FDA U.S. FOOD & DRUG ADMINISTRATION

FCON COVID-19 Deployment
Oral History Interview
LCDR Nathan Caulk, MS, BSN, RN, NHDP-BC

FCON History Committee
FDA History Office
Collaborative Oral History Project
Edited Transcript
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Oral History Abstract

In this interview, LCDR Nathan Caulk discusses his deployments as a Public Health Service officer in the USPHS Commissioned Corps in response to the COVID-19 emergency. At the time of this interview, LCDR Caulk was employed at the FDA as Senior Regulatory Program Manager working in the Office of Pharmaceutical Quality. During his first deployment he served as a Quarantine Medical Officer at JFK Airport in New York, where he screened international travelers for COVID-19 at a CDC quarantine station. In his next deployment, LCDR Caulk performed contact tracing and COVID-19 case management duties in Duplin County, NC, a rural area where many migrant workers are employed. He worked with the local health department to educate the community about COVID-19 safety precautions. He also performed contact tracing and COVID-19 case management at the FDA Occupational Health Clinic at the White Oak campus. LCDR Caulk also deployed as an outpatient RN and performed COVID testing in Washington State for the Indian Health Service.

Keywords

Commissioned Corps; contact tracing; COVID-19; deployment; Indian Health Service (IHS); JFK Airport; North Carolina; nurse; patients; Public Health Service (PHS); quarantine station; testing; vaccine

Citation Instructions

This interview should be cited as follows:

"LCDR Nathan Caulk Oral History Interview", History Office and FCON Historical Committee, U.S. Food and Drug Administration, Department of Health and Human Services, March 19, 2021.

Note: This oral history has been extensively edited by the interviewee.

Glossary

510(k)	Section of the Federal Food, Drug, and Cosmetic Act establishing a premarket notification requirement for medical devices that can demonstrate substantial equivalence to approved products
ACA	Affordable Care Act
ACF	Administration for Children and Families
ACS	Alternative Care Site
AEG	Agency Executive Group
AMSUS	Association of Military Surgeons of the United States
ASPR	Assistant Secretary for Preparedness and Response
ASPR TRACIE	Assistant Secretary for Preparedness and Response Technical Resources, Assistance Center, and Information Exchange
BARDA	Biomedical Advanced Research and Development Authority
BOP	Bureau of Prisons
BSL Lab	Biological Safety Levels Laboratory
CAP Team	Capital Area Team, U.S. Public Health Service
CAPT	Captain, U.S. Public Health Service (O-6)
CBER	Center for Biologics Evaluation and Research, FDA
CBP	Customs and Border Protection Agency
CBTS	Community-Based Testing Site
CCHQ	Commissioned Corps Headquarters
CDC	Centers for Disease Control and Prevention
CDER	Center for Drug Evaluation and Research, FDA
CDR	Commander, U.S. Public Health Service (O-5)
CDRH	Center for Devices and Radiological Health, FDA
CFSAN	Center for Food Safety and Applied Nutrition, FDA
CMO	Chief Medical Officer
CMS	Centers for Medicare and Medicaid Services
CONOPS	Concept of Operations
CPR	Cardiopulmonary Resuscitation
CRAFT	COVID-19 Response Assistance Field Team
CTP	Center for Tobacco Products, FDA
CVM	Center for Veterinary Medicine, FDA
DART	Disaster Assistance Response Team
DHS	Department of Homeland Security
DMAT	Disaster Medical Assistance Team
DOD	Department of Defense
ECMO	Extracorporeal Membrane Oxygenation cardiovascular life support device
EHO	Environmental Health Officer
EMS	Emergency Medical Services
ER	Emergency Room
ESF	Emergency Support Function, FEMA
EUA	Emergency Use Authorization
FDA	Food and Drug Administration
FEMA	Federal Emergency Management Agency

FMS	Federal Medical Shelter, FEMA
FOIA	Freedom of Information Act
HHS	Department of Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
HIS	Indian Health Services Agency
HRSA	Health Resources and Services Administration
HSIN	Homeland Security Information Network
HSO	Health and Safety Officer
HVAC	Heating, Ventilation and Air Conditioning
ICS	Incident Command System
ICU	Intensive Care Unit
IMG	Incident Management Group
IMT	Incident Management Team
JIC	Joint Information Center
LCDR	Lieutenant Commander, U.S. Public Health Service (O-4)
LT	Lieutenant, U.S. Public Health Service (O-3)
MCAS	Marine Corps Air Station
MD	Medical Doctor
MMU	Monrovia Medical Unit (Liberia Ebola Response)
N95	Particulate filtering facepiece respirator, NIOSH rated "not-resistant to oil" filtering 95% of airborne particles
NCTR	National Center for Toxicological Research, FDA
NDMS	National Disaster Management System
NIH	National Institutes of Health
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Standards and Technology
NP	Nurse Practitioner
NPI	National Provider Number
OASH	Office of the Assistant Secretary for Health
OC	Office of the Commissioner, FDA
OFDA	Office of U.S. Foreign Disaster Assistance
OLS	Office of Laboratory Safety, FDA
OMB	Office of Management and Budget
OPDIV	Operating Division
OPM	Office of Personnel Management
ORA	Office of Regulatory Affairs, FDA
OSHA	Occupational Safety and Health Administration
PA	Physician Assistant
PAPR	Powered Air Purifying Respirator
PCR	Polymerase Chain Reaction (test)
PHS	Public Health Service
PPE	Personal Protective Equipment
PTSD	Post-Traumatic Stress Disorder
RDF	Rapid Deployment Force
RedDOG	Readiness and Deployment Operations Group
RIST	Rapid Incident Support Team, U.S. Public Health Service

RN	Registered Nurse
RT-PCR	Reverse Transcription Polymerase Chain Reaction
SAMSHA	Substance Abuse and Mental Health Services Administration
SAT	Service Access Team/s, U.S. Public Health Service
Sitrep	Situation Reports
SME	Subject Matter Expert
SNS	Strategic National Stockpile
SOC	Security Operations Center
SOFR	Safety Officer
SOP	Standard Operating Procedure
TAT	Technical Assistance Team
TDY	Temporary Duty Assignment
TPN	Total Parenteral Nutrition
USACE	Army Corps of Engineers
VA	Veterans Administration

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Interview Transcript

VB: This interview will be a contribution to the FDA Commissioned Officers Network and FDA History Office Collaborative Project to document the experiences of officers who have been deployed on the COVID-19 public health emergency. I am Vanessa Burrows, FDA Historian, joining this interview from Silver Spring, Maryland.

JS: And this is John Swann, also an FDA Historian, and I am speaking from Bethesda, Maryland.

MF: This is Lieutenant Commander Marcia Fields. I am calling in from Richmond, Virginia, and I work with the Office of Regulatory Affairs.

VB: And we are interviewing Lieutenant Commander Nathan Caulk. LCDR Caulk, would you introduce yourself?

NC: Yes. Hi, this is LCDR Nathan Caulk. I'm a nurse officer in the United States Public Health Service Commissioned Corps, and I am calling in from Laurel, Maryland. I'm very happy to share with you my experiences with the COVID-19 pandemic and looking forward to speaking with you.

VB: Thank you, LCDR Caulk. Could you, for the record, just state your FDA title and how long you've been with the agency?

NC: Sure. My position [with FDA] was within CDER, Center for Drug Evaluation and Research. I was a Senior [Regulatory] Program Manager working on the drug quality side, Office of Pharmaceutical Quality. And that was my position at the beginning of the COVID pandemic.

VB: And you have moved on since then. Did you have any other federal positions prior to joining the FDA, and what is your current position?

NC: Sure. So, I joined FDA in [August] 2010. And when I commissioned with the Public Health Service, along with joining the FDA in 2010, I was stationed in [Phoenix], Arizona for a training program. It was a brand new [long-term] training program called the CDER Academic Collaboration Program, and that's how I joined FDA and the Commissioned Corps, all at one time. It was an exciting [time and definitely a life changer for me], probably not as exciting as this past year with the pandemic. Prior to FDA and the Commissioned Corps, I served as a registered nurse, staff nurse. I was a critical care nurse for the [Phoenix] VA Hospital and worked in their medical ICU. And as of this past December, December 2020, I transferred from FDA to a position within the Centers for Medicare and Medicaid Services (CMS), one of the other sister agencies of Health and Human Services (HHS). I'm currently stationed within the CMS Center for Consumer Information and Insurance Oversight, the Center that actually [implements] the Affordable Care Act. And as you have heard in the news, there is a lot of talk about the Affordable Care Act, and a lot of the initiatives (inaudible - 0:04:04), so it's been very

exciting, a lot to learn. Although, I was sad to leave FDA after 10 years, this is a new opportunity for me and a good opportunity to serve as well with CMS.

VB: Wonderful. So, I am going to just briefly state the information that we have for you about the deployments you served during the COVID-19 [Pandemic] response, and if you could just confirm that I'm accurate, I'd appreciate it. So, from March 9th to March 27, 2020, you were at JFK Airport in the CDC quarantine station, is correct?

NC: That's correct, yes.

VB: From June 22, 2020, to July 15th, you were in Duplin County, North Carolina, at the public health department doing contact tracing and case management?

NC: That is correct, yes.

VB: From the 28th of September to the 27th of October 2020, you were doing FDA contact tracing in the Occupational Health Clinic?

NC: Yes, correct.

VB: And this past January 26th to the 23rd of February 2021, you were in Wellpinit, Washington, at the IHS Service?

NC: Yeah, I was deployed there from January 25th through the 24th of February, but that was my most recent deployment.

VB: Thank you very much. So, without going into any great detail at this point, would you just state the general nature of your responsibilities on each of these deployments?

NC: Sure. So, I'll go in a sequential order since there are a few to go through. But I break it into, the first deployment back in March a year ago with the CDC, that was more of the kind of boots on the ground, seeing the first phase of the pandemic. The next two [deployments] were more of the response, the contact tracing, and thinking back to where we were at within the response. In June and July [of 2020], and then even into the fall, September and October the contact tracing was extremely important and we were doing a lot of testing. We didn't have the vaccine really until December/January.

So, those were different phases of the whole pandemic response. And then, recently, now we have the vaccines to help prevent the spread. So, you asked about my duties. In March (2020), at the CDC, the quarantine station at the JFK Airport in New York, I served as their Quarantine Medical Officer. And basically, the role of the Quarantine Medical Officer was to screen the travelers coming from overseas, screening them for signs of COVID. At that time, we didn't really understand exactly what type of symptoms [would present with the virus]. We had an idea. But [the Quarantine Medical Officer's role] was really to prevent the spread from travelers arriving at the international ports of entry, and JFK Airport was one of those ports. And then, the next two deployments were geared more towards the contact tracing. So, in North Carolina, they had a large backlog of COVID cases that we were trying to contact and trace the

contacts. Similarly, but in a very different situation as the [occupational] health case investigator that I did with the FDA, that was more geared towards keeping the employees and the workforce of all of FDA, not just one part or in one Center, keeping them all safe and pretty much being able to provide a resource for not only the employees, but also the supervisors if they had questions or concerns. [I would speak directly with employees and supervisors to assess their COVID situation and provide pertinent] resources [while maintaining patient privacy]. And finally, the most recent deployment to Washington State. This was with the Spokane Native American Tribe. I was at the Wellpinit [IHS] Service Unit and supported their COVID relief efforts any way that I could, from testing, and of course, vaccines, and then just general nursing care.

MF: LCDR Caulk, this is LCDR Fields. First, thank you for your service. You have been extremely busy the past year. Just looking at the dates, it seems like as soon as you got home and rested, you were right back out of the door again. And also, congratulations on your new position with the Centers for Medicare and Medicaid Services, I think the acronym is CMS.

NC: Yeah.

MF: So, the first set of questions are around the timing of the deployment and as it relates to your notice in receipt of its time to go basically. So, the first question is, when were you informed of your deployment, how much advanced notice did you receive?

NC: Yeah, I think for all of them, they definitely varied. The quickest one was in June, when I went to North Carolina. That was about a 24-48-hour notice [once I knew where I was going]. However, I was initially rostered, as in the Commissioned Corps Headquarters had contacted me, letting me know that I was placed on the list for deployment. And for whatever reason, it took a couple weeks for me to actually go out the door. So, in that regard, there's a lot of variability, but I think you're right, saying that I've been very busy in the last 12 months. I'll share too that -- in those 12 months, [my wife and I] have a newborn baby girl at home [along with two other daughters], so it has been very busy.

MF: Wow, so your wife gets a trophy too. So, you get a trophy for all your deployment efforts, but your wife gets a trophy for maintaining the home in your periods of absence. I'm happy for you. Congratulations on that expansion of your family. So, the next question is about what you had to do to prepare. So, you've had a couple of transitions, not just transitioning from different missions that you've had to go onto in response to COVID, but you've also transitioned into a new position, new agency. So, for the purposes of this interview how did you prepare to transition out of your FDA duties for the three that fell during that time and not specific to your new role, but any kind of transition that you had to do? Because you just recently deployed right after you garnered your new position. So, can you just talk to us a little bit about what you have to do physically to transition, and perhaps some of the mental transition that needs to take place regarding movement between your regular day job and preparing for deployment.

NC: Yeah, thanks. I think for your question, the importance of preparation is definitely key. And the more you do it, the -- it's not that it gets easier, but you know more what to expect. And

I leaned on [my previous experiences] as well. So, prior to the pandemic, I probably averaged [annually] about one deployment or some type of [clinical] support of other PHS activities, temporary duty outside of FDA. And as a nurse [officer], that was pretty common, at least from my experience. So, I had deployed previously in different types of positions. So, for example, this most recent deployment with the Indian Health Service -- well, back in 2016, I had actually deployed to the [Rosebud] Native American Reservations in South Dakota for a 30-day deployment there, so I knew the Indian Health Service; I was familiar with that. That definitely helped me, this previous deployment. And then, just other different deployments, such as hurricane responses.

During the 2017 hurricane season, I was deployed [to Florida] for those [Hurricane Irma]. Those experiences really are valuable [by providing real life experience that you cannot learn in the classroom]. So, [at my duty station], I had a very supportive supervisor [and coworkers], and they knew the routine of an officer would get called up or rostered, and then, within the [short] timeframe, they would be deployed, mobilized, boots on the ground, and then demobilized back home. The transitioning on the technical side, kind of the workload management, a lot of the team members had experienced that before, that I had worked with. And they were able to pick up some of my work projects I had been working on or my supervisor [would cover]. [And then, I would pick those up once I return].

[And of course -- my wife, who is also a PHS officer, deserves many recognitions for all of her help and support as well]. Finally -- it feels like the last 12 months was a big transition, right, or at least that's what it sounds like. So, the transfer to a new duty station, new agency, again, that was more of the handing off those responsibilities that I had with FDA [and closing out other projects], similar to what I had been doing already with, -- these are the main areas

tasked that need to be done while I'm gone. And then, trying to pick those up. Once I return, and then go back and meet with those folks that were assisting in that area while I was gone, and then picking those tasks back up again.

MF: All right, thank you for that. Sounds like experience was a very good teacher for you.

NC: Yes, [hands on experience was beneficial].

MF: And the support that you said that you have, it definitely makes a difference in any type of transition. So, did you feel like you had to wear two different hats, the hat that surrounded your responsibilities in your regular job, as well as your employment duties? Did you feel that at all during any of the four deployments related to COVID?

NC: You mean at the same time, like while I was deployed or more like trying to get back and finish up, for example, travel related vouchers, post-deployment tasks? Can you clarify?

MF: I'm sorry, during the deployment, did you feel like you had to fulfill the duties of both your regular [agency] job and your deployment duties?

NC: Yeah, I don't think I really had two hats to wear while I was deployed. Going back to the first deployment in March with the CDC, there was no way that I was going to be able to – well those were 12-hour shifts. I was 12 on and 12 off, and you know, recovering from that 12-

hour shift and preparing again, even if I had some downtime, I don't think I would have been 100% efficient to actually complete my FDA duties as well.

There was one deployment though that I had the opportunity, and that was the third deployment with the FDA Occupational Health Clinic. And the reason why that was, is because that was an agency related deployment. So, as an agency related deployment, I was able to do a lot of that virtually, [and therefore I wore two hats].

[00:20:15]

And being flexible was key, especially for that particular [agency] deployment. In any deployment, flexibility is important. I was doing a lot of my responsibilities for that particular deployment in the morning timeframe. So, I was responsible for any communication or contact tracing case management up until noon. And then, in the afternoon, I had some time where I could pick up my regular FDA duties, meetings or working on projects in the afternoons [into the evenings]. And of course, with contact tracing a lot of it is the communication, but also sometimes you might not get a hold of someone you're trying to contact. So, you have to be a little more lenient in saying, hey, okay, well, I can call you in the afternoon; although, I'm really responsible for contacting folks up until noon, for example. So, that was the only one deployment that I was kind of wearing the two hats [simultaneously].

MF: Right. So, the next few questions are related to not the deployment specifically, but sort of around maybe the assignment and how you felt about deploying. So, I'll just go one at a time. Do you have any insight on how your assignments were determined?

NC: Any insight on how my deployment [assignment] was determined? Well, just as a nurse [officer], that's probably the key right there. For the CDC Quarantine Medical Officer, I did not know what role I was going to be [assigned] until the first morning I was there really. We were in the [JFK] quarantine station, and people were asking, "Okay, does anyone speak Mandarin?" And "Who is medical here?" And one of the outgoing [nurse] officers that was transitioning out, I had a couple days [to train] with them, and they said, "You're a nurse; you're coming with me!" So, that was my role. That's how I knew what my role was for that first deployment.

The next two [deployments] for the contact tracing were pretty specific to what I was going to be doing. You know, there's a lot of variation in the parameters of that role, per say. And my previous deployment with the Indian Health Service, even -- so, I did have some lead time before I actually was mobilized. So, [during that lead time] I did seek clarification into exactly what my role was. The [IHS deployment] request was very broad. And I didn't know exactly what type [of nursing role I was expected to perform]. I knew it was an outpatient clinic, a service unit. But, [I was unaware of the severity of the patients and] at what point of the pandemic response was the community in? Were they doing testing, vaccinations? What type of patient population were they treating? So, I did seek clarification prior to me being deployed. I wish I had more information, but once you actually get boots on the ground, the first day or two is really when you can get those roles clarified or adjusted. But the overarching role of a nurse is kind of the expectation that you're going to perform within that scope of practice.

MF: Right. What about any input did you have in the assignment or the duties that you fulfilled? So, for example, when you talked about the quarantine station, you were identified as

soon as you got there as someone in medical, a nurse? Did they pull you to the side to talk to you? Do you feel like you had any type of input in what you were going to do during the quarantine assignment-- or any of them actually? Do you feel like you had a voice in what your assignments were and completing the mission? Was there any leeway for you to operate or give input? That's what the question I'm asking--input in your assignment?

NC: Yeah, I think yes and no. As a Public Health Service nurse officer that's my duty to perform what is asked of me. However, there are limitations, right? It sounded almost like during the last 12 months I was saving the world, right? And I know that's not the case. There are limitations to what we can and cannot do. So, with the input of saying, okay, yes, I am a registered nurse, and I know to practice within my nursing scope. However, it's been many years since I've worked in the intensive care unit, right, and to keep me safe and my patients safe, it would not be wise to put me in the ICU. [That is one general example] of those limitations.

However, for the deployments, I would say one of the more important inputs in your assignment is the safety aspect, right? Back in March a year ago, we did [not] know a whole lot about the coronavirus. That's why they called it novel, right? And, you know, just looking back from that first deployment to this previous one with being able to give a vaccine, that's pretty remarkable if you think about it, of how much we've learned, grown, and from those first couple of months. The two [deployments] in the middle, the contact tracing, I think those were more areas I probably didn't know as much as I knew when I first started and throughout the deployment, I grew into the FDA contact tracing, the case investigation.

I took a lot of experience that I got from the North Carolina Health Department and applied that. Obviously, a lot of the CDC guidelines had been updated within those couple of months, but that experience that I had, the kind of boots on the ground, talking to folks in North Carolina and doing a lot more of the logistical side of case management and, what type of question are you going to ask? A lot of it was data management as well. So, that [deployment] was a lot of the logistical operations compared to the CDC and the deployment with Indian Health Service was more of the clinical I would say. Overall, each deployment built on the other. And back to your question about what type of input, there was variation, and I did have that chance to ask for clarification, but also knowing what my responsibilities were, and then taking that, saying that, okay, this is what we can do now [safely]. What can we do for this time frame?

MF: That's great. I'm glad it worked in your favor that you were able to take some of the experience from your initial deployment and use it to improve and provide input to those that hadn't been out in the field to contribute to how maybe they could be doing things more efficiently. I'm sure it was helpful for them as you did your lateral deployment. So, you just commented on the advancement that we have made from a year ago when the deployment first started and quarantine first started. You should be proud of being part of so many missions and being part of the advancement, of public health, our core values and our mission. So, my last few questions relate just to your first deployment and your sentiment around it. So, what concerns did you have for your first deployment and what were your impressions of the public health emergency at that point in time?

NC: Yeah, good question. And you're going to make me jog my memory here. So, it was definitely a challenging time a year ago. I've kind of told some family members when I got back from New York, and I shared with my coworkers the experience at the JFK Airport [quarantine station]. So, the impressions around the public health emergency, I guess maybe I can explain that with a couple stories of my experiences. [Starting with the beginning of 2020], there was a lot of buzz in the news about something happening overseas, this new virus. And I think life was still calm, or I'll just say it was normal at that time. And I remember this was right around like mid-February, Valentine's Day. And that's when I got a call that I was going to be deployed. I didn't know where, but I was going to be deployed. So, I remember talking to my wife on Valentine's Day, saying, "Oh, honey, I'm going to be deployed; let's talk about figuring out logistics, home-wise, to take care of the kids and other stuff." And that had happened prior, but this felt a little different [because of the unknowns and global impact]. And due to travel changes or logistics of trying to get me to New York, I didn't actually get there until the first or second week of March.

Now, originally, I was supposed to go the week prior, during the first week of March. And I was all set, ready to go, wasn't sure again what international airport of entry I was going to be going to. I just knew I was going to go somewhere. And trying to remember back into early 2020, you know what was happening. We had the Diamond Princess Cruise Ship. One of my FDA office mates, another nurse in the Public Health Service, he was in Japan. For that, he came back and talked to us about his experience. Had another PHS nurse in my office, he was deployed to the borders. I think he was in Buffalo, New York. And this was during the early days of the pandemic. The Public Health Service would deploy officers in different tiers or on-call months. So, knowing that March 2020 was my on-call month, and I saw a lot of other

nurses, not just in my own office, colleagues of mine, but others throughout the Corps were getting deployed. I knew it was going to happen, right? And then I got the email [and call] in February about being rostered for the mission. And then, I was set to go. For the logistics of actually going out the doors, one, I had to get fit tested for an N-95 [respirator], and then two, I had to be medically cleared. So, basically, I was scheduled to fly to Atlanta, and I was going to go to the CDC [Headquarters] in Atlanta to get medically cleared, get my fit testing, and pick up my [deployment] PPE.

So, during the first week of March, I was all set to go, and brakes were put on about a day before I was supposed to leave. The President was there [at the CDC in Atlanta] that first week and that delayed me by a week. I went down there [to Atlanta] that following week for the physical [medical clearance] and the fit testing and picked up the PPE. So, at that time [during the beginning of March when] I had been doing my FDA duties; I hadn't seen a whole lot of mask wearing. Obviously, that [masking] was more [popular] with airport traveling. My family was in Massachusetts with her family over Christmas and New Year's, so we drove and didn't fly at all. It wasn't until actually March when I flew from Maryland to Atlanta, where I saw so many more people wearing masks that it kind of hit me. Later on [that day] when I called and talked to my wife, I told her, "This is going to be big." I knew that then [in early March]. And once we were medically cleared and fit tested at the CDC, the following day we flew back north to the JFK Airport. I remember getting on the airplane from Atlanta to JFK, and there was no one on the plane. There was a few of us, but it was not a packed flight. I was so used to having a full flight, and here it was the beginning of March, we're on spring break and I was talking to the flight attendants, and I said, "Have you ever seen this before, where the flights are 25% full?"

And he’s like, “[Flying to JFK during the] middle of the week -- this never happens.” So, those kinds of eerie signs that you see.

[00:40:19]

Now, shifting to JFK, so we arrived midweek that second week of March. And there were a few officers that I knew that had either done a quarantine station deployment or that were previously at JFK, and I was in contact with them just to ask them what they had experienced or what I should anticipate. And one of them asked me the same question that I got asked the first day I was there at the quarantine station, “Does anyone have any medical background or is there any nurse, and does anyone speak Mandarin?” She asked me that, or one of the fellow officers had texted me or had been in communication with me the day or two prior, and so I knew that they were probably looking for more medical assistance [clinical expertise]. But again, thinking back to the beginning of March, or the second week of March 2020, life was still pretty normal. I went to New York plenty of times, and it looked like New York, the city that never sleeps. And sure enough, I saw a lot of people wearing masks at the airports. I don’t know if I really asked questions like, should I be doing this or staying my distance? Definitely at the end of the deployment [in late March], that’s when things had switched in the public, where we were doing a lot more social distancing. But at that time [the beginning of March], it wasn’t communicated, or it wasn’t known to do that.

One of the news stories from what I remember, is a day or two before I arrived at JFK, I remember there was a physician who was flying from JFK down to [Miami] Florida, and here I was going from the south in Atlanta to JFK. Well, he was on a JetBlue flight, and he had been

tested [for the virus]. He didn’t have his test results back yet. And he got on the [JetBlue] flight anyway, and [towards the end of the flight] right when they were taxiing, when they were on the tarmac, I think he got the call or text saying that he was positive. And I remember walking into JFK and they had the television screens on and they were showing this on CNN. This went viral. And sure enough, the next day, I was talking to that other PHS nurse that was going to be transitioning out, and she was the one talking to him [the health department] trying to figure out what are we going to do with these travelers that are positive or have pending tests? There were a lot of questions that we didn’t know [and plenty of work to do].

And that was a lot of my experience with that first deployment. It seemed like the [CDC] guidance was always being updated. There was a lot of changes to protocols that we were getting. Even during that first week, the travel restrictions had changed. So, within that first week, the President had introduced travel suspensions from Europe (Schengen Area), and that was huge in the way that we responded to the influx of [international] passengers. So, that was just the experience at that time of the response. People wonder how did all this virus come into the United States? I saw it. [There was no doubt] that was going on. And we did our best to prevent the spread. That was our mission. But we didn’t have the knowledge and testing at the time. We were taking temperatures, monitoring for symptoms, [and doing anything we could to protect the public health]. One of the public health tools that we had with the CDC was actually prohibiting further travel, and as the quarantine officer, I was asking what roles and responsibilities I had. That was one of the authorities at CDC, to prevent someone that is sick from traveling. So, we exercised those authorities, and my role was trying to figure out at what points should we exercise those authorities [on a clinical basis]. I remember the thing about JFK Airport. If you have ever flown into JFK it’s huge. I think it's one of the largest international

airports in the country. I forget what the statistics are on how many travelers come in on a given day, but it's enormous.

And thinking back to March 2020, what's happening around that time in the United States, throughout the country, in a normal year? Well, you have a lot of college students that may be on spring break or are studying abroad overseas in Europe, or they had just started their spring semester study abroad in Europe. And well, a lot of those programs were suspended for safety [precautions] or other reasons. They were sending those college students back to the United States and they were coming into JFK. So, a lot of the international passengers that I had assessed and evaluated for COVID signs and symptoms or what we thought at the time were younger college students. And they were very scared [upset, confused], and it was definitely -- yeah, I felt like I was in a movie really. Here I was walking around in full PPE [with authority from the CDC], evaluating passengers coming into the Unites States from Europe. This is big!

And I remember one passenger, he was a typical college student who was doing a study abroad trip. And he definitely had a fever. He had symptoms. And we [determined he was a potential case] and therefore prevented him from continuing on to the next leg of his trip. But he was trying to get back home, and home for him was in Wisconsin. So, as you can imagine, is he going to stay in New York? He can't get a taxicab or an Uber from New York City to probably Madison, Wisconsin. What were his options? Putting him on a bus was not a good option as we are aiming to prevent the spread of disease. Or can't he just rent a vehicle? No, he was not legally of age [to rent a vehicle]. You forget that to rent a vehicle a lot of the car rental companies require you to be in your early 20's, or so. In college you're not of age yet. So, basically, we had contacted his parents, who live in Wisconsin, trying to figure out if they're going to be able to get their son back home. They ended up actually driving from Wisconsin to

New York City, picked him up, and drove home. But you can't do that all-in-one day. There's some logistics to make sure he was safe and okay. We were coordinating with New York City and public health departments, trying to get lodging where he can basically quarantine, for an area for him to stay.

Another thing in my public health toolkit that I used was communication. I looked at what was the messaging that we're telling people. I think that was really important. What were we actually telling people to do? As I had said when I had flown from Atlanta to JFK, you know, I wasn't wearing a face covering or social distancing at that time. We were asking people to self-quarantine if they had symptoms or if they had a fever or been in contact with someone that was ill or someone that had been in the Wuhan area. Generally those were the guidelines at the time.

Well, how many people do you think actually, one, know what a fever is, and two, have a thermometer at home to actually take it, right? And so, we were telling people, if you have a fever, then you need to quarantine. Well, does that make sense? Is that actually feasible? Can people actually do that? Being able to [shop at a store or] buy something online and have it delivered, that's definitely been a common practice now within the last year. But some people didn't have that accessibility or don't know how to go and buy a thermometer from CVS or Walgreens. Also, if they were sick they needed medication. Did you actually want them to go and buy those supplies that they needed? So, I wondered what can I do here? And there happen to be a good stock of small oral hospital grade thermometers in the quarantine station. And I asked, what are we using these for? Can I give these to some of the travelers that I thought were ill or that needed to take their temperatures, so there you go.

[Checking temperatures and ensuring that travelers appropriately used] thermometers was my public health intervention at that time. It sounds kind of silly, but that was the messaging. It was like, okay, let's do something positive, let's have people take their temperatures and just be a little more self-aware of what to do. So, going back to your question about my thoughts of what the public health response was at the time, those stories kind of sum it up. There's a lot of things that were happening at the [beginning of the pandemic] that we didn't have full knowledge of. But just taking little steps here and there, trying to figure it out was definitely a case-by-case basis. Using my prior nursing experience and assessing the travelers, definitely doing that was important. But going back to the messaging and communicating with folks: There's a lot of fear of the unknown, definitely a lot of those college students that I saw didn't really understand the risks, or they were just upset that their spring break was cut short. It was definitely scary.

And just on a personal side, and then I'll end my story. I mentioned that we had a newborn this past year, and when I knew that I was going to be demobilized, I had asked my wife if it was okay for me to [safely] come home. That was a tough conversation. And I knew there was a possibility that we were expecting our third child, but I didn't know 100% yet. She hadn't told me. So, in that regard, I was on a phone call one night when I got off shift, and I had some really good news that I was going to be coming home but I didn't know when and I didn't know if it was going to be the next day or when that was going to happen. So, what I did to keep my family safe was once I returned to Maryland, I decided to self-quarantine in a hotel by myself until my 14th day. That was the recommendation that we were provided at that time, to self-quarantine. Testing wasn't widely available, so quarantine definitely was key at that time, but the logistics of doing that was challenging to figure out on my own. But, you know, that was

kind of the personal side; I had a lot of good news, happy news. There was a lot of stuff happening in the country, in the world, and personally, but also what do I need to do to keep myself safe and then to keep my family safe. So, like I said, it felt like I was in a movie. I'll end it with that story.

JS: Well, LCDR Caulk, that's a remarkable sense you've captured there of what it was like as you started this journey on your first deployment and the things that you encountered. That's really quite amazing. We also want to explore each of the deployments, the many different places and doing some different things. Among the audiences that will be reading these transcripts of the deployments are others that are quite familiar with public health service officers, but also people that probably don't have a good sense of what the officers do in these deployments.

[01:00:10]

It would be quite helpful if you could possibly relate what everyday experience was like on these different deployments, what sort of routines did you have? I'm sure things were different from day to day, perhaps, but could you share what specific kinds of responsibilities you had, what a day was like from the start of your shift to the end of it?

NC: Sure. Thanks for the question. Yeah, so each deployment was a little different. I spoke a lot about the CDC deployment. Of the next two deployments that focused on contact tracing, the one over the summer in North Carolina was somewhat representative of the everyday experience

or daily routine. I was assigned to the Duplin County Public Health Department there [in North Carolina]. The role was not only doing contact tracing case management; I would say that was more peripheral. It was more focused on data [management] and getting the information that they had collected. So, they probably saw cases coming in in March or April, and so they had a lot of data from March, April, May, and June-- four months of data. But they didn't really have the best system in place [to track cases].

So, in each deployment there are phases. When you're in pre-mobilization, that's a little different story, but when you're mobilized and when you're boots on the ground, it's really getting adjusted to that community, that role, and also the perception of the new coworkers that you're with. With any type of team dynamics, you don't just start off and your team is running efficiently. There are different phases to team dynamics as well, and I think those kind of apply to deployments. There's getting everyone together, and meeting, and talking about what we want to accomplish, and also asking clarifying questions, that storming/norming phase. And then that's when you can actually get into that area where you're being much more efficient. The daily experiences vary. Routine is very important. I'm a routine guy, early morning riser, you know? I exercise, all that. And being able to keep some normalcy of life when you're living out of a hotel for a couple weeks--you don't realize that comfort of home that you have until you're away, and you figure out what your normal routine is going to be.

Those are just the initial human side of things: I have shelter, I have food, and clothing. I have that; I'm good to go. But the logistics of travel, such as where I'm staying, that's on your mind the first couple days of deployment when you're thrown into that new role that you're living in for your deployment time. And then, being able to operate in a different role, learning a

whole different IT system you've never seen, with probably minimal training to get up to speed on that. So, it definitely calls for flexibility. That's what it is for the first couple days.

In North Carolina, we were really focusing on the data that they had. There's a back story with their county public health department back in early 2020. They actually had a malware attack on their IT system. So, they were not only having a pandemic on their hands but also had a problem with their IT infrastructure that ran the data that they were trying to capture and make some type of public health impact. So, they were definitely backlogged. They were using paper and pen [system] to capture a lot of their cases or contacts. They had a very good system in place by the time we got there at the end of June. But they couldn't keep up, right? So, that was one thing that we were able to do is help them with their data backlog.

So, going back to the roles and responsibility of what can we do to assist in this nature at this time: it's definitely a situation of needs assessment, talking with the leadership there on the ground. You know, they've been living that for how many other months or since the beginning of the pandemic, so they knew exactly what was important, what they needed assistance with. And it definitely grew and evolved throughout the deployment. For example, they wanted an assessment [of their operations]. In the [Duplin County] Public Health Department, they also have an outpatient clinic, so they wanted a nurse to evaluate their patient flow, how to mitigate any risks if they had an unknown positive case walk in; what they were going to do logistically to mitigate those risks to not only the staff but other patients as well. When you're deployed you can assist wherever you're needed. Keep in mind the importance of your safety, and your fellow officers, and the patients, and the other people that were there.

Going back to the everyday routines what was important and my impact -- I talked about my public health tool kit and at JFK airport with the thermometers. But as it got further along in

the pandemic, especially even in June/July when I was in North Carolina, or even with the FDA Occupational Health Clinic, and definitely this past month when I was at the Wellpinit Service Unit, it came down to taking care and listening; giving a reprieve to the staff that was battling the pandemic 24/7 since March. You're so focused on the mission, say, planning to vaccinate X amount of patients. That's our goal, but you're there for a finite time. You're only there for so many days. And the other staff members, most of them had been there from the beginning. I mentioned my personal story earlier on with the new addition to our family. Everyone had their COVID stories and things that happened in 2020 that everyone will remember, but I think just being there, listening to their frustrations, or giving them tips or encouragement, that had a huge impact as well. That was very important for deployed officers to do, is to actively listen. Knowing that people get burned out.

They've been doing this for so long. And knowing that, okay, here's a fresh person. It didn't matter where they were coming from. They saw the uniform and knew that we were there to help them. We didn't know the IT system like they did or the patient population like they did, but we were fresh, we were there to help. That emotional support was definitely key, and I think definitely this last [deployment], that was very important. And as nurses too, we have to care for ourselves, but care for other staff as well.

They're still battling the virus and giving the vaccines but hopefully my just three days of being there helped and gave them a little bit of a reprieve. I definitely felt that sentiment as I was winding down my deployment days there. They were very appreciative and said how much they enjoyed the officers coming. Although, in the grand scheme of things, it was a short amount of time. It felt like I was gone for quite a while with everything happening at home and newness of life here, but in the grand scheme of things, it really wasn't that long.

JS: I can imagine. Going back to the first deployment at Kennedy Airport, you had that wonderful, fascinating story about the Wisconsin student. So, it made me wonder what were the logistics like? How many travelers had to face quarantining, and what were the logistics involved when that happened? This is a pretty new thing to us, right? In this case, someone's parents had to drive back to get them, but typically what would happen when a patient came back and you suspected not all was right?

NC: Thanks, John. Yeah, I like that story. What was happening at that time? Having young kids I ask myself, am I going to be doing this when my kids are in college? Is that going to be me driving halfway across the country to pick up my kid? Yeah, so the details are kind of fuzzy. I wish I had written down more of the numbers of travelers coming through. I think that would have been good to capture. It's my knowledge of the overall picture of what was happening at JFK when I walked into Terminal 4 each day. I could tell how many people were there, what restaurants were closed, the taxicab area that was hustling and bustling the first day but by mid to end of March everything was just silent. Even the hotel that I was lodging at, the JFK Hilton was quiet. It was a short commute, a shuttle bus between the airport and the hotel. At first the shuttle going back and forth had a lot of people, and by the end of March it was just the officers in uniform and some flight attendants [and pilots]. There weren't a whole lot of passengers [on the shuttle]. And out of my hotel window, I could literally see the JFK runway. Well, I'm sure there are many runways at the airport. The first week that I was there, every 6 or 7 minutes there was a 747 landing and it seemed like it was right at my window. And a week later, it was just that silent eerie sense of what was happening.

Back to your question, if [we suspected] someone was sick, what did we do? Well, it was a case-by-case basis, right? And I definitely learned quickly, when you fly in, going through customs, you're flying from a different country, you know, there's a lot of different jurisdictions that you go through. You go through customs. Don't quote me on this, but in some countries, I think you can go through customs prior to actually landing in the United States. But the majority of passengers would go through customs once they land at JFK or get off the flight here on US soil. Once they go through customs, then that was more of the point where we were screening passengers and basically taking temperatures, asking simple questions, asking what, if any, symptoms they had, and travel history was also huge.

[01:20:18]

So, based off of that short interaction you were able to say okay, we need to do a more thorough screening, like a secondary or tertiary type screening. So, the science behind [the screening] was more the triage [process to determine] when we need to capture that potential COVID case and then to screen them. I know exactly who I would talk to at the quarantine station because they were very knowledgeable about a lot of these technical questions. And I actually reached out to her when I was in North Carolina. I had some contact tracing questions. She was very helpful with that. From a jurisdiction standpoint, once a passenger goes through customs, and has their luggage, CDC can generally no longer restrict travel for them. Then they would be under the New York City Department of Health. Once they were in a taxicab, or Uber, or someone picked them up then they were under the public health jurisdiction of New York State or New York City Health Department.

JS: Were there state or city health officials there as well then?

NC: Particularly there at the quarantine station? Not that I know of. As the quarantine medical officer, I had a lot of phone calls and conversations [with other public health officials]. But I guess the full-time CDC staff there had those contacts, so I [deferred to them in many of those] types of conversations. But I'm focusing more on the safety and clinical side. So, I had a lot of conversations with some of the local hospitals. And talking to the emergency room physicians, the charge nurse in the ER, trying to figure out the options [for certain cases]. What can I do? I had someone that I think is symptomatic with a fever. They have travel history. What can I do? And we did send some travelers to the hospital for further evaluation.

Also, there were resources that I had besides the JFK quarantine station staff, I had another quarantine medical officer at the CDC in Atlanta that I could call and explain to them the situation, bounce ideas off them. So, it was a constant flow of communication. I would have this case and need to determine what are our options? Not all parents can drive from Wisconsin to pick up their son. You have to work out the logistics if you are telling a passenger that they are not able to get on their next flight. Well, you have to figure out what do you do with their baggage. You have to call the airlines or make sure their luggage does not get on that next flight. Put yourself in that situation where you're trying to catch the next flight. A lot of times there's not a whole lot of time between when you touch down to when your next flight leaves. [When you arrive] in the United States, you go through customs and you think I'm in the United States, I'm almost home, almost to Wisconsin, but I'm not there yet. Someone [checks your temperature], says I have a fever and I had to go talk to this tall guy in uniform, military boots

and wearing all this PPE. And if you've been in JFK, sometimes the air conditioning is not working efficiently. It was very warm in that PPE from what I remember. So, not that comfortable.

So, yeah, you hit the nail on the head saying the logistics of actually trying to figure out what to do with each traveler, that we were trying to prevent the spread of the virus. That was very resource and time intensive. But I'll say, if I was smart and I was one of those travelers, there's some medication that you can take to reduce your fever. And if you have a cough, cough drops. And if you were smart or if you knew that or had a sense of their screening, and I want to get home, I probably would take some fever reducing medication. Not saying that I would, but how do we know that a lot of the passengers didn't do that. Usually, the pilots will say, okay, we're approaching our destination, our airport; we'll be on the ground in an hour. Well, there you go, there's your timing.

JS: Well, as you said, COVID testing wasn't done at this point.

NC: There was actually COVID testing, but it was more in the hospital setting, and that involved a lot of interactions with the hospitals to find out where [travelers could] get tested. A lot of it was for inpatient settings at that time. That's what I remember was that it, obviously, wasn't widely available at the time.

JS: Right. Your second and third deployments focus primarily on contact tracing, and I wondered if you had any particularly interesting recollections from that. Did you ever encounter much resistance in carrying out that responsibility and in North Carolina, for example?

NC: Yeah, good question. So, just to give you a little bit of background of the community in Duplin County. It was definitely a rural community, and there's a lot of migrant agricultural workers that lived there. So, thinking back around that timeframe, there were some questions about the essential workers that were going into the communities and working. If you like dill pickles and go to the grocery store you can get the Mount Olive dill pickles. Those are processed in Mount Olive, North Carolina, which is pretty close to Duplin County. A lot of the meat processing packaging plants were in that area as well. So, just something that was very different that I don't really experience living in [suburban] Maryland; although, I come from a background with family who farmed for many generations [in the Midwest], but myself as a nurse didn't have that background.

So, pushback or just challenges with the contact tracing: The public health department leadership or those coworkers that were there since the beginning [of the pandemic] were doing much of this [the contact tracing]. It was very much tailored to that specific community. They knew what the population was like, and they knew the different nuances. There were specific stores that I didn't know what they were talking about. They [the staff] were asking questions, if you were at this grocery store, or did you go to this gas station. And not being a local, I didn't know what that meant. The only thing I knew was when they said Walmart. That was a common theme--were you shopping at Walmart? But yeah, that was challenging for me to just kind of pick up the local lingo, per se. Just overall, my impression of my time with the contact tracing was really trying to explain to people how it actually worked. What was the benefit of it? And when you're on the phone and talking to someone, it's definitely different than that personal interaction that I was used to as a nurse. But also, working at FDA, we had a lot of internal [in-

person] meetings. Virtual platforms were huge this last year [and seems to be the way of the future]. But I think the human side can be kind of lacking at times when you're not there directly in person reading all the body language and [being physically present with people]. So, a lot of it [the contract tracing] was trying to explain to people why it was important for them to quarantine. And trying to put myself in their shoes, saying, well, they were essential workers. Whatever their family or social situation was they had to make a choice, just like you, just like me. We have decisions to make as adults and a lot of them didn't see this as a risk and they didn't really understand. Maybe they did understand some of the risk, but it was more for us to find how you communicate that [those risks]. Again, going back to the messaging that I said was very important in the early days of the pandemic in March, what are we telling people? You know, why is it [self-quarantining] important? And I think the key is the local health department; they know those [local] populations best. They know what to expect from people in their community.

You have to ask for their judgment, too. If we're trying to make some type of a flyer or something to communicate to the public to go get tested or get a vaccine, you have to tailor it [the messaging] to that specific group or that community. That was what I learned during those two deployments. And it was just, again, a sense of wow, I'm telling people that they need to go home, they need to self-isolate, they can't see anyone. Is this going to work for them? They need the necessities of life. They need food, and shelter. And so, sometimes I felt like I was a social worker just trying to figure out what would be the best situation for them. That was the role I played with contact tracing., but also it was [my] family members too. They were asking me these same questions about how much interaction should we do. And thinking back in the summer, things were reopening. The guidance maybe was not very specific, and it very much

seemed like it was a case-by-case basis. And I had a lot of conversation with family members, what they had been experiencing in different parts of the country. My oldest brother is a [county] sheriff in Minnesota, so he was dealing with it on the law enforcement side, and my parents, who were higher risk due to their age [and health conditions]. And then personally here with my wife and our young kids, and the expected little one that came into our life later in the year. So, the contact tracing helped me learn the CDC guidelines and the science behind that. And a lot of it was the communication, for example, what are we telling people? No one wants to be told, hey, you need to be at home for the next two weeks by yourself, and that's it. You really have to quickly develop that rapport with that person and be able to assess on a human side, but also on the medical side what are their needs and do it all on the phone.

Contact tracing, especially with FDA, was mostly done on the phone. I didn't see any one in person. A lot of it was also through email, but again, it was this virtual version that we've been living in. And there are things that worked and some things that didn't. I'm thinking this is probably how a lot of healthcare is going to be going. A lot of the telehealth restrictions were relaxed during the public health emergency, and it seems like that's a direction things are heading.

[01:40:20]

JS: Yeah. Particularly with the FDA-related tracing, was that local or was it across the field, for example, for purposes of those going out on inspections and so on?

NC: Good question. Yeah, that was all of FDA. So, what I think you're asking is, was the scope all FDA employees, contractors. Yeah, there was some nuances that I hadn't really known a whole lot about, FDA contractors per se, but definitely inspectors, or labs, and even at headquarters at White Oak. So, that deployment I felt really good about, like I was really helping my fellow coworkers. It was a different experience working in occupational health Besides doing [the White Oak] flu vaccine clinic, I hadn't had a whole lot of experience in occupational health prior to that. I would say, though, that in my experiences working at White Oak, it seemed like every fall, we were doing a flu vaccine campaign, and the PHS officers was giving the vaccines. And that experience just helped me logistically to understand that premise of occ health. I had met the chief medical officer there, and just being able to operate in that situation is very different than my previous experience with critical care or even with the CDC [deployment]. That was just a whole different experience, but it was definitely very welcomed and something I was happy to do. I remember the leadership of the program had mentioned that the impact for the FDA occupational clinic and the contact tracing program was just enormous. You're trying to keep the FDA workforce safe and healthy, and what we were doing at that time, this past fall, we were trying to get a vaccine rolled out. We were trying to approve the vaccines. And we [FDA]were also doing the reviews of the drugs that were used to treat for coronavirus symptoms. I also worked on the quality side of drugs, making sure that the manufacturing was of high quality too. So, those were my FDA duties along with making sure the FDA workforce was safe to [carry on their important work] as well. So, it was just an amazing experience to be in that situation. For a short amount of time, it was definitely something I'll remember.

JS: Yeah. Your final deployment for IHS, that must have been particularly interesting, a very different deployment, perhaps, than the others you were on. What sort of memories do you have of that or any stories from that experience?

NC: Well, that one was the most recent, so I should have better stories, right? So, the Spokane Native American tribe is located in the eastern part of Washington State, yeah, I had never been to that part of the state. I had been to Seattle/Tacoma area, though. I was told that I was going to be flying into some airport by its code and that I had to get a rental. My flight was going to be arranged, and there was a recommended hotel for lodging there. The airport code I was going to be flying into was GEG. I had no idea what the airport code was. It was Spokane, Washington, where I just came back from.

I just wasn't familiar with that area of the state. So, yeah, you're right, it was definitely a different experience, but I had found a previous deployment with the Indian Health Service in Rosebud, South Dakota [during the summer of 2016]. So, I had that previous experience to kind of lean upon. And the information that I was able to get beforehand [helped] to orient myself to the area, included what type of population. Again, with your friend Google you're able to find a lot of information nowadays. You learn more when you're boots on the ground, but I was able to find out more about the area, the location, and whatever information they had on their website.

I was able to quickly read through that before I flew out, just to get a sense of what I was going to be walking into. Yeah, I guess the experience I had gleaned from that deployment was more the clinical side of nursing. I mentioned earlier on, though, the need to care for the actual staff. And I kind of remember walking in the first day -- actually, well, let's back up. Getting there was a challenge itself-- the logistics of just travel sometimes is hard. And this was end of

January. There was a lot of snow and icy roads. And I was deployed with one other officer. She was coming from Florida, and admitted that she had only seen snow a couple times in her life. So, guess who was going to be driving? It was myself, which was fine. In Maryland we do get icy roads, so I was fine with that. But it was more living in a big city.

Rural health is very different for a lot of people, and I think for PHS officers particularly. At least, that's my theory, unless you've had those experiences on a Native American reservation. Prior to my time in the Public Health Service I lived and grew up in Arizona and was very familiar with reservations and Native American culture, being in the southwest. So I was comfortable being in a rural area compared to maybe a fellow public health officer from Florida that hadn't seen snow since she was young. And the closest lodging or hotel was about an hour away or so. And yeah, the regional difference in the country is laughable.

I think of how in Maryland we get just a little bit of a touch of snow and a little ice here and schools are delayed two hours. And pre-pandemic, you had the option to telework. And it wasn't the case in Washington state. You get 4 or 5 inches of snow with a bunch of ice, well, you're expected to still show up, even if you have to drive an hour to get there. Sure enough, they have the vehicles and clear the roads, but it's just a whole different lifestyle that I appreciate the more time that I spend in rural settings. And I was born in a rural cultural area in South Dakota, so I definitely appreciate that more and more.

Going back to the first time at the Wellpinit Service Unit, once we did get there, it was snowing. And I was probably more concerned with my fellow officer, that she was going to freeze. She didn't have all the winter wear that you would have in Maryland versus living in Florida, so I made sure we had the heat on and keep warm. You know, it's kind of cold out there. But everyone was very welcoming, and our goal was to get folks vaccinated, keep people

safe, and it took some getting used to that pace of work after my daily duties of teleworking with CMS. [Deployment] is definitely a different pace. There's challenges in both types of settings. Physically the toll that it takes getting to the deployment area and being on your feet for so many hours on end—that physicality is challenging. And then, throwing in the time change and different weather, being away from family, it definitely makes you appreciate your own bed and being able to get home and see family and getting back to real life.

VB: So, LCDR Caulk, this is Vanessa again. You already touched a lot on your past experiences on deployments and, how you drew on those experiences or parallels between them. And I'm sure given your many experiences as a responder, there's probably ways you don't even recognize that you're drawing on lessons from the past, just in your everyday motions. I'd like to hear a little bit about how the uniqueness of the COVID deployments were different from past ones, and perhaps even the Spokane deployment is a good place to start since you had similar deployment with IHS in the past.

NC: Yeah, good question. I'm sure there's a lot of things that I've just picked up in the years that I've been in the Public Health Service, and deployments, and various activities, that I don't think I would have ever had those opportunities if I had stayed in the civil service. As I mentioned, prior to commissioning I was a nurse at a VA hospital, so I definitely appreciate those experiences; although, they're challenging and tough, they're rewarding and also help you grow personally as an officer, as a nurse. And definitely makes you appreciate what you have at home. Every deployment that I've done that is a common theme. When I get back, it's wow! I feel very blessed with not just the resources, and the family, and support, and the responsibilities

that I have at home, but I'm glad too that I can help these people out in whatever ways possible here and there. But like you said, yeah, there's probably a lot of things that I don't even realize that I've picked up from those deployments. So, I guess you're asking about the difference from the previous IHS deployment than the one this past month. Was that your question?

[01:59:25]

VB: I guess maybe just did you detect anything that was like conspicuously different about the missions you went on for the COVID-19 pandemic versus past deployments that you responded to? I mean, anything that stands out.

NC: You know, besides the heightened awareness of actually people potentially being asymptomatic and carrying the virus, I don't think anything major popped up that I can think of right now. Maybe just with general life and with young kids, it seems like there are a lot more things I can consider safety-wise, now being a dad and father of three daughters, which is more scary to me than actually getting the virus. How to raise three kids in this world, let alone three daughters.

The difference in previous deployments to now, well, one, I think just physically they tend to be a little longer. I've done some deployments that were two weeks long, even prior to the pandemic. The deployment in Rosebud, South Dakota, that was for 30 days. And this past one in Washington State was 30 days as well. So, the timing wasn't really any different. I think it's just more of the heightened awareness of, okay, we're here to help with the COVID response, but a lot of it you don't really think about, like the challenges that the pandemic has

placed on your daily life, not just when you're deployed in a setting where you're caring for people or you're doing COVID testing. What do you do when you're off shift? You're living in that area, in that community [for the short-term], so you're very new to what the norms are and [public health] restrictions. For example, are restaurants open? You're living out of a hotel or whatever your lodging is at the time. You're trying to figure that out. You're new to that area, but you also have COVID happening as well. So, you're not as familiar than what you would be if you're just home and you know what the restrictions are or how to keep safe. What are the safety things that I should be looking out for really? So, I would say that's more of a stressor. It's an added stressor to these types of deployments. I get finished with my shift, and I get to go back, have some down time--whatever down time I have before I get up and ready for the next shift. So, to me, that was probably the biggest difference. And I would say the North Carolina deployment was when I noticed that the most.

Like I said, when I was at JFK the CDCquarantine station at that time, in March, we weren't doing math. Social distancing was in the early stages. I started doing that when I was [in New York] there in March. But any other Public Health Service deployments were very social, we are a social group of officers during our off-shift time or down time like to go and talk to each other and say what are your duties here and what agency do you work with. And by last summer we were doing social distancing [and trying to prevent any spread of the virus]. For example, the team meetings [in North Carolina]; we're used to having these large teams congregating in one room with a lot of officers together. That wasn't part of the pandemic [safety operations]. So, we had a lot of team meetings that were all virtual on WebEx or Zoom. And that was different, a lot different. So, the communication standpoint was for people used to it. Maybe it wasn't as tough, but some people who weren't used to do the WebEx calls, it was a

little more challenging and so that just kind of added to the mix of the whole deployment experience.

VB: I could imagine that that would enhance the sort of stress when it takes away the opportunity to commiserate casually or just interact casually off shift with your fellow officers. Were there any ways you were even able to manufacture opportunities for just like when you normally could have gone out to have a meal together or something? Did you have any chance to share experiences or get to know some of the fellow officers that were deployed with you?

NC: Oh, yeah, that was definitely a time that I really appreciated learning from the other officers. And again, with safety precautions fully enforced, definitely you can be very creative and be able to do certain activities together but also stay at a safe distance. In North Carolina I think there was a walking trail that was close by. This was in the summer, so it was humid in North Carolina, if anyone's been down there, but it was nice to get out and do some physical activity and stay socially distanced. But also, being outdoors and getting that down time with other officers, [specifically in smaller groups], was important and good for morale too. But yeah, we spent a lot of time together with other officers, and that's definitely one thing I enjoy about the deployments is learning from others and here I get to share my stories as well, and they can learn from me, so that's definitely a positive.

Keeping with the safety precautions, yes, we were able to enjoy some down time together. In North Carolina, I remember when we were just finishing up with the deployment. One of the staff at the health department remarked, "You know, there's this great barbeque place on your way back to your hotel. You need to stop there." And they had outdoor seating. We

were able to sit safely away, and that’s the best barbeque I’ve had. Just some of those fun things that we’re able to do while we are still on deployment. I was going to add to some of the challenges, the differences in a pre-pandemic versus during the COVID response, and a lot of it is the challenge that I’ve noticed.

And I’m sure I’m not the only officer that’s noticed this. I was on a call just this week with the other nurses in the category. They voiced the same concern or challenges as the amount of time we’re gone [deployed]. It’s not more of the time that we’re gone. To me, it’s more of the being gone, and coming back, and then going out again. There’s a lot of preplanning logistics that happen every single time you deploy, and it's all a little different. Did I mention the more you deploy, the more you’re used to it? I think the Public Health Service officers, we’re used to maybe deploying once a year. I guess that was kind of the average for myself, one time a year I was deployed, whether it was for hurricanes or helping out with the Indian Health Service. I’ve also deployed to the Immigration and Customs Enforcement or during some of the local DC events here in the Washington DC area.

So, yeah, again, when I tell people I deployed four times for the pandemic in 12 months, they’re like, oh, that’s a lot. And yeah, it is. I feel like that’s tough to really get into a groove not just at home but even at work too. And it’s definitely a challenge. It’s something new for officers to be called up so frequently. The time away--it’s more the frequency of being able to leave and be gone for that timeframe that’s a big challenge. I’m not sure what the solution is, but I’m sure things will change. This is an opportunity just like anything else when big things like this happen to reevaluate the structures, and there’s so many things that will come about from this big picture. I think there’s going to be a lot of good things that come out it.

VB: I guess that something that we have to look forward to is any improved processes or protocols that we may be able to implement going forward. You talked about getting such valuable opportunities and even more valuable considering the circumstances to interact with some officers. Did you have any opportunities for similar social interactions with the other staff, either at JFK or in North Carolina, or in Washington? Did you assimilate into the structure that existed there? Not just you, the other officers as well. Did it feel like they understood the role that you were going to play coming in, and did everybody get along?

NC: So, that last part, yeah, being a nurse, there's a lot of expectations that come with that, with the RN behind my name, and also there's also just a common theme, Okay, you're a nurse, you can do this, let's go, let's do it. So, in regard to the other staff that are not officers, I think they are very curious about what you do, and they've always been very welcoming. The situations are different, but I've always been able to assimilate. It's definitely their community, and I'm coming there to assist, to help, and having that understanding is key.

And that's just the norm that any officer would know. We're here to assist. We're here to help. What can we do? You know, I'm a nurse. This is my expertise. You probably don't want me to try to put an IV in--it's been a couple years since I've done that, and I can do it, but I might be a little rusty. So, certain things like [clarifying the roles and responsibilities can help]. But also, being able to read the situation and being able to know what you're walking into definitely helps too. So, sometimes you don't want to be told all the things that you need to know [on deployment], because it's kind of better for you to just figure it out on your own and not be biased by someone else's judgement. A lot of times, we might be coming into a deployment where we're reloading, as in the officers that have been there are getting

demobilized and we're coming to replace them. So, there might be a chance where you have some transition time where they're going to basically tell us everything that we need to know for the deployment. And there's no harm in that. I think it's good. But there's also sometimes when you have to let the officer just assess the situation from their own standpoint as well.

I'll say, again, another joy of being a nurse, also being a male nurse, is that you work with a lot of ladies. And one of the first things in North Carolina that I remember is that when we got to the health department, our first day there, just general orientation, a lay of the land, a lot of nurses were working for the contact tracing case investigations and some of them had come out of retirement to help out. I think in the whole health department there were probably two other guys, and so I was the third guy there. And the ladies had taken over the men's staff bathroom. So, they were like, oh, well, there's one men's bathroom here. It's over [at the other side of the building]. You know, you're going to have to walk. So, I had to walk to wherever. It was just the logistics of that, just a funny thing right off the bat, saying we're not discriminating against you, but our men's bathroom is being occupied right now, and that was kind of a funny thing with all the other social things happening; just a good joke. And I told him, well, this is the story of my life. I have three daughters. Well, my third wasn't born at the time, but I was like this is my life [as a nurse].

[02:19:54]

JS: That's terrific. So, I want to change gears here just a little bit. We're hoping to get from these, of course, the experience of the officers on deployment. But also, we want to try to give these oral histories a sense of what the patient's experience was like. And I think through the

eyes of officers like yourself, you've had an opportunity to obviously work with lots of people in all your deployments. You've already talked about the patients and how you had to deal with the issue of possible quarantine in your very first one. But I'm sure all of your deployments have given you perspective, some of which I hope will be worth sharing. We certainly don't want to be revealing of any privacy issues. But the patient's experience during the COVID epidemic is one that we also hope to learn from in these. And so, any experiences or stories that you care to share would be most welcome.

NC: Yeah, I would be interested in hearing more about patients and their stories as well. And, you know, so the few that I mentioned, the college student that was in New York trying to get back home to Wisconsin, all of the people that I had talked to for the contact tracing I can't even count. And then, most recently with the Native American population, the general sense that I've got was with those experiences is that people are still human, you know? They still want that social interaction. You go out in public now versus 12 months ago, you can see it? And people might be a little more hesitant, whatever you want to call it, or scared to go out in public or being scared of getting the virus, but I know we're still human.

There are things in our lives that are important to us. And with any change or big events that happen in our lives, there's a sense that we can move past them or take it in stride. It's definitely challenging, and I sure hope I don't have to live through another 2020 ever again. Just so many things that are different in our lives, but again, I remember earlier in the year in 2020, people were talking about this is the year to focus on, the 2020 vision, right? And the Big Apple, the ball dropped in New York City. People were wearing those 2020 glasses, right, and life was good back on January 1, 2020. And definitely a lot of challenges had come from the pandemic,

but the pandemic didn't stop people from getting sick. There's cancer, and people died from heart attacks, and there were also the well child checkups, and labor and delivery that I experienced. That was a different experience for me being on the father side of going through labor and delivery during the pandemic. All three of my daughters were born at Walter Reed in Bethesda and this last one, I'll say it, was very different from the first two, just the difference in [COVID] protocols. I'm glad it was our third. It would have been a lot different if it was our first.

So, what were the patients experiencing? I think they were experiencing the same thing that we all are. We've gone through this upheaval in our society whether it's medical things that you're challenged with, or just the social changes that are happening, or grieving a loss of a family member to COVID, or just the whole challenges with being socially isolated, and wearing a mask, and having kids at home [doing school online] when you're teleworking 100%. I think we're all having that similar experience and that's what gives me hope. And I tell people I think this is going to bring us together more [as a community]; a positive that will come out of it. We've seen a lot of challenges definitely this past year in many different aspects of life, but I think the patients were just experiencing that same or similar problems or challenges that we all are, just the daily life. I don't think there was anything really new about it. And it's trying to find those fun [humorous] times or interactions or the men's bathroom that turned into the ladies bathroom that I just laughed at, because that was just the story of my life. Seeing the big picture, the light at the end of the tunnel, definitely helps. And I really appreciate you guys taking the time here on a Friday to listen, and I'm glad I definitely can share these experiences. I hope whoever listens to these stories can glean from my experience and understand what life was like

or the nuances of deployments for Public Health Service officers and nurses during this time in our country and learn from those situations and go from there.

JS: Yeah. I don't know if this is what one would expect or not, but from your first COVID deployment, through the last one, did you see a change in a sense of concern, fear, or whatever you want to call it, as this whole thing unfolded? You were there out in the field witnessing a lot of this. But I was just curious if the mood of patients or others you were around was changing as things worsened? Was that evident to you in your role?

NC: Yeah, looking back at it, definitely I had been able to see different phases of the pandemic response from the early days where we had limited testing, putting those [CDC] travel restrictions to the contact tracing, testing during summer and fall, and now with the COVID vaccination campaign. Yeah, the changes in attitude being within different communities, it's hard to get a sense of what they're going through. When they first started, I had a good sense of life in North Carolina. They definitely had a good sense of where they had come from, and they had a lot of work to do still. But they were definitely better off when we were there during the summer versus when they were first hit with the pandemic earlier in the spring, and then had their malware attack on their IT system. So, definitely they had gone from such a challenging time to one when things were better for them. However, I think as you got more into the pandemic the wear and tear, the emotional side of it, was just wearing on people. I could tell that definitely later on further down in the last couple deployments. People knew what to expect, they knew what to do, they had their protocols in place for testing. There were, again, some nuance, but I think the sense of "Oh, my, what are we supposed to do with this influx of

patients," that was earlier on, right? That was in March, when I was talking to the emergency room physicians and the charge nurses in New York about what to do with the influx of patients.

There was more knowledge [as we progressed through the pandemic], right, but again, later on, people were kind of just worn and just had gone through a lot. And what I mentioned earlier on was being able to actually care for the staff or just listening to their tough times that they've gone through in the last year or so. That was very important. I thought that was something that I was able to help out. That was a positive thing for me to do.

VB: And I'm sure it's something that was very much appreciated and maybe in invisible ways, really helped sustain the workforce down to the individual level. I wanted to ask you, because it's been such an important issue for FDA, I mean, at every level, when you were deployed to Spokane, and you were actually vaccinating people, did you encounter skepticism or hesitancy? Did you have to do a lot of work to explain the value of vaccination? Did you feel that the fact that the vaccine was finally available maybe lifted some of that pressure you alluded to after a year into the pandemic?

NC: Good question. Yeah, that's been a recent topic, right? How willing or trusting is the community with getting vaccinated? I'll say, yeah, I encountered people with varying opinions, a lot of different viewpoints. My experience with the Spokane tribe, however, seemed like they're very community focused, and also there's a lot of multigenerational families or a lot of families taking care of each other. That structure helped with knowing explaining the values that you see in a vaccine, with being with the Public Health Service and a trained nurse. I'm lucky

enough to have that knowledge [as a nurse and understand the science] behind it. A lot of people don't, right?

[02:39:58]

So, I think in that regard, I had that ability to share my knowledge. The general impression was a community feeling or sense of I'm getting this vaccine to protect not only myself but trying to protect others. There's a lot of discussion with the mask wearing, and that too, was a big issue. And it was kind of an individual decision as well. You know, there's people that didn't want to be vaccinated for whatever reason that they had. Even my own family members, I've talked to them about these topics, and even within the family, there's lots of opinions and feeling one way or the other.

I did share with a lot of the patients, or even with family members, or colleagues, a couple [pieces of advice]. One, I think we live in a world where we have access to [an incredible amount of] information very quickly. With things being so virtual now, it's easy to get information. Now, the quality of information that's posted, or on social media, the quality may not be -- just in my opinion—that good. I would like to see better quality of information, the science, the facts, and with so much access to different lines of information, different opinions, and specifically for vaccines, it waters down the science behind it and the benefits. But I'll say too it's definitely that healthcare provider - patient interaction, that relationship that you have on that [a professional] level, that you can impact at the individual level. Maybe I would have more luck within my family if they weren't my family members, but with that being said, it's definitely still at an individual level. But it's very tough to get that message across when there's

so much other noise out there giving different opinions to and it's more the sound bites, or if this is worth your time to actually hear out [that it makes it difficult to sift through the information], and make an informed decision. And I guess that was kind of my experience, professionally or personally with family and friends.

The other thing that I would tell people if they ask me, "You're a nurse; is this safe?" And I tell them, well, do you think that all these healthcare workers that have been battling the pandemic for the last year would be vaccinated, or that the priority of the vaccines would be given to healthcare providers first, if people didn't think it was safe? That was just my rationale for a lot of people. And they said that makes somewhat more sense.

VB: It does put the calculation of risk in a different perspective, wouldn't you say?

NC: Yes.

VB: Yeah. Well, LCDR Caulk, I just really want to thank you for spending time with us this afternoon. And just I've learned so much from listening to your stories, and I know that so many other people will too having captured this now. If there's anything else you'd like to add before we end the interview, I'd welcome it. But if there's not, I'll just go ahead and stop the recording.

NC: Yeah, just to wrap up my thoughts. Again, thank you for the time, and hopefully this can help others learn from my experience. You know, the common themes that I noticed throughout the year and the deployments is the flexibility of being an officer, and this is what the public needs, responders to public health issues, and definitely it's an honor to serve in that regard. It's

definitely challenging and something that I never thought that I would be living in this type of situation and going through what I did in the last year. And I think a lot of people are probably in that same boat. But again, in being able to step away and see the larger picture makes me confident that this whole situation, the pandemic, is going to make things better. There's a lot of opportunity that's coming out of this, which makes me hopeful. It might not be right away, but it's definitely going to be I think down the road. Definitely we'll see some changes and some light at the end of the tunnel. So, thank you again.

VB: Thank you. And thank you for those closing remarks. It's really beneficial to have that perspective. And yeah, I'm going to go ahead and close the recording.

[END OF INTERVIEW]

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