March 6, 2024 / Why measles is back

[HALF SECOND OF SILENCE]

[BILLBOARD]

SCORING IN Hanna, BMC

HALEEMA SHAH (Guest host): Measles was declared eliminated in the United States over 20 years ago. But today, there are cases popping up around the country.

*<CLIP> GOOD MORNING AMERICA:*

*This morning, measles cases on the rise in South Florida… at Manatee Bay Elementary school near Fort Lauderdale….*

HALEEMA: Most Americans were vaccinated against it as kids. That’s the good news. The bad news is that it’s really easy to catch if you weren’t.

<TAPE> KATELYN JETELINA: Measles is one of the most, if not the most, contagious, infectious disease on earth.

HALEEMA: And the number of people opting out of common vaccines is growing.

KATELYN: It's concerning to me that especially in this post pandemic world that we are allowing our response to infectious diseases to be a choose your own adventure type of approach, rather than using decades of standards of practice.

HALEEMA: Coming up, a new resurgence of an old disease, and how Florida became the center of another outbreak.

[THEME]

HALEEMA: It’s Today, Explained. I’m Haleema Shah filling in as host today. 41 cases of measles were reported so far across the United States. Florida is in the lead with 10 of them. But the case numbers aren’t the only reason Florida’s measles outbreak is in the spotlight…it’s the state’s unusual response to it. We reached out to Caroline Catherman to explain what’s going on. She’s a health reporter at the Orlando Sentinel.

CAROLINE: Florida's a really wild state to be a health reporter.

HALEEMA: I asked her how the measles outbreak started in Florida.

CAROLINE: That began a few weeks ago, when a kid at an elementary school in South Florida tested positive for measles, despite having no history of travel.

*<CLIP> WPGL: Parents say they found out Thursday night by email.*

*PARENT: It said that a field trip was canceled because of a confirmed case of measles. So when I saw confirmed, I was like, wait, what?*

CAROLINE: The outbreak spread pretty quickly among other kids in the school.

*<CLIP> CBS MIAMI: We are at Manatee Bay Elementary in Weston, where there are now five confirmed cases of measles.*

*<CLIP> MSNBC: 8 percent of kindergartners in that county are not vaccinated for measles according to state data.*

CAROLINE: At this point, a few people, you know outside the school have contracted it,

*<CLIP> WPGL: A 10th case has been reported in the state. It is a travel related case in an adult that was reported in Polk County. Now, the other nine cases you probably know are in Broward County, seven of those linked to Manatee Bay Elementary School in Weston….*

HALEEMA: Now, after going through the Covid pandemic, when the numbers, the case numbers were in the thousands, ten can sound like a small number, can you talk about why that's such a significant number?

CAROLINE: Measles is a serious, highly contagious airborne disease that is characterized by a rash and also often comes with a fever, a dry cough, and a runny nose.

SCORING IN Because we care, BMC

*<CLIP> CSPAN:*

*Mission, Measles: Physicians today know that measles is more than a nuisance. It can bring on bacterial infections, can cause fatal pneumonia and in some cases and so colitis, inflammation of the brain. Each case needs good medical care…*

CAROLINE: It is almost completely preventable by vaccination, vaccination prevents 97% of cases. Measles is also incredibly infectious, even more infectious than Covid. So if someone is unvaccinated and they're exposed to someone with measles, they have about a 90% chance of catching it. The really scary thing about measles is it comes with all of these potentially serious and fatal side effects. So 1 in 1000 will get encephalitis, which is this, you know, brain swelling that can lead to serious permanent effects. I think 1 to 3 out of a thousand people are going to die from measles. And it's just a really scary disease.

SCORING OUT

HALEEMA: How did the Florida Department of Health respond to this outbreak?

CAROLINE: The Florida Surgeon General sent a letter to parents at the school essentially saying that though the typical recommendation is to stay home for 3 weeks, unvaccinated kids can go to school if their parents are comfortable with it.

*<TAPE> TEX PRODUCER:*

*Florida DOH letter: Due to the high immunity rate in the community, as well as the burden of the families and educational cost of healthy children missing school, DOH is deferring to parents or guardians to make this decision about school attendance.*

CAROLINE: He did not urge parents to vaccinate unvaccinated kids. The Florida Department of Health has, however, been offering measles vaccines at Manatee Bay elementary since the outbreak began.

HALEEMA: What do we know about this particular Surgeon General? Is this unusual for him?

CAROLINE: He was appointed to the position during the Covid pandemic after being a very outspoken critic against the Covid vaccine.

*<CLIP> ONE&ONLY:*

*FL Surgeon General Joseph Lapado: One of the things that we’ve lost sight of during this pandemic and really far in the rear view mirror is choice and this has actually been a cornerstone of public health.*

CAROLINE: I would say that he is one of the most influential and honestly, probably the most credentialed voices in the movement against the Covid vaccine. He’s Harvard educated, was at UCLA until Governor Ron DeSantis appointed him our state surgeon general. And he's a big proponent of natural immunity, of just letting the virus, you know, wash over the population. And he has just been incredibly skeptical of the Covid vaccine, despite overwhelming evidence that it is safe and it is effective. In his role as the surgeon general, he has gone on the campaign trail when our governor was running for president, he's attracted a lot of criticism. I know after this measles incident, U.S. Rep Debbie Wasserman Schultz called for his resignation.

*<CLIP> Rep Debbie Wasserman Schultz: Our state leaders are failing us on this front. Surgeon General Ladapo needs to go.*

CAROLINE: He's gotten a lot of negative feedback from the health community and others.

HALEEMA: So this highly credentialed, Harvard educated medical professional is questioning the Covid vaccine. And it’s obviously not sitting well with other members of the public health community, but I wonder how parents and schools are reacting to him.

CAROLINE: I feel like it is a mixed bag. I mean, I think there's definitely parents who believe that vaccines fall under parental rights, and that is something that should be left up for them to decide for their children. But I also have talked with parents who are concerned for their children's health.

*<CLIP> WRAL: Manatee Bay Elementary mother: It makes me a little concerned… so my daughter is fully vaccinated but my son can’t get his second one until he’s 4 and he’s high risk for a lot of other issues…*

CAROLINE: There are some kids who can't get vaccinated because they are allergic to the ingredients in vaccines, or kids who are immunocompromised, and vaccines don't work as well for them. And a lot of parents are very afraid for their kids and afraid of the implications of not encouraging vaccines.

HALEEMA: It also occurs to me, Caroline, that parents have had to deal a lot with schools being in lockdown, with their kids being at home, with struggling to find childcare. Is any of that, is any of the struggle of Covid-19 influencing how parents are seeing this particular situation?

CAROLINE: The state surgeon general has made concerns about kids staying home from school, you know, a big part of his vaccine hesitancy. In his letter, where he said parents could decide whether to keep their kids home from school. He referenced the impacts on social and educational development that keeping kids home from school for three weeks would potentially cause. So I, you know, obviously kids staying home from school really set a lot of kids back.

*<CLIP> ABC 7 CHICAGO:*

*Manatee Elementary Parent: I think the education value is still there with them returning the school. You know we already had a massive time away from school with covid, we don’t want to repeat that.*

HALEEMA: Caroline, the the surgeon general is now facing calls for his resignation. There is now nationwide attention on Florida's measles outbreak. Do you think that any of that is going to have an impact on how Florida addresses this going forward?

CAROLINE: Honestly, I don't think so. He's faced a lot of calls for his resignation before from powerful people. You know, the FDA and the CDC have sent him multiple letters throughout the Covid outbreak telling him that by discouraging vaccination, he is endangering public health and abandoning his duty to the public as a public health official. I don't think that this scandal is going to change Florida. Florida's public health policy.

SCORING IN Sad Phantos, BMC

HALEEMA: Caroline Catherman is a health reporter for the Orlando Sentinel.

We reached out to the Florida Department of Health to get their take. And they told us media outlets are politicizing this outbreak and that QUOTE 97% of students at Manatee Bay Elementary received at least one dose of the MMR immunization.” END QUOTE. MMR stands for the measles, mumps, and rubella immunization. One dose is highly effective, but the CDC recommends kids get two for more immunity.

The department also said the Surgeon General’s current guidance QUOTE “ensures that parents or guardians are able make the best decisions for their families regarding school attendance.” END QUOTE.

SCORING BUMP

Coming up, the number of parents opting out of vaccines for their kids is hitting a record high. An epidemiologist explains what’s behind that.

[BREAK]

[BUMPER]

HALEEMA: We’re back. I’m Haleema Shah filling on Today, Explained. The invention of the measles vaccine was a hallmark of human progress. That’s because the disease was nearly unavoidable for most of history.

KATELYN: Measles is one of the most, if not the most, contagious, infectious disease on earth.

HALEEMA: This is Katelyn Jetelina.

KATELYN: I'm an epidemiologist and publisher of the newsletter Your Local Epidemiologist.

HALEEMA: What has a measles diagnosis meant for a person for most of history?

KATELYN: I mean, for most of history, it is detrimental. I will say most cases is a rash. It's usually mild, but cases can move in to be very severe, leading to hospitalization and death. One thing that people don't realize what measles can do, um, is the secondary impact. So even if you survive a measles infection, it can wipe the immunity you have to other viruses. Uh, so for example, influenza or COVID-19, and so what happens is, yeah, you may survive from measles, but unfortunately, your defenses are down to other common, uh, viruses circulating, which can then also lead to severe disease. So bottom line, it's nothing to mess with. And, uh, vaccines have been a game changer with this disease in the United States and across the world.

HALEEMA: Kaitlyn, Measles was declared eliminated in the U.S. in 2000. It wasn’t supposed to be a problem for us in the new millennium.

SCORING - CEZ\_CEZ\_4328\_00201\_Take\_a\_Night\_Train\_APM

HALEEMA: So why are we seeing outbreaks today?

KATELYN: So in the United States, you're right, we have this elimination status. And what this means is that we just don't have sustained community spread that is not randomly spreading at a grocery store, for example. But it's not abnormal to have a measles case here and there. We actually see them every year. Cases typically come from international traveling and people bringing them to the states and then spreading in little pockets of unvaccinated people. And so it's not abnormal, again, to see a measles case here or there, but we are starting to see measles come in hot in the year 2024.

*<CLIP MEASLES 2024 US at risk>*

*ANNOUNCER: Back here at home, the CDC is warning about the rise in measles infections in the U.S. Hundreds of thousands of children are at risk of getting deathly ill.*

KATELYN: The reason why us epidemiologists are a bit concerned about 2024 is, one, measles flares up every five years. It has these Cyclical flare ups. The last big quote unquote measles year was in 2019, where we had about 1,200 cases. And in fact, in 2019, we almost lost our elimination status…

HALEEMA: Wow.

KATELYN: because we did have community spread for a couple months. Um, and that was mainly due to a huge outbreak among Jewish Orthodox community in New York City.

*<CLIP MEASLES 2019 outbreak>*

*ANNOUNCER: An outbreak in New York City led the mayor to declare a public health emergency in part of Brooklyn today. This orthodox Jewish section of Williamsburg, Brooklyn is ground zero, where some 250 measles cases have been confirmed within the last nine months.*

KATELYN: We're also starting to see more sparks or more embers across this nation at a higher rate than we did see last year. And the concern is if these sparks hit a pocket of unvaccinated people, it could lead to a wildfire.

SCORING OUT

HALEEMA: What is ultimately driving the lower vaccination rates that we're seeing?

KATELYN: I will say vaccine skepticism.

*<CLIP ​​MEASLES Rogan Vax Skeptic>*

*ROGAN: If you’re like 21 years old and you say to me should I get vaccinated, I’d go no! If you’re a healthy person and you’re exercising all the time and you’re eating well, I don’t think you need to worry about this. All you hear is ‘take this vaccine that doesn’t even prevent you from getting this disease or you can’t go to the Broadway show.’ It’s madness!*

KATELYN: This isn't new, although it seems to be worse than this post COVID vaccine era because misinformation and disinformation is starting to hit the mainstream.

*<CLIP MEASLES Tenpenny 1>*

*SKEPTIC: I'm sure you've seen the pictures all over the internet of people who've had these shots, and now they're magnetized. They can put a key on their forehead, it sticks. They can put spoons and forks all over them and they can stick.*

KATELYN: We used to see mis and disinformation in very small pockets, but now we're seeing it in the general public. Due to loss of trust, due to this changing information landscape, due to bad actors making a huge profit due to the pandemic, putting vaccines under a microscope.

*<MEASLES Tucker Disinfo>*

*TUCKER: The lies we were told about the COVID vax were so grotesque and so overwhelming. a lot of people were killed or permanently disabled by it. How many people were hurt by the vax? How many people were killed by the vax that was mandatory.*

KATELYN: And then there's also other reasons, for example, a lot of children missed routine doctor's appointments during the pandemic, and we're still trying to catch up from from that in 2020 and 2021.

HALEEMA: How are people going about bypassing the measles vaccine? Because that's one of those vaccines that you get as a little kid before you enroll in school.

KATELYN: As a parent, you can get an exemption at schools and there's two types of exemptions. There's a medical exemption. So for example, there you the kid medically cannot get this vaccine because it puts them at risk for other more severe diseases. Outcomes, but then there's also non medical exemptions and because of religious reasons or philosophical reasons, and these non medical exemptions have been increasing very quickly in the United States, and it's concerning because it shows that there's this uptick in parents believing vaccine misinformation or certainly being hesitant to it.

HALEEMA: People have a lot of reasons for vaccine skepticism. And, you know, it can range from maybe mistrust in the medical establishment because of a history of medical abuse in your community, or all the way to, you know, a discredited conspiracy theory. How is a provider and a health department supposed to overcome that? Because these are really emotional issues.

KATELYN: It is emotional, and it's not only emotional, I think it's really important to recognize kind of like what you're saying is that vaccine hesitancy isn't dichotomous. You're not pro vaccine or anti vaccine. Really, hesitancy lays on this spectrum. And so how you help that person, one, you have to realize where they are in that spectrum. But regardless, empathy really helps. How you frame a conversation with skeptics matters. Because our goal is to set new foundations of trust, and if we use words like absurd or insane, all they're going to do is double down because that is the tribe they're a part of, um, and they'll become defensive. So I think we really need to think about empathy. And the second reason or thing we need to do is we need to equip trust in messengers, for example, physicians, pastors, education boards, people in our community that people trust and that they'll listen to and we need to figure out how to best equip physicians, for example, with this evidence based education, um, to help diffuse the bad information.

HALEEMA: But it seems like part of the problem here is that the trusted messenger, at least in Florida, the Surgeon General, is breaking with public health norms. I mean, what are you supposed to do in that situation?

KATELYN: You're right, you know, a lot of vaccine disinformation spreaders are physicians, people with white coats, people that have an M.D. that we're supposed to trust. And so I think that this is where our systems come into place, for example, our medical review boards the credentialing process for public health departments because really that lever is what's going to help stop those top down vaccine disinformation spreaders.

HALEEMA: I mean, one thing that occurs to me is that the mechanism that parents are using to basically not get their kids vaccinated is filing for an exemption on the basis of philosophical grounds. Should parents be able to do it as easily as they're doing it?

KATELYN: You know, this has been a really strong state level conversation that we've seen, and there's actually states that do not allow non medical exemptions anymore. One, for example, is California, um, and they changed that law after a huge measles outbreak at Disneyland in 2014/2015.

*<MEASLES CA Law>*

*ANNOUNCER: but starting in 2021, it's going to get a lot harder to get a vaccination exemption and kids without them have to either get vaccinated or they can't attend school.*

KATELYN: And the impact that that state level legislation had was enormous. So I, I do think it's really important and I do think that's where governments help step up. I think the ultimate challenge, though, is that it comes down to, we are. Moving in a more individualized society, but the problem is with infectious diseases, that it violates the assumption of independence that what you do immediately impacts those around you. And so the biggest question to me is, if our society, if the United States is moving towards individualism, how do we then combat things that require community action? It requires us to be on the same team against these viruses, and I think that it's a cultural question that we're just going to have to see unfold and see how we collectively answer that in the years coming.

SCORING IN - MYMA\_JUST\_0151\_03901\_Altered\_Lines\_APM

HALEEMA: How does this make you feel as an epidemiologist, Katelyn? We're talking about a highly contagious disease that is highly preventable that is spreading in the 21st century.

KATELYN: I'm exhausted. <laughs> I feel, and I know a lot of my public health colleagues feel like we're moving backwards, and maybe that's what it takes, right? Um, that people may just have to see how badly measles is before there's change. You know, we live in a very reactive society, and eventually the pendulum has to swing between panic and neglect. It's tiring, uh, but we have this collective amnesia towards these really old diseases, and I think people are privileged to not know what they do. But it does, it certainly concerns me, uh and makes me a bit nervous going into 2024.

HALEEMA: Katelyn Jetelina, your local epidemiologist. You can find her newsletter on Substack.

Our show today was produced by Jesse Alejandro Cottrell (COT-trul) and Victoria Chamberlain. It was edited by Amina al-Sadi, engineered by David Herman, and fact checked by Laura Bullard.

The rest of the team includes Avishay Artsy, Miles Bryan, Hady Mawajdeh, Amanda Lewellyn, and Rob Byers. Our supervising editors are Amina Al-Sadi and Matt Collette. Our Executive Producer is Miranda Kennedy.

We use music by Breakmaster Cylinder.

I’m Haleema Shah filling in for our regular hosts, Noel King and Sean Rameswaram. Today, Explained is distributed by WNYC. The show is a part of Vox.

<< For podcast:>> Today, Explained is distributed by WNYC. This show is a part of Vox, which is totally free thanks in part to contributions from our listeners. If you’re feeling generous, you can contribute too at vox.com/give>>

<< must cut this out for radio >>

[10 SECONDS OF SILENCE]