Samantha Hughes

Behind the Mask

June 28, 2022

Barr: Good afternoon. Today is June 28, 2022. My name is Gabrielle Barr, and I'm the archivist at the Office of NIH History and Stetten Museum. Today I have the pleasure of speaking with Samantha Hughes. Ms. Hughes is the Deputy Director of the Division of Emergency Management (DEM), which is part of the Office of the Director (OD). Thank you very much for being with me.

Hughes: Thank you.

Barr: To begin, can you please explain what "emergency management" entails? We've heard a lot about it, but it's a very broad term. Also, please speak about the responsibilities associated with your position.

Hughes: Yes, I agree. Emergency management has probably gotten a lot more popular as a term and in everyone's daily lives as of late. The last couple years brought all of that to light, which is good. It's been really good for our division to kind of get the spotlight a little bit, [albeit] not in a good way—I wish it had been for something a little more pleasant. But if there's any silver lining to come out of it, it's to make people think about it a little more—not just at work, but also in their personal lives, because it's important.

Our division is responsible for emergency planning for the NIH. It covers a broad range of emergency types, including smaller things that may happen inside of a single building. Say the fire alarm goes off. We're responsible for helping to make sure that that building has a plan in place, that their staff are trained, and that essentially everyone knows what to do in response to that emergency. Taking it to a basic thing, like if the fire alarm goes off, everyone should know where their assembly area is and evacuate to that place immediately so that people can know where you are and know you're not in the building and that you're safe—and so the fire department can do their job. From something as minor as that to something larger, like a pandemic, we get involved in it. We're kind of the tie between emergency responders to leadership and everything in between, making sure the plans are in place, exercises are done, and everyone knows what to do—and knows that we're going to work together to do what we need to do to respond to it. We also work with the Department of Health and Human Services (HHS) to coordinate what NIH is doing with what our department is doing and what they expect us to do.

For the internal response to the pandemic, we've been involved from the very beginning. We stood up an incident management team mainly focused on the Office of Research Services (ORS). A lot of the responders and those essential personnel came from ORS. Not all of them, obviously, but a good majority of ORS are considered essential staff, making sure that the basics of the NIH could be maintained—the animals were still taken care of, making sure that we still had security guards in place, that we still had fire response capabilities. Even though there were few people on the campus, there still had to be that minimum level of services throughout the pandemic. We helped organize from the beginning and helped plan from one stage to the next. We weren't in that leadership group who were making the final decisions, we were just helping inform their decisions. My particular job was compiling data—getting case rate data if NIH staff were infected and they reported it to us, then compiling all that data to see trends and whether it was increasing or decreasing or things like that—to help the leadership make risk informed decisions along the way.

Barr: What kinds of data did you look at? Local, national, and international?

Hughes: Yeah, all of the above. There were a lot of sources.

Barr: How did you differentiate? There's a ton of data out there.

Hughes: Yeah, there is. We did find a source that matched up with what the CDC [Centers for Disease Control and Prevention] was using initially—I believe that was Johns Hopkins at first, and I don't remember what it ended up being. Once that data was out there more reliably, we could just use that directly—whatever the CDC was posting, we could use that as a more direct source, at least for the national and international trends. For NIH staff—the most important thing to us because that was driving how many people we could have on the campus—if there's a large rate of transmission in the community, we could see if we were doing the right things on campus to not be at that steep curve. We wanted that to be a lower rate here, so that we knew we were doing the right things as far as mitigation or if we needed to step it back. If things were increasing in the community and increasing at NIH, we could "Okay, we need to step it back. We need fewer people on the campus to reduce that transmission probability." There are a lot of sources.

My job duties definitely went outside of what I expected to do at NIH as an Emergency Manager—beyond my wildest dreams. I have basically become a data analyst. I have no background in that other than just being pretty proficient at Excel. Excel can only do so much. I had to learn a new software, a completely new program to me. I taught myself how to use it.

Barr: What did you learn?

Hughes: Power BI, it's a Microsoft program that is a lot like Excel, but it does a lot more. It lets you manipulate data behind the scenes and then put it into tables, where you can create visuals and make them as simple or as complicated as you want or make them multiple pages. It just creates a way to do and do again, but automatically. You tell it what you want it to do with the data, how you want it manipulated, and then you refresh it—and you don't have to touch it again. It's kind of an automated way to take data, merge it together and make it what you want it to be, so that you can create those visuals and just have it repeat that process over and over again, where you don't have to do it manually.

Barr: How often did you have to refresh the data, and how often did you have to show leadership graphs and data?

Hughes: It was once, sometimes twice, a week. It depended on how the case rates were and how busy it was and then there were new things to visualize. Case data and positivity rates were always at the forefront from the beginning until now. We added more visuals to the briefing along the way to include vaccination rates. That was the next big thing. I used the program for helping to prioritize the staff vaccination eligibility because we were doing vaccinations at NIH—way more people than we could vaccinate, either both by stock of vaccines that were received or just being able to have enough people to provide the vaccinations. We had to time it and pick and choose what groups of people based on job titles and how often they were at work. We wanted to put the highest risk people first in line. To be able to do that, because we have plus or minus 48,000 people on the books, we couldn't just put them in a big pool or do first come, first served. We had to put some kind of thought behind prioritizing them so that we could get the best result from that. We also had a program where people could request to be prioritized within their designated group. You don't get to the very front of lists, but you could request a medical prioritization based on whatever your designated group was for vaccination. If you had

some kind of condition that met the CDC definition of high risk, you could make that request, and you could be bumped up a little bit in order to get your vaccination a little bit sooner. We had to manage those. It was a lot.

Barr: How do you balance one medical risk over another? That must have been challenging.

Hughes: I don't want to go too much into that particular process, but it was from them, it was first come, first serve. It wasn't prioritizing the pool of people who made that request. It was that if you made that request sooner than someone else who made the request, then you would be put in line that way.

Barr: A lot to keep track of!

Hughes: It was a lot to keep track of. It got very complicated. Thank goodness for the program that I learned because I have used it for so many different things, not just creating these visuals in the beginning. We've built more along the way. We've added on to it. This briefing that covered what was happening from a data standpoint and trends along the way, from case rates to vaccination rates, got to be ten pages long. Now that there are some vaccination requirements, we're tracking those as well. It's not what I expected to be doing. It's been a challenge. I've learned some skills that I can definitely carry forward in areas.

Barr: Such as?

Hughes: This program is just helpful for repeating a task over and over again. There are things that we're tracking that we would have to do manually beforehand. Now, we can build that in the background, and have it displayed so that our division or emergency coordinators throughout the Institutes and Centers and the Office of the Director can actually see what we see. We can manage permissions; we can lock it down as much as we need to and protect not only the data itself but protect the integrity of the visual or whatever it is we're sharing. It has a lot of different ways we can use it. We do an accountability exercise every year where we request that every Institute and Center account for all their staff. It's a five-day exercise that really every NIH staff member is a part of. If something catastrophic happens, they need to practice the process of contacting all of their staff to know what their status is. We've automated the reporting process for that. They do their accounting, report it with a form, and that form automatically feeds into a Power BI dashboard that gets refreshed every day. We're kind of hands off at that point. The Institutes and Centers and Office of the Director do their thing. They do the reporting—we don't have to manually keep track of that and send it out via email, and they don't have to wait for us to do all this. We're not a pinch point anymore, and it happens automatically.

Barr: Does the program allow you to blend several documents of data into one graph or something like that?

Hughes: Oh yeah, definitely. It takes all kinds of sources. You can use Excel spreadsheets; you can use CSVs [comma-separated values]. Those are the primary ones. You can integrate with SharePoint Lists. There's a lot of different sources you can pull from, and you can get things into a single view. It's really helpful with doing those kinds of merges and doing it automatically, where you don't have to interact with it. You do quality control and make sure it's working as it should. But for the most part, once you get it set up, it takes a lot less time. You're investing up front so you can save time later. It's working really well. I feel like I'm advertising for this program—that wasn't my intent!

Barr: Are there graphics or data analytics that you wish the program would have and that you are using other programs for or that you would recommend to the creators of this particular program to put into their software?

Hughes: I actually haven't found anything that I feel like I'm lacking or missing. Maybe that's just because I don't know what is out there. Like I said, I'm not a data analyst, and I'm not an IT specialist—although some people are starting to think that I am.

Barr: With emergency management becoming more data driven, have others on your staff become more like data analysists? Is that something you're going to have to start looking to train within your department?

Hughes: Yeah, definitely. Our division is also using it to visualize and summarize the occupancy levels in our buildings. We're using it for our Occupant Emergency Program. This is new; we're in the process of launching it. The Institute or Center that has the highest occupancy generally is responsible for providing an Occupant Emergency Coordinator for that building or campus. This is for leased facilities; the main campus is different since we have our own Fire and Police Department on site. Among the off-campus buildings, and there are a lot of them, the IC with the highest occupancy level of staff, they should generally—and there are caveats and exceptions—be providing an Occupancy Emergency Coordinator for the building. That person is generally on site most of the time. They help coordinate and manage the Occupant Program for that building to make sure that the plan is in place, and everyone knows what to do. We help facilitate that, but we can't be there all the time. They know their building better than we do. We help them with what the requirements are and help develop the plan. Once that's in place, they help maintain it and make sure that all the components are there, and that new staff get the training they need. To be able to see who the lead is in that building—because we have so many buildings—using work location data from the NIH Enterprise Directory (NED) system and now Power BI to put people in the facility that they belong to, we can easily see on a single page which IC has which building. That's kind of a new thing whereas before it was the ICs waiting on us to update them every year or two or tell them who was responsible. But now we can see it, they can see it, and it gets updated automatically. Integrating those automated processes is just making life easier for all of us and making things more visible.

Barr: How do people react now that it's data driven more so than directives coming from you?

Hughes: It's a work in progress. Our division has a long way to go. The pandemic has helped us get that visibility from a leadership standpoint too, seeing the importance of emergency management as a concept and driving other things, not just pandemic stuff. Everyone's thinking about emergency management a little bit more. That's going to help us get these programs moving faster and get them in place so that everyone feels supported and ready to deal with whatever may come at them. And that's what we want to make sure is in place. This is going to help us move that forward more quickly.

But the other part of the emergency program are those requirements. There are requirements that are coming down from the department that are in CFRs [Code of Federal Regulations]. They get more general as they go up, but there are a set of minimum components of our emergency program, that we should be meeting. We need to be able to track that because there are a lot of buildings—but using more data and having that in a place where everyone that needs to see it can see it, and where we can see where those gaps are and address them. Having those visualizations and being able to pick out those weak points and those spots that need attention more quickly—that's going to help us make things better and make them better more quickly to make sure no one's getting left behind. We're so spread out, and there's so many people. It's complicated. Having that in a succinct visual dataset is going to help us.

Barr: During the pandemic, were there plans for how to deal with floods and chemical leaks and things like that? There are a lot fewer people on campus and just so many more variables. Did you all come up with revisions, or a "Plan B", for how to care for routine issues, beyond people just being sick?

Hughes: Yeah. That's actually a good point that you bring up. There are a lot fewer people in the buildings now, and that could continue for any amount of time. I don't know if they're going to make changes to the minimum number of days people have to be in. For now, we have to plan as if the way it is will be how it's going to continue for some time. In the past, we've had a set of people predesignated to perform certain duties if there's an emergency. But now, it's much harder to do because of schedules being so different. People that you might expect to be in five days a week may be coming in only one or two days a week. Having that team there and having them there reliably is just not feasible. We did have a working group recently, a couple of months ago, to visit these issues and kind of reimagine what the program is and what we can do to make it better and not put so much pressure on people that might not be there that we're expecting to be there but really looking at what we are expecting them to do. It's going to take a culture shift to make the changes that we're suggesting. Since they haven't been approved yet, we need to get them approved before we can move forward, but we are definitely thinking about that and knowing that it's going to look a lot different. There's going to be a lot more training. There's going to be just a different concept of what the Occupant Emergency Program is going to look like, so we have our work cut out for us.

Barr: Before we go into the challenges of COVID in particular, were there any other considerations that you all have put into your COVID-19 emergency plans? You talked about number of people, those vaccinated, and things like that.

Hughes: There are a lot of variables. The biggest thing is that there is a "lessons learned" project happening, which hasn't been finalized, making sure that those lessons learned are recorded so that we can act on them and circle back around to where the initial plan was, incorporate those action items, and make those changes, whether it's organizationally or process-wise. Maybe we need to pull more people from other areas of NIH to help because we were kind of relying on volunteers a lot.

Barr: What parts of your plan do you think worked well, and what do you feel in the future could be amended?

Hughes: I don't want to get into that because that is a bigger project that I don't want to speak to. I have not been involved as much with it. There's a bigger scope beyond what I've seen that I don't think I'd be able to speak to that intelligently.

Barr: That's totally fine. What were some of the challenges that you and your group dealt with during the past two and a half years?

Hughes: This is not just us, but because our division is so small, we weren't necessarily equipped. This was NIH-wide. Having enough staff to deal with what we have to do on a daily basis is not a problem foreign to anyone. Adding on the other responsibilities of dealing with the pandemic specifically, we had to pause of a lot of our divisional duties and redirect our focus completely to just doing COVID. Because we were helping with the testing site, that took a couple of staff full-time to assist with that.

Barr: How did you guys help with the testing site?

Hughes: The Fire Department was generally in charge of it, but our Division Director helped with a plan—where it was going to go, how it was going to run, and actually staffing it. We had a couple of our division members doing vehicle control and check-in as the vehicles would come in—helping direct them, making sure they actually had a test scheduled and weren't in the wrong place, giving them instructions on what to do next, helping with traffic control, and check-in. That took a lot of time. Obviously, it got a little bit better as we went a little more on autopilot—but by then, we weren't doing it five days a week, so that kind of tapered down some.

But in the beginning, it was a pretty heavy lift to help do all those duties. We really had only a few people and we had some vacancies as well. We're already small, but luckily, we got a couple of those filled. We're in much better shape than we were, but things got a little difficult for a while.

Barr: How do you feel that your experiences in the Coast Guard, which have ranged from serving as a helicopter pilot to acting as a search and rescue contingency planner prepared you for your work with COVID-19?

Hughes: Oh, I think my experience has just prepared me for life in general. The jobs in the Coast Guard have always been high stress. Being able to handle that stress, compartmentalize it and not let it get the best of me has been the biggest help with this because it was pretty high stress. There was a lot asked of us and there were many deadlines with short turnarounds. A lot of extra hours and extra time spent working was just necessary. Being in the Coast Guard I accepted that. A lot of time there was no "9 to 5"; it was you do what you had to do to get it done. That was what was expected, and you did it. At the end of the day, your mission is to save lives. That was the most important thing. It's just as rewarding being here. That's why I like being at NIH. That's why it was so natural for me to do this kind of work, because I may not see it directly, but knowing that the mission of NIH is continuing, and that even if it's a small part, I had a part in making sure that happened.

Barr: How did you motivate your staff and keep up their morale as a supervisor during some of the more stressful parts of the pandemic?

Hughes: I'm technically not a supervisor. I'm a team lead. I don't know if that changes the question.

Barr: No, it's the same sort of thing—a person who has a leadership role.

Hughes: I just wanted to make sure. I generally like to keep things light. Just having a sense of humor and being able to joke and make light—knowing my audience, though, and not joking all the time, keeping it appropriate and when it's appropriate. In the division, everyone definitely gets along pretty well. We make, I think, a pretty good team. Honesty and levity—that's how I conduct myself, to make sure that they know they can talk to me and can vent if they need to and know that it's a safe place to do it. Just being able to joke with people and get a laugh once in a while helps take that stress down a notch. I know it helps me. I have to do it all the time—vent that steam a little bit. Personally, just having those simple graphs at the end of the day and knowing they're as accurate as I can possibly make them—and [knowing] they are going to go all the way up to the NIH Director who is going to make decisions based on that—was important to me. It gave me something tangible where I could say "I did that." And I did not do it alone—whether it was that the division took on the burden of what I was supposed to be doing in order to get that done, or they contributed to the data itself, or they double-checked me and found errors—everyone had a part in it. I'm grateful to have worked alongside them. It's sounds cheesy, but yeah.

Barr: In addition to being an NIH employee, you're also a person who's been living through the pandemic. What are some opportunities and challenges that COVID-19 has had on you as an individual?

Hughes: Yeah. That part of it was pretty hard, with all those extra hours. I have two boys. They're six and nine [years old] now, but two years ago they were four and six. One was not in school yet and the other was just starting first grade, doing homeschool. My younger one didn't have the opportunity for preschool. I certainly couldn't do it; I didn't have the time. There was no more daycare. Working full-time and being a full-time parent and teacher, I don't know how I made it out alive.

Barr: I don't know either. That sounds really stressful.

Hughes: Oh, goodness. Yeah, it was. It got hard for a while. My biggest fear was, I guess, impacting my kids by not being able to be present with them all the time. They had to entertain themselves, which fortunately they were old enough to do. They're close enough in age that they could play together, and I wouldn't have to worry about them. With virtual school, I didn't have to do too much with that for the first grader at the time, but my younger one was basically alone for a while. They seem to have come out okay. That's been the silver lining—that they seem to have bounced back just fine. Things are looking more normal now, and I'm grateful for that. They survived me working all the time, and I think they're stronger because of it. I like to think I am too.

Barr: Did you give them formal activities or get ideas from other moms who were in your same situation?

Hughes: I got mental support from the other moms in my neighborhood because our kids are really close. They go to school together just down the road. A couple of them go to the same daycare. They missed each other a lot during that time. Eventually, when they were able to get back together, that made them closer, like "Oh, I missed you. I haven't seen you in forever." Getting through that, even though they were apart, is sort of like they survived it together and have a closer bond now. I couldn't do a lot of formal things with them. If it was "tablet time," I tried to have them do educational stuff, which worked okay, but my younger one definitely could have used the benefit of the preschool program that my older one had, and you can definitely tell the difference. A lot of kids are in the same boat, so they did a great job of working with them this year and trying to get him up to speed. That is the one area where it's probably going to take a little extra to get his reading up to par. But my bar might have been at a different place because my older one had the formal pre-K program, and he was above where he needed to be, so I think my standard is a little bit high as to what "normal" really is.

Barr: Were there ways that you coped and took a break from your work and the stressors?

Hughes: Camping. We did a lot of camping. We had never taken them before, and when I say camping, I mean in a cabin. I don't mean in a tent. If I don't have running water or my own bathroom, I'm not really happy. We did a lot of the KOAs [Kampgrounds of America, Inc.] in the area. There are tons of them. We've seen pretty much every KOA campground from Pennsylvania to West Virginia and down into Virginia too. [The idea was to go] where we could be outside and be around people, but still feel comfortable and safe being in our own space. The kids just loved it. There's just so much that we probably never would have seen and hiking trails that we never would have even thought to look at. It seems like everyone's getting outside more, but that really stuck with us. We've spent a lot more time outside and exploring. That was the way to get them out and exercising in the sunshine and for everyone to kind of take a breath and just be outside, but not in a way that we didn't feel comfortable. It was a really good way to be together as a family and also hop in the car and take a trip. We didn't do that for a long time.

Barr: Do you have any trips planned for this summer?

Hughes: We've taken a few—kind of made up for lost time. We've been to Dutch Wonderland and Hershey Park. We went to a little bed and breakfast farm in Pennsylvania. They have a litter of kittens every spring, so we went and saw them; the tiny things are so cute. They have a little tractor ride. We basically rent the house, so we have the whole place to ourselves. They have sheep and goats that you can feed. It's really cute. I like to support them because they're super nice. We've been there every year for the last five years to visit—visiting them as much as visiting the area. We've done that and we're going to Ocean City later in the summer. We took a quick little weekend trip earlier, like a month and a half ago or so—just a long weekend just to get together.

Barr: That's exciting for the kids that they can now get out.

Hughes: School is pretty much back to normal and they're back in daycare, so things are about as normal as they can be right now. It's different, but it's as close to normal as we've been in a long time.

Barr: How did you reassure your kids in terms of what was going on? How did you tell them what was going on with the pandemic from the perspective of a child, with people afraid and getting sick around them?

Hughes: I tried to keep it as simple as possible and not get into too many details—just that there was a virus like the flu, but that could make people really sick. We explained that we didn't want them to get sick , and we didn't want them to be afraid, but there are people that could get sick and be sicker than others, and we don't want to spread it, so we want to make sure we take care of each other too, not just ourselves—and to put it in perspective, saying things like "You'll be okay, don't worry, but we want to make sure that we take care of everybody and that's why we're being so cautious." They seemed to take it in stride. They had no problem throwing on a mask. No problem at all. We still wear them most of the time and they seem to be very accepting of it. I'm grateful for that—very grateful. COVID went through our house last summer, so I guess they've been through it, and they've seen it, and we all came out okay. That was kind of reassuring to them as well. But I want to make sure that I tell them that we still have to be cautious, and to make sure that we take care of people and be respectful of people if they have more concerns than we do. Or if someone's wearing a mask around you and you happen to not be, let them—don't say anything and be respectful. I got off the hook easy on that one.

Barr: That's great. Well, is there anything else that you would like to share from either your professional or personal experiences with COVID-19 or about what you would like to see for emergency management in the future?

Hughes: Just that I'm glad that it's gotten some more attention because it's a really hard concept. It's more about trying to mitigate or prevent. You plan and, thankfully, it may never happen—hopefully, something bad never does. But you do all the planning beforehand and it's hard to see the benefit from it until something bad does happen. We never want that to happen but having something where it's gets the attention that it needs—that is the silver lining we need to look at so we can give it more attention, more time and energy, and whatever else it takes to put that effort in and spread it across those different risk areas—not just infectious disease, but all the other physical or natural things that could happen, putting a focus on it again.

Barr: Definitely. Thank you so much for all your do and for your time. I wish you and everyone else the best. Thank you.

Hughes: Thank you.