spike, doesn't cause our health care system to get overwhelmed.

Ellen Kelsay:
That was Ashish Jha, a physician, health policy researcher, Dean of the Brown University School of Public Health, and an incoming White House COVID response coordinator. Dr. Jha is recognized globally as an expert on pandemic preparedness and response, as well as on health policy research and practice. He has led groundbreaking research on Ebola and is now on the frontlines of the COVID-19 response; leading national and international analysis of key issues and advising state and federal policymakers. He previously led the Harvard Global Health Institute and taught at the Harvard T.H. Chan School of Public Health and Harvard Medical School. We look forward to checking in with him today on the current state of COVID-19 and work being done at Brown University on the impact of long COVID on people, economies, and societies. We will also discuss how we should be planning for the future.

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Dr. Jha, welcome. We're delighted to have you.

Dr. Ashish Jha:
Thank you for having me. I'm delighted to be here.

Ellen Kelsay:
Wonderful. Well, let's start with a note of optimism. We appear to be turning a corner and entering a more optimistic period of the pandemic with so many indicators moving in a more positive direction - case rates and hospitalizations and death all are on the decline. And we've seen just in the past couple of weeks, many jurisdictions, schools, and businesses lifting mask mandates. I would love your perspective on does this mean we're entering a new phase relative to moving from endemic and out of pandemic?

Dr. Ashish Jha:
First and foremost, we are absolutely moving into a better phase. We are done with the Omicron surge. Infection numbers are basically back below where they were before the Omicron surge began. Deaths are still high, but they are coming down. They always lag three to four weeks behind, so that's not a total surprise. It will take a few more weeks before those really get down. Then the question is, what is this phase? How long does it last? Are we moving into something that's going to look like this for a long time? Are we going to get future variants? There's a lot unknown. What I would say is we should absolutely assume that the Spring, and probably the Summer, in most parts of the country in early Fall, should likely be pretty good with low levels of infection and hospitalizations and deaths, but we've got to prepare. We've got to prepare for new variants and we've got to prepare for future surges and we've got to prepare for living in a world where this virus still has a lot of uncertainty ahead of it and not making assumptions that it's somehow all over or it's all behind us. It may be, but I don't think we can count on that.

Ellen Kelsay:
I want to come back to how do we learn to live at this in just a minute, but back to this, are we entering a new phase and your notes of positivity around the Spring, Summer, and Fall? Do you think that means we

are moving into endemic and what does endemic mean? What does that really mean from a practical perspective to our listeners?

Dr. Ashish Jha:
Yes, you did not hear me use the word endemic on purpose, for two reasons really. One is lots of different definitions of what is an endemic disease, endemic virus. And the second is endemic does not necessarily mean good. It can be endemic at a very high level and cause a lot of suffering and death or something can be endemic at a low level. To be perfectly honest, I don't know if we're entering an endemic phase. What I know is that the last surge is really over. There clearly is a seasonal pattern to this virus, which makes me think there will be more surges, and there have been a lot of surprises in terms of variants. I'm not thinking that we're somehow into this kind of end game of this virus, that somehow we're nearing the finish of the pandemic. Instead, the way I look at it is we're entering a good period. It could last months, it could last longer, and we ought to prepare for future uncertainties, so no matter what mother nature throws at us, we'll be ready and we'll be able to manage it effectively.

Ellen Kelsay:
All right. I love that because I think that does bring us to, okay, so let's learn to live with this. This is not going away. Anybody who is wishful thinking, who hoped and prayed that one day where it would be a world without COVID is probably not going to see that day anytime soon. So, we do need to learn to live with it. It is to your point, seasonal. We will likely see new variants emerge. How do we prepare for that and how do we from a practical perspective prepare for that, psychologically prepare for that? What are your thoughts as we move forward into other cycles of this virus in the future?

Dr. Ashish Jha:
Great question and obviously one that has multiple parts to it. The good news is we have learned a ton about this virus in the last two years, and every variant, you know, have their own features and such, but they have a certain set of things that are consistent across every variant. It's an airborne disease. It spreads largely indoors, especially when you have large numbers of people crowded together in poorly ventilated spaces. Our vaccines have held up pretty well across all the variants, certainly at preventing severe disease. If the question is, how do we manage this moving forward? The way I look at what it means to manage this virus is the following: I want infections to be at such a level that our health care system isn't overwhelmed. If you have a heart attack or a stroke or get into a car accident, there are plenty of hospital beds to take care of you. We need to keep infections low enough, in hospitalizations, low enough so that our health care system functions. I want to make sure that for businesses and schools, you can get back to having in-person full-time schools and not worry about large outbreaks in schools that will send everybody home. We're not going to get to zero infections and that's not the goal, but the goal is let's do the things that are really important to us in our society and do it in a way that doesn't cause deaths to spike, doesn't cause our health care system to get overwhelmed. In that manner, in my mind there are sort of three or four major principles of how we do this. First, we have got to keep plugging away on vaccinations. The reason health care systems get overwhelmed is because not enough people are vaccinated and either unvaccinated or unboosted people get infected, they get really sick, they end up in the hospital, and that overwhelms the health system. Look, if 90 to 95% of Americans who were eligible fully vaccinated and boosted right now, our health care system would have barely noticed the Omicon surge. That's the bottom line. Unfortunately, that's not where we are. We've got to do everything we can to get more people vaccinated, because that's probably the most important thing to keeping our health system functional. Second, we have to work on indoor air cleaning. Now this is going to sound like a funny topic, but the way I look at it is there used to be a time in human history when you drank water, you had a pretty high likelihood of getting sick. We didn't tell people to keep boiling water forever. What we did was we built up sanitation systems and we did a lot of things so that now when I open up my tap and get a glass of water, I'm not worried about is that water going to make me sick. Right now you walk into buildings, poor ventilation, poor air quality, that means one person in there with COVID can spread it to 20 people. We've got to work on improving indoor air quality. It'll help with COVID. It'll help with the flu. That's got to be an important part of our strategy.

A couple more things - I think we've got to be at a place where we have widespread, cheap testing available. We're making progress there. I want to get to a place in the country where there's so much testing available, that anybody wakes up with a little cough, a little fever, would test themselves. If they find out they're positive, now they don't have to go in and infect others. That can help a lot and we're getting close to that.

Then last, but certainly not least, is therapeutics. The big problem with this virus is, it is actually much more deadly than the flu, especially for unvaccinated people. It's a pretty serious infection. If we have treatments that can turn it into something really mild, that changes the game because the day you wake up with that fever and a cough and you test, and you're positive, you call your doctor, you get a prescription for Paxlovid, it's a five-day course and you recover. Boy, it just doesn't feel like a pandemic anymore, not in the same way. But we still have work to do to make those therapeutics, enough of them, and make them widely available. If we do those things, I am pretty confident no matter what mother nature throws at us, we're going to be able to manage our way through it.

Ellen Kelsay:
That's great. I love that you mentioned all four of those and they don't seem completely insurmountable. Maybe a year ago they did, but we have made so much progress in this past year and many of those things, the President commented just recently in his State of a Union address. I want to come back to a couple of them. Maybe I'll start with the first one that you started with on vaccinations. We certainly have a number of people who have not yet received any vaccine and then there are many others who have gotten their one or two doses, and they've also gotten the booster, and are also starting to question, well, is it time for me to get the next booster or the next cycle of my annual vaccine? I think the next order of questions is, what does it mean to be vaccinated and is that changing for whom they already are vaccinated? Any thoughts on that?

Dr. Ashish Jha:
Yes, that's a very good question. Unfortunately, there's some things we know and there are places where we just don't have very good data yet, so it'll be harder to say. Let's talk about what we do know. I am very clear, based on all of the evidence and all of the data, that adults and probably kids need three doses. This is a three-dose vaccine, and I'm thinking about Moderna and Pfizer, and actually probably even a three-dose vaccine for J&J, though maybe with J&J you can get away with two. But it's a three-dose vaccine where this third dose really has to come at least 4-6 months after your second dose. What that does, is it does two things. It gives you much higher levels of antibody protection, which does wane over time, so that's the part that people worry about and do I need a fourth dose? But the second thing that three doses do for you is they really help your immune system mature in a way that they can handle the virus, and that does not wane the T-cell, B-cell maturation that you get with three doses, does not appear to wane over time. What that means in my mind is if you are three doses and let's say you're 6-7 months out, and you're worried, should I get a fourth dose? Right now, I have not seen enough evidence to suggest a fourth dose for anybody, but what I'm saying is you are still very well protected against severe disease, and that's critical. Now, it may be that for high-risk people, they need a fourth dose. It may be, and maybe even probable, that we all need an annual booster. We're going to know more about that, I think, in the weeks and months ahead, but three doses is critical and that is what gives you the protection against severe disease that matters most.

Ellen Kelsay:
I referenced the President's comments the other night and he spoke specifically about test and treat, and that really is about making testing widespread and affordable and available, to your point, but also that immediately upon testing positive, treatments in the form of therapeutics are available. You said we've made progress, but we're not fully there yet. In practical terms, are we a month out, three months out, six months out, for that being reality for most of us?

Dr. Ashish Jha:
In my mind, the number one priority are the high-risk immunocompromised people. I want to get to a point where the first group is that if you are immunocompromised, you might have gotten three or four doses of vaccines, you may still not have enough protection. When do we get to a point where every immunocompromised person can immediately get therapy? I think we're very, very close to that now. We now have enough doses of most therapeutics, but if you're immunocompromised, you can get treated. That's critical, because those are the people who obviously get really sick and can die very quickly, so making sure therapeutics are available for them. Then the next group is what I sort of think of as a higher risk group - older people, people with chronic diseases. That's a big group of Americans. We are probably several months out, so maybe by late Spring into early Summer, we'll have enough doses that anybody who's at all high risk, if they get infected, will have pretty readily available therapeutic options. It may come a little earlier than that, but probably it's not right away. For the rest of America, a healthy 35-year-old or a healthy 20-year-old, that may be more like end of Summer or Fall, is my best guess. Again, the people are working really, really hard to ramp up production of these therapeutics, but we may be still 4-6 months away from a point where anybody can walk into a CVS or a Walgreens and pick up their Paxlovid, with a doctors order. Just because these are complicated therapeutics to make and companies that are making them are going as fast as they can, but obviously also there's a global pandemic and other countries are trying to make them as well. There is a little bit of a pathway here that we have to be a bit patient, but I want to get the high-risk people covered as quickly as possible.

Ellen Kelsay:
That's actually a more encouraging timeline than I thought you're going to say. For the most risk, they are within the next few months, and then for the rest of the population late Summer, early Fall, is very reasonable, again, given all the other considerations you mentioned regarding manufacturing and production and the global distribution and supply. So, that's encouraging. That's great.

Dr. Ashish Jha:
Of course, worth remembering that if you're vaccinated and boosted and otherwise not immunocompromised, if you have a breakthrough infection, it is going to be mild anyway, so you probably don't even need therapeutics. It's really for that rare person in that category who might need therapeutics, but for vaccinated, boosted people who are not in super high-risk groups, it's not totally clear you're going to need therapeutics. I've had lots of friends who've gotten breakthrough infections with Omicron, who were kind of miserable at home for like 2-3 days and then got better. I do think that the high-risk group is the group obviously we care most about because they're the ones who tend to get sick. And I do think it's months away, certainly not years, and it's not 9-12 months, it's probably in the next few months that that group is going to be able to get what they need.

Ellen Kelsay:
I'm talking with Dr. Ashish Jha. This is a Business Group on Health podcast. We'll be back right after this short break.

Ellen Kelsay:
I would like to transition. You mentioned the global supply distribution, you know that our audience largely are global employers with employees and their family members all around the world. We also see that there's some disconnect in places like here in the United States and in other countries in the UK, they're dropping mitigation strategies and we're moving into this more positive phase, while there are other locations like Hong Kong, that's kind of implementing and putting more restrictions in place. Help us think about that from a global workforce perspective. How should employers think about taking a varied approach to supporting their employees and family members all around the world.

Dr. Ashish Jha:
It's a complicated question. The short answer is that you're going to see a lot of variations around the world. Let's kind of talk at a high level what's happening globally and then we can talk about specifics. We're making great progress on global vaccinations. About 60 some odd percent of the world has now gotten at least one shot, 10½ to almost 11 billion doses into people's arms. Really good progress. There are a couple of areas where progress has been very slow and real problems. The biggest one is the African continent. There's been vaccination rates kind of in the teens now. Moving slowly. I would say until now it's largely been a supply problem. Just not enough vaccine doses getting out to Africa. Over the next month or two I expect that to flip. If you remember back to the U.S. in early 2021, for months it was, oh my God, no one can get a vaccine. It was almost a hunger game for vaccines. Then all of a sudden, one day it flipped where there were plenty of vaccines and then it became an issue of demand. That's going to happen globally in the next couple of months. There's good news and bad news. The good news is again, production of vaccines continues and we'll have plenty. The bad news is that the demand is going to be a problem. There's a lot of vaccine misinformation that, you know, goes well beyond our own shores. Employers can do a lot in helping their employees get vaccinated in places where that misinformation is rampant and where people are not getting vaccinated. In terms of mitigation, Hong Kong, you mentioned, part of the problem right now is China has done a very good job of vaccinating its population, also lots of high vaccination rates in Hong Kong, but with the Chinese vaccines, which the best we can tell and we just don't have good data, the best we can tell is that they're not very effective against Omicron and a lot of these other variants. So you are seeing very kind of difficult, I would say almost at times, draconian measures being put in place to try to mitigate against spread in a population that's gotten vaccinated, but not necessarily with vaccines that are as effective as they need to be. You're going to see that kind of variation, because it's not just China and Hong Kong that have gotten those vaccines, parts of Latin America, parts of Africa, and those populations are potentially quite vulnerable to more surges and infections. It's a complicated picture out there and it really will vary from country to country, almost community to community. Last thing I'll say is for employers, I think the very best thing you can do, if you want to protect your workforce, is get them vaccinated and try to get them vaccinated with reasonably high-quality vaccines. They are becoming more widely available, and I think that's probably the most important strategy for keeping a healthy and productive and effective workforce.

Ellen Kelsay:
I'd love now to transition to your work at Brown University, and in particular, the study you and your team there are conducting on long COVID. I would love for you to describe the study to the audience. Who's involved, what's it about, and any insight so far?

Dr. Ashish Jha:
Yes, the long COVID initiative that we have launched here at Brown about 6 months or so ago, really driven by the fact that we could see really a large number of Americans who've gotten infected over the past 2 years, who continue to suffer pretty substantial levels of symptoms, disability from COVID. The estimates of what proportion vary a lot, I think it's probably in the kind of 10-15% range. The severity of that varies a lot. For some people it's moderate, it's annoying and difficult. For other people it's downright debilitating. We don't know a lot about either what's causing it or what we should be doing from a policy point of view. There's some very good research groups doing kind of clinical studies, studying these people, trying out

therapeutics. We decided what we really wanted to focus on was, not that clinical part necessarily, but to focus on the broader implications and the kind of policy stuff that comes out of it.

For instance, employers as they're bringing people back to work, as they're re-engaging their workforce a bit more, they're finding a lot of their employees are suffering in substantial ways. What do you do with that? How do you help employees? What are the policy changes you need? What do you need from government? What do you need from insurance companies? What do you need from the health care providers? There are just these incredibly important issues that are coming up as a part of this. So, using a combination of roundtables, expert consensus, pulling together evidence surveys, we're trying to understand both how are companies, businesses, government, health systems, how are they approaching and managing this? What are best practices and what kind of policy changes do we need to help America once we are out of this pandemic, really manage the long-term effects of all of this infection and illness that we've seen.

Ellen Kelsay:
That's such an important study. It's going to be fascinating to see the outputs and the recommendation that you all put forth. Any early indications of what some of those recommendations might be or what are you hearing from the study participants thus far as really some of the primary areas of concern and focus?

Dr. Ashish Jha:
I think part of it is we're learning that the health care system is largely, you know, sort of ill-prepared. We don't have good diagnostic codes, so you see a patient in clinic with long COVID and often people don't know how to even deal with that, how to code that, how to flag that. So, one is we need a health system that begins to really be able to shift and manage and help identify these patients. That's critical and we heard that from both a lot of providers and payers. From businesses we're hearing that they found that a lot of their employees were able to manage working from home, but as they're bringing people back to work, they're finding that a lot of people are really struggling, because of these symptoms of having to commute in and spend the day in the office. And companies, I think, are just like the rest of us, it’s not a blame thing, like all of us are just really taken back by the severity and even the frequency with which they're seeing these things. My take is, we don't want every firm, every company, to sort of wing it, try to figure this out on their own. We need to try to start providing guidance. We need guidance from the government. We need the standard tools we use in these contexts to start helping companies. My hope is over the next few months, we'll start being able to give some more concrete recommendations there. That will be important. There are all sorts of other issues that come up that I had barely thought through when we started this project. A lot of these people got infected at work. Well, what does that mean in terms of workers' compensation and those kinds of things. We have a very complex ecosystem by which we deal with these things in our country, and we've just never quite dealt with a pandemic in that context. I think a lot more coming, but what you're going to see is, I think, real action to start sort of collecting the data and becoming more systematic about these things.

Ellen Kelsay:
The few high-level things that you touched on are so critically important, and the magnitude of this is extensive on an individual, on their family, across a workforce, across a community, and a society. It will be, I'm sure, just so fascinating to see, again, the recommendations that you put forth. I imagine it's long COVID, but we are now 2 years into this pandemic, which is in the grand scheme of a virus and a pandemic situation, not “long enough,” right? It was still short time in terms of the duration of this virus that will be with us for probably many, many years to come. Do you envision that you will do subsequent phases of the study to assess what does long COVID look like 2 more years from now, 5 more years from now?

Dr. Ashish Jha:
It's obviously something we're going to have to track for a while. There are some critical questions that we can only begin to the think about now. There's a big question out there of what does long COVID look like in

vaccinated people? We think it's less, we think it's less severe, but we don't know. That work needs to be done and really sorted out and there's been very little work to really understanding this in a vaccinated population. Then tracking people over time and tracking businesses over time and figuring out how are people coping, how are companies coping, how are government policy changes helping or at times not helping? This is not a one time you do a bit of analysis, you put out reports, and then you go home. This is really work that we're going to have to do for the long run, because the implicate of this are long term.

Ellen Kelsay:
I would love to perhaps close by asking you, you touched on many glimmers of hope in some of your comments, but if you could kind of signal to the audience, what gives you the most sense of optimism as you think about the months ahead, and perhaps the year ahead, as we've been through what's been a really brutal past couple of years with lots of twists and turns and unexpected things that have come our way, as you think about your future outlook. What gives you a lot of hope and optimism?

Dr. Ashish Jha:
Thank you for asking. Pandemics have been with us, with human societies, as long as there've been humans around on this planet. They last for different lengths of time. Often, they do last for a decade, 5 years, 10 years. Typically 3-5 years is a pretty common time period where there's just a lot of infection, suffering, death. If you think about the 1918 influenza pandemic, the Spanish flu as people call it, the estimates of like 50 million people around the world, maybe more, died at a time when the world's population was much, much smaller. So, this has always been with us. Then the question is, well, what gives me hope? What gives me hope is our ability as humanity, as humans, to respond and adapt, and really it's our ability to use science. I mean, my gosh, within a year, we've developed highly effective vaccines. Within about 18 months, we had a whole host of therapeutics. Yes, it's not as fast as I would like. Yes. I'd like to have production of hundreds of millions of doses happen overnight. There's some things I'd love to go even faster, but if you take a step back and ask how have we done? On those issues, on the issues of where science has been able to respond, our response has been, I think, nothing short of fantastic. The reason that gives me hope is that, you know, we may get future variants. We very well might. We might get ones where we're going to make changes to our vaccines. That's okay. We've got the ability to do that. We've got great scientists and our capability as humanity to come together, to work out the science and data, and come up with solutions is so impressive. That makes me feel very confident that whatever mother nature throws at us, we will figure out how to manage it.

Ellen Kelsay:
Well, that's great. It really is remarkable when you look back at all the things that we have accomplished in a relatively short period of time. It is remarkable. In the moment, it doesn't feel that way, but when you do sum it up the way that you did, it is truly remarkable. To your point, we can do this. We've done it already. We can do it again, if we need to, and we likely will need to and so that sense of resilience, and that we have adapted is really important for us all to remember the next time we should get thrown another curve ball. Well, I am filled with optimism that we have people like you at the helm, advising us and doing the good work that you and your team are doing. So, Dr. Jha, thank you so much for joining us today. It was a real privilege to speak with you.

Dr. Ashish Jha:
Thank you for having me here. It was a pleasure. The last thing I will leave people with is I think it's been difficult, but I think the good news is we have all the tools to manage our way out of this and I'm very optimistic that we will.

Ellen Kelsay:
I've been speaking with Ashish Jha, Dean of the Brown University School of Public Health. Dr. Jha is leading a team of researchers studying the impact on long COVID, with a goal of translating and sharing the latest evidence, equipping employers with tools to work with impacted employees, as well as developing policy

recommendations. Dr. Jha has recently been named as the new White House COVID-19 response coordinator.

I'm Ellen Kelsey. This podcast is produced by Business Group on Health, with Connected Social Media. If you like what you heard, please consider sharing and leave us a review.