INTERVIEW WITH

DR. NICOLE LURIE

H1N1 ORAL HISTORY PROJECT

Interviewed By Sheena Morrison

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Interview with Dr. Nicole Lurie
Interviewed at Dr. Lurie's Office
Washington D.C., U.S.A.
Interviewed on May 13th, 2010
H1N1 Oral History Project
Interviewed by Sheena Morrison

Dr. Nicole Lurie: NL
Sheena Morrison: SM

Sheena Morrison: The following interview was conducted with Dr. Nicole Lurie on behalf of the National Library of Medicine for the Making History: H1N1 Oral History Project. It took place on May 13th, 2010, at Dr. Lurie's office in Washington, D.C., and the interviewer is Sheena Morrison.

So, the questions that I'd like to pose to you are drawn from some of our previous interviews. But before we begin, is there anything that you would like to talk about in particular? Do you have any--?

Nicole Lurie: No. I think we are good.

SM: Okay. During an earlier interview, on March 9th, one of your concerns at the time was that the surveillance systems and the fact that that vaccine systems, in your opinion, weren't robust enough to be able to take on some of the safety signals. Is this something that persisted throughout the campaign, or is it still an issue?

NL: I think, certainly, we have stood up and really tried to optimize a lot of the systems that we have for monitoring safety, and I think we've built a much better foundation for going forward. You know, the challenge when you do that, and to use systems in real time that you've never used before, is that they've all got different limitations and warts, and they can let you jump to conclusions that you might not want to jump to. And so, just kind of being careful in working through and understanding those things, and sort of not freaking out along the way has been a problem. But I actually feel like we're building a better system for the future, and I think that's a really good thing that's come from this.

SM: Can you tell me about some ASPR's current efforts to coordinate strategies for an effective system?

NL: What kind of systems?

SM: A vaccine system.

NL: Well, so, by and large, the responsibilities for doing [unclear] coordinated vaccine system, I guess.

You know, one of the things I think we've seen through this and through the countermeasure review is that, traditionally, my agency has just kind of been in its own lane, and it does its own thing. So, every agency is just kind of in its own lane, and so what we see is all kinds of places where we need to be much more coordinated. So, even right now, as we plan for the future, we know that BARDA has got its part of ordering a whole lot of things that have to do with vaccine, you know, ordering and sending that to warehouse. But there's other places where CDC has to pick up and move forward. And we have to plan how we're going to do a response, understanding how our systems are seamless, and building systems that are really seamless. And that involves a much different way of working together than I think we're used to doing.

SM: Can you tell me a little bit about that? And when you say a much different way of working--

NL: You know, I think it's much more working together across agencies. We all have our own roles and responsibilities. But if you just do stuff in your own stovepipe, we're not going to be able to have a coordinated response. And so, I think we're feeling this, too, in the countermeasure review that things will start in one agency that transition to another, that need FDA early, and often, then transition to CDC. If they're going to go to CDC, CDC needs a plan about how to use it. How you're going to use it ought to have impacted on what you're trying to develop in the first place. So, they need to be--you have to have much more coordination.

And so, we've just actually, as a result of this, started a whole series of portfolio reviews about all of our countermeasures so that everybody has shared visibility about what's going on.

So, even in flu, what have we heard? We've heard a lot that people had a lot of difficulty with the nasal spray. It had different cold-chain requirements. People out in

the communities didn't necessarily understand it was sprayed up people's noses. They were more comfortable giving shots. Healthcare workers were afraid of it, et cetera--a lot of education to do.

Also, we may want to think about what the end-user requirements are for using this, and see if we can take different products to the next generation of what they are. And so, that's just about making the stuff.

Then there's all the, obviously, all the issues about getting it packaged and distributed and all those other things that you learn from. You've seen, I think, through this that this is kind of a team sport. We have to be really coordinated through this, and it's difficult for us.

Somebody used this great analogy for me the other day. They said, it's like watching their kids learn to play soccer. So, in the beginning, you just sort of kick the ball and you keep it to yourself and you do all this, and over time, you get this idea that you've got to pass the ball to somebody else and they pass it back. And over time, you figure out, in order to really get this ball into the goal, that it's going to take the whole team. And I

think we're at the point now where we have the whole team, and we understand the whole thing about passing and blocking, and . . .

SM: It's moving.

NL: You know, we're ready to kick a goal.

SM: Okay.

NL: Now, the challenge is going to be to keep up that kind of teamwork that we've developed through this for all the other work we have to do in our non-emergency mode.

SM: Like now. Now, things are kind of quiet around here somewhat.

NL: It's better, it's better. I mean, the countermeasure review is taking a lot of time, energy, and effort, and we are coming to the end of that as well. So, what's good is to be able to think about all of the lessons learned, and consolidate. Just start to say, "How we consolidate those? How do we do things differently? How do we learn from other lessons learned out in the field about things we want to do

differently?" And that's another part that I'm pretty interested in.

SM: Well, this is about the surveillance systems that you spoke of really early in our interviews, and the collaborative one with the health insurance company.

NL: Yes, the first, vaccine safety again.

SM: No, no, surveillance for...

NL: Disease.

SM: Yes, for disease. Did it ultimately meet your expectations for active surveillance?

NL: It wasn't active. I mean, maybe you're a little confused. So, there was some active surveillance, not with health insurance companies. There were health insurance companies that were sending us surveillance data that they did, as opposed to doing it collaboratively. That was helpful. And then, there were hospitals, hospital systems, others that sent us data from their emergency departments, or others that form the basis of trying to do some other

kind of work. But we did not have a collaborative surveillance system with insurance companies. I mean, they sent us a lot of data that they had. It's kind of interesting to think about how do you use it, and it's interesting data. When is it actionable, and when isn't it? How do you deal with all the different kinds of data feeds you're getting? And I think that's a whole new environment, especially with the Internet.

There was also some interesting surveillance that went on with CMS, where we asked them to look at their claims data in terms of people getting vaccinated or people getting sick, or whatever. You know, there's always a lag in claims, but in my mind, that was the first data system that really showed us that we had serious racial and ethnic disparities. And, I think, because it wasn't a data system that we use and were unfamiliar with, it was a little hard to have our eyes fully opened to the fact that we had a really big problem here. Aside from the fact that doing something about it is extremely challenging.

SM: I was at the meeting yesterday. It was a really good presentation.

NL: I have to tell you, that meeting drove me nuts. I was really upset by it.

SM: Tell me more.

NL: And I was upset by it because we're talking about, thinking about, a campaign for subsequent flu seasons, to stimulate uptake as well as to do something about the profound disparities that continue to exist.

But the notion that we can't be accountable for uptake because if it's not such a severe flu season, people aren't going to get motivated to get vaccine just isn't what I think we're about. I mean, we're accountable for motivating people to get vaccinated.

SM: Yes. I wrote your phrase down in response to the person who said that, which was, "Well, that's what prevention is all about."

NL: That is what prevention is all about, and I was very careful not to just get on her case about, "Of course we're accountable for this, and how can we duck our accountability?" We always want to play it safe, and we

can't. That's not why we're here trying to serve the American people.

SM: Do you think that it's been a little more, that there were more barriers in your position here as opposed to when you worked on the outside as a researcher, in implementing some of the strategies that you discovered would actually work?

NL: The barriers are different. That's for sure. So, adoption of new ideas and technologies, new whatever, is much slower in government than it is on the outside. So, some of the consequences of using it for the nation are different than the consequences of using it in a community. So, people are understandably more cautious. And the investments and scale of them are different. So, you have to understand and be sure they're going to get you there by the same token, and government is extremely risk-averse. And so, it's often really hard to stimulate and support and adopt innovation. It's always easier to do it on the outside. And that's why you always want public-private partnerships, or private-sector partners that can be much more flexible and more nimble than you are and, frankly, can push the envelope more than you can in government.

SM: Like the big-box stores.

NL: Right. So, Walgreen's together with J&J and Text for Babies, or whatever, have decided to mount a really big campaign for this next flu season to encourage people to get vaccinated. It's all around how to care for yourself to prevent yourself from getting sick, or to care for yourself when you have influenza. Walgreen's, of all the chain drugstores, has the biggest penetration of market share in minority communities, so it's an exciting development. They want to print 20 million appropriate health-literacy appropriate low literacy brochures to go in their advertising supplements.

SM: Twenty million.

NL: Does CDC want to endorse the content? No, they're not in the business of endorsing content. They can't do it with one and not another. They're, just like we were with the SORT tool, continuing to take the position that they don't provide direct advice to patients, so they can't do this. But anybody can be free to take the guidance and the guidelines on the CDC website, and modify them for whatever

they want, can use them for whatever you want; it just can't say CDC. Now, the same thing with the iPhone app. Same thing with all of these other things.

And it's a really hard question to say, are there situations in which you, as a government agency, endorse this? Or, is your role as a government agency to provide the information and tools and say, "Here's what we think. Go use it"? It might be the latter, but then when it's the latter and you're providing information for clinicians about what to do, is there anything else we do or don't want to do to provide information for patients? I think position is we don't provide information for patients; we provide information for clinicians and public health people and these other things. So, they're really, I think, struggling with that. In the meantime, these guys have got to go ahead and print their brochures, so they're going to take their best shot. And CDC has been great about providing, looking at content and providing them feedback, but that's different than providing an endorsement, a logo or anything else.

SM: But part of the message earlier on from CDC was to hold people accountable, and for them to do what they could

in order to protect themselves, and so, doesn't this, what you say, fit within the same realm as--

NL: Is that a rhetorical question?

SM: Yes. Yes, it is. But it's really interesting to me.

NL: You know, I think it's very interesting and challenging when you try and think about how you operationalize your role, and it's easy to see both sides of this.

SM: Okay.

NL: So, yes. So, outside, you can be much more nimble and creative and push and pull in really different ways, and there are a lot of different ways to have impact. And so, one of the things you do in government is work with really flexible and more creative people on the outside to try to encourage them to do cool things.

SM: Okay. Thank you.

You also mentioned in one of our earlier interviews that when you initially came on board, that one issue of significant concern was dissatisfaction around policy coordination. Can you talk to me a little bit about that? What was the focus of the dissatisfaction? What exactly was the--

NL: Well, I think, as I think of it now, one of the things that I understand much more is that this office has been shaped by its history over time, and its history over time is that it's been a response organization and sends a national disaster medical team places and has the Secretary's operations center. It's a response organization. But yet, the staff division in the Office of the Secretary has responsibility for policy coordination, and the Secretary looks to us for that.

Well, traditionally, our strength has been in operations, not in policy. So, we're really needing to build that capacity and to play a role--just what we've been doing in all those flu calls, right? Bringing everybody together, teeing up an agenda, working through policy issues and decisions that need to be made in a way that's thoughtful

and coordinated, and it isn't everybody just going off and doing their thing.

SM: Right.

NL: I mean, you've seen a huge amount of energy going into bringing people together to talk.

SM: Absolutely.

NL: And when decisions need to be made, bringing people together to make those kinds of decisions. And, I don't know, I wasn't here before the degree to which that was the *modus operandi*. I think we all got that process as we went along. We got better at being able to foreshadow things, to be able to understand what might be coming, and prepare ourselves and the Secretary for that, think through the implications of different decisions, et cetera. But that's got to be a reflex; that's got to be so ingrained that that's just what we do in our gut.

So I don't know. I can't remember if I asked you to come, but the day, the morning after the Haiti earthquake.

SM: No, I wasn't. I would have loved to attend.

NL: You know, we just sort of said, "Gosh." One thing we took from H1N1 is that everybody in the Department has a role here. And obviously, the whole set of issues of that response was different, as planeloads of orphans were showing up here, or whatever. And so, we started that whole process. It was just, okay, wham, everybody who plays a policy role in the Department, at least, needs some visibility in what's going on. Be prepared for issues as they arise.

And then it became extremely intense as a whole set of issues and challenges that we'd never confronted before confronted us. But, at least, the basic mechanism of "What's our role in this and how do we operationalize it?" and "what do we learn from things we wished we'd done better in H1N1?" that we applied even to the way we ran the cost really sort of came into place. And it was very constructive.

And, I think, the other thing that was kind of neat is that the people who came to the table were not necessarily the people at the table for H1N1. A whole different set of

players who were there all the time, who now understand they have a role in preparedness and response. And that's great.

SM: Wow.

NL: So I think we're getting better at it, but there's still a ways to go, and there is still a need to work on the fact that our role is in policy coordination, and not necessarily to make it all, do it all. We have to share information and decisions with some of our other partners. We're getting better at that. It's kind of fun.

SM: There were, for H1N1, several meetings all day, particularly at the height of it.

NL: All day, all night, all weekend! [Both laugh.]

SM: Could you reflect a bit on some of them, and why there were so many? I mean, if you could just tell me a little bit about them.

NL: So many meetings?

SM: Yes, and what they--I mean, when I came for the 12:30 meeting, I would hear, "Well, on the morning meeting," or "At the evening meeting," or "At the White House meeting," and they were all H1 related, and I thought, wow, these people live and breathe H1N1. And so what I'd like to get on record is some of the decisions that were made there.

NL: A couple of things happened. One is that every Monday night we had a meeting at the White House, which started really being about how we were going coordinate communication across all of government, you know, DHS and the Department of Education, the Department of Labor, everybody else, and we all met at the White House. We all sat together. And the more we did that, the more, again, we sort of realized that successful communications depended on really doing a better job, which we did; anticipating what the messages needed to be, what policy decisions needed to be made to support the messages, how to get the public ready, and really, how to coordinate. But all across Federal Government, and then vertically through states and locals, and, you know, states and locals run the Emergency Operations Center. We had calls from them a couple times a week. So, that kind of communication was really unprecedented.

And, again, it got everybody across all the departments on the same page. It surfaced issues. We were able to leverage each other's resources. Gosh, I've got all these great networks of college, whatever, so let's deal with immunization in colleges. Or, gosh, you know, people from the White House bring…we've got these relationships with all these celebrity figures who could go message for us. Here's the DHS community, here's the Department of Labor and unions. So, using their networks to both bring in what are concerns that people have that we need to be aware of, and on top of…and then to message back out was pretty important.

It also turned out that at different points, as you know, the media interest and needing to respond to it was just nonstop, and needing to have all the facts straight, how many doses, whatever it was going to be. You needed to have all the facts straight and to be consistent, and to be able to anticipate what it was that people needed to know, and how we're going to do it. So, we got into another rhythm of starting the day with a media call so that we could deal with the other substantive policy issues that came up during the day. We sort of said, "All right, we

don't need to drag everybody through how are we going to talk about this issue with the media. That's a small group of us that needs to get on a call every morning and anticipate what the day's media events and questions might be, and be sure that we're in a position to be able to respond to them." And that was also just really helpful.

Sometimes questions would come up from media folks that we just said, "Gee, we kind of need a better answer to this," or "We need to clarify or crystallize our own policy or thinking," and so we did.

SM: Okay. And then there was the midday meeting where everybody more or less came to...It seemed that decisions--

NL: There was a morning meeting, there was a midday meeting. In between times, people were at all these other smaller meetings that people were sort of working through, doing things there. God, it seemed like every night. It probably was. Either I'd be talking with Laura or Steve, and then Steve and I had a regular, at least once a week, if not more, meeting as well just so that we could--we had to set visibility for what the issues are. We could tee things up for one another. We could say, "Here's stuff

that I'm worried about," without too many people hearing and getting wigged out. You could actually sort of say, "What do you think about this?" and sort of talk it through, because so much of it is just talking through issues and doing the collective problem-solving and the brainstorming and all that. And it's great if you want to have lots of different input. Sometimes the more people who are involved, the harder it is to ask the questions you really want to, or bring up issues that if you want to explore something and it may or may not be sensitive, but could... And you see how hard it is to communicate on these conference calls.

SM: Yes, I do.

NL: Especially when half your team is on the other end of a phone line, that you want to say, "Gosh, I don't want this conversation to get misinterpreted and everybody get wigged out. Let's just see if he's seeing the same thing before we go forward."

SM: I witnessed the response or the tone from the callers that weren't here, and you could tell that there was, maybe, there was some lack of clarity.

NL: Its hard a lot of times. And it's just really, kind of hard to do this when you're dispersed, but it's also life. And so, we just have to learn to do it better.

You know, maybe we should have just decided to do all of the video teleconferencing, but that all has a little bit of a delay, and a bunch of times the technology is down and you still don't have everybody in the same place. And sometimes you can get too enamored of technology and it can really hamstring you. I'm not sure what the right thing was to do. You know, the White House things were VTCs with CDC, and I'm not convinced that made it any better.

SM: Given the vaccine delays and the uncertainties of flu. Was there any point in the campaign, after it was decided that the U.S. would not use adjuvant, when the question of whether to use it was again on the table for consideration?

NL: Oh, multiple times. But I can't remember when you came into this, but pretty early on I asked George Korch and others who were really involved in this, "Let's lay out a decision tree. What are all the things that would make us use adjuvants?" And we have this very complicated

decision tree, and there were several times...So, the kinds of things that were going to make us use adjuvants were more disease severity or trouble getting vaccine, in a nutshell. And there were a couple of times, particularly when we had the big vaccine delays or we worried about something bad happening with vaccine delays, where we said, "Wow, this is a trigger for us to revisit this decision," and we pulled everybody together, or a small group together, frankly, and said, "Let's revisit this decision." And in each case, we decided not to move to adjuvants, because it was still going to take six weeks to fill and finish it. By that time, we'd be through this problem, and/or the transmission of really serious disease. The disease wasn't severe enough for us to want to flip to that, because we all knew that the decision to use adjuvants would mean tremendous public skepticism about the vaccine used under emergency-use authorization. And it was hard enough for the public to feel comfortable getting vaccinated. That just seemed like too much of a risk.

SM: Rob Stein wrote an article on the 1st of April for *The Washington Post* which highlighted that there is an estimated 71.5 million doses of vaccine that would have to be discarded, if not used before the expiration date. His

article attributes the situation to manufacturers' delays in vaccine development and production, and ignores a wide range of reasons why people opt not to participate in public health programs.

SM: Can you tell me some of the strategies, or some of the concerns about the ambivalence and resistance to people getting vaccinated, particularly among the minority populations?

NL: If I knew the answer, if I knew how to fix this, I would fix it.

It's such a hard issue. I mean, I think we went into this with a huge amount of public skepticism in the safety of vaccines. You know, the whole vaccines and autism and the whole anti-vaccine movement in this country has been pretty active, and so you have that as a backdrop.

And then you've got spreading, all of this junk through the Internet, and all of these fears and concerns and rumors through the Internet. I mean, you saw people were getting Guillain-Barré, before the vaccine was even available, on

the Internet. I mean, it's like wacked. So, there is that as a backdrop.

And then, we certainly know, in minority populations, that their vaccination rates are lower. And we know that there's a whole host of reasons for it. Some of it has to do with the fact that, in general, the distribution of income and education is different, so they're lower-income, less-educated populations. There's a lot of folklore about the safety of vaccines. It's a little bit different, particularly in the African American community. There's a huge amount of distrust in government, certainly for older people, and it's pretty inter-generationally transmitted, the legacy of Tuskegee is still there. And it takes a lot of energy and time and effort to work with people around those issues. We still haven't figured out really what it takes to help certain populations feel confident in the safety of vaccine.

You know, I think, over time, we understood that grandmothers would get it if they thought they were putting their grandbabies at risk. There are other kinds of things that, certainly, we've known forever, that you have to have

trust in messengers, and all that stuff, but I don't know that we had...

I mean, this is a place where I felt like we could have done much better, and it continues just to really frustrate me. So I think Bruce said it really well. He said, "Well, we'll do the same thing we do every year, just louder." And the same thing we do every year doesn't work every year or it doesn't work as well as we want it to every year, so why do they think it's going to work? But everybody was really busy and fried and had low bandwidth. And every time you'd try to raise the issues, everybody thought they were doing it, or they thought that by having a visible spokesperson, that that was going to convince people to get vaccinated. No, it's people you trust in your communities. So I think the reasons that people don't do it are really complicated.

I remember Ann Schuchat telling me about some communities she went to, where people were talking about, well, this was a government attempt at genocide. Well, if it's genocide, do you think all these white people would be getting vaccinated? I think it was a great comment where somebody made that comment at a dinner table. But I

remember her relating this story to me. But how do you get there?

And then you have all these language issues. And then you have all these issues about lots of uninsured people. This is why health reform is so important. So, if you have to go access the healthcare system to get vaccine, you know, you're not going to do it. People would be shocked that it could be free at public health clinic. We've got to get the message out to people that you've got to put vaccine in their path. Well, different people have different paths to put vaccine in front of. Different people can pay $10 or $20. So it's very complicated. Yet I think if we took a different set of approaches to it, we'd get further. And I'm just talking about patients.

I mean, I sort of kept track of my record in clinic, convincing people to get vaccinated. Some days I was as low as 70 percent, and I would feel like a complete failure. Most other days I was higher. I was in the 80- to 90-percent range. But that's a hell of a lot better than how our general population did. And this was with an almost entirely minority patient population.

Now, granted, these are people who had a regular place they went to for medical care. But there's a huge amount of skepticism, and had I not persisted after they said no, I would be down there like everybody else. Clinical practice just isn't designed so you can spend 20 minutes talking somebody into a flu shot. I mean, that's pretty crazy. It was just, I was doing this, and I was just hell-bent on understanding people's reasons.

SM: So you did a little survey.

NL: Well, I wouldn't call it a survey, but I paid attention to my own experience. A resident would come out and say they don't want a flu shot. I would go back in and say, "You know, I really want to understand what are the concerns." And then I would say, "I'm working in this job and we're trying to reach people, and I need you to help me understand what people's concerns are, so that I can figure out how to address them." And it was interesting.

You know, the same thing that keeps women from getting mammography, "God's going to take care of me," whatever it is. There are just a whole lot of different attitudes and beliefs, and it's a really big country, and we don't have a

great understanding of the range of it. But we also don't have a great understanding of where's the big concentration of them. So we've got work to do there.

SM: Okay. Well, what about the physicians? There was also some ambivalence and resistance among physicians, and I understand that there has been some effort to understand it and to address it. Are you aware of that? Can you speak to that?

NL: Well, I think that plays itself out at two levels. One is the healthcare providers in general don't get themselves vaccinated. They think that they're above it, and they're skeptical. I don't know what it is, but a lot of physicians choose not to get vaccinated. So, some of the issues were about people's personal choices; others were about the advice they gave others.

And, again, there was a lot of skepticism in the physician community and it's, again, another place where I'm not sure that...I think we have a lot to learn about how to do better physician outreach. Physicians trust their peers, other physician-peer leaders, and it's the same issue of getting into that sort of social network, right?

SM: Right.

NL: And dealing with it. And, again, we have a pretty set way that we outreach to the physician community, the healthcare-provider community, and we do it the same way every year. We did it this year a little louder, and we didn't, you know...I think we've got to take a hard look and sort of break the mold, and that all takes energy and resources.

SM: That's what I was going to say. I remember your saying that one of the areas that needs to be addressed is research outside of operations and outside of just the science, that there are other areas where research could actually help to facilitate a successful campaign.

NL: That's right. So, to the couple kinds of research that--I've sort of been playing this violin for a long time--one is much more research on communication and communication science, and much more about what motivates people. I mean, this isn't even like trying to lose 50 pounds; this is like something you've got to do for five minutes, just get a shot, and it's hard to motivate people

to do that. So, how we motivate people to adopt good health behavior we just need to understand a lot more about that. And we need to understand a lot more about that for different kinds of populations. This is not a one-size-fits-all thing.

That's an area of communication science, especially now with the Internet, and all that stuff. Marketing people get people to buy all kinds of crap all the time. How do we do this? There are a lot of different ways to tap into expertise that either we might disregard, or we don't label as science. Or, because we don't label it as science, we don't invest in it, or whatever it is, or it's soft.

The other area is all this research about operations and logistics and supply chains and efficiency, all that kind of stuff. Again, we've just never really thought that much of that as science, and so we've kind of dissed it, and yet we need to do a huge amount of that stuff.

SM: Still do.

NL: We still do, we still do, big-time.

SM: Besides your decision to bring a historian on board, is there any one decision or strategy that you could point to and say, "I'm really glad that I did that"?

NL: Oh, I think there's just loads of them.

SM: Okay. I would like to hear a couple.

NL: You know, I think reaching out to the health insurance community and the large employer community and really getting them to work with us and be on board, I think was extremely positive. I think, in the long run, pushing on this vaccine safety stuff and really working with health plans to set up this new monitoring system. We'll see if it turns out. Helping people understand the kinds of data that are out there and how they might be used. There's just a lot of these things that kind of, every day, in lots of ways, you just say, "God, I'm glad I did that."

And a lot of it, too, was, again, it's not something I did by myself, but that you can get an idea on the table out there and get people to go ahead and do it or adopt it or come to a decision about this. And all of these things

were, well, most of them anyway, were things that we sort of just kind of decided to do as a team.

SM: One of the reasons I posed that question was because Rich Besser said, "The one thing that I'm really glad that I did was to insist upon open communication about risk." I believe he called it "risk communication."

NL: Yes, absolutely.

SM: And he said that set the stage.

NL: Absolutely, it absolutely did in so many ways.

Another thing that he did that was really great was set up this Team B. And to think about--I think early on it functioned much better than it did later--but how do we get people outside of government tell us what ought to be on our radar screen and what they're worried about, scream what they're worried about [unclear]? Because you can get into this groupthink, or you can get into the, gosh, you know, if I say something or recommend something, then these guys aren't going to work for me anymore. So you need

people outside that can constantly be giving you a little bit of a reality check.

SM: Okay. Well, this is the final question, and we made it through an entire session.

NL: It's amazing.

SM: Okay. Well, the anniversary of the first confirmed U.S. case of the virus has passed. Vaccine recovery is underway, and the agency's efforts are now focused on next year's flu season. What are some of the preparations that are underway, and what are your priorities?

NL: Let me say a couple of things about that because I think it's a really important question. Some of our efforts are focused on next year's flu season. Some of our efforts, and particularly my efforts, are focused on, gosh, in another public health emergency, that is much worse across the board, of all the things we have to be prepared for, how do we do better? A bunch of them have to do with the healthcare system, which is really different than focusing on the vaccination campaign. Some of them focus on surveillance or other kinds of things. But across the

board, what are things that we need to and can do better? And the fun part about this period now is being able to figure those things out and start to put things in place.

And what could we have done differently to make it easier in emergency rooms? What could we have done differently to make it easier in ICUs, or clinicians, or whatever, so that you're not ever in a situation where you're running out of ICU beds or whatever. So it's pretty complicated.

And the other thing that's kind of odd is that, you know, running flu season is number one, by and large, done in the private sector. Number two, this is not an issue that the ASPR deals with. It's like CDC and NVPO and those guys. And you heard me say that, I think, last time. But the reason that I want to stay at the table is because of my very firm belief that if you can't do it day-to-day, you can't do it when the balloon goes up. And we can only strengthen our preparedness by strengthening day-to-day systems. That means getting people used to getting vaccine to prevent disease. So, gosh, if we had a big outbreak, do I want to be able to use the schools to vaccinate kids? Absolutely! So if I'm going to do that, then I've got a stake in whether or not we can do it every year.

I have a huge stake and passion in whether we can figure out how minority communities can do as well as anybody else. We have really a long way to go.

So focusing on our annual exercise, which is flu season, how are we going crack this nut? We've got to do it, you know. And I'm just going to stay at it because we can't let that one go.

SM: Is there anything you would have done differently?

NL: Probably a lot. I mean, big-picture...I think we've learned a lot about how to sort of organize this whole interagency thing. And there are just things operationally that I'm doing differently already, and doing better at, just in terms of organizing these meetings with agendas and minutes and all this stuff. And particularly, after we had some personnel issues and couldn't work with the task force anymore, a lot kind of fell apart. That was unfortunate.

But I continue to wonder, should we have done all of this in incident-command mode, using the operations center, or

did we really need the structure that we had? And I think the jury's still out on that. I don't know.

As I continue to watch the operations center and watch what happens during all of this, I think it just would have been a lot harder to do, because I think all of the folks in the Department who come to the table for this don't work really well in command-and-control mode. But I wonder about that going forward as everybody has used some form of ICS for everything, and we certainly do too.

SM: ICS?

NL: Incident Command System. I wonder about that a little more.

There are some ways in which I would have interacted with some specific individuals differently.

On the one hand, there's ways in which I probably should have jumped up and down and yelled and screamed about stuff I didn't agree with more. But by the same token, you always walk that fine line in terms of sort of burning your bridges, and people just saw me as enough of a pain. If I

did that more - who knows? So I think it's just always harder in those kinds of tradeoffs than anything.

But in terms of really big decisions, I don't think there were really huge decisions that I have a lot of heartache about. Were there some things that there were more bandwidth? Yes. I just would have been able to put a lot more time and energy, absolutely. And I think the big ones are: the whole minority disparities issue that we talked about, really pushing a lot harder on the outreach to clinicians, and getting them engaged around the country is another really big one that I feel like they could have just sort of done a lot better on. I think that those are the big ones.

And then I think there's stuff like, we all learn from this. So we've all sort of come to this concept about what does budget preparedness mean? Because we can't...we've got to be much more nimble than we were able to do, than we were able to be, and that's hard. And so we have to figure out how to make our systems more nimble so that when we have to buy stuff, we can buy stuff; and if we have to get money to the states, we can get it to states; when they have to get money to locals, they can get it to locals, and

you don't have to go through waiting periods and gazillions of permissions and all that.

SM: Okay.

NL: So I think those are, I think, the biggest kinds of things. I mean, yes, all kinds of things you can sort of second-guess yourself on or do whatever, but, you know, I think overall, it's gone pretty well. And I think...

In fact, I was just reading this article that was in the Canadian newspaper (I have got to go) today that was really about, only this many people died and they spent this much money, but yet, in hindsight, it was still the right decision because it's better to be over-prepared than under-prepared, right?

SM: Absolutely.

NL: We have this job to do for the American people, and I don't think we let them down. And I think we did a really competent job. Could we have done things better? Absolutely. We can always do things better. Did we learn?

If this happened tomorrow again, would we do things really differently? Absolutely.

But it also is the case that some of those things we can't do differently without investment and without the public, Congress, everybody else, understanding why it is so important that we have a public health system in this country that works. That also means that, at multiple levels, public health has to explain to the public what it is and does, and they have to see it as vital in their lives. And that is a big challenge.

SM: All right. Thank you.

END OF INTERVIEW

Broad Themes

- Safety monitoring – surveillance/vaccine systems. Safety signals
- Countermeasure review
- Portfolio Review
- Coordinating response across agencies

- Vaccine production – end user requirements, packaging, distribution
- Lessons learned
- Surveillance data
- Uptake
- Private/public partnerships
- Policy coordination
- Meetings
- Decision trees
- Resistance to vaccine – minority disparities, physicians resistance
- Communications/messaging
- Research on operations, logistics
- Partnerships with health insurance industry
- Risk communication (Rich Besser)
- Team B
- The next public health emergency
- Annual flu season
- Intra-agency coordination
- Incident Command System
- Budget preparedness