November 3, 2023 ACD Meeting Transcription

>> >> >> Zoom we have Cristal Gary, Octavio, Josh, Dr. Meadows. Then in the room is myself, Joe's here, Monica, Daniel, and Julie so we have a quorum. A few members are doing other things, they'll be here in a few minutes but let's go ahead and get started. As has been the tradition so far, one of the important things that we hear about at each of these meetings is an update on COVID so that's what we're going to do first this morning. I'm DEIA lighted to have here today Brendan Jackson who has taken over duties. He's the lead of the epidemiology team in food and water born diseases. He's going to update us today and start a discussion what CDC is thinking as we enter into this fall and winter season. >> Brendan Jackson: Good morning. It's an honor to be here. I just took over last week but I've been on the COVID response on and off for the past two years. This is obviously a huge topic, both the pandemic and CDC's role in it so I'm most interested in the section at the end with your feedback advice and comments. I want to take a moment to acknowledge this has been tough on the CDC staff. I spend a lot of time talking with my colleagues. A lot of it has not been the hours or hard work. We follow the news, we're like social immediate like most people and it's tough to see the failures real and accused everyday. We join the agency because we believe in its mission and potential impacts. I think the morale can't be underestimated. We also know there's things we can do and must do better. While COVID is not what it once was we're still here fighting, we're hungry to serve. We're trying to forge a vision for the future for CDC and COVID response and what we can do. With that out of the way, where are we with COVID? If I can figure out how to change this. I'm not going to spend much time here. We're close to an all time low. What we are starting to see is an up tic in hospitalizations and positive cases. We're trying to be as prepared as possible. The big question is we're going to get a rise in infections, how much of that is going to translate to the things we worry about, long COVID, deaths, that kind of thing People are primarily familiar with this slide estimating various things based on a huge amount of data that happens every week. We passed B A-4 and 5 and they're fading into the background although they comprise a majority of those that are out there. The new ones, they all really roll off the tongue, don't they. They seem to be growing faster, more trance I'm sorry I believe and other level of concerns about them. There's one we're watching XBB, in Southeast Asia. The challenge with all three of these is they have resistance implications. That's being sorted out. There's a prophylactic cocktail that's good at preventing consequences, it's sort of like a vaccine but not really. That's something that's being watched and acted upon very quickly here. The good news is our anti-Verizon Wireless, Paxlovid, seem to be unaffected so far so we need to be dodge down on those. What does this mean in terms of vaccines and other preexisting immunities to questions. The data is relatively processing, there is again like with every one of these incremental increase from escape from immunity. These are the great grandchildren of B A-5 and 2 so not a massive change we're talking about here. All right. So I want to talk about the COVID community levels. These were covered pretty widely several months ago, it's fallen out of coverage. We're still producing them week after week. This is a metric looking at healthcare strain and cases. They're not what they used to be.ment in terms of transmission. So right now

we're in a pretty good place, less than 3 percent of counties in the country are high community levels where we are recommending people step up. People are mask at all levels and that's one thing we message more, making sure people feel comfortable masking. How do we shift that factor there. We know these numbers could easily rise in the next few months and as new variants come go and, these can flex and recede with them so this is sort of our up plan for now. One thing we need to be thinking about is COVID is not the only respiratory illness out there, it's not 2020 and everyone's watching the news on RSV and influenza. Let's talk strategy for a second here. I know CDC has been criticized by some circles by focusing on preventing the health consequences rather than preventing solely infections themselves. I get this. The challenge of course is with Omicron infections are really, really hard to prevent. We've all dealt with that for months and months now. Even China has challenges controlling COVID and containing COVID infections with 0 COVID policy. That's not something we're going to come close to or want to in this country. These are several months old and summarize a range of guidance updates this summer. I want to bring it up because there was a lot of coverage and we didn't communicate it in the right way it was shifting away from a collective responsibility and actions to individual ones. That was not the intent but we could have done better in communicating that. Two things I want to drill down. We got some criticism for moving away from six feet social distancing metric and saying we were getting away from the importance of social distancing. That was not the intent. The criticism we're getting is six feet is not a magic binary. It's a stew of factors, inside or outside, ventilation, masked, whether they're talking too fast like myself. That was one factor we're trying to convey. The other was removal of quarantine, CDC is getting rid of quarantine in most settings, it had not been recommended for months and months for vaccinated people. Vaccination is not a great barrier to infection, still very good for preventing advanced disease. So I think there's a lot more discussion to be had and like to hear feed bragging what we as a society can do to protect the most vulnerable. There aren't easy answers here I want to talk about current response priorities. There are too many. Little overoptimistic here but I want to go through in a little bit of detail The first are increasing uptake about our key tools, boosters and therapeutics. The problem is too many people still aren't getting them specially in socially disadvantaged groups, the intent is how do we reach people where they're at, how do we partner together to get increased access and a way that people can relate to. I'll get to some of these others. I want to drill down on integration. I think we need to focus on respiratory disease to see this theme of communications coming up again and begin this is a key focus what we can do at this point. The next is transition, we've been transitioning with COVID for a long time in terms of our own operations within CDC. We've moved a lot of stuff out of emergency operations center to programs that can handle it from their more routine -- I it won't say routine because things have been expanded and beefed in the pure emergency phase and long-term phase right there. We have escalation plans in place if things get worse. Finally equity. It's not supposed to be a box on the top. It's supposed to be central to what we do here. Next slide. Drilling down VONS, you're all awell aware of this too. The boosters authorized back in early September it's been going fairly well. It's a little bit behind but it's a very different situation now of course. What's

most concerning to me is that red box, only about 20 percent people over 65 have gotten those updated boosters and these are the people at greatest risk of dying even more than they were in the past. So helpful for people of all ages to get these boosters so we want to do what we can to increase that. We're tracking the vaccines up particular with the administration numbers and have urgently looking at vaccine effectiveness of these boosters in preventing boosters. We see similar disparities in the uptake of the anti-viral Paxlovid which is most effective and widely used. This recently MMWR shows it's based on an updated base, and nonHispanic whites, controlling for age. The other challenge is we hear a lot of myths about Paxlovid. Doc said I didn't need it because I don't feel that sick and I'll probably not need it anyway. You're supposed to take it in the first five days to prevent you from going to the hospital. The rebound we will see. It's with or without Paxlovid. The bottom line is if you have rebound it's usually almost always very mild and it's more preventing severe disease in the first place. On to ventilation. I'm going to spend a lot of take about ventilation and it's become clear that good indoor ventilation is a key way do reduce the spread of COVID. It doesn't require individual actions to have effects. We're working on stepping up our game in this area. Would have's got websites, we're working on stream lining those. We're working with the office of technology policy, cross governmental targets for where buildings could be. A long way still to go there but we can move forward. This MMWR figure here shows progress in the area but how much remains to be done. This is looking at schools and the ones that have implemented higher end interventions, HEPA filtrations, improving HVAC system to do that and still a majority of schools have not been able to do that yet. The next one here preparing and we've talked about preparing for what's coming this fall and winter. We've got 8 million potential viral hosts out there, humans and animals. I think there's some questions is this virus run to the end of its revolutionary rope for humans, we'd like to think that and we've been surprised by Delta or Omicron and we need to be prepared. The next slide, the final priority I'll mention is long COVID or post-COVID conditions a we call it. There's so much that we don't understand and we urgently need to. There's a lot of suffering going on there. NIH is the lead agency when it comes to understanding causes and those kind of things. We're trying to help advance clinical education in this area because we're hearing all kinds of experiences patients are did dealing with this across the country. I'm going to end by saying we still regard COVID as an important public health priority. We're doing the best we can given the resources you a lotted and know we can always do better and looking forward to hearing your feedback. >> Thanks so much, Dr. Jackson, for that excellent presentation. I feel a lot safer knowing there's folks like you guiding the incident command process. Let's go ahead and open this up for discussion. There are several questions already with folks in the room so I'll start with Daniel. >> Thank you. I wanted to talk about the MMWR ratio and ethnic disparities in outpatient COVID treatment for a second because in that report what we found striking, I think, from my perspective is you all talked about disparities for black, multiple, or race or Hispanic patients present across all ages, but it was the 59 to 75 year old group that had the most striking disparate. There was a death rate of about 44 percent. So I wanted to know what you all are doing, since you talk about centering equity what are you doing to reach that group of older adults that we see consistently

on the down side and the ones most affected of minority groups, curious your thoughts on that what do you think is driving that, what is being done to address and I mean to tag on to that the obesity piece. I noticed that's the one number one underlying health condition and I want do know what CDC's doing to address that as well. Yeah. I think that's the most concerning feature is disparities are the highest in oldest age groups. This is a partnership between different agencies, agency for strategic performance and response. We are doing a lot of things to try and support that. We got a number much communications products in development. Our health equity experts are doing a lot of outreach on different local platforms, sort of targeting -- that's not the right word any more -- focusing on certain markets. I think there's a lot more that we could be doing to help support that. We've stayed out of the therapeutic space a little bit while other agencies take the lead. CDC is a widely recognized name even if it's not the most trusted name in all places these days. I think this is a more forward looking thing than where we've been. There was a recent MMWR at the same time that looked at disparities by zip code level, it looks like those have been narrowing in the last few months. I think some. Interventions as a whole in terms of telemedicine, I know it doesn't always get more disadvantaged groups. I think one thing I was really hopeful about was the pharmacist prescribing factor. We know vaccines are provided now by pharmacists. The EUA was updated to make sure pharmacist high school a creatinine test available through one or another. It's not feasible in most pharmacy settings. That's a real gap in being able to get these to people who need it. We know test to treatment sites are really the current ones are focused on things things that have like minute clinics. Your second question on obesity, huge question, really important question. I would defer to others to talk more about what CDC is doing on obesity in general. I think that's hard to address in the acute phase but app clearly an important risk factor we need to be aware of. >> Joe and off Lynn and also Joe and then Crystal. I would like to congratulate you and applaud you. That was concise. It was logical. It was factual.s it was -- this is the sort of communication we want from CDC. You did it beautifully so thank you for that. >> It's not often I'm accused of being logical so thank you. >> It was the best. So we're all professionals, medical people or scientists. The general public deserves that communication an the opportunity to ask questions about what they don't understand. It wasn't messaged, it was factual, you said what we fadeed to know. That's the way. Now isn't it logical that we should start treating COVID as another one of the respiratory diseases that we don't know theality yet but aren't we at the stage that the same messages you apply to flu or RSV that we should apply to COVID. We don't know what's going to happen in the long-term so why should we separate it and treat it different is my question, I guess. >> I 1 percent agree with you. We need to integrate it more. That's part of a move to programs at CDC is to integrate it more within the national center for immunization and respiratory diseases. That's something happening right now. We haven't gotten that public enough yet but it's something we're preparing for. >> One last point. Long COVID, it's just a theory but is it that long COVID -- we're seeing long COVID because we've had such a huge possible lags base and long disease probably happens in many other diseases except we don't see the same population there? I'm thinking of Lyme disease, chronic fatigue syndrome, things like that. Do we need to say that long COVID is different from some long something else and

should we be not looking at it as a disease phenomenon that may be common to many infectious pathogens? I think it's a great point. That's what I spent a lot of 2021 working on was long COVID. I think it's an incredibly important topic. I think there's a lot of parallels with MECFS and chronic fatigue syndrome. I think the challenge is long COVID probably not one thing, a lot of different things going on. So some are probably common to other diseasings. I wouldn't be surprised if there's something more specific to COVID going on here. There's a great Atlantic article that was talking burnt immediate COVID. That's probably a lot more common. We need to focus on the long version too because those people are going to be suffering for the longest period. I think it goes back again there's a lot of variation is what's going on there and a lot of urgent work do tease all those things apart. I think one thing, it's helpful to at least mention is while people can get some version of post-COVID infections after any degree of infection. How much of this is the sequelae of being in the hospital and post-ICU syndrome and all those types of things versus all the other categorizations that are going on there and I think to lump them all together it's challenging for sure. >> My complements for the presentation. I don't remember if we GB session when you were at an earlier stage. I have a few questions one being around your questions about communications. I think it's been very difficult for the public to pivot from, you know, this is like Omicron surge, every time you turn around somebody has it and seven people knew it was important, and now it's easily in the top ten causes of death every single day, it doesn't seem important to them because they don't really understand public health. Every time I turn around I don't experience somebody's having a heart attack over there and dying of cancer over there. You know, figuring out a way -- if you could get a vaccine that would completely prevent having stroke for the rest of your life you would get it or you would receive did if it could treat 50 percent of all cancers, and we've got something that's scaled at that level more than 300 people every day dying and most people don't think it's important to get the boosters. That's kind of incredible. And it's not that they completely prevent it but at least in younger people they prevent you from dying. If there's a way to somehow reframe the communications around the significance of this issue as a public health threat and to get people to understand how important these threats are. We know on a day-to-day basis how hard it is to communicate about public health so if that doesn't turn into something that's easy because it's hard to get attention to prevention of hypertension and diabetes and all the things that cause cancer obviously. The other point I wanted to make, you know, being among those older folks that I get every vaccine so I'm in your good statistic but I know that I'm boosted up wazoo and I know immunity is waning no, problem there, but I know at my age that is not a guarantee I won't die from COVID so I'm wearing this all the time. I think that is a message that needs to translate into stronger efforts toward prevention of community transmission. I have colleagues at my institution, George Washington University, you might know who some of them are who are advocating that it's not important to immunize the children because they themselves are not getting sick. Now we're seeing it's not a good thing in the context of review SV and everything else. It's not a good thing in the context of grandparents to not be immunized because the parents will be somewhat protected but also need to benefit from a reduction in community transmission and we're not getting that benefit.

So that was -- I think that's the communications point as well that it's not just about the risk to your individual child and by the way a lot of immunizable pediatric infections, most kids aren't very sick. Polio, most kids aren't very sick. In a way the problem with polio is long polio virus one could argue and 75 percent of no symptoms at all but the logic some people are using to say kids don't need to be immunized, our entire framework of pediatric immunizations but that's coming from a very passionate pediatrician here. The other point, these don't all connect but well we talk about equity the one thing I think I don't hear enough about is every week shocks me when I see the statistics is the rate of death between Alaskan natives and the rate of death occurring in those populations and how to get national attention I don't know but it's horrific what is happening. Your map, you know, when you look at some of the areas that are still brighter, that's the country, reservations in those places. I know you know that. But it's so important and it's just like another infectious disease onslaught on that community. Then the last but not least point I wanted to make with what we're seeing with the surge of RSV and flu and everything and what I'm hearing in the pediatric community is the hospitals are becoming overwhelmed and we have a severe nursing shortage even in our hospital at George Washington, people are leaving leaving the emergency room because there aren't enough nurses, they're having to board patients in the ER because not enough nurses to have enough beds to adds mit him. Children's Hospitals is worse because you have all the specialized care. One thing we should have learned but haven't learned from COVID is that people hate this and it's a really great thing to take these off. What we should have learned is these prevent transmission. When we have epidemics of respiratory virus among kids why not put masks back on them? Why is it bad, you know, for the CDC to recommend that? Great to say fix the ventilation in the schools. Schools need funding for that. They need money. But this is simple and it's really not that bad to wear a mask speaking of which. Thank you, Brenda, very much. >> I'm going to briefly because I'm running out of time. Communications number one I couldn't agree more. If we could have 1/10,000th of the energy spent to criticize CDC. It's not something that happens over night and not a vacuum. The second topic of pediatric immunization it's a good point. I'm not the expert in this let me clarify that but I know a year or so ago we ran into the trouble to promoting the benefits of vaccination for preventing infection a little too much. We don't have good estimates yet to fully understand how much it makes a impact. Even a 20 to 40 percent in infection transmission can mean a big thing at a population level. That's a hard thing to convey. I agree we need to double down on that. The American Indian issue I agree, there's folks at CDC delegated to working with those partners but not easy, major structural issues there. Then masking, I will say there's talks right now how we message masking in the more broader sense beyond COVID, nothing can be mandatory, how do we communicate in a way that's going to be most FESHTHive. >> At a minimum don't go to school sick, don't give your kids anti-his at that minutes or decon gest apartments and send them to school sick. I think we learned that too. >> CDC is not in control of a sick leave policy and parents need to go to work and drop their kids off at school or daycare. Double down on that message for sure. There has been hundreds and millions spent on school ventilation. A lot of that is gone unspent for a variety of reasons. The supply chain of people waybill to implement those things has been

a lot of demand for that that exceeds supplies. >> We have the same problem in the university. >> Let's go to Josh. >> Ut-oh. We can hear you. >> Oh, you can. Now we can't. >> You should continue with somebody else. >> Keep going. >> You can hear me again? Yes. >> Go for it. We hear you. Great. I'm back. Three specific suggestions, this is a great presentation. I really appreciated it for whatever they're worth. Very quickly, you know, the forecasting center has long had the idea that people could appreciate the risk of the respiratory disease along with the risk of the weather. I don't know if CDC is considering working with weather reporters, creating a respiratory disease index, putting it on weather reports. I think it's a way for people to think we have an umbrella, I carry a mask, if it's 90 for Baltimore, I'm going to decide to wear a mask all day. It's not about mandates or making it really tangible. Like a heat alert day, this is a disease alert day for a particular city, getting to that point. I don't know if that's realistic for this particular season but given the amount of disease for children I think thinking about how to communicate, not just through the detailed maps you have. Number two, you probably May already have this but we were talking about misinformation and disinformation and sometimes it seems like something comes out and it takes a few days for CDC to respond. I don't know if you have a misinformation team as part of IMS that is particularly watching this information spreading to particular communities that are vulnerable, that could be one contributing reason why you're seeing equity gaps but if you had really looking for that and not just waiting to hear about it, then it takes three days to explain ASEP doesn't mandate vaccines. It might be better to just anticipate and be right on top of it and have a female totally devoted to. >> I pulled up the letter on Paxlovid because pharmacies are a really important access point for people. I don't think it requires having access to creatinine to do a lab test. I think it says sufficient information is available such as access to health records less than 12 months old to assess renal and hepatic function. I think there is room for CDC to engage with FDA to provide some guidance, a safe harbor, you know, for pharmacists, listen to them what is keeping you from doing this? Maybe they're afraid this they don't have a creatinine level, they've overinterpreted FDA guidance which would not be the first time. Really there may be a different safe harbor to be like look, if the person has no risk factors for renal disease or you call the doctor and it's fine to give or you don't have to have some inedibly high standard because particularly they're at risk for dying from COVID. Making a public health judgment call with FDA about a reasonable set of criteria pharmacists could apply and putting that out in guidance could be a better approach. I wouldn't take FDA that maybe concept that they need to get a creatinine level as a given. >> I'll briefly respond. I love the idea about the respiratory disease index. It's been batted around in the past. I think that's something we can absolutely take back. I love the idea of misinformation team. A lot of communications comes at the agency level, at the office of associate director for communications and making sure we're as intergated as possible. I would love to see us be more forward leaning in that space. Third on the pharmacy issue I talked with a number of pharmacy groups and chains. I don't think their intent -- they are well aware of the challenges -- the rules and what they feel like they can do. I was being overly simplistic when therapy said they need to get a creatinine. The practical cults to get that information or have access to EHR really difficult in the retail setting these days so that's a huge limitation but I'm absolutely

interested in continued engagement with FDA and would love to hear your continued advice. >> Thank you. This is interesting. We're going to go a few minutes later than scheduled. To Crystal and Anna and I will ask one short question. >> Thank you. I'll try to be brief. I wanted to build on the question that Jill asked about long COVID and there's a lot of confusion and lack of information about it. You presented a lot of rich information and data to us today about COVID and COVID infections but no date about long COVID and maybe that's something we can revisit in our next meeting. But while long COVID, you're right, long COVID is more likely after severe illness it can occur after any infection but many people aren't aware of the risk of long COVID and taking that into account when they're making decisions about getting boosted or other preventive measures. They're not as worried about severe COVID initial infection but they are ear also not thinking about long COVID. It seems that positioning really needs to include long COVID and I'm really interested in what role you see CDC playing in educating, addressing, and responding to long COVID in the long-term. >> It was not intokes slight long COVID. Since I speak I couldn't cram everything in but I'm happy to address that at a few meeting in detail. I think we can do a better job of communitying that. One thing I'm particularly proud of is we were the first group of the gate with any long COVID clinical guidance. We worked with a range of folks in many fields early on, the clinician outreach calls in terms of that. I was pretty grate tied because there were a number of patient advocates who were very critical of CDC for a variety of reasons who applauded when that came out. Not a lot has changed given our understanding in the last year. There are some things absolutely. I think one of the challenges, it's sort of like a classic problem in medicine is I'm sorry, there's nothing further we can do. That is the worst thing you can say to a patient or family member, there's always something you can do even if it's not a curative factor. We've been partnering with clinical groups, I'm going to get the name wrong, American society for physical medicine and rehab has been a really strong mover in this area and a lot of other so the and a lot of discussions with them how to move it along as well as ongoing reels with the patient advocacy groups. I should point out to the other question earlier which is with chronic disease syndrome, the branch that works on that at CDC has a lot of responsibility related to long COVID these days so I think are able to translate some of that forward. Is there more we can do, absolutely. >> Thanks. >> Thank you for that for our presentation. Right now this is about Paxlovid and equity and it's free right now where there's no charge to the patient. I understand the drug itself is free. I think there can be an administration fee. My question though is this relates to equity because my assumption is in the fear future FDA will approve did. Once it's approved I don't see anyway there won't be a specific charge re for the drug, you have to pay for it. So in all likelihood those people without insurance will have a problem. I'm wondering if this is not specifically in CDC's domain, however, when we talk about equity and then we talk about CDC should work with other agencies, I wonder if there's a plan for that because probably there is going to be -- the people who have no insurance will have a problem. You know, how will -- is there a plan for working with other agencies to deal with this problem so that the existing equities do not further increase once there is a charge for the drug. >> ASPR is the lead agency when it comes to distribution and this type of planning. We talk about them frequently at least weekly or more

on these type of things. I would hesitate to say something that's not correct based on with a they're doing. I think it's a real concern. I think one of the biggest problem is the lack of ongoing COVID for funding and it's a reality at a certain point the money's going to run out and we have to make sure these are available. I think the supply of Paxlovid is still pretty good for now but that's going to be a challenge for the long-term. My point is to point this out as being one of the things when we look -- CDC doesn't have jurisdiction over everything however we have a long list of things we are saying the agency should take action and work with other agencies and containing the lead if there's a real interest in centering health equity to try to fix despite the lack of jurisdiction and lack of authority over these things and I don't think that's going to be easy but here's an example in front of us. >> You're preaching to the choir. >> This has to do with your communication challenges you presented and the likelihood that this winter will face increasing number of cases as well as potential changes and new variants. The big question out there from a communication standpoint is what can we say about the efficacy of vaccines as these new variants emergency. I'm wondering in the past the data CDC relied on was in cohort studies. That took a while to generate information. So the questions the media were having were not ones that were able to be answered scientifically. We deinvolved into misinformation about vaccine efficacy. Have you thought about ways to confront this challenge that we're likely to see with more real time data collection relative to systematic case that is are being reported and God forbid long-term control studies that would allow CDC to be first talking about vaccine efficacy. >> We get asked this from all different quarters all the time. The efficacy is out there from the published studies. The big question is the new variants and everything. We have a pretty good timeline for when we'll be able to get some of these things out in the next several weeks most likely. It's an inherent question we are not Israel so we are relying on big cohort studies and brief E- beef those up as much as possible. We have the vaccine infection break through surveillance which is tracking those cases. There's a couple challenges. One is up particular has not been super high yet and cases have not been super high yet so it's a hard time to accrue that data. I think we'll be one of the first, not that it's a competition because we see this as a top priority and the administration sees it as a top priority as well. I think there's been a lot of talk about this vaccine has not been tested, this and that. I think it's a great analogy with flu. It's not like every single flu vaccine gets tested. We know that boosters work already. This is adding a little additional piece of information about where they're at right now. I think the bigger question is going to be how long is that protection going to last and we've seen generally it doesn't last all that long. We're going to hope it gets us through the next year but time will tell. This is also potentially an opportunity for working with selected state or local health departments to create in real time the kinds of case control methodology that would allow you to compliment anything that's coming in for long time surveillance. Keep that in mind that's a strength to work with them looking for rapid answers. That's the challenge at being at the federal level is we're too removed from what's happening. Thanks. >> Thank you so much for your presentation today. I've got a lot of NFRJ in this group, a lot of good information. We appreciate you being here. >> Hold on to your seats because we now have another very important topic and another excellent presenter and I'm really delighted to ask John Mermin to

come up to the podium. He has a long history as you know of providing leadership in infectious disease prevention. He's also the national center for HIV, TV prevention. Thanks for joining us. We look forward to your update on monkeypox. >> Jonathan Mermin: I appreciate the chance to go after the worst epidemic in many decades. For a reflection on what happens over time and how the responses can be different and learn from each other. So let's see -- I am releasing responsibility for advancing slides. I want to highlight a few things about this infection. The reason M pox virus has derived a lot of attention is because it's part of the ortho pox viruses, the one that causes smallpox. There are some data from previous outbreaks and cases of monkeypox that indicated it could cause severe disease. It is named monkeypox because it was first discovered in 1958 following two outbreaks of pox-like disease in monkeys in the laboratory. I think there is an ongoing effort to potentially change or allow a different terminology because of stigma from the name itself. I would say that what's been happening over the past few decades is as the proportion of populations that have been immunized is going on and because the human and animal situations we've seening inning outbreaks with M box. These are some of the characteristic lesions. It's macular Pap lair and they can puffed use, ultimately scabbing over and takes a couple weeks for that to occur. The clinical presentation in the current outbreak is somewhat different in some ways than what we've seen before. The first is there's a slightly shorter incubation period. Lesions can be localize $to a body site or develop in waves. The rash often starts in mucosal areas and can cause severe illness, strictures and age lesions in pursuant to agreement of counsel tights and tonsil swelling and dysphasia and lid nap lid napopathy. >> This can occur or be absent and occur after rash shows up. The duration is still about trois to four weeks. It's not completely clear whether these differences is because it's claimed to be and how that manifests itself in large numbers or has something to do with the site of inknock lags. As I noticed some severe disease can occur. I'm showing these photos to show this is not a benign infection. When severe disease does occur and it is generally in less than 2 percent of cases persistent or recurring rash, necrotic lesions, sometimes over 100 of them, despite treatment with available agents. We can get multi-system organ failure, obstruction and strictures, and secondary bacterial or fungal infections. The majority of these occur in immunocompromised persons. The majority have -- we've seen severe deaths and people with nonHIV immain owe compromise. Who has gotten M pox in the US? The average age is 34 years. 96 percent are cisgender men and women. The majority of case are gay, men who have sex with men, and a third in African Americans, a third in Hispanics, and a 3rd in whites. 40 percent of cases were HIV and 40 percent have had an STI diagnosed in the past year. One-third have had greater than five sexual partners in past three weeks, and also well documented cases associated with caregiving or nose owe comb al events in the hospital with a finger stick. What's happened with the epidemiology and response? Next slide. So first when M pox started in Europe and came to the United States, it was noted that it was occurring primarily between gay and bisexual men, people changed their sexual behavior. There's a well documented P reduction of 50 percent and other reviewing factors that can put people at a higher likelihood of getting M pox. Then soon in July when the vaccine started to become veilable, we were able to get vaccine doses out and this highlights that we reached a

peak of vaccination in July to mid August. Dark blue is the first of dose, two dose vaccine series. We administered over a million doses, 650,000 of first doses, the trend over time has been reduced numbers of first doses and also the consequent reduced numbers in second doses as well. I will say there can be some discoloration that can last for weeks or months in some people who get the vaccines which takes one fifth the dose as subq determination and by allowing that vaccination we ex-panned the number of people who could be vaccinate but we allowed that to be placed in areas that could not be necessarily seen as publicly including subscapular or deltoid regions. The ACD asked questions previously about COVID and how you evaluate vaccine effectiveness or performance. While we are conducting some effectiveness studies we did an analysis to allow us to get a sense what was happening. The predominant number of people that we were able to look at had received mostly just the time period involved was the first dose of vaccine but we saw that there was a 14 times higher incidents of M pox in persons who had not been vaccinated compared with those who had been vaccinate and we have some ongoing additional analyses looking at what's happened over time including a second dose and looking at intradermal doses versus subq to establish this continues to be effective. Next slide, please. So what's happened to the epidemiology? This is the kind of Epi curve. We see we reached the peak in the United States in mid August and a fairly steady decline up until the current time. The right tale of this curve maybe looks like the rate at the time may be slowing to some extent but it is important to note that this infection is locally spread and we are doing some deep dives into both states and counties and within counties to better understand where this is occurring so we can very rapidly respond to clusters, outbreaks and individual cases on -- by supporting the health departments and perhaps even having people at CDC travel to the jurisdiction to assist because ultimately that's what it's going to take to truly reach the angle. Next slide, please. So from the very beginning of this outbreak we were concerned about equity issues. We established from the beginning of establishing the EOC response system an office for health equity that recognized both the issues related to the fact that the majority of cases are in gay bisexual or other men but to reduce some racial and ethnic disparities that naturally occur in an unKwell society unless we work against them. We reflected on other outbreaks including the ones I'm involved with in my center, HIV and STIs, so we were able to have special vaccine programs but also to bring up these important issues in both the communications we're doing and when we're working on health departments. On the left what you'll see is the epi curve by race or ethnicity. You can see regardless there's been a dramatic reduction in incidence of M pox. However, on the right, what you can see is even though it's been going down, it's decreasing at a faster rate in certain populations. The light blue are African Americans and the proportion occurring in African Americans are has increased quite dramatically from 15 percent in the beginning to now close to 50 percent. Next slide, please. So even before we started to see those changes, we did have community engagement and equity focus, and we used fact based messaging to reduce stigma, tried to use driver's license median add other channels to reduce MSV [digital] There's been a lot of influences and organizations that are focused on health but work within the community is most affected and we've had both integrated equity issues into the guidance provided for vaccination but also have any efficacy

programs, we encouraged health department to develop vaccine equity program that is could bring the vaccination to communities of color who were potentially benefiting from vaccination. There's some considerable success in some of these events and venues. What were some of the communication challenges? I know CDC has been talking about that during this meeting. Vaccination uptake is decreasing. There are estimates that there are about two million people who would benefit from vaccination in the United States in understanding the current situation with the epidemic and we haven't reached that number but the absolute number of people getting haven'ted every week is going down. There's some concern because the LGBTQ is often remined the of the HIV and being blamed. Intersectionality increases obstacles for African American and Hispanic Latino MSM. I would say CDC has been criticized for increasing stigma as well as criticized for not highlighting the disproportionate burden. How do we get the information out effectively who need to get that information without increasing stigma or discrimination? That question comes up for all of us in this room which is how do you disseminate messages and interventions to your audience without untoward negative effects and how do we do that in an environment where we can strategically deal with expanding disinformation or preventing them from occurring. I wanted to highlight here, these are kind of our estimated outbreak trajectories from our models. In the upper figure is cases by day report, the lower curve is the FESHTHive reproductive number. What you see is the effective reproductive number is estimated with some confidence but not assurety to be below one but you can see there sat least some probability that things could change. I think in reality that reflects the fact we're on a good trend but can't count our mission accomplished. So why now? Next slide I think we're in an environment where we see increasing. Every year we've reported more SDIs in America than the prior year. At this point other than COVID-19, STIs are essentially -- cases of STIs are 80 percent of the reportable cases in our surveillance systems in the United States. So M pox arrived where we have an inadequate STI infrastructure, systemic home phobia, racism, and economic policies associated with increasing STIs in some of the major racial and ethnic disparities that occur with gone yea and syphilis and herpes and chlamydia. MSM and transgender persons bear the largest burden of these STIs. There's been changes in the IV prevention landscape that changed the environment that could have led to increasing STIs. There's a rapid spread with M pox of a rarely viral infection with scientific unknowns. Although a black swan is described as an unthought of event but has a major outcome that occurs, a gray swan is an event with potentially cat graphic outcomes that we knew could occur but did not think it had a high probability of occurring. Much of preparedness is accepting there will be gray swans but how do we prepare for them well. I will say the supply of vaccine an testing accessibility were initially inlimited and now we have a full ability to do testing in the United States for M pox and it's shifting from constrained supply to ample supply and we have to adjust our response within that framework. Next slide. Some of the key issues for a public health response. How do we ensections routine M pox vaccination in clinics that provide HIV, STI, prep services and link those with community organizations who can bring people to services or bring services to people. How do we continue venue and event based vaccine equity initiatives? How do we nurture engagement with community organizations and lead centers

how do we continue research in the treatment, vaccine effectiveness and mode of administration, understanding animal reservoirs, there's concern in this environment some domestic animals might become hosts for M pox. Ohio do we better understand viral shedding? All when there's a new infection and no disease specific funding for any agency specific for M pox other than small amounts used previously. How do we expand collaboration between communicable disease and STI/HIV components? There are different silos at health departments and CDC. How do we cross those bridges and how do we ensure these are CDC public health authorities that make this happen? We are fortunate to have doctors in the end, they highlight we have problems with public health authorities to be provided to provide information to CDC but other public health authorities that have never been established that allow us to respond quickly and then zee things like the Paperwork Reduction Act which continues to hamper our ability to get our job done rapidly. Some of the lessons and obligations. One is we should anticipate the future and act fast. Focus on equity and work with communities. Bring services to people and make prevention easy is the way this is going to be gone in the long run. Gain trust with proof of action and share information in an effective way. And we are doing this in an environment whereas societal concern decreases public health increases and how do we deal with that in the long run? We put down three questions particularly that you are open to answer and ask any questions you want. One is what has CDC done well with M pox and what should we stop doing? When is the M pox outbreak overfor US and for the world. What policies, systems, infrastructure and resources need to be in place so we don't have a reyour gens. Thanks for that excellent presentation. I'm open up the floor for comments. I saw Lynn's hand first. >> I wanted to start by thanking U we've had a relatively lot, nobody has had a lot, of the disease in Washington DC. What I saw that has been excellent that CDC has worked very well with whatever you want to call it, I think they consider themselves to be a state health department, the DC Ophth government. I think they did many of the right things in terms of immediately getting in and communicating with the community of people. We had various festivals and events and other things that accelerated the spread early on unbeknownst to anybody that right about the time of introduction into our population there were pride activities and other activities bringing people together. So I think across the federal government, the innovation, it was really bad there wasn't enough of -- I'm not going to kid you. It's a sense of inadequate supply. But the innovation of being able to administer it so that there was more available on a local level, they were able to get it out in clinics in the community. They immediately had a focus on the disparities and have all along at least in DC and I've seen a lot of support from the CDC in that In terms of communication, we have found on our campus because we have students on our campus who have this, and the community has told me, you know, coming from DC because we have met with members of our community, community advisory boards, a lot of people in the HIV aides community have felt very marked by this. One if you call it as you are a sexually transmitted disease, that can make people feel this is like everything else, use a condom and you're not going to get it. A lot of the activities spreading this virus, I'd like another name for t have not been what kids consider to be sex because there's not the possibility, you know, of getting gonorrhea and getting chlamydia

and getting sHIV from this activity but you can get this pox. It's because all you need is skin to skin contact. We have been extremely explicit that the behavior that is leading to this is skin to skin contact, not sexual activity. Yes, a lot of that happens when people have sex but it happens in settings where at least from the standpoint of people in the age group of my students, they don't think they're having sex when they're having those activities even though they are romantic activities maybe. So I think that is one thing to think about in terms of how we communicate with because it's very important for prevention. We want want them to use barriers and all of that because there are a lot of STIs, but that isn't adequate for preventing this. But all in all, it's hard for me to understand except for I think we talked about this earlier all of the negative stuff, you know, on Twitter and everything else and how, you know, CDC has been by many people as an agency that's too slow. I didn't think this was slow at all. I think the information came forth quickly. I think it'sen cleared. The numbers have shared more or less in real time. Have I nothing but praise for the response. I think the fact that, you know, the incidence is going down very rapidly. If I had one criticism in terms of the data presentation would I like to see rates instead of numbers. I know that's hard to do. I tried to do that in the MMWR report. It makes the disparate ever much larger because if you're looking at the numbers of people with the disease who are black versus white, fine, except for the denominators are very different for those groups. It is underestimating the extent of disparities which are just incredible. But thank you for everything you guys are doing. Really. >> We'll do Julie, Jill, Daniel, and naref. I would like to compliment all your efforts. I have a question and I'm the's a little slow in speaking because I was looking at data online to see if there's information about the vaccines administered by race and ethnicity. I was curious what ovation information do you know? You see this widening disparate. I'm wondering what you're seeing about vaccine by race and correct any at this. We will be posting more data on that. The information we have is there is disparate in race and access of vaccine by race and ethnicity as well and it's part of the reason we're putting so much effort into getting vaccine to the people who need. >> I have a follow-up question. It's little bit different. It seems from my perspective public health as able to leverage the existing HIV infrastructure to help with this response that seems so critical because of the community connections and engagement that happens baseline from an HIV per inspectorive. That's my perception. I'm wondering if you can validate that. Also if there were challenges that you all experienced in terms of leveraging that infrastructure, having worked in public health for many years there were outbreaks and try to leverage existing infrastructure and being told that's not what the funding is for and you can't do that and I wondered if you encountered any of those barriers. We did. I think what happened was the communicable disease infrastructure in health departments reacted first and in many cases were able to link into HIV departments and sometimes not. One of the ways we were able to address the difficulty in getting resources both human and financial was to put out communications from CDC SAMS and HRSA that allowed the ability to do M pox work as long as it was done in conjunction with the work that had -- the resources had been provided for by essentially congress. That did allow the mobilization of disease investigation specialists and contact tracers of vaccinors and others to do multi-disease work, good public health work that showed a

holistic approach than we've done with the silos. That is a continued activity. It's not completely easy. But we tend to think if my world of, you know, STIs are essentially -- they're the concept of disease diagnostic resources. I should be able to address am different things. In the communicable disease they say I should be able to respond because so much is salmonella contact and finding source and stopping the spread versus Legionella versus COVID. A lot of the principles that you teach are there but the resources are tied to certain disease specific activities and that constrains our ability to respond FESHTH ively. >> Thank you so much. One thing we talk about is a lot ofa the siloing of the work and how to build bridges between different centers but this is an example how you were able to actually do testimony add hope there's some lessons learned that can be shared throughout the organization. >> Great point. We're going to go until 10:30 so I ask folks to be succinct in theirs questions. Jill. To build on that thought of the system, the RLN system in this situation worked there. Was a test the CDC had. It had been distributed to state labs. We learned though that there were issues, the test we had was manual, not adopted to high through put, not using the platforms am labs had. There was also a great deal of DPRERN healthcare providers of the amount of data that was required to access a test. I think that everybody agrees that at the beginning of an outbreak, having totally available testing is incredibly important. So from my perspective, it's congratulations, but, and we need to modernize. We need to establish more gray swans. We need to move away on another vector, I'm going to use that turn gray swans, we need to move away from the list of tests. We need to be much broader in anticipating what pathogens might come and have tests ready and validated so we know they're accurate even if not fully validated and we need a system of labs developing those tests and I think this is something Jim will participate in his plans. We need to have them adapted to multiple plat norms we know the labs use -- platforms that we know the labs use and we need a minimum data set at the beginning. We know we need to collect a lot of data for positives but we can plan for a minimum data set to get the tests in quickly to all labs. Thank you. >> I think you will not find a single person at CDC that doesn't agree with you. I will say in addition to those preparatory activities you mentioned, we are at a cusp of revolution in diagnostics. Before this meeting I did a Sars COVID 2 test in my house so I would be comfortable coming to this session and taking off my mask. So what does that mean? The other thing is for nuke lake testing what will it be for home testing where different aspects can be added as you said very quickly. Right now for M pox we don't have a point of care test and we actually don't have a multi-Plaintiff's Exhibit test because what's happened is well we look at the data about a third of people who have samples taken to be tested for M pox have a positive M pox. That lesion was something else at the time. It's complicated for patients and clinicians to address some of these diseases without knowing what it is. The future will be multi-Plaintiff's Exhibit testing in major laboratories and potentially that same thing at home and our ability to do what you said would change tremendously. But you imagine your getting a respiratory infection and you check and see what you got or you go to the doctor and the doctor checks depending what it is. I'm very supportive of that. I also noticed we have -- in the room and they're interested in minimum data sets and the concept what it would mean to have data come to CDC to be identified and make sure we get those

data in the speed and completeness required. I don't know if you have anything you'd like to add. >> [Inaudible.] They're deferring to later. I'll talk about it later too. It's lovely to see you all on the same page. We need to work with manufacturers to have a platform that's rapidly adaptable, yeah. Thank you. >> It is so great to be so excited about laboratory testing. [Laughter.] >> It's hard to follow that enthusiasm but I want -- I don't have a question but mainly a comment because we rarely get a chance to thank you in person. So I know -- thank you, John. I now work at the Kr seamarks ge foundation and New Orleans is one of the places we partner with. As the former health director in Boston I appreciated the accessibility that we had to our CDC colleagues. I also appreciated seeing the MMR in our read ahead and the work you did with the Louisiana Department of Public Health. I wanted to thank you and your tips. I was not involved in the behind the scenes work but just the accessibility and the ways in which you partnered with both the state and city and I know in that example they worked in lock step with one another and to see that and all the leverage from the health hub and the community vaccine clinics that were held which I did not know about, it was gratifying to see that in the report and how the health hubs, how you were able to reach the hard to reach populations and racial minorities in the report and everything provided to the health hubs beyond this vaccine so thank you very much and just great work. Thanks, Monica. >> First of all a comment and then a question question. There has been a reasonable debate between being fast, credible and being correct. I think in the past we veered to having the CDC have a longer review process that insured CDC was correct. I think with monkeypox you found a good balance with the technical reports and forecasting appearing in a timely fashion, actually during the during the actual outbreak and seeing the data publicly very quickly after the White House was briefed so thank you. That was a nice example. With monkeypox we saw several shifts in the data symptoms report the response. What's been learned and how do you interact with the states to make this process faster and better through this last few weeks and months? >> Thank you. In response to your first point there, will always be tension between speed and accuracy, between kind of taking too long and not taking long enough. I think recognizing that -- when you need to do something quickly, pulling in all the people necessary as fast as possible, there are some logistical and even policy challenges to be able to reach out and get all partners involved in what you need to do to move guidance and recommendations forward, and we are working on that. Ultimately we did try to take that balance in stride and move forward. There are still some fundamental questions that matter for public health in regard to M pox and we're trying to answer those with data we have or other countries have so we can continue to be prepared to provide accurate information to some extent of what puts you at risk and how much relative to other activities but also what doesn't put you at significant enough risk that you have to take precautions. That is a complex environment with this infection but we know people are expecting that of us. In terms of the data sources, rather than details, I think that's the next session as well and I hope you'll be able to ask that questions again. Thank you. >> Well, our great appreciation from the ACDR, Dr. Jackson and Dr. Herman for the excellent presentations this morning butten add most importantly to the leadership you're providing to CDC for these important issues. Without overstating it, it's very encouraging and makes me feel safer to see

your presentations and around your work so thank you very, very much. With that, we are going to go to our next agenda item. This is also a critically important one and it is one like yesterday where there is an action step that we're asking the ACD members to consider. We will have a presentation from the data and surveillance work group. That includes a report and some proposed action steps that will then be presented by our co-hair members of the ACD as potential recommendations for the ACD to adopt at the conclusion of this session. So I hope I have given enough time for the speak tors switch places here. This is going to be led jointly by Dr. Morita who is present and Dr. Shah who is presently virtually. Dr. Morita, are you going to lead off here? Over to you then. >> Julie Morita: Good morning, everyone. Can you hear me? Before I start I'd like to acknowledge a few folks. First, Nirav Shah who is my partner is in did you know lick Ireland and not able to join us in person. I will dethe majority of the talking portion of it but he'll chime in later on. We've been a team through this whole thing -- through this whole thing -- through this past few months and it's been wonderful working with him. I'd like to acknowledge and thank the 15 work group members including ACD members, that includes David Fleming, Crystal Gary, Lynn Goldman and Rhonda meadows. Lastly and most importantly I'd like to acknowledge and thank Dan, Jen, Agnes and Natasha for their engagement and support and also John Auerbach for his ongoing knowledge as we maneuver through this ACD working group space so thanks to you all. The data and surveillance work group has focused our to strengthen their efforts to build a responsive MRETH infrastructure while addressing health equity. Since August our working group met three times and narrowed our focus on how we the CDC can implement sharing of data exchange, within state, local, territorial, tribal, federal and healthcare partners. We shared a member with ACD members that summarized three priority action steps for improving data exchange between health care and public health systems. These action steps aaddress the working group's first two terms of reference. First is CDC's authorities and ability to establish policies and systems consistent with existing laws and regulations to overcome real and perceived barriers to data sharing. The second is improving data exchange across the health enterprise. The working group and I would like to share these action steps with you, to discuss them with you and ask you to consider endorsing them as recommendations for CDC. The first action step is to define minimal data necessary from core data sources with an emphasis on data quality, harmonizationen adds standard aization. CDC with SDLT, state territorial local tribal partners and with input from healthcare and federal agency partners, they should develop, accomplish, and regularly update a list of data elements that constitute the data necessary for disclosure to STLTs for the same core data sources. CDC should work with STLT partners to develop a list of data elements that constitute the range of data necessary for disclosure to STLTs so it's in partnership working closely with the STLTs. The second is establish a public health data systems to promote the exchange of high quality data. CDC should work in coordination with SDLT in the office of the national coordinator for health information to develop an implement a coordinated phased approach to certification which should start with ex-panned guidance for public health criteria, and ultimately advance. The third action step is to implement a strategic approach to data use agreements and frameworks that provide patient protections while supporting real sometime

decision making. CDC in coordinate Nance with STLT partners should establish a proactive approach to DUAs and streamline the process for individual policy and scream line other concerns like the use and release of data consistent with laws applicable to each party respectively. These are not exhaustive and do not intend to address all data sharing issues and needs across public health. They show data harmonization and system interoperability improvements particularly on public health activities. At this point I'll stop and open it up for discussion. Next slide, please. Joan who barely beat out Monica and then Monica. >> These are great recommendations. I love the minimum data set one. It's going to be a challenge. We're working with CSTE to start that discussion and CSD is working with CDC. There's a minimum data set for a lab requisition, for a case report, and so it's getting consensus is going to be appropriate but I think it's wonderful that we're all on the same page of the need for this. I want to make a comment, you know, at the beginning of the outbreak there was a great amount of data that physicians were required to test at a public lab. Then when the five big commercial labs came in for monkeypox testing that just went away. I think it sort of says the need is there and it can be done. So just congratulations and we look forward to working with CDC and the association partners as well to do this. Thanks so much. You can tell by the way these are outlined a that we acknowledge our partnership with STILTs. That became clear through our working discussions and we as members felt sellarly as well. >> Thank you for representing those proposed acting steps. My mask is caught on my ear. I apologize. Had I a question on the minimal data set. We valued your participation in the health equity group. I wondered if you could say more about some of the data elements that we had discussed and how those might be re flecked in the first proposed action steps. I think we did not in these recommendations that I shared at this high level did not get into specific data elements. That is more for us to say that CDC with partnership with other agencies need to work out how those are. If you look at the memo we are socio being core elements. It was clear the data was limited in terms of race and ethnicity, gender, less so, but definitely limitations in terms of what data were collected so in the memo itself it includes specific reference to those data elements. >> We're going to do Octavio and then Josh. Thanks, David. Great presentation. I really love the recommendations. Thinking about equity though, especially with territories and Indian Country, any thought -- I know it's a high level -- of how to ensure equitable intraoperable inare from a structure address that is need to be made which is more about budget and ensuring it's not all going to go to the city and public health attention departments there because they get the attendance, a lot of them are quite rural, any thought how to expressly ensure additional resources are needed because they are behind the curve, so to speak. >> That's a great question that you asked. It connects to the specific challenges of tribal areas really encounter but also gets into the resources and the funding. If you look at the recommendations, the memo itself, I presented the high level action steps but if you look in the memo itself we did acknowledge there was a need to get into the resources that are required to fully implement this. That is not something we tried to address in these recommendations as much as to say these core data elements are necessary, certification is a good thing to move forward, and also get to work on use agreements. We have another term of TLAEFRNS will get more into the

resources that are required so anticipate getting into more deep conversation on how to ensure adequate resources are allocated. Nirav, did you want to add anything? >> We're recommending working closely with all our partners as opposed to something handed down from above society resources will be necessarily part of the conversation. In learning from and speaking with ASTR and CHP and many others during the process of getting to these three initial recommendations, that certainly came up many times. >> Great. Thank you. Really appreciate that. >> Thanks, Josh. Josh. Quick question. I apologize if I missed this. Can you talk about what you envision for certification or thumbs up and thumbs down or if it's modular, you can get certified for the core receiving surveillance data but also different types of data you can get through the health care system, electronic health records, other data resources. How do you design given how different health departments are how do you think this would work? We didn't get into real specific recommendations. What we did say was the CDC should work with state local tribaler to recall partners and the ONC to develop a staged approach where these things can be determined. We didn't feel it was the working group's responsibility that we were the right people getting in to the granularity of those kind of recommendations, really saying CDC please work with these partners and do this in a way that's most appropriate for all involved. Josh, just to add that, Mickey likes to say have you certify the pitchers and catchers. If a multi-state hospital system today has to present the same data elements 92 different ways, across different jurisdictions, which is a real example, that may not be the most efficient use of their efforts and energy and records. Over time our goal is with the appropriate funding to have folks understand what are minimum data and from that using the template of what occurred with meaningful use on the healthcare data side and taking what elements make sense to the public health side. >> What you say makes sense to me completely. It may be that, you know, there's some things that are -- it rolls out over time and some things that some health departments that it doesn't make sense to do. If you got one little hospital and they're going to walk over the thumb drive every morning, you know, versus a place that looks totally different and completely different information environment. So figuring, you know, that out presumably will be part of that process. >> Yes. >> Great points. So important to recognize that a key piece of this recommendation is a notion that is not only phased like Julia said but developed in concert with the partners involved so there needs to be agreement across the partners for how this is going to be able to move forward and have it happen. >> Congratulations, great report. This question, I think, this was not really in your task assignment here. One of the things that always struck me is the United States in contrast to a lot of less industrialized countries doesn't have comprehensive data. You know, labs don't necessarily report to the CDC. The EHRs are difficult to access. Is there any thought about making any recommendations toward moving somehow toward a system by which there could be a much more comprehensive -- there could be much more comprehensive data on the nation as a whole? >> In some ways that was baked into one of the terms of reference in terms of an overarching system that could house all this information. Because of some of the time sensitivity issues that did emerge within the group we didn't get that deep into those conversations. We felt these steps that we've identified will help us move into a more positive distribution direction to have more standardized DAILT that

will show what's happening in the US from a disease perspective, not saying this is the end all or be all of solutions. These are time sensitive things if we move forward with make a difference over the short-term. We could P go down this path exploring that kind of iron. We didn't spend the time to do that but you raise a really good point. >> The example from healthcare comes to mind. With COI now on its third revision we've seen over time in the healthcare side of things we add on with a lot of stake holder inputs each iteration in terms of how things are reported similarly across all health system. To the extent that also includes a lot of public health data that's useful and knowledgeable. Think about that as a parallel for our own public health needs. >> I think one of the things great about serving on this working group not only the leadership of our co-chairs but also the support that we had from John. Bringing together the perspectives of people who are coming from, if you may, kind of the whole data analytics industry that's poised to move into this space and serve the state and local health departments and KRCHT DC. There's the healthcare industry that already has this EHR system that billions of dollars literally have gone into. The investment in that has been truly huge. Then state and local health agency that is have, you know, fax machines am of them, that's their data systems. And I think that, you know, the ability to bring those people together and I think that's would very clear is that you have to have a starting point down a path where someday we might have a system that is much more encompassing but that you have to start somewhere and I think we attempted to come up with a starting point that is most critical and most realistic but that's not the stopping point. If CDC takes this as this is all that needs to be done that would be a huge mistake. It is the beginning of a process of completely transforming the public health data system and I thank that's an important point. It's a change in culture. A lot of people immediately will save money who are coming from -- a the law of people already have all the money, the hospitals, the labs, they have all the money. They will save money because their reporting will be simplified. But the state and local agencies and CDC will need resources in order to implement this T we didn't go into that. That wasn't our job as a working group to do that but that does need to be clear. We trade to make it very clear in what we wrote that instead of pointing savings to those already doing very well, you know, that the resources will have to be somehow provided and I think -- I just hope that policy makers just as they saw the importance of resourcesing the EHR process, the federal government invested a tremendous amount of resources into that, that there have to be federal resources in to that. I wanted the public on the line here to hear that too. Some places it creates efficiency for sure but the resources aren't in place for the infrastructure that this needs. Including people. >> Thanks. That's a key point. I will be really quaffed maybe this is naive but I'm thinking of the public health accreditation system through the AHB and where in the medium term maybe having a data system that was compliant with certain criteria would be stick because I know ultimately you don't get funding if you're not accredited so just putting that out there. I think that's part of the point if we establish standards then other bodies can then be the enforcers of compliance with the standards but at this point we still have to establish what the standards are. Yeah. I think that's a great point. >> The job of this committee is to make recommendations to CDC. This particular process was one that in a very positive way was necessarily informed by KRVD as well so I'm wondering before we move

this if you would like to make any comments on the CDC perspective on the KOCHLT >> I think this is -- it was great working with the co-chairs and all the members of the committee. It was a hard task, things that I think have been challenges across public health in all levels. These recommendations really help us to as Lynn said make the start of this. This is not the end but I think critical things that are needed and need to be done thoughtfully in collaboration looking critically at short-term and long-term sustainable path for this. >> Thank you. Thanks >> I'm hearing pretty uniform agreement with the content of this document. I'm wondering if Jill would be prepared to put forward a motion for official consideration bit committee. >> So moved. I'll second. The motion has been moved and second kid and it would be basically to adopt the proposed action steps by the working group as official documentations that the ACD would make to CDC. Is there any further discussion? Okay. I'm sorry, Octavio. >> I'm totally on board and agree. I wanted to make one additional support comment to what Lynn was bringing up in thinking about the overall report and not just the subsections that we've been going through including this one. I think there's an argument to be made hear for the public and our policy stakeholders that we're talking about -- especially when we're talking about equity and infrastructure of the public health system that we want a first class public health system for this nation. Why? It's about the health of our citizens, the health of the nation and tied to our national defense. We need to be able to make the argument and make those connections so everyone realizes why this is so important to my colleagues here and why it should be important to everyone across the nation regardless of who you are, race, color, and created because it's also about the quality of care of what we're talking about when it comes do every community member. I'm thinking about an overarching statement or something when it comes to why we're making these recommendations and be a first class system as in in the private sector must make investments. This is not just cost and savings but investing in the future. I know it's not directly related to the vote but Lynn got me thinking so thank you for allowing me to express my statements. >> Thank you for expressing those very important thoughts. Critical. Seeing no further comment I'll go ahead and call the question. All those in favor of adopting the motion as opposed please signify by raising your hand. Any an extensions? Opposed? Congratulations. The nation as opposed is adopted. Great work, folks. Wow. >> This is an action filled meeting. We will be out of here before or at our time of noon so don't worry about that. We have built into the agenda a little bit of flexible time in case any of the issues needed further work but also for a late breaker. There is an Ebola outbreak occurring in Uganda that has ramifications for dauntary and the rest of the world as well. We're delighted to be joined by the Joel Montgomery to talk about what is going on and entertain investments and advice from the ACD. He's the Chief of viral special pathogens branch and is highly qualified to be joining this response. Dr. Montgomery, you're now up and online. >> Joel Montgomery: Can I confirm you can hear me okay? I have limited time so I'll try to be brief and want to make sure we have time for a few questions as well. I think you have a slides and have you a print out at least so I'll go through some of these and raver to a couple slides during my presentation. I want to point out since 2018 which is not in the slide Dick we've had six Ebola outbreaks in con go, one in Guinea and Gana so we've had six outbreaks since 2018. This is a current outbreak that's

ongoing in Uganda and specifically the ministry of health declared this outbreak on the 20th of September. This is a slightly different speech piece than we've seen in the past. I'll explain why this is an important point later. The first confirmed case was reported to CDC on the 19th of September and this was through a process we had in pass with Uganda institute for a number of years there. Was confirmed and reported to the CDC. On September 20 the medicine STLI of health officially declared this outbreak. Symptom onset of the 11th of September. This occurred -- you have I think on slide 4 you can see exactly where that is. It made it look like it's a rural area of Uganda, actually I was out myself two and a half, three weeks ago. It's easy to get there which is a concern. A lot of traffic between that area and KApala. As I mentioned already this outbreak is caused by sued Sudan Ebola virus as opposed to previous outbreaks, that was a large outbreak in west Africa. There are no FDA approved treatments for Sudan Ebola virus and no FDA approved vaccines as opposed toent ZIAR where a lot of the work that was done, a lot of vaccines and therapeutics were developed out of that specifically for Zier. There are several vaccines being explored and the plan is to have some clinical trials put in place in Uganda. Since 2000, this is the fifth outbreak of Ebola called by Sudan virus in Uganda. The most recent was in 2012. In 2000 there were 300 faults so quite a large outbreak there. This is on the third slide if you have the hand out. There are six species of Ebola virus, specifically. Of those four known to cause human illness. Sudan is one of those speech Iraqis -- We've had countless number of Ebola outbreaks across the region. Again, the largest was in west Africa, upwards of 30,000 places. Moving on now to the situation update on the ground, as of today we have 152 cases. Of those 131 are confirmed, TRON probable. We had one new case yesterday outside of Kampala in a new district. On the slide deck you have seven districts are affected including Kampala and wikiso. You we have Masak affected which has not been re released on the ministry of health yet but that's a new district affected. Viteae 152 cases, 131 confirmed, 21 probable we've had 55 deaths. Around 37 percent. That's about standard for Sudan Ebola virus, it's usually 40 to 45 percent case mortality rate is what we're seeing. In Tebay where we have one treatment unit, zee a fairly good clinical management team there and they've been able to reduce the case mortality rate to 20 percent. It's a bit higher where the management team is. I won't run through the names. I've got them on your hand out. We've had a number of healthcare worker infections we'll, 15 total with six DENTHS deaths. Contact tracing we're hovering around 1800 contacts being followed. Some challenges we have had had is community engagement which is not uncommon and that has hampered some of the contact tracing and also getting some of the contacts and suspect cases into treatment units. Right now we have approximately four ETUs that are currently functioning. There's another large ETU being constructed in MUMBA that will expand some of the care and treatment. Moving on, this is my final update slide, response efforts to date for the Uganda coordination, and we're all working under and through the ministry of health in Uganda, it's large partner engagement regarding a lot of USG, USAID and Department of Defense, the state department, the Uganda health authorities are leading this response with partner supporting. The national emergency operations center of the Uganda MOH was activated on the 20th. To date CDC's support, we have approximately 40 to 45 staff members on the ground. This is a combination of

headquarters staff here in Atlanta but also our country office based in Kampala. We have staff working at UBI lab. We have staff in Kampala working through the national task force. Then we have a number of staff out in Mumba. We have staff supporting pillars such as infection and control, laboratory logistics, contact tracing, epidemiology, and data analytics. It's a large effort by CDC. We're currently activated at the center level, our national center for zoo nottic diseases. I want to make sure we have time if you have any questions. That's a brief overview. >> Thank you so much for that great update. I open the floor to questions or comments or suggestions that ACD members might have. If we could on the screen -- there you go, perfect. >> In the past iteration this committee had a working group on global health and that was the ACD in a major focus. It seems to me that, you know, global health in some ways has been overwhelmed by COVID, so much attention paid both to COVID and a lot of -- a lot of attention moving away from other issues, whether chronic disease or infectious agents like Ebola. I'm wondering if you can give us a sense, you know, number one of what is the resource situation for CDC in this space right now? I've had the impression there were a lot of reductions in the support to CDC that maybe a lot of the support had been coming through special appropriations like the last time there was an Ebola epidemic, a Ceca epidemic Demme extic, do you have an ongoing program and how are things going for you with international cooperation which is so critical with this kind of issue in particular the WHO but also others. Thank you. >> Dr. Montgomery, do you feel like you would like to talk about the resource issue in particular that she's raising. >> Probably not the best for me to respond to that question. Probably best for Sherry who's not in this meeting or not. I will tell you the point about COVID, I mentioned we had a number of healthcare worker infections in this outbreak. This started in regional reference hospital. A number of the health care workers were infected. We think a lot of it was due to COVID fatigue and lacks in protocol and use of PPE. It has impacted our response. It has impacted the Uganda response. There's been a lot of turn over in staff. As far as the resources that we have hear, we've been, I think fairly well positioned to respond to the current outbreak with the resources we do have. It doesn't mean we don't have more. We have infectious disease rapid response funds that we've been utilizing for this response. But I'm not the best one positioned to answer that question specifically. I think COVID has had a serious negative impact on the capabilities in Uganda and likely elsewhere, a lot of COVID fatigue with staff turn over. It's surprising to us, Uganda has been dealing with the Ebola outbreak since the late nineties and they've managed to keep them small, they're managed to keep them within their borders but a lot of staff turn over over the past couple years, likely because of COVID. Thanks. I wanted to pick up on that last point you made. Clearly in the west Africa outbreak the cross border spread was an issue. East Africa is different. I was wondering if you could comment on the COVID fatigue of the ability of the countries that may be adjacent to Uganda or may be experiencing travel from Uganda to detect the arrival of this disease. They do have limited capabilities. We have been building those capabilities, CDC and UAID, building up their response team structures, laboratory capacity. Again, this is a different species, so tools such as gene expert were great for Zier but not Sudan. We're having to really scale up their capabilities. That's been again with partnership and also working with Africa CDC so having lab capacity to

detect these is going to be important. DRC has the capability through some things that CDC has developed that we're using in-house and utilitying at DI so they have that capability. Some are using assays from German government, the rapid response tips, surveillance are all being scaled up and we're trying to provide support. They're suffering, I think, much like Uganda has with COVID if a teeing so a lot of staff turn over. Since this outbreak has started we probably had 15 to 20 alerts in the surrounding countries. They've all been ruled out either directly. We had one recently there as with a fatal case and we were able to rule that out. The others have shipped samples to UVEI or South Africa to rule out but they've all been negative to date. >> Thank you very much. Thanks FOECH so much for your efforts and for sharing the update. Your presentation makes me think back to 2014, 15 in Chicago where we were identified as one of the five places for entry from west Africa. I'm wondering if there's been efforts to think about that kind of approach in terms of prevention of disease into the United States. I feel that was an inedible effort. We were pleased to be part of it. I'm wondering if you're thinking of that. I didn't even go into that. We have an entire domestic preparedness piece on this. We're funneling passengers into one of 5 air PORPTS and a significant scale up of diagnostic capacity as well. We have actually 25 and we will have 28 plus that will have laboratory capability for Sudan virus. Then we have regional special pathogens treatment centers, there are 11. Hopefully in the next week to two weeks we'll have all of those on line for Sudan as well. We have an in-house assay that we are scaling up and getting approval through FDA that we should rollout. It will take a bit longer because of UA process but the plan is to have response capabilities. It's different than COVID and monkeypox because of the nature of this virus. For biosafety, biosecurity measures similar to what we did in 2014, 16, a bit more focused approach but we should have good regional coverage for diagnostic and been actively engaged with various part nerves from LRN to APHL to the emergency medicine physicians groups and obviously other partners that we're working with, CSTE, et cetera. It's a been a big scale up. Sorry I didn't go over that because of time, I'm focused on Uganda. >> Thank you. Octavio. >> Thanks for the great presentation on the Sudan Ebola viruses. I'm thinking about the public health communication challenges we've had in reference to COVID and now with M pox even though it was a great response there from the CDC, but thinking about the fact the difference between Zayer and Sudan viruses, does the public understand the difference between the two knowing it's understood there's a vaccine for Ebola and I'm wondering how that's working out there if there's any lessons learned we can think about public health messaging here in the United States. Thanks for the great question. That's a very important point and something we've had to focus on in presentations and that's why I made a point in my presentation to describe the difference between these species. Most people assumed we've got a vaccine and therapeutics, that's not a question. That's been a big communication challenge and it's something we focused on heavily is making there is an understanding that the current vaccines that we have for Zayer and Sudan. I was in San Diego when this started and went to Uganda to start meeting with our counter parts there. In the message in meeting with my counterpart there, the incident commander for the Ewing ministry of health, I told Henry you need to focus on the basic elements of Ebola response here. We don't have therapeutics or vaccines. Focus

on contact tracing. Focus on Ebola treatment units. You need more ETUs than what you currently have any add it's better to have empty ETUs than need one and not have one and focus on diagnostics. These are the three essential elements to control Ebola outbreaks. We want vaccines for Sudan and I think there are a number that are being evaluated. That's kind of the basic elements in what we know and how to control these outbreaks. The basic components were contact tracing and isolation and laboratory confirmation. To your question and your point, the communication has been a challenge in making sure everyone understands we do not have vaccines or therapeutics for this species. >> So many of the deaths are healthcare workers and I think that highlights that challenge especially in places that have such shortages of healthcare workers. >> Thank you for taking time out of your da to update us on this and we appreciate it and ask you that you get back how to the important work you're doing and once again look forward to hopefully the quick termination of this with your efforts >> >> Thanks so much. >> Okay. So John and I had talked in advance of the meeting and went ahead and incorporated into the agenda some flexible time that gives us an opportunity for breaking issues like we just heard about. In the future we'll probably continue to do this because it gives us time if there are any issues with the wording or the reports of committees that requires some revision it gives us the flexibility to do than add bring it back to the XHOOET as part of the same meeting. It also gives us flexibility on making sure we get out in time. We have a few meetings. Last meeting I don't know if you remember we opened it up and asked for some real time feedback on how folks thought the meeting went, ideas for improvement in the future. We heard from you the importance of making sure there's enough time to discussion as we get presentations from CDC but also for our deliberations and if we're trying to tee up questions from our presenters on specific issues they want input among others. I think we made some progress but would like to briefly open it up if anybody either in the room or ICD members virtually have thoughts about this pith, about what went well, what we could be doing differently and how we should be thinking about the next meeting. >> I think it's been a great meeting and I appreciate -- I think there's been more open space, less show and tell and more time for us to be providing advice and feedback so I think that's been great. I mentioned earlier and I've been thinking about it, I slept on it last night. I do want to raise the question of whether it could be good to have a working group about science in the CDC to really give some thought to -- the way CDC has done science has been the same for a really long time. Everybody else has been modifying their approaches. I served on a strategic planning group for the national research council to change how they do science. They came up with some completely new and innovative way of doing the work and reports they produce. I would love to see us be able to engage in something like that with the agency, not just COVID but so many of the things that we care about. The way CDC does its work has gotten the job done but it hasn't kept pace I don't think with what we can do in terms of getting science to people more quickly. I wanted to put that on the table as a possibility. I realize there's only so many working groups that John can handle. >> Thank you for that. Jill? >> My question is not just anything as the learns. I'm thinking about the report for congress that we have to do about CDC processes. I'm wondering if you could elaborate a little bit more is it the directed research they do, is it -- you know,

science is a big word. What does that mean? I think that such a working group should take a very broad look. I think it goes beyond the congressional language. I think congress has been worried about a very specific thing that certainly is a part of this. To what extent I believe that CDC is a science ways based agency, a lot is produced by the scientists at the CDC. I think the interaction between CDC and the broader scientific community is quite weak. I believe the scientists at the CDC do not have mechanisms for quickly for being interactive with scientists. I understand in public health there are a lot of scientists but a lot of scientist whose are not working for government agencies that don't contribute on a regular basis. I also think that the mode of scientific communication, you know by and large or through journals is too restrictive. I think there's innovation. I think there's more collaboration, one could address communication modes and interventions. And -- that's not the word I wanted but anyway and one could also address the way that CDC makes underlying data available to the scientific community. I remember midway through COVID wanting certain data from the reporting system and what the process is that I had to go through, you know, to request the data and receive the data which are very, very contrary to what's going on today, you know, with for example, the public use data that NIH has and other data. It's a multilevel issue. I don't have the answers to those questions. I think it would be good to have people engaged, not just people on our Advisory Committee but other scientists, maybe there are plenty of scientists who used to be CDC staff and understand the CDC processes and internal scientific capacities with CDC really well. I think there are also some complicated issues around what is CDC science versus what is NIH. Where I saw this huge gap is I went to NIH when they had all that money for warp speed, you're developing new vaccines what about the science around implementing a big vaccine program national overnight, behavioral science around getting people the to take the vaccines, and they were like this lady is crazy. They didn't think that was science or important. So putting all that in the hands of NIH but yet CDC didn't have any fundingoring or any program for addressing the pieces of that, nor the other agencies that congress could have handled it to, but the thing is there is this -- I think that's a piece of it, you know. Anyway, it's a very complicated question but I don't think it's what your group is doing. If it is you don't have the right people on it. You don't have enough broad enough -- If we could keep it a short response. I promise to be brief. I disagree with you on what we can put in the congressional language that's fine. If we have a group like that, can I be on it? Also I come from an institution that has a parallel public health track and research track and to me that is the perfect model. It's like CDC and NIH together so I love that. So I fundamentally agree with you. >> [Inaudible.] Thank you. I'll stop there. Thanks. An important issue. And one for those of us that have been around for a while, it's not a new issue. It's been a probably all along and certainly worth thinking about. Monica. >> Thank you for creating this time for feed whack and wrap up. I wanted to congratulation the two working groups, health equity and data modernization for the great work of the teams. The first question is about where do we go from here in terms of ongoing feedback loop with the CDC and the next steps with both of the work groups and their processes and the second question that some of us have been talking about and thinking about from yesterday, and I don't know if this is related to Lynn, and I don't know if the mechanism is a work group or standing report

back to the ACD but the communications presentation yesterday. You know, I totally appreciate the importance of restipe and structures and the boxes on theoring chart and it's underpinning the work of all three work groups and the work ahead of us and the ACD and some of the members in particular with a lot of experience in terms of public health communications, beyond risk communications, crisis communications but rebuilding trust. I wanted to elevate this because I think it's important for the field and the work that the STILTs agencies across the system are GRAMGS with in terms of rebuilding trust and I see this as an opportunity for the CDC to help lead this effort. That was the second question was around how to follow up on the conversations that we just started yesterday. I think am would second that. Many people after that came to me and said they were glad I said something to him about -- there was a lack of vision in what was presented that was worrisome given where CDC sits right now within public's opinion. I wanted to see more urgency around that issue. I think a number of us did. That could be another working group. >> We're going to have Julie and Dr. Meadows and Josh. It was at our dinner table last week and she brought up this concept of having a working group. One point was when we do these working groups we're able to bring expertise beyond ACD itself and in this communication space there's a lot more expertise available outside of ACD and I think it's something to explore and decide whether we want another working group on communications. >> Thank you for all of those groups and can I talk with John and you all with folks to say given our band width are there ways of defining some of these topics with.tensionally a more time limited span for getting reports back, maybe that intermediate level that we briefly TWAUKD about last time but really, really important issues. I see your card is up as well. Let me go to Dr. Meadows. I think Josh might have been ahead of me in the queue I was hoping he was going to speak so I could second his motion. Despite all the discussions we've had been communication being need to be significantly improved and made future forward in its efforts to address all kinds of undermining elements to it, I want to make sure the CDC also knows there are people who are doing everything we can possibly can to the best of their ability. How they communicate though it impacts our effectiveness and the ability to convey what we have done really well. Some may feel disheartened, some may feel attacked professionally and personally. There's something worse than being criticized. Worse is when you are completely ignored because people have given up on you. When you hear people make a comment but communications needs to improve and coordination needs to improve there's still some hope and desire for CDC to lead in this case. It's worse when people don't even tell you these things because they've stopped and given up all hope. That's the worst case scenario. As tough as it is, be strong, keep the faith, and keep moving forward. Second there are two things folks have said on the call. It's been a benefit to be virtual because I can make myself listen instead of talking over folks. One was what Crystal Gary said about needing more information and effort focused on COVID. It's not just a matter of people in the science community and clinical community understanding what's going on but there's also a need for people who are impacted to know what long COVID actually is. They may not understand the symptoms they have long-term are related to COVID and they have taken it as a sign they're getting older, they are getting weaker so that should be something we bring back for follow-up

and presentation on what is the strategy meaning in the science clinical and patient populations. Josh's excellent point about this is not your grandfather's communication strategy any longer. There needs to be a source of expertise that addresses not only miscommunication but has the expertise and experience on how to handle social media and a media cycle that is so fast and so rapid that it takes amazing miracles to get ahead of the message but we must get the correct message out as fast and as accurately as possible. It's been a great meeting. It's been very informative and thank you all. >> Thank you for those very insightful comments. Josh? >> I get to second what Rhonda said. That was great. Very quickly, I do think David I want to thank you for your work in this meeting approach and having time for questions and discussions with CDC. I think it was a great meeting. Thank you. I'll just comment that I wasn't originally planning to be on line but it's been very well done online. I think all of us have suffered through every possible variation of a disastrous online meeting during a pandemic and the hybrid ones are harder to do but everything's been clear, the audio's been clear, the slides have been clear, it's been very well executed. There's some silent heros out there that figured out how to do this. >> Huge amount of work behind the scenes by CDC to make this happen. I can't see this but I'm imagining 150 behind the scenes in the room. I'm sure they were imagining that too. >> The other thing is I do want the sound track of Jill saying yes or no to things that I'm saying for anything that I'm doing. I thought it was -- we couldn't see Jill but we could hear her immediate feedback. We've got to figure out how to bottle that. You know, the kinds of things that give me a sense of what the act can be more helpful, not that we need input by tomorrow, CDC does sometimes need that but not a ten-year planning project. It's these things that are on the scale of months where, you know, some clear direction but not a lot of tiny specification are going to be useful for the agency. That's what we're off on on the lab issue so it does raise the question are there other areas. The two thoughts had I is given that there's so much influx at CDC would I should reiterate the openeded offer that if there are things on a Scoville months that would be help elful for the committee to weigh in on we'd be open to do that. I don't know where they are with they've got this totally handled with their organization two different competing ideas within the CDC and it would help to have a thoughtful review and they could get some input. It would be up to them. I think being as helpful as possible at this unique moment of change in the CDC would be great for the committee. My last point echoing Rhonda here is I do think that the area of misinformation may be -- and communications more generally but the communications specifically mentioning social media and misinformation with may be one of these areas where we could be helpful. The fact that it wasn't a very clear priority in the overall communications plan seemed noticeable to me as did the terrific presentation from the commoved incident manager saying that misinformation that's handled by a different part of CDC, that would -- I kind of raised my eyebrow like a quarter inch because it's so important to the COVID response. In fairness, nobody knows how to deal with this and there are a lot of outside experts with GIFRN different ideas. Even regardless of what CDC can do in days to weeks, this is a months to years challenge. Particularly the ground has shifted so much but every other week you see some way this is having impact on CDC's work so that would be a specific thing to pee suggest as an area that

might be helpful, bringing in multi-disciplinary experts who are thinking about this challenge. It's an opportunity for the agency maybe and we thank you again for the chance to talk about it. >> Thanks, Josh. I too just want to ditto everything Josh said about this meeting. I think it's been a pretty productive and informative meeting. I just wanted to think Octavio would never forgive me if I didn't bring this up, we did a study looking at mental health inequities in the United States, we released it a few weeks ago. As we talked with folks from around the country, whether it's dealing with monkeypox or refusal to get treatment or unable to get treatment or dealing with HIVAIDZ patients and others, there's this underlying current of depression, mental crisis engulfing the United States and I would love to get an update on how CDC is integrating this really critical issue, whether it's can communicable or not communicable, work moving forward. Think that would be extremely helpful for us. It is a major major issue that we have seen cross cutting these major themes that we raised even in the last two days of meetings. >> We'll move to the closing remarks. I'm smiling. I think we had the best closing remarks from all of you. I and John will take those to heart. I'm hearing the interest and potential need for thinking about some sort of process, a working group or maybe expedited working group for issues like science, issues like communication, issues like mental health. In addition a little bit on what Josh said, I think that that advisory committees are most productive when we're giving advice on things CDC wants advice on. Some of it is telling the agency maybe things they don't want to hear but also asking them where are the places you can think we can be more useful and particularly I think for me the discussions around moving forward and the transformation that CDC is going off of now and continuing by this committee to be part of that process. We had good fortune to be Aub able to have dinner with Jen and Mary. We're at the beginning of that process and can offer our services there. I would two other things for your all's consideration. One is early in this committee we heard about Patty about workforce which is critical and underpins most of what we're doing. Rochelle talked about the 3.9 billion dollars that are allocated by CDC and it might be good at a minimum to get an update on that and figure out if there is a role in implementing that massive investment that's going to receive a huge amount of scrutiny. The last thing I would ask you and ask for your help on this, I'll say again from my experience one of the weaker points of the Advisory Committee process is once recommendationings have been made there's not often follow-up and they can wind up on a shelf and gather dust and that's what CDC wants to have happen and not what we want to have happen. We need to be thinking conscious anily in our agenda not only what issues are new we want to take on but how we can continue to provide input and recommendations on things we have already spoken to CDC on. I would like to include in our agenda routinely the expectation of report backs from CDC on working group, on ACD recommendations that have been made for CDC reaction to those, how they're moving forward to get CDC and the committee to say with are there additional recommendations that would be useful in moving forward these critical issue like health equity and data surveillance. That's an important part of closing the loop and making our work as effective as possible. With that I'm going to give John the last word in a minute but I want to say how great it was to have the working group reports and adoption of those as recommendations. That gives us substance and meat to our existence hear

so that's personally very satisfying to me. I also -- we talked a little bit about the CDC staff behind the screen to make the virtual meeting effective. But just can't say enough about the CDC staff that we've had the good fortune to work with in our working groups, the subject matter experts, the designated federal officials in each of those committees that have really heightened and created a partnership. Then finally this guy here sitting next to me has been so instrumental in the beginning set up of our committee and providing guidance and helping me lump along and making sure the right things happen and tending to details, yes, but also watching out for those important things. So the committee owes a great deal of gratitude and thanks for the work John has committed to this committee. [Applause.] Over to you. >> Thank you very much. I would reiterate it has -- with a a team effort it has been and really point out a few names. We have Lauren Hoffman who is here who is the key person in the laboratory work group. We have Agnes who is here who is the key person in the data and surveillance work group. We have many people who worked in the health equity work group including Leandrus, Bridget Richards. We have great support from Tiffany brown, from Kerry Caudwell. Thank you for so much of what you're doing. I'm not going to list everybody. The rest of the people please note we appreciate you as well. It really takes a team. Partly it's worth mentioning that because of your question about band width of the ACD. We have to some review of what your capacity is to maintain the three work groups, there's work still to be done with each of the ones that has a deliverable. We had two deliverables already in this meeting. The laboratory first deliverable in the next pith. That's not the end of those groups. We want to make sure they don't SFRUFR pulling resources to create additional work groups. That said, we heard you and think that the identified issues to address either in work groups or other arenas is something we will take very seriously and we'll go back and have internal discussions and talk it over with defeated and you all because our goal is to be responsive. The other thing I would say is that our goal is also to continue to evolve these meetings so they're most productive. And we did -- two things we did differently this time that came directly from you is we lengthened the time period for discussion so that's why we're a day and a half now instead of simply a day and that was to make sure you didn't feel it was just 10 minutes and you couldn't express an opinion or perspective, you only could ask a question question so I think that was a success. I heard that from others. The other thing we asked which game came from David and Ethers ACD is you wanted the speak tors say what is the speed back they need right now. With each speaker you may have noticed we don't want open-ended question, we want to you say to us is there is there something right now on your plate the ACD can be helpful and I think we're working on that to make sure it's the most immediate issue which may not be the issue you want to talk about but the issue in terms of the most pressing issues. Thank you for that. I offer those too to say we're listening so if there are other ways to improve the meeting we want to do that. I say a third area for informal discussions among ACD members about staff, not policy identification but getting to know each other and provide information about background interest and expertise is key so please continue to let us know that. I want to say special thanks to the ACD members themselves, those who are watching this meeting, don't appreciate how much time and effort went into the work of those three work groups. I mean, to get to the point where we

have material to bring to the ACD requires tens of hours at least of work, I don't know if we've reached 100, but we're well up there particularly for a co-shares so particular thank you to the six quo chairs that have been remarkable and people as people mentioned David is on every one of those work groups so we have to think of your band width too as we consider the creation of additional work groups because those only work when we have leadership from members of the ACD. I think that's it in terms of we're looking forward already to the February meeting. I think you helped us in thinking of some key things we'll put on agenda. Much appreciate your dedication, your skill, your expertise and the way that's helping us at CDC right at this particular junction where we're involved in reorganization, culture examination, thinking about how to get better. Your discussions and more targeted responses really, really are helpful. On that point we'll also consider what are the vehicles other than the regular meetings of the ACD or work groups where there may be a possibility of input in a timely way that is consistent with the rules. We'll see if there are some other approaches that may be possible. This is an important time in terms of CDC and CDC make taking a critical look at the work we're doing and putting all resources behind, strengthening our self so we're ready to address the challenges we need to in terms of health and well-being of the public. Thank you. Back over to you David. >> Perfect. I can't add to that. We're adjourned.