Final Hannah Newman Transcript

VC: Hello, I'm Vanessa Corwin

KK: And I'm Kathleen Kaan

VC: While many refer to "before the pandemic" when discussing Covid, the reality is that it's still very much with us. And we are now facing monkeypox and polio. To answer our questions, including some from our listeners, today's guest is Hannah Newman, Director of Infection Prevention at Lenox Hill Hospital's Department of Epidemiology in NYC. Welcome, Hannah. Thank you so much for joining us today. Let's start with Covid. Now, we're hearing a lot about Paxlovid and rebound infections. Certainly, some very high-profile people have had this, like the President and First Lady, etc. So why does this happen and if we get Covid, should we take Paxlovid?

HN: First and foremost, thank you so much for having me, it's really great to join you guys and talk about some of the things that are going on in the infectious disease world. So rebound infection is a phenomenon that we see in both treated and untreated Covid-19 patients. I really think recovery from Covid is not a linear process. There's a lot of nuances. But after the game changer anti-viral started to be used late last year we have started to notice this perplexing trend where some people who have taken the drug may recover and then the symptoms and the virus vanish only to mysteriously return two to eight days later. And what we see is that this happens in both untreated and treated people. The cause of rebound remains unclear. I think there's a lot of information we need to learn and studies that need to happen but we have but there have been some hypotheses on why this is happening. Really, experts are thinking that it's unlikely to be due to, let's say, drug resistance but more testing whether this viral replication, which was suppressed by using the drug, might bounce back when the drug vanishes from the body. It's hard to say right now, but I think what's important to note is that the CDC still recommends that those who are at risk for progressing to more severe disease or hospitalization should still get this treatment. We want to keep people out of the hospital, we want to make sure that we're preventing deaths and this is doing just that. The other thing about rebound infections is that there haven't been any severe rebounds. We might see viral levels return. Symptoms are generally mild or sometimes not even there at all. We are seeing that the rebounds are not serious.

KK: Is it possible to have covid and not know you've got it unless you test?

HN: Yeah, absolutely. Asymptomatic infection is, unfortunately, one of the ways that Covid presents. We know that breakthrough infections can occur and really the goal of vaccination is to keep people out of the hospital, keep people alive. And it's doing just that. But I think because of this it might even be more common to have milder cases or maybe cases where we don't have any symptoms at all. And in those situations, really you would need a test to know that you had Covid. So really that goes into, when should we be testing? Obviously, it's not realistic for someone to take a Covid test every single day. But certainly, if someone is experiencing symptoms that is obviously an indication for testing. If you're exposed to somebody who has had a confirmed case of Covid testing is recommended. We don't want to do it too early so that it gives time for the viral levels to be detectable but the recommendation is five days after an exposure, regardless of whether or not the person is experiencing symptoms, that would be a time to look and see if maybe it's an asymptomatic infection. And, of course, you're going to consider testing if you're going to be in contact with someone at high risk of severe disease. For example, if you go to a concert and the next weekend, you're going to see Aunt Sally who might be immunosuppressed, maybe she had cancer, she's more at risk for severe disease, that would be a good time to take a test to make sure that if there is something that's brewing, if there's an asymptomatic infection that could be passed along to the next person, we're protecting those who are more vulnerable. And, of course, we'd want to pair that with protective measures like masking, social distancing, finding well-ventilated areas to meet, all of the protective actions that we've been taking throughout the entirety of the pandemic

VC: Let's move on to long Covid now. We've been hearing more about that lately. So, what do we know about long Covid and do we know who is most at risk?

HN: Sure. And just to familiarize the audience with long Covid, this is a phenomenon you may have heard of as long hauler covid, chronic covid, post-covid conditions, long covid, etc., but basically what we're seeing is that this is a phenomenon that people continue to experience symptoms of Covid after they've been infected with the virus that are long-term effects. It can happen for weeks, months, or even years after the original infection. So, there's no magic formula to say who's going to get long Covid. You're more at risk of getting it if you've had a severe case but it happens with mild to moderate illness, with asymptomatic infections, it even happens with people who didn't even know they had Covid in the past. But in terms of who's more at risk, post-Covid conditions are more often found in people who have had severe illness, but really anyone who has been infected is at risk. I like to use the analogy of car accidents. The more you get Covid, the more at risk you are. Every time you get into a car, you are at risk of possibly getting into an accident. But if you're driving for 50 miles every day you might have more opportunity for that, right? The other population who might be at more risk of developing post-covid conditions are those who are not vaccinated as well. And again, these are populations who would be more at risk of getting Covid in the first place.

VC: Now we have a new, updated Covid booster in the works, so can you talk a little bit about that? What do we know about it, when will we be able to get it?

HN: The thing about viruses is that as a survival mechanism for a virus, its main goal is to be able to replicate and continue on. So, what happens is that a lot of times viruses will have mutations and if it makes it easier to spread and easier to survive, that is going to naturally select itself. So, this is where we get our variants, right? So, we had original Covid, we've been through delta, now we're on omicron, it's continually changing. I guess one of the positives of this is that we've seen a shift from a lower respiratory infection to a more upper respiratory infection which has kept a lot of people out of the hospital, probably saved a lot of deaths, but in this mutating the virus has somehow found a way to spread more easily and also, it's changed a bit so there's more breakthroughs from vaccination. So, basically with this new booster that's in development, it's really looking to update the booster itself to be able to account for these changes in the virus. We're hoping, there's no announced date when the vaccine will be available, we're hoping Fall, but this will be an opportunity to give a booster that will help with some of these newer variants that are evading our current vaccine strategies.

VC: Yeah, so it's updating the vaccine to be more effective against these current variants.

HN: Absolutely. You can kind of think of it like our flu vaccine, right? Every year we have a new formulation for our flu shot. So, this kind of goes in line with that.

VC: Let's move on to monkeypox. So briefly, can you just clarify how it is transmitted?

HN: Sure. So monkeypox is a virus, a DNA virus and it's transmitted a few ways, either with direct contact with a rash or sore with someone who's been infected with the virus; it can also be contact with things that are saturated with the fluids of those rashes or sores, so think clothing, bedding, other items that are used by the person that may have been contaminated by the virus and then prolonged face-to-face contact. So, in this outbreak we're really seeing the virus spread through very close intimate contact, so this could be different kinds of sex, oral, anal, vaginal sex, but also through kissing, hugging, cuddling, anything that's going to have very prolonged, direct body-to-body contact. But I want to make it really clear. This is not a sexually transmitted infection that you would think of like HIV, chlamydia or gonorrhea. We're seeing it transmit a lot with sexual activities but it's because of that very close, intimate contact where you could come in contact with infectious matter.

KK: One of the things that we are hearing, that the outbreak is that the outbreak of monkeypox is prevalent among the gay community, bisexual, men who have sex with men. This scares me a little bit to pinpoint it to the gay community because that is exactly what happened when we had AIDS and everybody else thought, "not my

problem, I'm not gay." I'm afraid that this might be happening again here. Do you have any—can you give us a little info on that?

HN: Sure. While we're seeing a majority of cases right now in the men who have sex with men community, I think it's absolutely important to stress that anybody can get this virus if they come into contact with it. Viruses do not discriminate against sex, gender, sexual orientation. And really anyone who has been in close physical contact with someone who has monkeypox can also contract this virus. It's not a gay disease. It's just happening among that community right now. You have to think about it. If you're having close contact with other people in your same community, that's how viruses spread. Sexual networks are also not fixed. You have to think back to the HIV epidemic which began in one community but just spread to other networks. It just takes one jumping over. So, I think really the takeaway here is that certainly there are higher risk activities in certain communities where we have to be super cognizant of activity and prevention measures. But it's important for all of us to be aware of the symptoms, be aware of how it's spread so that we can take healthy actions to prevent further spread of this virus until it's completely under control. Luckily, we have tools like vaccines to slow the spread. It's not like the beginning of HIV where it was brand new, even Covid when it was brand new and learning about it. We have this base of information that we can use to our advantage. The other thing, I feel like we have an advantage with monkeypox versus Covid is that an individual is actually not contagious until they are symptomatic. So, we've all been symptom-monitoring since the beginning of the pandemic to look for any signs of illness that we can stay home and isolate. I should probably talk a little bit about what those symptoms are. So, what we want people to look out for, the hallmark symptom of this disease is really the itchy or painful rash or sores. And they could look like pimples or blisters. A lot of times they begin on the face, on the hands, on the feet, but it can really be over any part of the body. We're also seeing, in the rectum, in the genital area as well. Oftentimes there can be a prodrome, or a pre-symptom that precedes the rash and usually this presents similarly to the flu, so think things like fever, sore throat a feeling of fatigue, a general feeling of malaise. If you feel off, certainly if you have any rash develop you want to get checked out by a healthcare provider, essentially get tested and take action to prevent further spread.

VC: We've been hearing about, there are some children who have been infected. How does that happen? Is it that they come into contact with these towels or bedsheets or…

HN: Yeah, so before this outbreak household transmissions was a very common phenomenon we see. It's not just intimate sexual contact. Like you said, it could be contact with contaminated items like blankets and towels. You have to think, if there's a parent, for example, you're holding your children, maybe they sleep next to each other, there's certainly a lot of opportunity for skin-to-skin contact so that could also be a potential mode of

transmission as well but again, like I said, there is an association with intimate contact for this illness but that's not the only way it can spread. We still have to be very aware of linens, anyone who is sick should be wearing a mask so that there's not that prolonged face to face contact through saliva, things of that matter.

KK: Like in Covid with the medication that's being given, once you have monkeypox, there is no medication, is there? It's the vaccine but can you have the vaccine after you've had monkeypox?

HN: So, there's a couple of different situations here. If you have been exposed to monkeypox we actually do give the vaccine as post exposure prophylactic depending on the level of exposure. So, let's say somebody who had broken skin or had their mucous membrane come into contact with a direct wound or sore, that would be a very high-risk exposure and that would probably be a case where they would have post-exposure prophylactics administered in the form of the Jynneos vaccine. If someone has been infected and they're symptomatic, it's mostly symptom monitoring, supportive care, but there has been a treatment called TPOXX, it's also available for some patients and also being able to have that pain control given that some of the lesions can be very painful.

VC: Now, we have this vaccine for monkeypox. Can you tell us who are the best candidates to receive this vaccine?

HN: Sure. The eligibility is really set by the states, by the CDC. And this may evolve as the outbreak evolves and it's also based on vaccine supply, but right now what we're trying to do is get shots in the arms of the people who are most at risk. So right now, there are a couple of eligibility requirements and people who meet all of them can now be vaccinated. And that includes gay, bisexual, other men who have sex with men, transgender, gender nonconforming or gender nonbinary folks who also have sex with men. People must be 18 or older and they must have had multiple or anonymous sex partners in the last two weeks.

VC: Now, if a person gets monkeypox and then they recover, are they immune?

HN: So, someone who has recovered from the virus generally has some protective period after recovery. I don't think we can definitively say how long that period lasts but if I were to counsel somebody who just recovered from monkeypox I would not recommend the vaccine for them. I feel that they have, at least in a short-term period, some protection there.

KK: Having a low immune system, that doesn't tie into monkeypox, does it? Because I know somebody who said, "I want the vaccine because I have problems with my immune system."

HN: Just having issues with immune suppression alone is not one of the eligibility requirements right now. If somebody who is immunosuppressed and is also in the community and participating in high-risk activities I

would certainly, even more so than someone who is immunocompetent get the vaccine but really, we're focusing on the risk factors here that I had mentioned in the eligibility requirements. And right now, those are the only people who are allowed to, given the requirements of the State and the CDC.

VC: In your view, what is the outlook for containing monkeypox at this time?

HN: We're certainly working with the city and state with the vaccines that we have available, and I really feel that this is our greatest weapon against further spread and in conjunction with awareness of symptoms and how it's spread so that we can maybe modify behavior to less risky activity that could be spreading monkeypox at this time. But what I can say is that in my health system, between Long Island and the City, we put more than 5,000 doses into arms, even more supply, there are pod locations in Manhattan and Queens, Staten Island and parts of Long Island, people are signing up, they are very eager to get their vaccine and since we've been deploying vaccines, really you look at it as a Bell curve and we're starting to see cases come down, we're kind of seeing the latter end of that Bell, and I think that's a good outlook. So, I feel very confident that we will be hopefully talking less about monkeypox in the next few weeks and months.

VC: So now, let us move on to polio which was found recently in New York City waste water and was also discovered in waste water that was tested for Covid back in April, according to news reports. Can you talk about the implications of this, what does this all mean?

HN: Wastewater surveillance is a strategy that we can use to detect levels of the virus, it's often found in stool, to give us an idea of whether or not there are active cases or transmission in a community. It's important to note that nobody's going to get polio from the water. It's really just a surveillance system where we can kind of see what's going on in a community. But we have had a confirmed case of polio north of New York City. And really what we want to focus on here is vaccination. We know that vaccines are a proven strategy to eradicate polio. We had completely eradicated polio from the United States. What we know from our confirmed case is that it occurred in an unvaccinated individual and we know right now that anybody who is not up to date with their vaccinations should do so as soon as they're eligible. If it's a younger child or if you're an adult you should certainly continue receiving that series of vaccines to prevent any further spread.

KK: Vanessa and I both assumed that we all had been vaccinated for polio in order to even begin school. Is that still true? And how did this person—I don't know if it's the law—but you said they were not vaccinated for polio.

HN: My feeling is that the risk to the general public is very low because you're absolutely right, polio immunization is part of the vaccine schedule in the United States. And actually, CDC data has shown that over

92% of US children under 24 months are vaccinated against polio. This is great coverage and I'm confident that this is a good level that we want to see to protect against any potential threat but you can find pockets of unvaccinated individuals and that's really what we worry about because it's a very contagious virus, it can spread from person to person, through contact with stool, from respiratory droplets, sneezing or coughing so it can certainly go through an unvaccinated community very quickly. There are other reports of cases of polio in the UK. I'm going to give some background here, there is what we call a type 2 polio virus and this is a polio virus that is derived from a polio vaccine that uses a live form of the virus. So, we don't use that in the United States. We use an inactivated virus in our vaccine. There are still parts of the world that deploy this type of vaccine. It could have been that that's how it started. Maybe the person was asymptomatic but you could still spread the virus through stool at that time. And then if you come into contact with an unvaccinated individual that's how you can see the virus jump from person to person. So that's a potential theory. But I think really the takeaway here is that the United States is really good at vaccinating people against polio, we might just want to take a look at communities that might not be up to date and make sure that we're getting people vaccinated as soon as possible so that we don't see further spread.

KK: One more question. Thank God we have the polio vaccine. Just because it's starting again in some communities, do you think that we would need a stronger dose of the vaccine, or the one we have is…

HN: There's no indication that our current vaccine will not be effective. I think if you completed the series as a child or even if it was a bit delayed if you're up to date with your vaccines you should feel very confident that you are protected against polio virus.

VC: So last but not least, if people want to get more information about any of these topics that we've discussed, where should they go?

HN: Sure. So, misinformation is a huge problem in the world today. I always recommend reading trusted sources that have been verified. The CDC is really the number one source of truth, if you will. The whole thing is infection-related, and they have some great pages that can give background on the diseases and what we can do in the community to protect ourselves and to protect others so I would recommend people going to CDC first and foremost. But the Health Department has some great resources. Make sure that you're actually looking at these verified sources and you're not just taking word off of Facebook and social media, because, some information can get out there that's not the best advice or may not be completely accurate. We want to make sure that we are spreading good information, spreading things that are going to help people.

VC: Hannah, thank you so much. This is great information and I think it's going to help a lot of people out there.

HN: Thank you. It's really been a pleasure talking to you guys. I really appreciate your having me on here and giving me a platform to give out some information on these very relevant viruses right now.