TWiV 1326 Clinical Update

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Vincent Racaniello: *This Week in Virology*, the podcast about viruses, the kind that make you sick.

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From *MicrobeTV*, this is *TWiV. This Week in Virology*, Episode 1326, recorded on the 28th of May, 2026. I'm Vincent Racaniello, and you're listening to the podcast all *a*bout viruses. Joining me today from New York, Daniel Griffin.

Daniel Griffin: Hello, everyone.

VR: Looks like Daniel has viruses on his bow tie, doesn't it?

DG: Yes.

VR: Are they icosahedral?

DG: They're supposed to be, I guess I'm trying to see myself in the thing, they're supposed to be HIV. What do you think? I don't know if you can zoom in close enough to see.

VR: Yes, I don't know about that.

DG: They're just round blobs, basically.

VR All right.

DG: All right. An artist's rendition.

VR: Yes, exactly.

DG All right. Let's jump into it. I just changed the quotation at the last second. I thought it was appropriate. Hello, everyone. Here's our quotation. "People don't care how much you know until they know how much you care." I think we're trying to give a human face to virologists, clinicians, scientists, so keep trying to do that. We do, we care, right, Vincent?

VR: Yes. Maya Angelou had some kind of saying like that. People will forget what you did, what you said, but they will never forget that you cared.

DG: How you made them feel.

VR: How you made them feel, right.

DG: She's great.

VR: You know that one, huh?

DG: Yes, that's an excellent one. Hopefully, people will remember how we make them feel. This is a labor of love, and we're doing this to try to keep people informed, try to keep people safe, try to help people have the information they need to make good decisions. The first one I wanted to start off with is actually malaria. That's not a virus, by the way, but it seemed to be along the lines of what happens when we let public health fall apart like we're seeing with measles and so many other things.

In the malaria section, we have the CDC operational guidance for investigating locally acquired mosquito-transmitted malaria, United States, 2026, during 2023. People may remember the news a little bit, 10 cases of locally acquired mosquito-transmitted autochthonous malaria. This is malaria spreading here in the U.S., not just cases coming in. These locally spread cases were reported to CDC from four U.S. states over a 20-year period with no autochthonous cases. 20 years, none of this, and then we have these cases.

These cases highlight that although the United States eliminated malaria transmission in the early 1950s, we're susceptible to malaria reintroduction. Local transmission of malaria in the United States is a significant public health concern because the majority of U.S. residents lack protective immunity against malaria, rendering a person susceptible to severe illness and death of infected. Mosquitoes capable of transmitting malaria are present across most of the United States.

VR: That's *Aedes aegypti*? No, not necessarily.

DG: *Anopheles*.

VR: *Anopheles*, that's right.

DG: Just a warning. We're going to get to measles, which we keep seeing more and more cases. You let public health fall apart, and measles, polio, malaria, oh my gosh, what kind of a country are we headed towards? All right, mpox. I thought our longtime listeners would enjoy this article. We're still moving ahead and making an advantage, and this is the article, "Performance of Five Mpox Antigen-based Rapid Diagnostic Tests Tested on Lesion Swabs in Patients with Suspected Mpox from the Kinshasa Province of DR Congo: A Diagnostic Accuracy Study," published in *Lancet Infectious Diseases*.

Basically, here what we're doing is they're looking at a number of these rapid antigen tests, the RDTs, remember those from, well, you shouldn't have to remember them. We're still using them for COVID and flu and the rest.

VR: RADTs.

DG: [laughs] Here we actually get a comparison of these rapid tests. The best-performing assay was from the Guangdong Wesail Biotech, sensitivity of 77%, specificity 93.5, and they give us some reports on some of the other tests as well. I was like, that's great, but what about CT values? What about when it's rip-roaring? Because we would expect it to be a variation. You can see that when we have CT values less than 20, so it comes up pretty quick, we have more sensitivity, as it takes longer and longer for that PCR to pick it up. Just

really encouraging to see these rapid tests being developed and validated for mpox.

VR: Some of these companies have really poor results compared to the others.

DG: Oh my gosh, yes, that's really true.

VR: Interesting, not all rapid antigen tests are created equal.

DG: The NG Biotech, for instance, that's down there.

VR: Horrible.

DG: Maybe 39% sensitive.

VR: What does sensitivity mean? That 39 out of 100 times it will get it right?

DG: Yes, that's probably it. We'll pick it up if it's there. The sensitivity is your ability to find it if it's there. Your specificity is when you find it, what percent of the time are you actually right? I think that's it.

VR: Yes, so you're not picking up and something else.

DG: Yes, like, "Oh my gosh, you get mpox." You're like, well, with a specificity of 10%, meaning 90% of the time you're wrong. [crosstalk]

VR: Sensitivity of 77% and specificity of 93%. The specificity is higher, that's good, but the sensitivity I don't know, even 77%.

DG: Yes, you want more than 77. Think of this as a point-of-care test. If it's positive, it's positive 94% of the time or higher with most of these assays. If it's negative, you might miss it a quarter of the time, so you do want to go ahead and wait for that PCR. It allows you to quickly figure out what's going on. All right, hantavirus. We've got these dashboards, and I had a bunch of dashboards. A lot of them aren't really being updated anymore.

The most current we get from CIDRAP is the outbreak now has 13 cases, three of which were fatal, so there's another positive case. Several passengers remain in isolation, quarantined in various countries, including 18 Americans who are staying in a bio-containment unit in Nebraska through the end of the month. This is an issue. Forty-two-day incubation period, so six weeks just waiting around to see.

VR: I guess it doesn't matter that it's Nebraska. It could be anywhere. A containment unit is still bad.

DG: It's not a pleasant place to have to spend a lot of time. It doesn't matter that it's Nebraska. I don't know. I'm trying to word that in such a way where I'm not dissing Nebraska. Nebraska is fine. [laughs]

VR: Yes, I know. I'm just saying it doesn't matter because you're inside. You can't get out.

DG: You can be anywhere. Yes, you can be in Hawaii. I'm just going to leave a link into the correspondence, “Andes Hantavirus Outbreak on a Cruise Ship, 2026,” published in *The New England Journal of Medicine*. The tough thing about it is you really need up-to-date on what's going on, but I think it's consistent with what we were saying, is that this is not the

next pandemic. This is not COVID-19. This does transmit person to person, but we're not anticipating this to go rip-roaring through the population.

VR: All the known positives now are isolated, and so it should not transmit to anyone else.

DG: That's really true. There was one issue. I don't know how true it was, but in one of the quarantine areas where people were waiting out their time, they were dining in a communal area, and then somebody got symptomatic and tested positive, and then they had to reset the clock. I understand they're all isolated, but oh, my gosh.

All right, Ebola. That's the big news right now. We do have an Ebola tracker, which is not really up-to-date because if you're looking at updates from the WHO, we're seeing probably over 200 deaths already. We're seeing over 1,000 infected, but let's go through a little bit about what's going on here.

I'm going to start a little bit with how are we responding in the U.S.? What is the U.S. CDC doing? We read that the, "U.S. CDC Seeks Staff for Ebola Screening as Outbreak Response Expands." CDC Acting Director Jay Bhattacharya said in this email that the agency had activated a Level 2 emergency response on May 18th to this outbreak of the Bundibugyo strain of the Ebola virus in the Democratic Republic of the Congo and Uganda, and was expanding recruitment beyond its usual emergency responder pool as screening of selected international arrivals ramps up.

Level 2, it's an intermediate level of emergency response. It indicates a need for substantial additional staffing to meet the response demands. CDC said enhanced screening operations are already underway at several port health stations and will require additional personnel. They're licensed medical providers. We've got public health advisors, emergency specialists, and volunteers. They're calling for volunteers to be tasked with monitoring incoming travelers for signs of illness, checking temperatures, referring suspected cases for further assessment. Just to give people a sense of what's happening here in the U.S. Let's say you're in Uganda and you're trying to fly home and you're a U.S. citizen, you'll be routed to one of three airports. Let's say you were doing that direct flight to JFK, that's not going to happen.

You're going to come to DC or Atlanta or Houston, and then you're going to be screened and evaluated, and then sent off to wherever you're going to be sent off in the U.S. They're getting a little stricter. It's clearly U.S. citizens can come back, but they're limiting non-U.S. citizens. It sounds like now also green cards, visa holders, there may be some travel restrictions here. Here's, I think, the thing that has people a little bit confused, is that we read in *The New York Times*, "Trump Administration to Send Americans Exposed to Ebola to Kenya."

I think, Vincent, I always, when they say Trump administration, you know that there's some bent to their view on what's going on. This is *New York Times*. In past outbreaks, Americans exposed to the virus were sent home to be treated in state-of-the-art facilities. The Trump administration has already flown some U.S. citizens to Europe for treatment. I'm going to share an excerpt from this article by Apoorva Mandavilli and Zolan Kanno-Youngs.

"We know that their chances of getting through an Ebola infection would be higher in specialized units that have been designed to care for them," said Tom Inglesby, the director of the Johns Hopkins Center for Health Security at the Bloomberg School of Public Health. United States has multiple facilities with state-of-the-art resources for monitoring and

treating people with dangerous diseases, including Ebola. These include a unit in Omaha, Nebraska, where 18 Americans are under observation for hantavirus. Dr. Inglesby said he was particularly surprised by the plan to not repatriate public health service officers back to the U.S. for treatment.

"We have a strong ethical commitment to care for them with the best possible care in the U.S.," he said. “While the facility in Kenya may be better than those in Congo, it is unlikely to match the sophistication of those established in the United States for Ebola and other dangerous pathogens,” according to Dr. Craig Spencer, a public health expert at Brown University. “I find it hard to believe that they're going to be able to stand up in the span of a couple days or even months a similar system that has been created over the past decade to do exactly this," Dr. Spencer said.

VR: What you said before is you said the Americans are coming into Dallas or whatever. They're not, actually.

DG: Well, if you were there and you're like, "Oh my gosh, I got to get home," you're going to go that way. If you actually have Ebola, if you're infected, if you're sick, then they're not bringing you back. It used to be like if you came to JFK or you came through here, you might end up at NYU. They've got a state-of-the-art facility there. You might end up at Omaha. Now here, it's like if you have Ebola, it looks like one American ended up in Germany, others, you'll head to Kenya.

VR: This is ridiculous. We have the state-of-the-art facilities, as they say in this article. We spent hundreds of millions of dollars to build them. They used them in the 2015, or I guess it was built after the 2015 outbreak. Why aren't they using them? What's the problem, and who's made this decision? Bhattacharya, RFK Jr., who?

DG: I think it's this concept of, and they like to say, there's no cases of Ebola on U.S. soil.

VR: There were before. What's the big deal?

DG: It was fine. We can deal with it. Again, as we saw with hantavirus, if you know what you're doing and you follow the protocols, this is not something that gets out of the facilities. This is not something that needs to scare people here in the U.S. These are people over there risking their lives, trying to take care of people, trying to do the right thing.

VR: As Inglesby said, we have an ethical commitment to care for them in the U.S. They're Americans. Germany is probably fine.

DG: They're some of the best of us actually.

VR: Kenya is not going to have the same kind of facilities. People should be outraged at this. If you were there and you got sick, you'd want to come home and be treated. I sure would.

DG: Yes, very much appropriate. The quotes from Craig Spencer, who actually, in the last big West African outbreak, he got infected. He ended up back here in the U.S., taken care of here in the U.S., got excellent care. Look, now he's left Columbia and he's over there at Brown. All right. Also, we've got the article, “Vaccine Experts Debate Options to Combat Outbreak of Unusual Ebola Strain,” published in *Science*. I thought this was really interesting because a lot of people are like, "Oh, Ebola. We know about Ebola." It's the same issue with

hantavirus. It's not just one hantavirus. It's not just one Ebola.

The Ebola vaccine that worked in 2014 has since helped derail several outbreaks, but it has proved itself only against the Zaire species of the virus, one of four that's sick in humans. There are three others. The one we're dealing with right now, we're just going to call it the BDBV.

VR: You don't want to say it, Bundibugyo.

DG: Bundibugyo. [chuckles] OK we'll say Bundibugyo. Actually, maybe that's easier than BDBV.

VR: Yes, it is.

DG: Sudan and Taï Forest. We've got these four. All the vaccines feature the surface protein or spike of Ebola viruses. One study, I'll leave a link into it, tested an early version of the Ebola Zaire vaccine, which incorporates the gene for Zaire spike into harmless vesicular stomatitis virus, VSV. Really limited success. It did protect three or four monkeys from death when intentionally infected or challenged with the Bundibugyo Ebola virus. They all became ill. They all had viremia. They were all, we felt, able to transmit virus to others. I'll leave in a link here.

Scientists weren't particularly surprised that this Zaire vaccine only partially worked, given that the genes encoding the Zaire and Bundibugyo spikes differ in their sequence by about, you ready for this, 30%. That's a lot. A later experiment testing a spike-bearing VSV that was a better match, this one actually worked quite a bit better, as you would predict. No disease, no viremia, no nothing. I'll leave a link into that. That was published in *PLOS Neglected Tropical Disease*. There's currently no clinical-grade supply of any vaccine. Here we are, like, "Oh, this would be a great time to test out these vaccines, but there's no supply." I'll leave in a link to that.

Now, a research group at the University of Oxford in January received an award worth up to $26.7 million from the European Union and the nonprofit Coalition for Epidemic Preparedness to develop vaccines against Bundibugyo and several other filoviruses. The Oxford researchers have teamed up with Moderna to make mRNA vaccines and the Serum Institute of India to put this particular spike gene into a chimpanzee adenovirus. Sound familiar, right? Like ChAdOx.

VR: The problem is that there were only two previous outbreaks of Bundibugyo virus, so they said, "We don't have to make a vaccine." Now they're going to do it, because this is a big one. This is really going to be a huge problem.

DG: Unfortunately, yes. Unfortunately, as we pointed out, the WHO has said there's already at least 220 deaths. There's over 1,000 people infected. Why is this out of control and why weren't we prepared? I think that's what a lot of people are asking. The idea is we were expecting this. It was a matter of time before it was going to happen. We had realized that. There was this article, “These Researchers Would Be in Africa Fighting Ebola, But Trump Cut Their Funding.” I think Elon cut their funding.

Anyway, the Centers for Research in Emerging Infectious Diseases was launched during the COVID-19 pandemic. The group lost its funding under Trump in part due to conspiracy

theories. Established in 2020 by the NIH, the Centers for Research in Emerging Infectious Diseases, do you love their acronym, CREID. It's a terrible acronym. That's probably why they got their funding cut. They didn't have good marketing. The CREID network was conducting research into viruses that emerge from wildlife and spill over to people, including the family of viruses that Ebola belongs to.

The network operated 10 sites around the world where these types of disease outbreaks are likely to occur, including in Central and East Africa. They were also researching something called hantavirus. NIH provided CREID with approximately $82 million in funding, over five years, and its funding was up for renewal in 2025, but what do you think happened? In June, the Centers received a stop-work order stating that their research had been deemed unsafe for Americans and not a good use of taxpayer funding.

VR: This is BS.

DG: That the agency's priorities no longer supported the network.

VR: This is just lies. This is stupid. Conspiracy theories. This is the danger of conspiracy theories about COVID and other viruses, that you don't have these centers that you need when you need them most. This is disgusting, and this administration is just ignorant in all of its scientific and public health policies. Unbelievable.

DG: Yes. I know people think it's fun to discuss these conspiracy theories, but this is the consequence. Here we are, hundreds of people are dead already, and we expect that to be climbing. The USAID and all the surveillance and everything that should have prevented this from getting to this point, that should have nipped it in the bud, that was all shut down. It's really interesting if you're able to stomach listening to Elon talk about when he's making these cuts. It seems his logic is that if we save all this money and we're really rich, really rich people can do things quickly.

VR: Just nonsense.

DG: That's very odd. You don't have to be prepared, Vincent. You just have to be rich.

VR: People, you should be upset, folks, because this is just totally unjustified and it's going to get worse.

DG: Yes, unfortunately. We'll keep everyone updated, but yes, this is a disaster. All right. Measles, it's interesting. Measles, the cases keep going up. We're over 2,000. There were another two, three dozen this last counted week, so we're up to 2,033. I keep seeing these comments, like, "You said there was going to be a lot of measles cases, and look." I'm like, "Yes, and look." [laughs] I'm not sure what they're trying to say.

VR: There are a lot of measles. It's May. It's the end of May, and we're already almost to what we were in all of last year.

DG: Yes, 2,242 last year. We're going to blow by that. All right. Not only are there numbers, but a qualitative, what happens to these people? This whole idea, it's no big deal. It's like *The Brady Bunch*. Now, in the *MMWR*, we have, “Characteristics of Patients Hospitalized with Measles During an Outbreak, West Texas, January to March 2025.” Now, last January, so January 29, 2025, the Texas Department of State Health Services Public Health Region 1

was notified by the South Plains Public Health District of a case of measles in an unvaccinated school-aged child.

During January 20 to March 18, 2025, a total of 325 confirmed measles cases were reported. 18.5%, so 60 little kids, were hospitalized. Available medical records for 52 of the hospitalized patients were reviewed. Over 90% were less than 18. About 89%, you're ready for this, no underlying medical conditions. These are young, healthy, perfectly fine kids. If they'd been vaccinated, this wouldn't have happened. All these kids in the hospital. All of the 54 were unvaccinated or unknown vaccinated status. No known vaccinated kids ended up in the hospital.

Hospitalized patients were admitted for a median of two days, but a range, some kids were in there up to 20 days, and many experienced complications. Remember, it's, "Oh, we're just keeping them there to isolate them." No. 72% had pneumonia. 46% were dehydrated. One ended up with hepatitis. One ended up with febrile seizures. 70% required supplemental oxygen to breathe. 7% were admitted to an ICU. A couple required intubation and mechanical ventilation, and one of them died, one of the hospitalized kids died. Not only are we seeing numbers and numbers, but this is what it actually means on an individual basis.

VR: I'm happy that MMR published this, *MMWR* published this.

DG: It's great that this is actually, you would have worried that this stuff would have been squashed and suppressed.

VR: Suppressed, yes.

DG: We're out of the flu season, but we're still counting the number of children that died this last season, and our tally is up to 172 children. As we know, about half of those kids were completely healthy before this, and over 90% were unvaccinated. All right. Also out of the RSV season for now, which is nice and very encouraging news on COVID. This is really, I think, the lowest wastewater levels that we've seen for years. Look at how good that is.

VR: Yes, it's right down there. You could look at the graph, which goes back to ‘26, ‘24, and it's lower than that. What's the reason for this immunity, you think?

DG: There seems to be this seasonal variation where we get a lot of it, and then I think there's this immunity, and then it goes down. Unfortunately, we're probably going to start seeing cases in the South and Florida, this pattern. Then by July, August, it'll start to come up. That's what we anticipate. We'll keep an eye on that going forward. We're already hearing discussion, and pretty soon we'll hear about the next batch of COVID vaccine. The FDA advisors are weighing, updating the COVID vaccines to target the XFG or the stratus variant, NB1.8.1.

VR: Just rolls off the tongue, doesn't it?

DG: (Laughter) It does. All right. I'm going to wrap us up here with a Long COVID paper. It's really interesting. This is out of a group up at Yale, and it's, “A Causal Link Between Autoantibodies and Neurological Symptoms in Long COVID,” published in *Cell*. I was surprised because this is a group that previously has done these screening for autoantibodies and did not actually seem to find anything, but now they do a different

approach. We know that acute SARS-CoV-2 infection triggers the *de novo* production of diverse, functional autoantibodies, these AABs, we're just going to call them autoantibodies.

You can't call them functional autoantibodies because then they'd be FAABs, and that would confuse everyone in the immunology field. Maybe that's an inside immunology joke. Anyway, OK. These functional autoantibodies remain elevated in long COVID, but we're not really clear. Are they causing any issues, any pathology? They go and they use tissue-based immunofluorescence, they use ELISA, human protein arrays, mass spec assays, and they identify a broad range of these autoantibodies and the autoantibody targets among individuals with Long COVID.

Individuals with neurocognitive symptoms showed increased autoantibodies against central nervous system and peripheral nervous system proteins. Purified IgG from these folks reacted with human locus coeruleus, thalamus, adrenal gland, thyroid, and cross-reacted with mouse sciatic nerve and meninges. Now, the CNS reactive autoantibodies correlated with several neurological symptoms. Now they go ahead.

The MED-20 targeting IgG from patients with Long COVID showed enhanced body-dependent phagocytosis. This is what I thought was the most interesting. They go ahead and they do this passive transfer experiment where they put the IgG from individuals with Long COVID into mice. This induced fatigue-like behavior, loss of balance coordination, thermal hyperalgesia, small fiber nerve damage, and increased pain-related neuronal activity, really recapitulating some of the patients' symptoms. This, I think, opens up the potential that targeting these autoantibodies might offer therapeutic benefits for this particular Long COVID subgroup.

VR: What would you do? Do an anti-B cell therapy like rituximab or something like that?

DG: I think that would be the easiest to think about. Anti-B cell, anti-plasma cell, targeting of them. Then maybe even something more specific like a CAR-T therapy where you specifically knock out these autoantibodies. You create these chimeric antigen receptor T cells that are specifically, because you hate to knock out all the B cells, all the plasma, all the antibodies.

VR: Sure.

DG: Ideally, if you can target these specific auto-antibody-producing cells.

VR: Yes, but they do in some diseases. MS used. It's not unheard of. Targeting may be a little more difficult.

DG: The other stuff's off the shelf, rituximab and some of these other options.

VR: That has not been tested for Long COVID, has it?

DG: Not that I'm aware of, but you see something like this, it makes you think that that would be a reasonable trial.

VR: This would be a justification for that trial, yes.

DG: All right. No one is safe until everyone is safe. Not sure why people think that's fear-mongering, but it's true. We are doing everything we can here now for May through July.

We're doing our FIMRC fundraiser. They're in Uganda. They really need our help right now. Now's a great time to step up if you're saying, "What can I do to help?" These folks are on the ground. They're in Uganda. We are doubling your donations up to a maximum donation of $10,000. Go to parasiteswithoutborders.com. Click on the donate button. Now is really a great time to step up and help these folks.

VR: Anyway.

DG: Tell me, Vincent. Tell me, Vincent.

VR: I forgot what I was going to say. Anyway, oh, this is a short one. We only have four emails, so step up the emails, folks. Ask us questions. We're here for you.

DG: It's sailing season, Vincent. They know that I've got to go out.

VR: Maybe that's it. All right. It's time for your questions for Daniel. You can send yours to daniel@microbe.tv. Damian writes, “My friend's mother has been volunteering as an OB/GYN, helping with deliveries in Uganda in what is now the Ebola zone. She's been told by CDC to evacuate. Do you have any resources that can help simplify the logistics of her leaving the country through the approved connecting airports, et cetera? For context, this is a woman who stayed too late in New Orleans during Hurricane Katrina to oversee a delivery there, and she is making the same vague noises again about trying to coordinate with Delta, but also maybe having to hunker down if she gets waylaid.

We're hoping that a clear exit plan and/or someone or something to help her coordinate might be enough to prod her into action before things get even worse. Anywhere you could direct us would be greatly appreciated.”

DG: All right. Damian, fortunately, we mentioned this a little bit earlier. There's going to be three places that a person who is asymptomatic but just has been in the zone, in harm's way, so to speak, can fly back into the country. That's going to be Washington, DC. That's going to be Atlanta. That's going to be Houston. Really, at this point, it's still a matter of jumping on a commercial flight, coordinating with Delta like that, to get back. It depends where she is, too. If she's in Uganda, sometimes crossing over into Kenya, getting to Nairobi, and going that way is another way.

Otherwise, Entebbe, the big international airport there in Uganda is right outside of Kampala. We've got cases. We had a death in Kampala. It really depends where she is, whether or not it makes sense just to move to a neighboring country and then go from there.

VR: Remember, if you're not symptomatic with Ebola, you are not shedding, typically.

DG: Yes. This is a disease that you transmit to others when you're sick.

VR: Right. Jim writes, “With the recent death, apparently from pneumonia-related sepsis, of 41-year-old NASCAR racing star Kyle Busch, should 40-year-olds consider discussing with their doctor getting the pneumonia vaccine prior to turning 50? I understand the age for the vaccine was lowered from 65 to 50 a couple of years ago because of the risks of pneumonia to the 50-plus age group. What would be the downside of getting the shot in your 40s instead of when you turn 50?

DG: This has been in the news a lot. A lot of people have been, 41-year-old, really healthy. These drivers just go through incredible physical training. It gets up to 110 degrees in there. He got 3 or 4 Gs. Here's a guy who, what we're hearing is he was actually sick for quite a while, ended up getting pneumonia, ended up getting septic, and unfortunately, he passed. The pneumonia vaccine, we think of it as a vaccine against a disease, but it's really the *pneumococcus,* the Strept pneumo vaccine. It potentially protects against Strept pneumo, but not all types of pneumonia. What will be the issue about moving that to 40 instead of 50? It's really a question of studying it and looking at, is there a risk-benefit? There's no reason to think it wouldn't provide protection, but it's one of those things you've got to look at because you get it in your 40s. When would you do additional shots going forward?

VR: All right. I remembered what I wanted to say before. You say, no one is safe until everyone is safe. Some people say you're fear-mongering. No, you're being kind. You want everyone to be safe. It's not fear-mongering. You're being kind that you want to take care of everyone.

DG: Yes. It's also the issue that when other people get sick, then they can make you sick. There's even like a self-serving circle to it all.

VR: Yes. That's absolutely the other thing. Kindness, compassion. Can we show that, folks, for other people? I know that our leadership is not kind and compassionate, but that doesn't mean you have to emulate them.

Bistra writes," Thank you for the useful information and reviews you provide every week. It's a fantastic public service. I have a question about traveling to Dar es Salaam in Tanzania at the end of June for a large African health conference. I'm wondering how worried I should be about the Ebola outbreak in DRC and Uganda affecting Tanzania. I know Tanzan - is it TanzaNIa or TanZEnia?

DG: I always call it TanzaNIa, but I'm not sure. It'd be nice to know what do the local people call it.

VR: All right. Tanzania. I know Tanzania has not reported any cases. If I were just traveling there to meet with our local partners, I would not be too worried. The meeting will bring people from all WHO African region countries, and many will be healthcare workers. What do you think is the risk for Ebola spread with this type of gathering? If the meeting is not canceled and I decide to go, what are the measures one should take in these circumstances to prevent Ebola infection? I'm sorry for these naive questions, but I've never had to consider this before.

DG: No, Bistra, these are not naive questions. These are excellent questions. It really goes to how is the virus transmitted. First thing with Ebola is it's transmitted from symptomatic people. We learned with COVID-19, a lot of people learned that that's not always the case. Sometimes people are transmitting in a pre-symptomatic or an asymptomatic state. Ebola historically is something where you're symptomatic, or you've died and then we get transmission. Also tends to be a contact unless someone's vomiting and somehow aerosolizing in that context.

A meeting like this, we've got people who are at the conference. You notice someone who's sick and sweating and not looking well, OK, don't go over and shake their hand and give them a hug and be in direct contact with them. No, this is a situation where they'll be

looking at what's going on in the ground. These are not naive questions. At this point, I don't think this would be a high-risk issue, but we'll see as it gets closer to the time of the event.

VR: John writes, I've read that Sanofi is now handling the Novavax vaccine. Do you know whether it is labeled Sanofi now or still Novavax? When I asked at my pharmacy whether they had Novavax COVID this year, they didn't, but if it's labeled Sanofi, I don't expect them to understand that they're the same thing. Either way, is there a revised protein-based COVID shot for spring 2026? John, is William and Mary, '71. Congratulations to your daughter.

DG: Oh, that's fantastic. William and Mary, '71. John, this is a marketing issue for everybody involved. Everyone would go and say, "Oh, I want the Novavax." The Novavax is the company, and the vaccine was the Nuvaxovid. People would be upset. "I want the Novavax. I don't want this Nuvaxovid." I have to write it down because it's like, "How am I supposed to remember that?" They do need to rename it.

That's it. The brand name of the product is Nuvaxovid. You ask for Nuvaxovid, if you could remember that tongue-twister. That was even what people had to do this last year. My understanding is not only is Sanofi going to keep this horrible name, the Nuvaxovid, but my understanding is they may have already started production, anticipating based upon what we heard from the Europeans and WHO, this updated stratus variant.

VR: Yes, you remember that, but not the real name, right?

DG: [laughs] No.

VR: All right. That's a really bad name, Nuvaxovid.

DG Yes, right?

VR: If someone says, how do you pronounce it? Whatever you want, because it's made up. It doesn't matter.

DG: Yes, it's random.

VR: That's *TWiV* weekly clinical update with Dr. Daniel Griffin. Thank you, Daniel.

DG: Oh, thank you. Everyone, be safe.

[music]

[00:39:04] [END OF AUDIO]