June 6, 2024
ACD Meeting Transcript

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>> DR. DEB HOURY: We will give it minute as we're switching. I see the numbers increasing. Our participants are joining and then I will kick us off.
[Pause]
>> DR. DEB HOURY: All right. It has slowed. Good morning, everyone. And welcome to the meeting of the Meeting of the Advisory Committee to the Director. Please note the closed captioning link has been provided in the chat box for your convenience.
ACD members, please ensure your cameras are on during the discussion portions. Certainly welcome to have it on during all periods, it's easier to see your face and track hands that way.
The CDC is currently seeking members on ACD. The deadline is July 8th, 2024. All submissions include a cover letter, reference letter, and reference e-mails e-mailed to ACDirector@cdc.gov.
Please encourage interested applicants to apply. There's several vacancies for the ACD. So encourage you to share with the networks.
Now turning over the David to start the meeting. Hello, and glad to see you virtually.
>> DR. DAVID FLEMING: Welcome, everyone to 2024 ACD meeting. And today's meeting is virtual. It's good to see people if only on camera. B.
As usual our first order of business is the role call. I'm David Fleming, no conflicts. Helene Gayle.
>> Present.
>> DR. DAVID FLEMING: Octavio.
>> Good afternoon, present. No conflict.
>> DR. DAVID FLEMING: Julie.
>> Julie, present.
>> DR. DAVID FLEMING: Josh.
>> Joshua Sharfstein no conflicts.
>> And Jill.
>> Jill, present no conflicts.
>> DR. DAVID FLEMING: Monica.
>> Hello, present no conflicts
>> DR. DAVID FLEMING: We have quorum. As for ACD members, please keep your cameras on. And if you want to make a comment, please raise your hand. Feel free to speak up if you feel you're being ignored.
With the ACD meetings and work groups, they are placed on the web. We have an agenda today.
>> David, already a hand up.
>> DR. DAVID FLEMING: Oh, my gosh!
>> It's Rhonda.
>> DR. RHONDA MEDOWS: I want to say for the record I'm here and no conflicts.
>> DR. DAVID FLEMING: Sorry! Oh, my gosh.
>> DR. RHONDA MEDOWS: It's okay.

>> DR. DAVID FLEMING: We're going to start this morning by a discussion and presentation by the CDC Director and then on heat and heat. And then update on ACD work group on Data and Surveillance Workgroup. And then there's a lunch break, and CDC laboratory leadership will have Laboratory Readiness and then the Social Determinants of Health. And then update on the formation of the newest work group, and then a presentation on H5N1. So that's a lot. Our work group updates today are primarily informational and may not run quite as long at the time allocated. Gives some room and the possibility to end early. Not a terrible thing.
We need to get started. I'm delighted today as is our practice to start off with Dr. Mandy Cohen. I know we have seen how busy at CDC you have been so looking forward to this discussion.
>> DR. MANDY COHEN: Thank you, David, and thank you for joining again and giving your time to this important advisory committee. I can't believe it's only been a quarter. I have a lot to tell you about since our last meeting.
But it's focused on the 2024 priorities. We're focused on our mission, Protecting Health, Improving Lives. And we're focused on three priorities.
The first is being ready for any health threat. A lot of work in the readiness space. I'll touch on avian, our respiratory virus work and heat risk tool. And improving mental health and reducing suicides and over dozes.
And third area of focus is supporting young families. You'll hear about the social determinants work and promoting childhood experiences. This is a broad focus for us. And focusing in CDC to continue to move forward in the effort and we've done a lot of great work there.
I want to thank this committee again. Even today this morning on a meeting I was having with the laboratory team, we were referring back to the recommendations to the committee and actively driving work.
Starting with the readiness work. You're going to get a full run down on the avian response from Demetre Daskalakis who runs the national center for respiratory diseases and communication.
And it's something we're incredibly focused on and responding to with urgency.
We're seeing a lot of collaboration across USDA, FDA, CDC and state and local health AG partners.
This is highlighting about the importance of having the core infrastructure we need to respond to whatever health threat.
In our response efforts for avian, we are in a very different place than at the beginning of COVID. We have learned a lot of lessons. But this is a place we've been investing and doing work to be prepared for many many years.
We are able to use the kind of surveillance tools, look at our emergency room data in realtime at the emergency rooms in our country and looking at what's happening in realtime. And we have the laboratory data for ordering patterns.
And we are using our waste water network that we're using for COVID. We also used for Mpox and now using it for our avian response.
We have this infrastructure that is different.
Similarly, we have a laboratory structure for avian assays, and we're on a path to scale up to commercial availability for H5 assays as well.

We're getting prepared even as we're seeing no changes in the genetics of the virus. Three human cases, two were conjunktival symptoms and respiratory symptoms. And we're using the tools we have to build trust with our folks in the dairy industry to stay ahead of thivirus.
A lot more from Demetre on that.
To rewind the tape, very early in the quarter we released respiratory guidance. And there's a lot of recommendations on this committee how to simplify the guidance and make it actionable and simple for folks.
And at school guidance and looking at ways schools can keep kids in school, healthy, and learning. That's been great work.
Next on the list, we released a heat risk tool. I see Ari Bernstein is here to give you an update on here. I'm proud of the team.
We all know 2023 was the hottest on record. And I'm appreciative of the team putting data to help folks know what to do to plan ahead, be prepared, and navigate through what will be a another very hot summer.
Not just a tool but also linked to clinical guidance. We work on QACs and Ari will go into that.
On the global front, the U.S. government released a health strategy which CDC was a part of and in alignment with our global health framework. I had the ability to participate in that launch and spent some a couple of weeks in Africa, and in Zambia and I was with our partners and in terms of the IHR amendments we were learning lessons from the pandemic.
That was good news. And we were able to host President Nuto of Kenya. Our teams were in Kenya and it was wonderful to host them back at CDC in Atlanta.
That was a special opportunity for us to show the President first hand how we do our work. We took him around to the emergency operation center and we were able to have a good dialogue and sign new agreements on how to continue the work and sustain the work.
On the mental health side, I spent most of May for mental health awareness month. And we released a new national strategy for suicide prevention. CDC was co-chair of that with SAMHSA.
We have a new center Director, Allison, hitting the ground running and the suicide work to the table. And what CDC can offer, data, expertise and evaluation of best practices.
That's what we continue to do. What I love about the national strategy for suicide prevention is the concrete commits that folks made across the U.S. government for this.
We are losing 50,000 folks a year to suicide and we need to do better. A lot of strategies. The first was investing in community based resources. That's where I did a lot of travel to Nashville, LA, Birmingham and thinking about this issue.
And on the overdose prevention space, we saw for the first time that maybe we've turned the tied a little bit. We saw a 3% decrease. Small. A lot of work today. But that means we're losing 100,000 people to overdose.
The potency on the street is incredibly high and we need to stay ahead. That is where, again, CDC's data and expertise comes to bear and we continue to get our opioid money out to help us.
Third area, our young families, we're focused to make sure our kids get the best start of life and our parents are healthy. And this is the focus on immunizations and we're doing a routine back to school vaccination and worrying to talk about the working group on communication and partnership.

I think this is a great place. The good news we continue to be 90% of childhood vaccines. Nationally it's 93. But there are pockets in the country where we dip into the 80s. And we have work to build that trust.
So a lot of work. That's a prove. We're focused on putting out resources around promoting positive childhood experiences. We know how important the data on adverse childhood experienceses is and how it shapes your life health patterns.
And I did a lot of work around maternal mortality for our African American maternal mortalities, seeing the large gap between black moms and white and Hispanic moms. African American moms are more times likely to die during childbirth. That's not okay. And we have an efforts and CDC is a part of that.
Our data, I'm proud, is driving that effort and that prioritization and the deployment of resources. That is great.
That's young families work, an a lot more in that space. I know you'll hear about today.
Lastly, I wanted to end on our fourth priority, an internally facing one, our one CDC work. This is how we're embedding lessons learned from the pandemic, meeting the new moment of public health of being different with one CDC team. I hope the most visible of that is the new website.
We have our foot print on the website, that's how people access information. It's a big effort, called clean slate. We based on user patterns and saw how folks can navigate. And we simplified the language.
It's a work in progress. Still getting user feedback. We hope you notice the difference. We want to get better but another linkage to that work group.
We're making big investments and setting a course on our data work. We put out data strategy and how we're going to continue move forward.
I'm really, um, impressed with the work, Jen and her team is doing and aligning across CDC. But we have more work to do to make sure we have an enterprise way of thinking with data to be effect and efficient.
That is the back half of 2024, but we're looking at electronicicates reporting. I was at the hospital association and American medical association, talking about the importance of our medical data alignment and make sure we're getting get data standards out there that align with what hospitals and doctors are already doing for their interoperability and making sure CDC is plugging into that.
And the lab strengthening, rolling out a program in our labs and folks are working hard in terms alignment. This is a place we need continuous resources, I talk to the Hill on the core capacities. I look at the disease diagnostic way to say how to be more efficient and be ready for the healththets.
And make sure we're thinking about CDC being the best place to work. We do have a change in our making sure that more and more folks are being in-person so we can be one team together.
So, really proud of all the work that's going on to make sure we're on boarding people in a new way, to make sure we're recruiting and retaining the west talent out there. (Best) talent to carry out the mission.
In closing, looking forward to working with you and on this Communications and Public Engagement work group, I see a tons of opportunity moving forward here. Let me close and I would love to answer any questions.

>> DR. DAVID FLEMING: Thank you, Dr. Mandy Cohen. You are busy and we love to hear all the things going on.
We want to open this for discussion and question, we have a fair amount of time. We want to remove the slide from the screen so we can see our community and committee members.
>> Sorry, you saw a piece of me a whole time.
>> DR. DAVID FLEMING: We saw you but you were small screen but your voice followed through.
>> DR. JULIE MORITA: Hi, Mandy, nice to see you, thanks for the update. I'm appreciative of the progress you're making in terms of progress and priorities. And what you brought to the agency.
I think when you came, there was anticipation you could work with the Federal Government and commenting how you're working with other agencies, FAS or SMS SAMHSA and I like how you lifted up the data.
This is core to what CDC is and the strengths you have and the added value that working partnership with other agencies.
The work is appreciative of your champion and through your support and encourage. I want to thank you for all the progress you're making and doing. And great to see you and keep up the great works.
>> DR. MANDY COHEN: Thanks, Julie, I want to highlight, I forgot to say in quarter, Deb and Sherry talked about this team sport effort, across government and thinking how public health and healthcare can align.
We're doing more to reflect the evidence on the CDC side. I'm excited about the progress there. And yes, foot stomp on data enterprise.
We have work to do there. And I'm certainly being a champion. It won't happen over night. It will need some change management work internally. But I really feel good about alignment we're getting externally from the CDC but we have continued work today.
>> DR. DAVID FLEMING: Yeah. The data piece is so important. I want to reinforce how great Jen laden has been with the Data and Surveillance Workgroup in creating additional input on that.
I did not track the order which the hands came up. So I'm going to do this on the screen. I'm going to Monica next for the question, comment.
>> Thank you Dr. Mandy Cohen. And I want to address the progress of Julie in the quarter. And I wanted to address the updates you shared related to health equity. As you're sharing the work to date on black maternal health outcomes.
Could you share more on H5N1. And the cases you mentioned are at three currently, I was wondering if you could share specifically any efforts to raise awareness, education on those who are working on different farms?
Knowing that many of the workers on the farms are from very diverse communities. Could you say more?
>> DR. MANDY COHEN: Sure, thanks, I'll get to avian on the infant mortality work. And they put out an action guide related to the ways in which we can continue to make progress and closing the gap. So a lot of work there.

On avian, you know, this is a challenge. I think the dairy industry had not seen avian before. We have done this with our agriculture partners in poultry for many years. We're using the lessons from that and mapping over. Not necessarily the same but very similar.
And we're a ton of outreach with farm advocacy organizations. I want to thank secretary buSierra and has recorded a number of in Spanish messages to that community.
Also, we are putting out a ton of information from our HRSA partners. They run farmer clinics. And we're doing paid advertising through social to it raise awareness in targeted areas. We're taking our data and turn to it action. We have our waste water and positive herds and we have this paid advertising happening now.
We encourage folks to protect themselves and use protective equipment around the cows and raw milk. And we're getting information to the public about concerns about raw milk, and consumption of raw milk and concerns. Pasteurization does work, please consume pasteurizes products.
I think there's more we need to do with the farms individually. We're blanketing the area but we want to do more to partner with our dairy farms.
On poultry side, we have many years to build trust, I want to commend USDA for putting in place compensation for farms to test their cows. I think we need more to test that linkage between the human side and public health. We're continuing down that path.
>> DR. DAVID FLEMING: Good question. As you said, Demetre is going to talk about us. But it's great to hear from your perspective. Next is Josh and then Helene and Octavio.
>> Thank you. I don't know if CDC has said that if you put a Google alert for Dr. Mandy Cohen it will crash your e-mail. You're doing a great job.
Two questions, at a high level, not too much details, how do you think the agency is learning in the response to COVID and the avian bird flu.
Also, I wonder in health and CDC has been able to work with the SAMHSA 998 and to analyze that data and how it links to challenges. The 998 is really an interesting and important step forward to access to services. I wonder if you have been able to engage in that.
>> DR. MANDY COHEN: I'll do the first one, but Deb, I'll ask you about the 988. I don't know the data but I know we're pushing out the 988 and it's part of all my speech. Not sure about the data.
On the lessons learned, I feel great about, there's always work to do, but our focus on readiness and core capacity. We're using capacity built for COVID and using in the avian response. Our emergency room realtime data, waste water infrastructure, and data viability. And beefed up our genomic capabilities.
We've been invested in flu for decades, a lot of the infrastructure was there. And you're seeing it played out.
I see a lot of coordinated response, not just at CDC but across HHS and U.S. government. Now we have different perspective on how we want to do the work. There's a lot of coordination. We are on daily calls across the U.S. government to make sure we stay coordinated with the state.
We're putting out simple, actionable things we can do.
And we want to be clear, this is what we know today. Every time we do press, this is what we know today. This virus could change tomorrow. Risk is low to the general public today, but that could change.

But we're also seeing where more investment in the core resources helps us go further. It's hard to scale up testing to commercial labs without resources right?
So we were able to put out about a 90-$100 million in order to handle the avian response. But only because we were able to repurpose dollars in the post-COVID world.
All that flexibility is going away in the next-year, 18 months. I've been talking to funds how to mobilize funds before it's an emergency.
Avonian is not an emergency yet. We don't have the ability to rapidly access the funds, but you want us to actively respond.
So there are some things I would love the committee to help us articulate. There are a couple of places with the authority and mobile resource has been challenging and where there's more opportunities to keep things from becoming an emergency and mobile threats faster as opposed to an emergency.
>> DR. DAVID FLEMING: Deb? You want to respond?
>> DR. DEB HOURY: We've been fortunate to work with SAMHSA for almost a year to work on 988. It helps with the continuity to work with SAMHSA around 988. And it's part of this coaction plan and the 988 data is part of the really robust action plan.
And internally we're looking at the dashboards on mental health and better to present the information on the fatalities and more to come on that. Appreciate the partnership with SAMHSA.
>> DR. DAVID FLEMING: Thanks, deb. Helene?
>> ATTENDEE: Like my other members, appreciate hitting the ground running and running start. It's hard to believe how much you're able to accomplish in a short period of time.
Thank you, I know it's not easy and I'm sure exhausting.
A couple of questions, you know, first, it would be interesting just to hear from you where you think, and you've touched on it a little bit, what do you think are some of our biggest obstacles and hurdles?
Two, I saw you when you came and spoke to the Atlanta chamber and it's interesting to see your partnerships with the private sector and what are the opportunities there in some of these areas.
And just, third, we all realize that November is going to be monumental one way or the other. And CDC used to be a lot more immune from the buffing of political winds. That's not the case today.
How are you thinking about preparing for whichever way the November election goes and to extent possible of keeping CDC moving forward regardless of what path is taken.
>> DR. MANDY COHEN: Great questions. On the obstacles and hurdles, as I was saying to Josh on resource mobilizations.
If you look at our budget, there's a lot of small little line items. That makes it hard to invest across the enterprise. And our data infrastructure, laboratory capacity and workforce in alignment with prioritization. Right?
And so, particularly, our global work fits in there. Our response work. We don't have line items, for example, on waste water. That's an infrastructure spanning two centers. Ran out of NCPI D but using it for respiratory and pathogens.
How to look at core infrastructures from a budget perspective? And this is authority question. How do you have the flexibility?

I believe, CDC is the response agency for health security for our nation. And that means things are going to come up and you need to mobilize both dollars and people.
And making sure our budget, authorities, and structure reflect that. I don't think we're fit for purpose, yet. I think we can do all the things we possibly can with what the restraints are. But there are more to do in the next year, looking at the authorities and budgets to respond to any public health threat that is out there.
Those are some of the hurdles, we are working on the internal pieces we can. Like I said, I think there's a lot of things we can do and we're doing them.
Private sector partnership is hugely important here. And it plays into this what are the obstacles and hurdles. There's always limitations on the what the CDC can and should do. But what about the partnership and leveraging that in the private sector and helping them prioritize their work.
We have to be better that a that these are the pathogens of top priority. These are the diagnostics and be clear what do we want from big or small employers to keep their workforce healthy.
I spent time going out to LA, and I kicked off the Milton global conference with Mike Milton talking about this exacttomic. It is the topic of conversation.
And even after this, please e-mail me welcome thoughts on how to do this more. I think, again, it's another place, this new working group can work with. It's hugely important.
Let me touch on November and transition. As CDC Director, the law changed to Senate confirmation.
But I do think that actually, look. Director, FDA, commissioner, those are deep research institutions. Those are scientific institutions. And so I think that actually aligns CDC where those other parts of HHS already were.
We're just going to stay focused on our work. I think if we're focused on priorities that resonate that both sides of the aisle, I think that helps keep the important work going. That's what I've been focused on.
There's no conversation on the hill that I had where people were not with us on health readiness response and improving health and families.
So, we are meeting the moment of what country needs and meeting the bipartisan support that will help the organization navigate, if there is a transition, because I think these are universal kinds of priorities that will allow us to continue forward into the future.
>> DR. DAVID FLEMING: Great questions and very insightful, Dr. Mandy Cohen.
I think as we get closer from an advocacy standpoint to make it clear CDC's role is important, and we can provide the input and advice on ways to make that message clear across the political spectrum. Octavio?
>> DR. OCTAVIO MARTINEZ: Thank you, Dr. Cohen for your comments and traveling across the country.
The robust talented workforce we need and in the research arena, on the SCOTUS antiaffirmative action that happened last year and the antiDEI laws happening making it more challenging and even more challenging.
It's so important when it comes to clinical health and workforce to ensure we're diversified and pulling the wonderful talent. And creative is so important.

Any thoughts on how we navigate this landscape as we try to -- not only try, but need to, ensure our workforce represents all of us?
>> DR. MANDY COHEN: We very much believe a diverse workforce makes us stronger.
I'm very proud that CDC is one of the most diverse places, not just in HHS but in the government. Do we always have more work to do? Of course.
And the EI officers and fellow trainings programs allows for us to track very diverse talent group to public health.
Our job is to retain them. So I actually think those programs are incredibly diverse, those are folks out of college and may not have a background in public health. But on that trajectory. We started the amarry core. And we have small winds on the place to convert those folks from a pipeline perspective.
And we're investing a lot in training. I've been spending a lot of my time internally focussing on the young professionals. We have meet and greets and conversations about how to skill build and think about building your career.
We are very much thinking about that. But there's always work to do. And there are challenges all over the place on that.
I'll through out that we know we need to see more Hispanic and Latino folks join the CDC team. That's an area focus for us this year.
I know our recruitment and retention teams have been upcoming our recruitment effort on that front because of it. We have long, long, connections to our historically black colleges.
I think we need to have more connections to academic institutions that are Latino and Hispanic. Those are places we would thoughts and suggestions on how to continue to do better there.
>> DR. DAVID FLEMING: Thanks, Joe, over to you.
>> Jill: Thank you Dr. Mandy Cohen. I'm joining everyone congraphilating the great progress. My passion is laboratories. One of the recommendations the lab group made to the ACD is the administrative processes for personnel.
We're not really supportive of either recruitment or retention. And things like having a career path within CDC for laboratory personnel so they didn't have to move to another area to get a promotion. Can you talk about it? And workforce with variety of experiences is essential to what you want to do.
Can you talk about the administrative challenges, put in place for the right reason but there are side effects that are not good.
>> DR. MANDY COHEN: I think streamlining our laboratory workforce is so important. They are the backbone of generating the data and the expertise that drive all our ability to respond. So very much know that.
I think some of the ways in which we've been very pathogen focused has kept us siloed and made it harder for folks to find career paths forward.
So, we are looking at ways to think about enterprise solutions for our laboratories that allow folks to get exposure to different kind of pathogens and also experience in platforms and running large labs that look more like public health labs in the state.
Which is what I came from and my mental model. That's not how we operate. We want to attract folks that want to do work on unusual pathogens and do research and surveillance. But we're also a diagnostic entity as well.

So, trying to balance that, I think that feeds into your question about career path ways. We have a lot of work going on both in improving quality, and improving effectiveness and how do we better align across CDC which, I think, informs how folks think of career path and trajectory. More, Jill, we could talk offline. And Ren has that work. I have a ton of confidence in his mission. We met this morning on lab. And so it's very present to plot out the next steps going forward.
>> DR. DAVID FLEMING: Thanks, Jill, and Dr. Cohen will maybe have a chance to chat with Ren in this meeting. Rhonda?
>> DR. RHONDA MEDOWS: I maybe the last one commenting. But Dr. Mandy Cohen, I want you to hear the unanimous support. No questions. Just saying thank you.
>> DR. DAVID FLEMING: Thank you for clearing that unanimous, Rhonda.
And this is the first ACD meeting where we hadn't have a specific COVID topic on the agenda. We realize there are many other important health issues.
On a question of COVID, it has to do with vaccination and the current work our communication and publication group may help with.
It's my concern there's still confusion in the public about the COVID. We don't know when the virus will settle down and when a routine immunization schedule might be.
So, any thought on the federal agencies trying to express more clearly to the public the reality of that uncertainty and provide an explanation for the confusion out there now?
In particular, what seemingly is as new vaccines become available, new viruses come and strains not responsive to the vaccines.
I think that creates a lot of confusion and distrust in the system. Is that an issue you're work ogwith the federal agencies?
>> DR. MANDY COHEN: The short answer is yes, the longer answer is that this virus is changing faster than the flu virus. We had a robust conversation at vur pack, run by FDA but we participate in.
There are new emerging strains and you want to pick the most ideal one. But you need to think about the practicality of communicating, and getting folks vaccinated.
I hope you saw what we did in the COVID guidance to streamline to the things we think save the most lives. Chief among them is vaccination. We want to get clear that COVID and RSV vaccines save peoples lives.
We signaled back in March, we're going to have an updated COVID vaccines so get ready now. You're right, we have not settled into, uh, black and white seasonal patterned the way flu has. We are likely going to see summer increase as we have seen every summer previously. Because the virus is changing so fast, it all ads to our inability to say, "Yup, every September you'll see a new COVID vaccines." We're trying to signal as early as possible in the year this is likely we're going to be the year we're updating the COVID vaccines.
And going back to the private public partnership, this is a message I would love you to it carry to the private sector, anyone who does a flu clinic, they should offer flu and COVID together. This is something that should get into our behavior patterns. But we have some work to do. You will see a communications campaign from HHS around vaccination for this fall season. But we just got more complicated because we have to talk about flu and COVID. These are tough messages to really transmit in 10 second sound byte.

We're working hard, testing messages and creative ideas. But I think this is why this new work group is so critical. I look forward to working with them.
>> DR. DAVID FLEMING: Thank you. Rhonda, I want to confirm that your hand up is still a symbol of uniimity or still have a question?
>> DR. RHONDA MEDOWS: No questions, I'm all good.
>> DR. DAVID FLEMING: We're at the end of this session. Thank you Dr. Mandy Cohen, for the great work at the agency you're doing and we appreciate you taking the time this morning to share with us.
>> DR. MANDY COHEN: Thank you, David, and thank you to the whole committee. I hope you have a good rest of the conversation. You'll hear a lot from the leaders while I'm out on the road trying to communicate with folks trying to help understand what we're doing, so you'll hear from the team doing hard work to improve health and protect lives.
>> DR. DAVID FLEMING: You're doing hard work too. We appreciate that.
Speaking on other issues within the agency, we would like to go to our next presentation which is about the reality that summer is almost upon us and with that heat.
And there's work on that, and it's my pleasure to announce Dr. Bernstein to talk about the work you've been up to.
>> DR. ARI BERNSTEIN: Turns out we went through hottest recorded in history. And we're seeing temperatures in the triple digits.
And last year there were 120,000 emergency department visits for heat related illnesses alone.
That was among one of the hottest Summers in the United States.
We learned about heat in the context of heat awareness.
So, I have a quiz. Next slide, please.
So the quiz pretty straightforward. And the question is which of these does heat not affect?
Pregnancy outcomes, learning, heart disease, medication safety and efficacy, suicide, power outages, and bacterial infections and substance use.
>> DR. DAVID FLEMING: I think it's a trick question.
>> ATTENDEE: All of the above.
>> DR. ARI BERNSTEIN: All of the above.
I think what's interesting about heat, while we tend to focus on mortality and heat stroke and heat exhaustion, they'll tell you we worry about people without housing and people who lose power and who's lives depend on electricity.
We see spikes in suicide, violence with heat events and certain more cardiovascular events.
And that some prescribed medications for blood pressure as one example, antihypertensive meds, heat can increase the risk of harm.
Child learning, there's studies looking at national and international showing if you take a test on a hot day, you perform less well. Because air conditioning is not across the entire population.
And heat also a risk for pregnancy outcomes.
We take heat seriously. It's hot out. The evidence is that it's getting hotter in years to come.
Next slide.
I know Dr. Barilla, you were in Chicago. I was in Chicago when people died in the heat.
The public response to heat was to take city buses and idle them in neighborhoods to cool. I think had some merit, but we have come a long way.

And the idea used broadly, we have the idea that an alert that's based on the temperature forecast that's communicated and provide access to cooling centers.
And having talked about this issue for many years now, and having spoken to people who have staffed cooling centers, you learn pretty quickly that the cooling centers, while they can be affected, if you get there, the if you get there is a big piece.
Turns out, they're not well utilized in many many circumstances.
We do have really good werring forecasters. But the (weather) but it's not clear how hot is too hot. And historically given by the service are not health based folks. But on temperature.
Meaning you look at the distribution of temperature for the year and make an arbitrary cut off at 85th percentile. And there's customization to that, but it's not based on health outcome.
How hot is too hot for health is a critical one. I'm happy to report we've made progress on.
The next in the chain to access to safety and communication. Typically when there's a heat alert, it's picked up on broadcast and socials. Not clear those actually reach those dying in the heat wave.
In Maricopa county, 700 people died and there were people unhoused or had substance use disorders. Not clear the path ways are getting to them.
And cooling centers are not in environmental justice communities. Many people haven't been and we have substantial evidence, in heat waves, and buses become free, people stand out in the heat waiting for the bus.
There's real questions about getting there.
So, as we ramped up a launch of heat activities, starting on Earth day, and just recently last week we released another tool, we have some things in our work. I want to walk you through briefly. Next slide.
So I'm a pediatrician by training. I spent many years at apediatric hospital. And I still see patients.
When it comes to things like heat, I don't know if we have engaged providers effectively in addressing this threat.
I think that's a critical opportunity for us because when it comes to an individual's risk of harm from heat, most of the the things that matter most are not neighborhood level factors or even, you know, um, block level factors, they're within the individual.
How old they are, what medications they take? Do they have chronic medical conditions? Can they afford air conditioning? And can they move around and get to safety? And do they have people to check on them to make sure they're safe.
These are things that are noble but hard to know at a public health leaders' perspective. But it turns out that clinics around the country through social screening are asking about utility screening. They know the medications and medical conditions.
And there are the asthma action plans and this is a guide what to do if your asthma acts up.
We've done that for a starter set of conditions we know increase. Those are heart disease and asthma. We have asthma for teens.
It was a lot of fun getting feedback from teens on the language on this. And we have it for caregivers.
And we have a second document for pregnant women.
And the foundations of these documents is to create a tailored path to safety that will work for that individual.

Meaning, if you need to stay cool, it might be a cooling center, but it might be a neighbor's place or church or shady area in the park. What will work for the individual? If nothing is available, then we'll have call outs who is the person who can check on you? And then we'll document in the medical record record.
Now we have a couple of places for people to contact that person and check up on that person. We've built on the foundation of what is the mantra of actiones, stay cool, stay hydroerate, and know the symptoms of what heat can do do an individual.
What are the symptoms of being overheated? You'll get the standard issues, you'll sweat a lot. But the people of chronic symptoms are likely not those but the symptoms of their disease.
If you have diabetes, getting overheated, your blood pressure will increase. And knowing the symptoms is really important because it enables proactive behavior before you wind up getting so sick that you're in trouble.
Important, number 4, check the air quality. You can hot days with fine air quality and cold days with terrible air quality. But heat and bad air quality is much more. Because of the increasing wildfire smoke, at night it people let in air in them home, but with smoke and smog, that may not be the most adaptive way to go.
The last piece we have is on medications. As I mentioned, medications may have different safety profiles. We're clear, the issue is not to stop taking your medicine, just to be aware. And to make a plan.
That's one of the fundamental pieces here. We're trying to get people a path to safety in place before the event happens. Doing in the moment can be really challenging.
So, this is a -- I think it's an approach that has been vetted in another domain, asthma, and we've partnered with HRSA and clinicsing to push into the provider clinics where we need they serve people without housing, farm workers.
A lot of the clinics are focused on the high risk communities.
The challenge, how hot is too hot? When to take these actions? That's another thing to talk about.
Over the past 6 years, there's an extraordinary partner between CDC and Noah. This is the heat risk dashboard pictured here.
And you can go to the dashboard, type in your ZIP code or click on the green button, and it'll give you a seven day forecast and gives you the unique relationship between heat and outcomes in your county.
Many states have started to move forward to more spatially resolved heat and associations in big city states,for instance, we know in LA is climate zones and temperatures.
And we have a powerful foundation to get people to plan. Anyone from a chronic health condition to their healthcare provider. And people can say we have resources. It enables a label of planning that is much more potentially effective and critically is it risk stratified.
And there's green and orange and red. And all those increments represents the increments of the relationship of heat and health in that place. You can be confident that a red day will lead to more health problems than an orange day.
Magenta days is dangerous for everybody. The color was magenta. There was a robust argument it was purple. But none-the-less, magenta won the day.
But this tool is so important, it enables individuals to say, "I have heart disease." And that guidance that on red days take the steps. But that person starts to get symptoms, on orange

days, they know in their head when the forecast says orange, they can take the steps we have outlined. How to stay cool and hydrated and the symptoms. It's a much more tailored response. Next slide.
So I can tell you that since the heat risk tool was launched with the guidance on Earth day in April, so a little over a month. We've had well over 1,000 hits to that dashboard.
We have not, however have a commence response in terms of looking at the guidance. So I wanted to, you know, solicit some thoughts from you all in the time we have around how we can do better at getting these tools out through your networks that could be the public health agencies and also the consortia of health crin ics.
And we look for feedback on the guidance documents. And we've done a real -- I think a really good job of getting engagement with a bunch of stakeholders but would always welcome others.
And that providers need to have integrated into their work streams. And how to integrate into the OHRS. And making sure that heat risk is incorporated into the weather apps. So you can on our phone, tap on the weather app, it'll tell you the temperature and also the air quality. And we need that to include the heat risk level. And we'll continue pushing on the. I'll stop there I'll open it up.
>> DR. DAVID FLEMING: Thank you, Ari Bernstein for that timely presentation. And we appreciate the innovation. I also appreciate raising the important issues for the committee. First Julie, Monica and then Joshua. Julie?
>> DR. JULIE MORITA: Hello, Ari. Nice to meet you. Thank you for mentioning Chicago's history. Proceeded my arrival in Chicago in public health, but it's something we carried with us in terms of heat or extreme weather. Or public health emergencies in general. The lessons we learned were the most vulnerable populations and our black communities and low income communities were hit the hardest.
My question, I think you've made incredible progress developing the tools and dashboard and they are focused on the healthcare providers and people making to healthcare providers but I worry about those folks not actually making it to the doctor offices and the healthcare providers.
We learned so much from COVID in terms of the value of partnership in community and understanding the challenges, understanding the issues and also helping to identify solutions most impactful for the response.
I wonder if you've explored that avenue in terms of reaching the most impacted communities. I think healthcare providers serve one level but don't get into the deep community. So I'm wondering what you're doing with that.
I appreciate also, like David said, the questions you asked s us. With the information, providers have been incredible resources of information in the past, and they're incredible sources of partners. I didn't hear you say that. May be I missed it. I would definitely explore those at the national level and state level.
There are chapters that can penetrate into community and healthcare providers may be not connected elsewhere. My comments does not dismiss the work done but how can you do more from a healthcare perceive perspective?
>> DR. ARI BERNSTEIN: Thank you, my grandparents imgreated and they lived in the south side. And you would know the geography, people would leave their homes whether they were black

and white or Jewish and Christian and go to a point, the great melting pot. The rich people didn't have air conditioning, the rich didn't have air conditioning, but that was the coolest place by the lake.
We tend to be reliability on air conditioning and things. But community design is important. You can do well in the heat wave if you have the green space set aside for community gatherers. The Chicago piece speaks to the way cities can be designed.
Its the interesting point about healthcare providers, I want to push back on that. The Brentwood clinic in D.C. has the largest population of homeless people in its care. More so than any other places. I think the clinics have specific programs reach into the communities in the way that non-profits.
And there's been so much work already in cities and rural areas are another challenge. But particularly in cities, Philadelphia a good example, they have taken, they moved from the paradigm and moved to a localized approach to heat resilience. The science shows that people die in the heat wave are those who don't have access to AC and who are not mobile.
They create local buddy systemses through organizations whether a church or secular organization, people are already engaged. Accessing the channel already present.
We need more support, I was talking with those yesterday in Maricopa county how they are ham strung because there's not enough resources to support their work. We have on the order of $10 million at CDC for the work, some states have pulled opioid money and some don't have resources.
I think the best is to support the local partners doing that great work of finding createive ways. And I don't think the healthcare sector is equipped to do this but they've been untapped. I think that's where the opportunity is.
Clearly we need the foundational infrastructure to be supportive more. I think our role is different. I think our role is to give support to them. And listen to them. Most of the ideas aren't coming from us but bubbling from them.
On the professional associations, we work with AMPA and provider are not able to absorb this from on high. I appreciate the state organizations, FCC, but reaching directly to the healthcare networks,ing the big healthcare networks and cities and saying what can we do?
We're not excluding them. But when we work through the FMA, we've done that but with the providers it's not getting through.
There's so many things going on. Heat is an idio syncratic thing. But we're pulling out as many stops as we can.
>> DR. JULIE MORITA: I appreciate your responses. I think it's a whole of public health issue that we haven't really embraced and support the community support that's necessary for any kind of public health emergency. Though we saw the impact during COVID. The resources have fallen away
Those who are dialing up front haven't seen the support. Thank you.
>> DR. DAVID FLEMING: Before we go to Monica, I want to welcome Director hardman. Ranging any conflicts?
>> Good morning, I do have any conflicts of interest.
>> DR. DAVID FLEMING: Thanks Rachel. Glad you can spend time with us. Over to Monica.

>> Thank you for the exciting updates on the work you're doing at CDC. This is a great set up on how we may be able to partner with you. With the release of the toll kits, as soon as we learned about it, we pushed out to the 5-year initiative and the environment teams.
And providers provide medical society consortium and health and nurses for healthy alliance and healthcare without harm and the hospital institute. So welcome any interest on your part or your teams if you would like to dive deeper with the partners a part of that initiative.
I'm actualing dialing from Portland, Oregon. Your RWJ colleagues are here. And there's a meeting this Friday on health impacts and climate change and building resilience. We will continue to promote and amplify the messages on the tools.
We're excited to see this action and available to support with the roll out and getting the key messages to our different partners, both healthcare providers and extensive network of CIOs that we're investing at the foundation.
>> DR. ARI BERNSTEIN: Thank you for that work. You've ran off organizations I've been about the past and I think we're directly engaged with as well.
One tool John's team helped us developed, released last week, is a new heat and health index. A ZIP code level tool that looks at the number of ambulance calls on hot days and adjusts for social determinants.
I think that's a huge step forward. The temperature doesn't mean the same thing in Maine and Mississippi, but the racial and ethnic composition of the population matters to how dangerous heat can be.
So, it creates an apples to apples comparison and we can see how many social determinants determine heat risk.
And the ambulance data is also in realtime. We're eager. We had conversations with green Latinos and we're eager because it shines a critical lens on the heat issue. It's the social determinants that are hugely influential. And we have a tool that can help us objectively see that in a way that wasn't possible before.
>> DR. DAVID FLEMING: Thanks. We'll go to Josh and then Octavio.
>> Josh: Sure, thank you really appreciate the presentation. It brings me back to when I was a health commissioner at Baltimore and we set up a heat plan for the city. I would wake up at 6 in the morning, I would walk outside to get my paper, and if my pajamas stuck to my back, I would send an e-mail that send alert.
And then one day, we had a cold front move in. And there was a press conference, and midday, people were wearing jackets. And they're like did you declare is day today? What's the basis? I said we don't have time to describe the whole process. But if you want to follow-up.
And then we had an expert tell us a prediction of excess deaths. I realized my methods were vulnerable to reasonably from the media.
And to have a greater sophistication to do it, I think health departments play a vital role. My answer to the community is to have clinics involved.
I wonder, first whether you think local health departments, you know, what are the key tools that you have? Certainly that map is great. I wonder whether you're recommending a color coded alert system?
There's a whole kind of public health practice side of it. Sending out alerts we have amounts of news coverage. But it's also good when you show up at someone's office and say, can you open

your senior weekend on the weekend because it's the only air conditioned place in the area. And they're seeing the alerts.
It's beyond what the health department does. I wonder was CDC is doing to really make it possible for underfunded health departments to have an easy set of things to do to have an impact in this area.
>> DR. ARI BERNSTEIN: Thanks, Josh. The heat risk tool is color coded. I think that's important because it's risk stratified now. Typically what happened with past heat alerts, the level was high enough, so you weren't getting a heat alert every day.
And now a yellow day, those are the people at risk, most likely to die. That's why I think this more tailored approach. But the only people who know that are healthcare providers and the individuals themselves. These people are not common in the community. That's why we're hoping to build a bridge because we don't want the health centers to contact these folks but branching to some sector whether it's secular, public, or otherwise, to be that outreach arm. We know that simply the act of reaching out can save lives.
In terms of the tools that support y met the state officer from Utah and they're going through the first heat wave. She said we don't have messaging. And we have that. A huge part is what are the messages. We send them and say messages are always best tailored to the local content.
Ours are high level, but we do have that.
The best we can do, think about it, the response to the heat in Boston, there was oped, where a Boston resident wrote in the paper, bring it on. I love how hot it is -- Boston ownians do not care whether it's sunny or cloudy. It's July 4th and we're going to party.
People in the south, not so much. So the messages really have to understand what the normal behaviors are for people in the community.
I also think there's compelling work done by health departments and clinics to reach through communications standpoint.
>> If I could ask, I appreciate everything you're saying. Do you have a sense of what is the basic set of things say a local health department should be doing on heat?
And these are the five things every local health department should be doing on heat. And more generally, how much, you know, coverage is there, like 2,800 local health departments it. And maybe they don't all have heat as an issue. But those that do, are we 2% of the programs or 85% that have a program that you think are good?
Do we see the local health department as a key unit of authority here? And are we able to see that progress?
>> DR. ARI BERNSTEIN: Thanks, Josh, that's helpful. I think on the assessment piece, I don't think there's data. Even do you have a heat plan in place? Which would be of the five things. The heat plan is number one on the list. And there's good templates of what a heat plan looks like. But there are local issues.
I think in cities there's more work. I don't think there's a national assessment.
In terms of the five things, it's really the one thing; it's a heat plan. And that, again, most cities have those now. They continue to iterate them. And with ASTO, there's a sense to get that covered.

And in the model I used, the paradigm, we have a heat alert, communicate to the mass media, open a cooler center. But there are lots of cities across the country pushing down to the local level and making a community based response.
I think that's paradigm we're supporting. Again, we can support those best practices through grants and I think our challenge is how limited support we have to actually give.
(Cross talk).
>> You have a great vision for this, there maybe ways through recognition programs or cohorts or collaboration are NACCHO or other places to spread what a great heat plan would be to as many places as possible. I think the local health department is really important. Thank you very much.
>> DR. ARI BERNSTEIN: Thanks, Josh.
>> DR. DAVID FLEMING: Great comments. Octavio.
>> DR. OCTAVIO MARTINEZ: Great presentation. Love the tip sheets and dashboard. I didn't want to make assumption. The tip sheets are being translated to other languages? And Julie kicked off the local community.
Thinking of Texas where I'm at, the Spanish local TV and radio stations could den-foot from the dashboard. When driving around Texas, most of the Hispanic Latinos putting on roof tops are listening to the radio stations. Great work on getting the news out. And getting the weather forecasters talking about your dashboard, I think would be fantastic.
And have you thought about utilizing the AHEC? Those get to training our health work down to the community level.
Just trying to help to spread the, I think, this great new tool kit in dashboard.
>> DR. ARI BERNSTEIN: Thank you, Octavio. That's a great idea.
Rural communities have higher rates of heat mortality than urban areas. This paradigm of the cooling center doesn't translate well to rural areas.
The work we've done has greater benefit to the urban areas where there's more people. Nonetheless, we have a huge amount of work to do with the farm land. And we are trying to figure out the best paths there as well.
I appreciate the suggestion.
>> DR. ARI BERNSTEIN: Thanks, Octavio and Ari. I think our next session, we're running a bit short. I really appreciate the point you're making about individual risk factors and medical risk factors and people we need to reach during a heat warning.
The sheets you provided look like for providers? And wondering if you simplify them to others in the community and community base ped organizations that are seeing people with these medical conditions and need to be appropriately counseled.
>> DR. ARI BERNSTEIN: Thank you, David. We have other resources that are pictograms. They're minimal resources. We have those intended to be to a provider and/or someone else, intended to be high level and noticed the symptoms.
But the most amount of feedback on is what is the best sweet spot for those kind of pieces of information? We have had for a long time at CDC, high level guidance of heat. Stay hydrated, no symptoms. It's not very effective.
Because how do you stay high drayed and stay cool? Those sheets go into that. That's where we need the feedback. Is that too much? Do we need to go to some midpoint? We're mindful

of the your point. Where to provide the language and resources to give us the best benefits with the least amount of potential confusion from overload. I don't know if we're there yet.
>> DR. DAVID FLEMING: Thank you and working with those folks in homeless shelters or agencies on what works best for them. Alian? Last question.
>> I keep putting my hand up and down, people keep asking my question. I want to say, this is great, having this kind of quantifiable dashboard is a huge step forward
I was going to ask the question Julie asked and touch on David's. I would continually to think about how outside of health departments and health facilitates, we can get this message out. I think people have no idea the first graph you showed and the multiple impact that heat has on health.
I think there's a deep need to get that information out. And may be as the communications group gets out, this would be one to think about.
I think, also, one other system that might be helpful is school systems. Not because children are particularly vulnerable as the aged. But children learning about these things can make a difference for families.
I wonder if that's another system to be used for a preventive and knowledge building not necessarily because of the population need.
>> DR. ARI BERNSTEIN: We certainly have done a lot of work with schools. I think this is an opportunity to do more work. I think the heat risk tool as with the public health department, helps schools to plansporous and recess and even to exam days.
I want to make a small point, it is absolutely true, in terms of mortality, we see people over the age of 85 to die. Heat is a cause of infant mortality and adverse pregnancy outcomes and because of the breadth of events I would say heat carries adverse health risks.
And there's a narrow lens of understanding. As a pediatrician, if you look at heat, it has its greatest effects in infancy but we measure death.
The learning thing, the school setting, the performance gap between black and white students on high stakes exams, like the regionance exam in New York City is a substantial component of the temperature not only the day you take the test, but the week before, it's clear that black students don't have access to air conditioning like white students.
And the effects of not passing an exam in High School and what that does to your life. If you eliminate a traction of that risk, it's worth it.
There have been a lot of conversations around schools and around this issue. My hope as it gets hotter, that we can find pathways.
There's a lot of great work around greening school yards. You can plant trees that were historically asphalt lots that sucked up heat.
We're interested in the school issue and interested from a disparities and health and learning from that standpoint. Dave
>> DR. DAVID FLEMING: Thank you so much doctor Bernstein. You can tell the committee interested in this. It's an important issue. We hope to hear more from you in the future and that CDC takes a leadership role here.
>> DR. ARI BERNSTEIN: Yes.
>> DR. DAVID FLEMING: Let's move to our next presentation, our ACD Data and Surveillance Workgroup that's a group shared by Julie Morita and shah and is Dr. Morita is here today to talk about the task.

>> DR. JULIE MORITA: Thank you, good morning again. I'm rent representing the work of the DSW and I'm representing me and Nirav Shah and those who have worked over the year with these issues.
I want to provide an overview of the progress we're making and a pivter shift we've made in the past six months. Next slide.
So, the working group first came to be we had a specific terms of reference.
Earlier this year, we actually made some changes and received guidance from CDC on their narrowing of the focus and to double down on the direction.
The terms of reference were updated this year. And I'll say the key factors of the pivot.
The proliferation of dispart reporting systems and CDC recognizing that streamlining could improve efficiency effectiveness.
What that meant was the DSW changed a bit. And these are the questions we've been focusing on the past six months.
How can CDC implement the process to assess data systems aiming to it enhance sustainability and minimize potential redundancies?
How can this process streamline the technical aspects of CDC reporting systems while establishing clear criteria for identifying and eliminating redundancies? There's a clear focus on us providing guidance to CDC and the process of more streamlined systems less burdensome to external partners.
What the DSW has been doing over the past six months is getting feedback from folks in the CDC and players heavily impact..
The office of the Chief Information Officer, the staff reviewed current systems and how they had data to the cloud, ongoing systems to rationalize systems and the IT governance processes in plates.
And the reporting mechanisms and the burnout on the state, tribal, local, and territorial agencies.
And there's a good representatives of current health officials who have validated the concerns on the Department of public health with the burden with the state local agencies to comply with CDC.
The next presentation we have and discussion we have is from the immediate officer of the Director who described military branch models for data system rationalization. So it consolidated number of branches into streamline set.
The thought was that the approach might be useful for the DSW to consider as we think how to engage and provide insights of the data system rationalization process.
The last thing we did was had an Office of public health data and surveillance technology staff run by Jen Laden discuss the hospitalization data sprint. A successful example how to streamline and modernize their work.
We have a numbering of presentations and the next steps are to hear on common themes that have emerged.
So, again, the next steps we have outlined are to look at this hospital sprint to rationalization framework as a potential model for rationalizing other systems. We have an example of something done well and we'll look at the successful example for this group as well.
And we'll look at criteria for rationalization framework that we can share with you to make recommendations said to the CDC overall.

I would like to spend more time. I'll read through the common themed that have been emerged and open up for questions or suggestions in terms of your reflections on these themes.
So, one of the themes that came up was the need for support of a one CDC approach.
Which is what Mandy alluded to previously to when she talked about enterprise level approach.
Rather it being individual centers or divisions determined the reporting systems to be developed and utilized, a more coordinated response overall.
For this work to be done in HHS collaborations. And this highlights what Mandy said to do this in collaboration with other HHS agencies.
And to leverage the IT standards and work with other federal agencies and partner.
Another common theme, not surprising, there's a need to incorporate state, tribal, local, and territorial and health care impact to thuproaches. Recognizing the data isn't coming from nowhere but some place.
And CDC should be contemplating healthcare agencies to provide input in the process early on.
One of the examples that has come up, the systems or enabling technology should allow for healthcare to send similar data only once. So that healthcare agencies aren't sending data to it similar parts of the CDC on a regular basis.
And levvaging the technical data and burden. Who is be burdened by the duplicative systems.
And the last theme is the leveraging of CDC governance and mechanisms and to support adoption across the agencies. Getting this holistic approach for the data systems so it's not so the one off or the silo type of systems we see played off in the past.
I'll review the next slide to tell you how we're approaching the next phases of the work. But I want to get your reactions.
The next steps are the DSW has created a writing team to summarize the findings and operations. And then we'll come back to share the findings and operations and hope to get recommendations to the CDC overall.
So, pack to prior slides, look at the common themes, but we would love to hear your thoughts and reactions related to the common themes.
>> DR. DAVID FLEMING: Thank you so much, Julie, if we could go back two slides to see the common themes. I would open up for the committee, whether there'sal high level input to provide to DSW on these issued? We want to thank Julie and Nirav. They've been instrumental. It's great to watch these folks in action.
Any comments, questions at this point for DSW recognizing they're now at the point of beginning to put some of these ideas down in front.
[Pause for questions].
>> Helene: Well, I would say, it's a great -- I think it lays out a great plan and vision. I don't have any specific but it's impressive.
>> DR. DAVID FLEMING: Thanks, Helene. It's complicated too. Those who have been around for a while know we've been struggling with it for a long time. It's heartening to see the progress being made on a CDC wide approach. And it's potentially a Public Health System wide approach and our ability to get the work done. Julie?
>> DR. JULIE MORITA: Thank you, Helene for her feedback. And Jen laden is available on the line too she can chime in with more technical questions. I see you Rhonda, Josh and Monica.

>> Monica: I'm very happy of the approach and more specifically about the coordinating with healthcare data sources. Thank you for doing it. I think it's going to be a lot of work. But it must be done. Thank you.
>> DR. JULIE MORITA: Thanks, Rhonda.
>> DR. DAVID FLEMING: If we can delete the slide and sees the committee members. Julie? You can see the hands I can not.
>> DR. JULIE MORITA: Thanks, Rhonda, I have Jill, Josh and Monica U.
>> Jill: Thank you Julie I'm going to ask a question which will display my lack of technical knowledge, I struggle this as a lab Director. It's a complicated issue. I'm happy to see CDC tackling with ACD input.
I'm a presentation from CDC back when Josh and I were chairing the lab work group.
And I remember the concept of understanding that CDC laboratories all have different information systems in house. There was the concept of, I think it was called the front door.
Almost like a portal? Where states -- the different states could enter CDC in my non-techy vision.
But then CDC's responsibility was to develop from there.
I thought it was a good idea because it was an interim solution understanding the long-term solution is an enterprise-wide consistancy.
I liked the front door portal approach. Is that still on table or changed?
>> DR. JULIE MORITA: That's a great question. I can't answer that. We haven't talked in the work group. But Jen is on the line, Jen? Can you chime in?
[Pause].
>> Mulitsa we may need to promote a panelist.
>> DR. JULIE MORITA: Maybe Josh's question? Josh?
>> Josh. Thanks. And this is not necessarily the most glamerse work of public health to get systems to work. I appreciate the work the committee is doing here.
I have two link questions. One is, let's say, you know, you wanted to -- you both. These systems to move in the right direction and you don't want these efforts to flounder because it's just too hard or there's obstacles. Or headed off in the wrong direction.
My experience with IT project is it's wonderful when they work but it's also rare.
I wonder if part of this could be from the committee, some sort of the click bait-y way, don't do these 10 things. What are the processes you have learned and put together on what to avoid so you don't spend a year in the agreement that nobody is attending to do anyway.
What are the signals off the path? What are the ways to avoid that and cut losses? Because they reality is often very different. On the projects.
And the link to that is that I found that sometimes the public health of a -- these are big projects and have different components but the public health value and making sure everyone understand that can help get over the line.
I've been involved with data sharing questions in public health and when people come together ing data sharing, it could be ponderous. Why are we doing this? Vs., we have a huge asthma problem and we should share data to make a difference.
I don't know if that's part of how to avoid project?s or frustrations. Or how to walk away from people not sharing data.

>> DR. JULIE MORITA: Great point. I think that shared value, I think we forget to do that. Whether to data or anything else, we don't lead with data and the sharing. And the other things we don't spend too much time and I know that's OTPHSTD, that group --
>> Josh: But even mining the experience that others might have might be helpful because if they're trying to push down a certain track, they can say the ACD said don't do that.
If these are the ways you get pushed off course, we can say these are not productive paths. I'll stop there.
>> DR. JULIE MORITA: I see, Jen, you're available. You can answers Jill's question.
>> Jen: Yes, on the front door, yes that whole concept is something we're working on. And it's actually a technical aspect of it, but it's a governance and processes are a critical component too.
If you have a one front door, or things request a technical way of requesting data is there, if every program can make their own request, you help solve the problem of ruseing the number of request.
That's around the governance and processes to streamline that. That's something we're working on closely. Our OCI colleague, Jason, I don't know if he's on, that's the technical component. But it's more complex. But that we feel can be helpful.
Josh, to your question, yes, 100% in a lot of ways. Getting more specific in some of the regulatory path ways down the pipeline to help us. Are there some outside CDC? Especially with ONC. They have the certified electronic health records and establish standards with public health systems.
This is the first recommendations out of the ACD. And they're close to doing that. They released a blog. But that establishes certain standards today. It has to meet these and align to promote the base level of interact ability.
And there's internal to CDC levers. An internal committee. To provide a governance structure to address the items you raised. Avoid duplication.
Sometimes it's not the whole system but a technical component of a data collection used over and over. Or you shouldn't do this way because it's not aligned or be supported by industry in five years.
That's a way to leverage that process in mechanism to reduce our technical debt but also create systems that will be agile as we go forward.
>> DR. JULIE MORITA: Thanks, Jen. Monica and then Octavio.
>> Monica: I think I still have a question, though, Jen I appreciate you're walk ugthrough the different levels and approaches. Maybe two follow-ups.
The first is, when I think about, Josh, you alluded to this, the complexities, just thinking about my city and state days in Massachusetts. And wonder,ed, Jen, you mentioned ONC might do some of the work by regulation.
The different ways our health departments are structured whether you're a highly centralized state like Florida or Texas. Or highly decentralized state, Julie, you mentioned Tennessee. An interesting state. You got state and the six health districts. Can you say why Tennessee?
>> Jen: The concept of standards applies to the technology and not the health department. Whether it's CDC, state, local. It would apply to that. And that's going to be worked out in the process to make sure we're not vexing ourselves in and achievable.

That would negate the public health systems. And technology continues to evolve and we build off IT technology, there's great ways that we can streamline the reporting and then use the technology to then like send it once, and there's a central place to the jurisdictions.
So each jurisdictions creates their own data when there's a similar type of data with the signal. We use that case reporting to have it sent to healthcare and routed to the city and states if that's how it's set up at the same time.
We're seeing a lot of early adoption. The Tennessee was the epidemiologist who just highlight adstudy. She looked across notifiable (Indiscernible) so they had 11 conditions and there were requesting the data to CDC.
It was an example to spot light the high burden at the jurisdictional level or healthcare.
>> DR. JULIE MORITA: Thanks, Jen, thanks for your questions, moncut. Octavio?
>> DR. OCTAVIO MARTINEZ: Thanks for the presentation. It is challenging work. It made me think, though, mostly about those that have the least capacity thinking about state, tribal, local, and territorial and ensuring that as we move forward with recommendations and this just crossed my mind, longitudinal implementation to ensure it's moving forward.
And seen as the failure, where are you now to your baseline? Given capacity is not form across STLTs. Especially individualized pace of progress. Though, across, there's is this goal we want to achieve. And capacity wise, any thought to provide resources to build that capacity so they can be in line with, and those at the leadership or at the leaders of implementing the recommendations.
You guys have probably thought about that.
>> Jen: I'm glad you raised that. There's jurisdictionings that are different levels of data maturity. And so there's a few things we've done. In our public health data strategy that lists the two year goals across the Public Health System.
We put milestones on a health equity lens on. With data monitoring, you don't want just 50% of hospitals. We're saying, X percent in certain areas. We're seeing a slower acceleration of adoption.
And we're seeing implementation centers over the next several years. Start over the next cup of months. But they will provide that technical policy tech assistance for the more mature model.
You can only do this at this state of maturity. Some will need help with cloud migration and ACR on boarding.
The other component is the workforce initiative. Through CDC foundation, they are the oversight of it and we are platesing technical experience in the jurisdiction for two years.
We had the first cohort, over 40 jurisdictions chuplied, which is great, which will help jurisdictions and work as part of the jurisdictional teams with the more challenging areas.
>> DR. OCTAVIO MARTINEZ: Thank you for that insight and the nuance. Wonderful to hear.
>> DR. JULIE MORITA: Jen, you said 40 states applied, how many will fill?
>> Jen: The first test cohort was 8. They wanted to test a process. And they just announced the cohort two for the application process. They want the individuals working together and the process. I get I can get the numbers and jurisdictions awarded. They will roll out cohorts on a frequent base basis.
>> DR. JULIE MORITA: I wanted to get a sense of the numbers.
>> Jen: A $70 million investments.

>> DR. JULIE MORITA: David? Anything else?
>> DR. DAVID FLEMING: I don't see anything. Thank you very much for that work and for Jen to join us. We are at the end of the morning session. We will take a break. Either early lunch or late breakfast. We'll reconvene at 36 past the hour. See you later. Bye.
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[Break].
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>> DR. DAVID FLEMING: Folks, we're going to start in a little bit. We gave people about a half an hour, and that's over in about 2-3 minutes.
[Pause]
>> DR. DAVID FLEMING: Ren, I think you heard me, we're going to be going a little bit later than we thought because of the break.
I I need to be able to see the other committee members as they join. So can we make sure that with the slides? Let me do that. Could you let me do that?
Maybe we could temporarily move from a slide to a more gallery view?
>> They are coming on, slowly but surely, sure. I just have you and Mr. Salerno spot lighted. If you change your view -- can you see them now.
>> DR. DAVID FLEMING: Perfect. Thank you so much.
[Pause].
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>> DR. DAVID FLEMING: Thanks for your patience, we have one or two more folks to join before we start.
>> DR. REN SALERNO: No problem. My sound okay?
>> DR. DAVID FLEMING: It's a little bit garbled. Maybe slightly closer to the microphone?
>> DR. REN SALERNO: Is that better?
>> DR. DAVID FLEMING: Yes, it's better.
[Pause].
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>> DR. DAVID FLEMING: So it's 40 past the hour. I'm sure another a couple of folks will join in a moment. But to be true to you, Ren, for being on time. Let's go ahead and start.
And at this point, I'm delighted to introduce Dr. Ren Salerno and looks like he's holding more than one job at the CDC, providing leadership for science systems and laboratories in the field. And he will present on Laboratory Readiness on the work group shared by Dr. Jill Taylor and Nirav Shah. Ren, the floor is yours.
>> DR. REN SALERNO: Thank you, there's four objectives I have. One talking about organizational updates. Two, talk about changings that we're making the strengthen

Laboratory Readiness internally at the agency, and third how to strengthen Laboratory Readiness with our public health partners. And fourth, what we're doing with the broader laboratory team for improving readiness.
So, as David said, we are acutely aware of the laboratory work group report that was related in February 2023 with a number of recommendations.
And we've been -- sort of synthesized those recommendations down to these specific six actions that we have taken or in the process of taking.
You can see there are some organizational actions as well as a number of laboratory quality actions.
We published our, I think I spoke to you in November the microbiological laboratories in September. And we have the infectious diseases review board which is well established at this point which reviews all newly developed tests before they are sent to FDA for approval, much less to any of our partners for actual use.
Really, excited about a new CDC test development work flow of health emergencies. And in particular, we are piloting the new work flow through the mx pox test that is now under development.
We are use our core laboratory to the majority of the word. The subject matter experts is providing that expertise. And the test being developed in a way to make it immediately accessible on platforms widely available in public health laboratories and other laboratories. That's a new work flow for us which seems to be going well.
And we're piloting a new electronic management system internally at the agency. Next slide, please.
So, one of the things that I'm very grateful to our new Director for is that she is regularly explaining to the public about what constitutes core public health infrastructure.
And consistently, when she makes this pitch, she uses laboratories, workforce and data in that infrastructure that's cross cutting. In other words not just at CDC and state health departments but across the private sector as well.
This is a fairly simple concept but actually a fairly new concept for us at CDC for us to embrace at the highest level the agency that laboratories at writ large, and all our clinical partners and even veterinary laboratories are seen in that core public health infrastructure.
When means we at CDC have an obligation to collaborate with all the partners when we think about readiness and response.
The other thing we've done, and the three titles that Dr. Fleming alluded to earlier certainly reflect this. When I spoke to ACD in November, I had one title, the acting Director of the communication systems and response.
Now we're combining that center, which was very externally focused and engaged with our clinical partners with the Office of laboratory science and safety which has always been internally focused with laboratory safety and quality at CDC laboratories.
The idea behind this structural merging is to reinforce that laboratory systems are fundamental to the laboratory systems whether at CDC, and these are the writ large.
These are the five pieces we're talking about, quality, safety, informatics, workforce, and response readiness.

When we think about laboratory work, to think about across these five different systems as fundamental to our ability to function well within our public health infrastructure. Next slide, please.
Okay, so I've, um, spoken about some work we've done both internally from an organizational point of view and internally in terms of a new test development work flow that we're piloting for future public health emergencies.
As many of you already know, the laboratory response network has been a foundation of a public health laboratory work for 25 years or more.
And it's made up of a large number of public health laboratories and depart of defense laboratories and others across the country.
And so examples of what we're doing, and the other thing I'll say, is the management of the public health laboratory response network has also been moved into our new organization that I just described a few minutes ago.
That helps us as a cross cutting organization at CDC to ensure that the way we're talking and working with the broad clinical and commercial laboratories is consistent with the way we're workering with our public health laboratories in the LRN.
Specifically with the LRN we're doing a number of things I'm excited about. We were able to establish a large laboratory with the Department of defense to help us transition LRN assays from platforms that are expiring to new more modern platforms that will make our LRN assays much more capable and enable higher foot print of those tests.
It's enabling us to accelerate the evolution and modernization of the LRN assays.
And the avian influenza we're seeing now, we're working with the public health laboratories to enhance during the summer months. But with a few public health laboratories to port or bridge our H510 K assay on to a high platform that already exist in the laboratories
So in the event of H5 outbreak of significant size, we will not be limited within the public health laboratories to a single use test. But able to rely on high foot print platforms across the laboratory infrastructure.
Next slide, please.
So, the other thing I wanted to touch on a little bit is our relationship with the broader clinical laboratory and commercial laboratory sector.
We started an MOU in 2018 with HPL and ACA and CSTE. We didn't have enough partners in the broader laboratory community. We extended the size of this MOU to all the partners you see here.
In addition to March of this year, 2024, we signed a new bilateral MOU with ACLA. It's the professional organization for approximately the largest 50 commercial labs in the use; has become a critical partner with us.
With ACLA's help, we're now engaging a number of commercial labs on the HPAI outbreak. Seeking their assistance not only on the surveillance of the summer months but potentially bringing them to bring on an H5 test of their own to expand our H5 testing if that becomes necessary.
The last thing I wanted to mention, I mentioned in November when I spoke to you, when we had just published request an information, RFIs, for the private sector. One on surge testing at the commercial laboratoriesb and one for new test development directed at the agent manufacturers.

We're now finalizing an RFP not only on retest but also on data. We hope that would be early on the street this summer. Perhaps fairy soon.
We hope that's an explicit opportunities for our laboratory partner diagnostics to engage with CDC on that development.
I think a lot of those activities, if not all of them, are directly responsive to all the recommendations to the laboratory work group of the ACD. We continue to be appreciative of all the work that went into that.
We still have a lot of work to do in this broad area but we're optimistic of making good progress. Thank you.
I think I have one more slide with a couple of questions.
So I won't read these to you. But I welcome you comments.
>> DR. DAVID FLEMING: Thanks, Ren. That's an important report back. We appreciate you taking the time today to be with us. And Ren has raised issued around other factors particularly with response and partners.
I will ask to move to a gallery as opposed to slide view. And we have the floor is open to committee members for input, questions, discussions. And I might pick on Josh and Jill to start off to see if you have comments, questions or input. Josh? Let me pick you on.
>> JOSHUA SHARFSTEIN: Jill is and has her hand up.
>> Jill: First of all, Ren, sincere and heart felt congratulations. You made incredible progress. It's terrific to see.
One thing I really really like is your image of the wheel [Chuckles] I like that image of CDC. It's a sort of color wheel rather than the sort of movement wheel. I thought about it, I love it. And just go for it. That's terrific.
Two things, and one of the things I asked of Dr. Cohen this morning while she was on workforce, do you have in place the workforce or the mechanisms to get the people you need? One of the areas of concern that we raised with the ACD are administrative processes which for all the right reasons, made it difficult to recruit and retain scientists.
Number one.
Number two, in your list of contacts and organizations that you're working with, are there included, not only traditional, hard walled lab, laboratory capacity and capabilities, but the point of care and home use development partners that in a large outbreak won't be straight off but needed down the road a bit?
That's it. While it's great, I love what you've done. Thank you.
>> DR. REN SALERNO: Thanks, Jill. In workforce, that's an area where we're making progress. I suspect this won't be a surprise to you, we still have more work to do there.
We have difficulty, frankly, attracting people to CDC with extensive clinical laboratory diagnostics, background, and experience.
That's not the kind of laboratory scientists that historically we are good at recruiting. And we are trying a variety of ways to change that and improve that.
But I think that will continue to be something that we need to work on for sometime.
But I do believe we have significantly raised the level of importance of clinical diagnostics within the agency. There's a lot more training now available than there was even a year for our own scientists.

The QMML and all those expectations and the new LDT rule and FDA quality management system regulation are compelling our laboratory scientists to be more familiar with these clinical diagnostic expectations.
In terms of the many manufacturers of point of care devices and even self-tests, one of the new numbers of our MOU group for surge testing is the MODX which is the majority of those companies.
And we are, you know, I did allude to the fact that we are working with specific commercial labs on the H5 issues now. But we are also working with specific manufacturers of test systems in large labs regarding H5.
Now, I know you're asking specifically about point of care, yes, but those one-on-one conversation with those companies are not as advanced with the companies building high moderate complexity laboratories.
We maintain close relationships and ties of communication with NASPR and the red X program. Both have extremely good connections those companies points of care. And we see it down the road and hope they will put investment for new point of care device development.
>> Jill: One thing that I think I learned during the pandemic was the importance of local labs. And I don't think we paid enough attention to them or funded them enough. The importance of local public health and public health labs in so many things. It came up today in heat, a heat advisories. And I just think that's something a lesson we all sort of, national public health has to learn.
And so having the appropriate diagnostics is really important for the long run. But thank you very much.
>> DR. DAVID FLEMING: Thanks, Jill, Josh?
>> JOSHUA SHARFSTEIN: Thanks. I appreciate the work and your leadership, Ren. Thank you for talking about it.
One of the questions, we learned in the lab work group that CDC has two important roles, it's a huge lab with many components. A complex lab.
And as a lab it works with other labs. And then there's like the policy role that's totally separate of getting the lab system to work.
It's totally separate because CDC could spin off the labs. Not that I'm recommending that. A sub sidsary of CDC. But it needs a serious lab division because they're so important to public health.
And the challenges of COVID, they're on both side. Everybody focuses on the lab challenges themselves. But we've done so many different, and I'm sure you knew before that, the lab system was working. And that it was a double failure in a way.
I hear you, I really appreciate you talking about here are all the people you're meeting with.
I'm curious, how your new effort is structured? How do you think about that policy change? Which might involve solving a problem that doesn't involve CDC lab at all.
How do you keep it independently enough not just for CDC lab but the policies needed to public health?
There's a lot of tension between those two and some-tension between those two. How do you think about those two different missions?
>> DR. REN SALERNO: It's an excellent point, Josh. One of our challenges at CDC in my opinion was having separate groups working on the separate mission. S. The lab people were separate

from the people who were focused on focusing on the laboratory work inside the agency that was part of the same pandemic response.
And so what we're trying to do now and bring those two groups together into one larger organization. But this maybe a little bit too much in the weeds from an org chart point of view.
But what I envision, what we've proposed and waiting for official approval on for this new organization, I will essentially have three deputies. One deputies will have the responsibility of oversight and quality and safety in all of CDC laboratories.
One Deputy will essentially be a deputy for readiness and response and be responsible for engaging the laboratory system writ large, whether it's the commercial laboratories and interagency partners.
And a third dept will cover the science and communications and policies.
And I'm hoping that structure will allow us to understand and recognize these different functions. But also be able to see where those functions need to overlap and understand each other and compliment each other. I hope that answers your questions.
>> JOSHUA SHARFSTEIN: I understand you don't want them to be completely different ZIP codes. But there's a risk for them to be too intertwined and how to get CDC policies. And getting the whole thing to work and having that Deputy really understand their job is getting the whole thing working.
And then get involved with the voice of CDC that doesn't involve CDC.
>> DR. REN SALERNO: I hear you. I'll say this anyway, the substantive laboratory work remains out the organization that I'm just describing to you
The subject matter expert labs will remain in centers. I think there's a level of independence with the laboratories and readiness and response.
But I take your point, there's inevitable tension and perhaps even conflict of interest between the way we think about lab work at CDC.
>> JOSHUA SHARFSTEIN: Last thing, I'm less worried about that than I am about how commercial labs get paid for participating in the national response not directly a CDC issue. Sort of falls down on the agenda because it's not so much about the CDC lab but like they won't actually participate unless there's a clear way for them to do it.
That's important for the system. It's important that CDC is there saying this is really important.
>> DR. REN SALERNO: Excellent point, [Chuckles], we're working on. You need to tell us when we're failing.
>> DR. DAVID FLEMING: Great, Helene? I see your hand up. Helene? Was your hand up?
>> HELENE GAYLE: Yeah. Sorry, I just didn't unmute myself. I was just talking away [Chuckles] Yes, also thank you for the nice presentation. You mentioned that getting the kind of -- for the capacity issue -- that recruitment is a challenge.
Why is it specifically a challenge for getting the type of laboratory capacity we need at CDC?
>> DR. REN SALERNO: Well, I mean, I think we're very good at recruiting laboratory scientists who want to work on exotic and rare pathogens and specifically from a research points of view. Like I think we have the best scientists in the world for, you know, for instance, viral characterization. To be able to look at a pathogen, an emerging pathogen and be able to understand how it's evolving, where it came from, how to recommend a vaccine development for that particular pathogen or that particular variant.
We're really good at that level of laboratory science.

For instance, the annual -- you all know this, but the annual flu vaccines depends on the CDC laboratory flu scientists to provide the recipe for that annual vaccine.
That's where we are really strong in laboratory science and we need to be.
We're also really good at developing diagnostics for particularly exotic and unusual pathogens. Pathogens we don't see regularly in a clinical environment.
Where we struggle a little bit, and this is the point the laboratory work group made in the report last year, we also have an important clinical diagnostic role.
We'll do a lot of confirmatory testing for public health laboratories. We, in many cases, hepatitis is a good example. Hepatitis tests are difficult to come by in many states and localities.
And CDC provides hepatitis A and B and C in localities. That's traditional diagnostic testing which is very different than laboratory research on exotic pathogens.
And because it's a small work we do. We don't recruit people for local diagnostics. We don't recruit people with clinical diagnostics. There are people where their time is spent on the important surveillance and characterization work for the exotic cases.
But that clinical diagnostic laboratory experience is critical when it comes to test development for test diagnostic for the public health laboratory space or commercial public health laboratory space.
That's the challenge we had, if you will, four years ago and where we need to improve from workforce point of view, how do we strengthen our clinical diagnostics capacity without losing the important capacity around novel research, novel characterization. I hope that's helpful.
>> HELENE GAYLE: Yes.
>> DR. DAVID FLEMING: And the surge capacity in the private sector, you've taken very important steps to rectify. I'm wondering if there's still inherent limitations in rapidly producing new diagnostics.
Where H5N1 suddenly came transmissible from human to human. I can imagine a huge surge for testing around the country. What is the recognition for the need of that test and our mission to make it widely available?
>> DR. REN SALERNO: Great but very difficult question.
We're working on that lag. In the case of H5, at least we know what H5 and N1 is and we have an existing series of tests for influenza that go from flu A to flu AB sub typing to H5 specific testing.
We are now in the process of enhancing the readiness of the commercial laboratory sector to be able to provide, at least have on the shelf and ready to go and submit to FDA for clearance, an H5 test they could bring online very quickly in the event of an H5 human outbreak.
You're absolutely right. One thing we're struggling right now is access to positive controls. And for test development we need positive controls and don't have a lot of those.
We're making progress and partnering with NIST who provided -- developed controls for us of Mpox in 2022. It jump started our ability for CDC to extend the 52 K ortho pox test to five commercial laboratories.
We're excited that FDA seems more open minded about synthetic positive controls, if we can provide them the data. That's a huge step forward with the FDA's thinking of test validation.
I'm hoping we're continuing to shrink that gap in time down. But you're absolutely right. Especially for a novel agent, it's going to be a struggle.

In my mind, what I think we're trying to do to prepare for a novel, an agent caused by a novel agent for which we don't have a test, back to the 2020 scenario, is trying to get -- I mentioned the RFP, hopefully released this summer.
Trying to get a number of private companies, manufacturers and commercial laboratories, on contract with CDC as a warm base that we could turn on as soon as we notice something unusual going on.
And then we would have access, ideally, access to their staff knowledge. And not just rely on one subject matter expert on CDC.
And we have our centers for excellence, and engaging them on H5 and how they can take an active role in H5 diagnostics. Can we leverage this idea of centers of excellence within the public health sector and have them contribute to test development as well as CDC and private partners.
So distributeing the risk a little bit and extending and expanding the number of people working ing laboratories and testing an active response.
>> DR. DAVID FLEMING: I recognize it's a tough question and you can't do magic. So communication when that happens. Jill?
>> Jill: Really quickly, Ren, you brought up the centers of excellence. I think it's important to keep genomics in mind. You're juggling a lot of balls. But with junomics, we can't lose that capacity and capability we built up during COVID.
>> DR. REN SALERNO: Thank you, Jill, I'm focusing on diagnostics here. But characterzation is important. And we have a lot more capability in our public health laboratories to do that junomic work.
>> DR. DAVID FLEMING: Thank you, Ren. Hopefully next time for an update, you'll only have one job
>> DR. REN SALERNO: Thanks for the opportunity.
>> DR. DAVID FLEMING: The CDC was formed to provide broad recommendations on health equity. And that was shared by Monica and the committee when it was requested to give updates on a regular basis.
I'm delighted to reintroduce Dr. Karen Hacker, Director, National Center for Chronic Disease Prevention and Health Promotion. And she's a leader in this effort.
She's talking about the effort CDC is doing in Social Determinants of Health. Over to you, Karen.
>> DR. KAREN HACKER: Thank you so much. And what a pleasure to be here. And great to see folks I haven't seen in a while.
I'm going to pick up where I left off a few years ago, I think in 2022 when I last discuss would the advisory committee. Can I have the next slide, please?
Thank you.
So, in November of 2022, I shared the CDC developed an agency wide Social Determinants of Health framework and we launched a task force.
The framework has been widely disseminated and there's six pillars from policy to infrastructure. But at the heart is health equity. Here CDC health equity is an umbrella where Social Determinants of Health reside. And these strategies will help us move towards health equity and diminishing the disparities that exist.
We've been working for years with the HH is and the White House, and spending new time with our new shows. The field is very interested in this area.

In November of 2023 the White House released a playback on the Social Determinants of Health by Dr. Sandy Ford. And that play book is on actions across the federal agencies in support of moving the needle on the social circumstances.
To accompany its the HHS has released the actions. And we are very involved in this. These meetings continue to take place as there's a government approach going on.
There's a number of CMS rules that are now making it possible for the healthcare system to provide reimbursement for a number of these needs.
This has add and amazing new challenge for the field and an amazing opportunity.
Our Social Determinants of Health task force, which was led by myself in collaboration with leadership of the Office of performance and evaluation and Office of health equity has worked with six sub committees and we have achieved a number of different activities.
We redesigned and updated the main Social Determinants of Health web pages. And literature review and updated the chapters of the book. And soon to be published.
And there's ways to assemable federal funding, of interest to the field. And that's shared with the governance board as one input as they determine tools going to be useful.
Hopefully you know that Social Determinants of Health is a cross cutting driver of help and has our agency wide priorities.
But mostly substance use and supporting young families.
But Congress did not take action to increase our line. There's now limited resources for this work, we are transitioning from agency wide to a counsel. This is the coordinating health unit.
This agency wide counsel will sit at my center, the NCCDPHP and we'll have the mission of this group to continue the work going forward and share educational activities and share information and drive the work of Social Determinants of Health across the agency.
So while NCCDPHP has been leading the charge, many of the centers are in the work of Social Determinants of Health ranging from surveillance to analysis to funding perspectives.
When looking at the funding opportunities across the entire agency, we found that last year, five centers focused on Social Determinants of Health in their NOFOs.
But just to give you a flavor of the activities. The national center for HIV viral hepatitis and health promotion have hosted webinarses to bring authors and researchers to the forrr.
And they had federal funding to the HIV epidemic. And the national center for health statisticses launched the data query system which brings data from multiple external sources and major HHS data and that includes information on nutrition, disability, and health insurance.
Our Office of Data and Surveillance Workgroup technology, that includes Social Determinants of Health related elements and we're doing a data call to make sure we understand all our surveillance systems that include Social Determinants of Health questions.
I want to mention, you heard from Ari today about heat and health and work. There's a lot of work going on in the agency relating to Social Determinants of Health.
And turning to NCCDPHP to give you updates.
And we're working with NACCHO with the initiative. It's the respective initiative of multipartners addressing Social Determinants of Health. Over the first two years, we learned a great deal that was used in many of our own NOFOs.
In the third year, we focused specifically looking at the relationship between public health and clinical delivery system and human services arena.
More to come on that.

As part of the this work, we started a community of practice to learn what each of them were doing and to guide some of their efforts.
And we're working with asto to work on the community worker landscape. It's a big new area, in particular, as you know, we had a grants working with health workers ending in a year. But there's sustainability with this workforce.
The surveillance system introduced the Social Determinants of Health health equity model in 2022. That data is now available.
Very excited about that. 39 states participated. We have measures that also mirror what CMS is asking the clinical delivery system to do in regards to their health screening.
And we had an MMWR and the vital signs on mammography and relationship to social needs.
And there's other papers coming out shortly and the foundational paper looking at the chronic diseases and social determinant rr.
And we have a scan and our center identified five areas connected to chronic disease. Those include care, food insecurity, environment, tobacco and policy and effectiveness.
And we researched the needs in these areas. We know there's a lot to do in building the evidence in the field to be able to understand what works and what doesn't. And so we have posted that on the website. We have presented to our colleagues within HHS and using that as a guideline for your research agenda.
We are also working on measures. And we've narrowed down and worked with partnerships to get feasibility issues and hope to narrow to three core areas in each of those five and be able to spread the work we're also doing. Can I have the next slide, please? Next slide?
Okay? [Chuckles]
>> There maybe a delay.
>> DR. KAREN HACKER: A delay. Thank you. I want you to pay attention to the line item of the Social Determinants of Health. In 2021, NCCDPHP received $3 million dedicated specifically to funding of planning grants related to Social Determinants of Health. And then in FY2022, that line increased from 3 million to $8 million.
So, we were able to fund a number of planning grants. And we recently funded planning grants last year. We've funded 71 different organizations to develop and implementation ready Social Determinants of Health accelerator plans.
The funding for those three easier was approximately $8.725 million. This last year, we expanded and funded five projects to help put their plans into action.
And we got a nites smatter of rural and urban areas.
So just to give you a few examples, here in Georgia, suvana is interested in bringing access to healthy foods to their communities through a mobile van or farm truck.
They just got met off the ground. They already provided 80 residents with vouchers and intend to expand dramatically.
In Illinois, oval county Illinois, it involves a number of rural counties. They too are interested in food security. And they established many food centers. Opened first one an May 1st and already supported many members access to nutritious foods.
We're trying to monitor the projects to determine what they're doing and if it's feasible. Only three years to achieve their goals.
We did one research project, the assimilation model of evidence -- SMILES. This is to model it practices and programs to determine over time what they would do in return on investment

and also what they might do in health costs. We hope this tool will be available to CDC and external partners.
While the President's budget had included sizable increases in the past, as I noted those increases did not make it in the final budget. And unfortunately, in the budget we saw a decrease of $6 million.
We're continuing with the projects but unable to the the planning grants. Last slide.
The last thing I wanted to mention there's a tremendous amount going on with multiple other agencies. I meant to mention our colleagues at CMS. There's a series of rules changing the field.
The 15 waivers to consider using the Medicaid dollars for social needs, including community health workers.
The rule that I mentioned earlier requiring health organizations to screen for social means was to be implemented by 2024. That's move forward and we're hearing about that in the field.
The last one, the physician fee schedule recently released now allows Medicare dollars to cover the same related social needs.
As we birn to see this going on externally, we're seeing the human services realm figure out how to contract with public health providers and we want to make sure public health is in the mix.
We've partner.Ed with community living to make sure public health is part of the care hubs.
And we're going to be awarding grants to organizations is squarely at the table.
And there's the clinical delivery system, recognizing you can refer to a variety of needs. But if the resources are not in the communities, it can be frustrating experience.
But keeping public health at the table is important. And encouraging our directors to work collaboratively with their Medicaid books and those in the field and local level working collaboratively with human services is critically important.
It's an exciting time. I spent all day yesterday in a healthcare worker meeting talking about sustainability. Talking about opportunities and challenges as we see many of these policies begin to roll out. Back to you David.
>> DR. DAVID FLEMING: Thank you, Karen, for your presentation and leadership. Going to open up to the committee for questions comments, perfect. Monica first, and Rhonda second.
>> Rhonda, you had your hand up first.
>> DR. RHONDA MEDOWS: I want to say I appreciate your presentation and candor about the loss of budget.
Dr. Hacker, I'm probably not the only person disappointed to hear about the lack of money following these policies. I've been around long enough to know without funding is difficult to move forward. I was hoping not to hear in the nursing home no additional movement.
That aside, with CMS, I'm wondering if there's a way to formalize the agreement between the Federal Government and state Medicaid agencies? Can CDC be a leader in finalizing the data sharing. Even though you can't do the intervention, you can share the data about health disparities and social determinants. You can do that. And you can help them do the assessment of whether or not their interventionerize being reflected. Can that be formalized?
>> DR. KAREN HACKER: We're involved with CMS on how they can have the date with the surveillance system and their own survey.

We're working with them and I'm optimistic they're giving indications to the directors this is the avenue to take. Medicare is a state program and looking that waivers, they deliver from state to state.
We're providing a tool kit I believe at the end of the Summer, with healthcare workers helping them understand what's happening in the financial realm. And working with asto, and we're doing our best to educate health department directors how to work with their Medicaid directors and to understand the waivers.
I think, to your point, while we may not be able to mandate these things, we're doing what we can to educate the field, to get them to be in the right place at the right time. And we've been doing that now and I think we're starting to see success.
It's been an interesting playing field to see how this is rolling out.
>> DR. RHONDA MEDOWS: Dr. Hacker, I know you're trying and trying to be everywhere you need to be. But I know the public health realm and CMS and Medicaid and Medicare. While Medicaid is state regulated it's also state funded.
I think it's to be said to formalize the data and analytics agreement as opposed to coming together in meetings. I think it needs to be formalized. The data and analytics you're able to provide not be rep lcktded at an additional cost.
And you can formalize that data share and agreement. What I'm doing is trying to make sure that the good work that you and your teams are doing is not taken as a nice to have. But built into day-to-day operations. And sometimes you have to add the contract and the money. Why Medicare plans and providers and state agencies to do something with data analytics you can do completely or supplement without additional costs being spent.
That way you're integrated into solution rather than advisories on the sideline. I get worried about that piece.
I know that's not your decision to make. I hope you're an advocate for it. I fear, 10 years I'll be sitting back and hearing how we're observing health disparities and observing avoidable deaths.
I like the examples of the if housing and the food. But it needs to be at a larger scale.
Maybe not something you can mandate but something you can have formal agreements on and be the convener and conveyer on how it can be done right with data indicating the effectiveness.
I want to say about you, I know about the budget stuff. But we've been in tight situations before. If one federal agency has money there's one to piggy back on.
>> DR. KAREN HACKER: Much appreciated.
>> DR. DAVID FLEMING: Thanks for that wisdom. Mon cu.
>> MONICA VALDES-LUPI: Thank you for sharing that data from there pillars and the framework. I appreciate you shared you were reinnerized spending time with the community healthcare workers that's important.
Not coming from criticism, I want to understand how you're approaching the 1 work. The progress you shared in the NOFOs, the funding and grants continue to go to asto and the state and local county public health departments, I some from that world.
And having spent a lot time lately with our local and state health departments, it really is a political environment and in some states they're not able to talk about SDOH, they describe it as non-medical drivers of health in some jurisdictions.

I wonder with the work of the health equity work group, in terms of recommendations, if there's any progress or development you can share about NOFOs and ways to get the funding to community based organizations.
Particularly given there are jurisdictions where they won't to be able to work in the ways you described to tackle the health inequities. I wonder if you can speak to that. It might be unfair to put you in the hot seat.
But the examples you shared, the implementation plans thrkss planning grants from implementation plans. Are they go to public health? Or the NOFOs you described are there efforts to get the grants and opportunities to CBOs? That's important to the health equity work group.
>> DR. KAREN HACKER: So the dollars that we provided under the action NOFOs because of the appropriations language had to go to state, tribal, local, and territorial health departments.
However the reach grants as you know go to coalitions and that can be at any level.
That certainly is one of the NOFOs that goes to communities themselves.
In addition, the action NOFOs and the plans, and I got to remember this, I think those could also go to more local.
But all of these are multiple partners. They might go to one governmental organization but given out to a variety of others.
It could go to local health departments as well.
And we've had more flexibility with this line item than we've had with other grants, for example, the diabetes grants or grants related to heart disease and stroke prevention which have to go to states
At this point in time, the action NOFOs are more smaller, one is county, city, state and a variety of different ones.
To your point, a community of health which I think you're getting at Monica, there's frustration that these smaller organizations where community healthcare workers are trained to their communities don't have access to these type of grants.
What we saw with our own grant, the organizations had their community healthcare workers in place.
We were not funding any new initiation of programs. But rather you have to have an existing organization and that helped them partner with their local health departments.
The challenges you're talking about, many of our grants now, don't have much open eligibility. It depends on who applies for those grants. There are those with the appropriations language that is very specific who can and can't apply.
I understand I you're coming from. We've been working with the infrastructure center to think of creative ways to get resources to community organizations which we know were absolutely critical in the pandemic because of reaching populations.
Because of trust factors and other reasons, and wanting to keep them engaged and keep them involved.
I think some of the learning collaboratives we're working on particularly with asto and NACCHO in this case are bringing those folks to the table. They might not know of Medicaid reimbursement.
Or a group convening in their own community they could participate with and do the billing for them.

There's squlairz layers and layers here to unpack. I want to say some from personal perspective how to get the resources into the hands of those who can make the most difference.
[Pause]
>> RHONDA MEDOWS: David?
>> DR. DAVID FLEMING: Yes, can you hear me?
>> RHONDA MEDOWS: I can hear you now. Dr. Hacker, have you talked to the American hospital association or American health insurance plans? Both are funding the community house workers and the FTEs and again, you have knowledge and data and analytics they need in order to train the folks better.
Again, another opportunity to not only partner but formalize a partnership and get them on to the right track.
You got excellent stuff and it's stuff they need. Otherwise they will create it themselves. With provdants they created an epidemiology research thing when they could have worked with public health more closely. Instead of creating a new -- you get what I'm saying? There's an opportunity.
>> DR. KAREN HACKER: Sorry --
>> RHONDA MEDOWS: It's funded out of the operational budgets and community. So those are funding streams with big entities into that space who could be formal partners with you. And then you wouldn't have to be worried about year to year grants because it's part of the operational budgets.
>> DR. KAREN HACKER: I think with the services, I think when we're talking about Social Determinants of Health, we're talking about the bigger community systems and policies. And we're assuming the health system is thinking about individual needs. We need to walk the walk with them.
Because most of our health departments, while they do in some cases have individualized services, we also want to get reimburse. For those folks if that's appropriates.
If you don't have the policy and system in place, all the screenings you do won't make a difference.
We've seen this in the communication, for example. That was the finding. We think public health can play a role. And we push our energies to get the evidence so they can understand the roster.
The issue with the reimbursement it does incrementalize the work, will be paid on a fee safe service and/or value? And many of the organizations we're talking about, this is not their skill set.
And in some cases they're not interested in becoming a healthcare provider, they're interesting in continuing their mission. But the times are changing.
I feel like we in public health can play a role in boying that up and support the activities at the local and state level.
And helping folks who have not been in the space before, there's a lot of healthcare jargon. And being able to understand where they intersect.
We're working with community health worker state groups and making themselves known and interested in wanting to create the policies at a state level. Like credentialing and certification. And we have 50 states, so each state looks different.

>> RHONDA MEDOWS: I'm not talking about the incremental or the individual, I'm talking about the national insurance plans or the national hospital associations that have state would efforts. Meaning they're physically building the buildings for homeless. And building the food markets with the state would food banks.
All I'm saying is be that source of expertise that informs their policy and where they put their capital dollars.
Otherwise, they'll continue to do it with good intentionses. It's part of their mission. If you're a hospital and you wanted to reduce your readmission rate or your are long length of stay, you want people to go to be medically discharged. If people are homeless they have no place to go. But when they do build the buildings and residential facilitates and extend to it food banks, wouldn't it be smart if people who know the most about social determinants at a community and state and regional level was there?
>> DR. KAREN HACKER: So we are, as I'm sure you've heard, working extensively with the healthcare system and CMS. And Charlene notified me we have a meeting with AHIP as well. I think we're moving in that direction. I appreciate your comments in this area.
>> DR. DAVID FLEMING: Thanks for your leadership on the agency and for your center. One last question from me before we stop this session.
You spoke a pick about the I'll say disappointing level of line item funding for Social Determinants of Health.
One of the recommendations in the health equity work group was that most of the CDC's categoryal programs should have STLT on their mind because of their work on infectious diseases.
There is the hope that more of the categorical line item funding not specifically labeled SDOH would be invested in the programs and tackling the issues.
Does CDC have a way of assessing or monitoring the extent that is happening or not. As we know, measurement is the first way to know whether it's doing what it is. And do you know if there's a plan to put those measurements in place?
>> DR. KAREN HACKER: We looked at the NOFOs to get a baseline and looked for words like Social Determinants of Health or social determinants. And there were five centers including that information in their NOFOs. That's not every one. But at least we have a baseline moving forward.
In my own center we had 25 NOFOs that went out last year and included language in this account. Well received by the field. One of the things you hear from the field is not having siloed funding streams. So in these NOFOs there was breathing space to look across programs. And we're doing a data call looking at surveillance in particular to see where Social Determinants of Health questions are being included in that. And we're looking at the baseline. I've seen the members of this counsel to have the responsibility and drive this agenda.
It is a process that goes on. But I will note that many ofuts have Social Determinants of Health that they are particularly interested in because they're less relate relevant to the outcomes. And NCCDPHP looks at housing and our center looks at food.
Not a one stop shop but moving forward, this is the agenda to keep this on the radar screen and in the mix regardless of what the ultimate funding stream may look like. But getting into the drinking water.

>> DR. DAVID FLEMING: Thanks, Karen for your leadership. We need to move on. But we appreciate your work and hope to see you back here soon for an update.
>> DR. KAREN HACKER: Thank you.
>> DR. DAVID FLEMING: In our last meeting, we established our newest work group. The Communications and Public Engagement. And Rhonda Medows and Octavio Martinez have cochaired this work group. And they are here to provide us with an update on the work they've done.
And that includes identifying non-ACD members to be a part of this great.
I'm going to turn to Rhonda and Octavio to provide its the up the.
>> DR. OCTAVIO MARTINEZ: Thank you, David.
There we go. There's our slide. Rhonda and I would like to thank and actually commend Kate, Charlene, David, Tiffany and Deborah to help through the process of the Communications and Public Engagement. The nomination period was opened and extended a bit and closed on April 26th.
We received 33 completed packages by the deadline and a panel review was put together, included the two co-chairs, Rhonda and I, and David and Charlene Wong. And we were able tool vet out and take a look at different angles.
Wanted to ensure we had diversity geographically and also skill set and their perspective and personal voice coming together.
We had a robust discussion, pros and cons on how many could be on the work group.
The terms of reference had indicated we go to a max of 15. We went back and forth on what would be the optimal number.
We landed on max at 15 because we did all those perspectives and diversities to be represented. That's a large group but we want to have everyone engaged and participating.
We have sent out invitations to those individuals to join the CPEW. And also want to mention, as you can see here, in addition to Rhonda and I from there ACD itself, thank you Josh and David, will be ad hoc ACD member consultants. That's in addition to four of us and 15. Not to mention everyone a part of the work group itself.
Those that were not chosen, we decided to let them know they were not selected but they're being notified that they will be also -- that we would like to keep them and their information to help us inform potential possible use of their expertise in the near future.
And so we wanted to -- those are the on the way out. We're currently at that stage. We're not at the stage to see 15 are, unless Kate can say how many accepted. I know the letters went out yesterday. And those have been done.
After that the completed letters to the folks not selected will also be receiving a letter from Rhonda and I. Rhonda? Any additional comments?
>> RHONDA MEDOWS: I think you covered it well. And thank you to the team for the work. I look forward to discussions and I look forward to us getting to work.
>> DR. OCTAVIO MARTINEZ: Yes. Indeed. This is exciting. It's going to be fun but hard work. But we already have ideas flowing. I concur with Rhonda's comments.
>> DR. DAVID FLEMING: Any comments, suggestions, or advice to the committee members at this early stage of the creation of this work group. We can go ahead and go to the gallery view.
>> HELENE GAYLE: Sounds like a good start.
>> DR. OCTAVIO MARTINEZ: Thank you.

>> DR. JULIE MORITA: Have you received a terms of reference for the working group yet? Or still in development?
>> DR. OCTAVIO MARTINEZ: The terms of reference? David?
>> DR. DAVID FLEMING: (Indiscernible) will provide them to you. We voted them -- ACD voted them at the last meeting. But we'll make sure all of you see the final version.
>> DR. JULIE MORITA: That sounds great, thank you.
>> DR. DAVID FLEMING: Anything else? If not, our next speaker -- yes, thank you two for the work you've done and the work you're going to do. People talk about their expectations for this process moving forward.
And our DFO Kate is with us and has her hand raised.
>> Kate: I'm looking forward to the work of the group. Octavio, to your earlier point, I have received eight acceptances of the 15 already.
Folks out there are really excited. They really are.
>> DR. DAVID FLEMING: Thanks, Kate. Our next speaker, we checked beforehand, but Demetre is not available until 20 passed the hour. Before we take a break until then, I wanted to quickly open the floor. No response necessary but we're thinking about the November ACD meeting. Any off the top of your head topics you think would be important for that November meeting? You can always send them in. But now is a time for top of mind.
>> Before or after the election?
>> DR. DAVID FLEMING: Before. Sorry.
>> HELENE GAYLE: Because I'm new and have not seen the different topics. Would it be possible to get the last year or so of agendas? For me, it would helpful for me to get things that might be useful that we may have heard or not heard in a while.
>> DR. DAVID FLEMING: That's a great idea, Helene. We will get that sent out to refresh the memory. And with your history, we at CDC would value your ideas with what's missing. Josh?
>> JOSHUA SHARFSTEIN: I appreciate this meeting. It's the only one in my calendar where there isn't a session on AI. Everyone is talking about AI --
>> DR. DEB HOURY: You're going to make us do it?
>> JOSHUA SHARFSTEIN: It might be worth it. There's components of AI that touch on the areas we've focused on, certainly equity and data.
If you think it's interesting, Dr. Houry, it might be an interesting conversation. I'm increasing under the view this is all something we have to learn and cope with and if not, use to thrive.
>> DR. DEB HOURY: I think by October that's a good idea. I know we have agency work groups. I think that'll be a good time to say how CDC implemented it and where to go and not go. Josh, it's a good idea.
>> JOSHUA SHARFSTEIN: Thank you, thank you.
>> DR. DAVID FLEMING: Kate, you had an idea?
>> Kate: Even though we didn't add to the tour of the CPEW, there's probably no way we're going to have year long worth of deliberations of community engagement and not talk about AI. So I think it has huge implications for the field of communications.
>> DR. DAVID FLEMING: Thanks, Kate. As you think about it, please feel free to send ideas in. We'll take a break now until 20 past the hour. And we'll reconvene properly.
Thank you so much and see you in a bit.
[Break].

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>> DR. DEB HOURY: Can somebody move Demetre up to a panelist? I see him in the attendees list.
>> DR. DAVID FLEMING: Let's go ahead and remove the slide that says, "Break."
>> DR. DEMETRE DASKALAKIS: Sorry about that. I was stuck as a non-panelist.
>> DR. DEB HOURY: I found you!
>> DR. DEMETRE DASKALAKIS: I appreciate it.
>> DR. DAVID FLEMING: Demetre, we're going to start in about a minute.
>> DR. DEMETRE DASKALAKIS: Great. Thank you so much.
[Pause].
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>> DR. DAVID FLEMING: Okay, the minute is up. One or two people may join. Demetre, if you're ready, let's get started.
At the outset. It's my pleasure to introduce your Demetre Daskalakis, National Center for Immunization and Respiratory Diseases. And we've already heard that you're going to talk about H5N1 and there's some discussion about that already. I think folks will have questions for you.
I wanted to thank you for presenting the information to us. About a week ago, we were asking you to present on a broader range of topics on immunizations. And you're already well into the developing the presentation. That work will not go wasted. We want to invite you back when you have time on the important work of your center.
Today it's H5N1. Now giving the floor to you.
>> DR. DEMETRE DASKALAKIS: Thank you, David, and thank you to the advisory committee on this important topic.
A little bit of a level setting on terms of H5N1 or Highly Pathogenic Avian Influenza A is. It's a virus that effects birds world wide. And it affects those poultry and marine mammals and domesticated animals.
In general, human infections with H5N1 have been rare. You can see this graph on the right. It really does show the contour of what we've been seeing with H5N1 globally.
General speaking, these infections usually occur after close contact after infected birds.
Generally speaking these are large poultry in larger set isings or backyard.
And we have very rarely reported human infectionses that have happened in related to exposure to other animals.
There was a significanted spike in 2015 to an outbreak that occurred in Egypt. And these sporadic infections have been reported in countries since 1997 and they have significant outcomes of a case fatality of 50%.
It's notable a small case of those have been reported. So not generating a lot of detected human disease.
Next slide, please.

As I said, this virus has been detected in birds and has been detected in different kinds of animals or mammals. We got some different news.
With the introduction of this virus into the population of dairy cows in the United States.
So I'm going to give you a number that's updated compared to the number on the deck. As of June 6th, there are 84 herds infected with Highly Pathogenic Avian Influenza A. And there's a website that covers this updated on a daily basis.
In terms of this outbreak, it's not just cows that have been detected with this strain. H5N1, wild birds, cats, raccoons, and possums have been identified in the setting of this outbreak on of any close relationship to dairy farms.
Also in the last day, a report is also being found in mice.
This really began in detections that were identified in cattle. And on April 1st, Texas announced it's first human infection of Highly Pathogenic Avian Influenza A virus. It was an adult working at a commercial dairy farm.
This case has been described in great detail on the New England journal of medicine.
This individual developed conjunkivitis and provided with tami flu and recovered.
And contact tracing focused on house hold contacts and they were given medications, tami flu and not reported any symptoms or adverse effects of the drugs.
A little bit of radio silence with new human detections. As that was happening, increasing numbers of individuals were being monitored by local public health as more herds were being detected.
On May 22nd a second case was identified by Michigan. And this was announced in relation, again, to a dairy cow.
Again, this individual only reported eye symptoms.
On May 30th, Michigan report another case, a third case total outbreak associated with dairy cows.
This was a dairy farm work worker making it a human spread.
And unlike the others that reported conjunctiveal or eye, this person reported flu symptoms like respiratory symptoms as well.
And he was offered tam veer and his close contacts.
In terms of where we are, one of the key componentsal to addressing a Highly Pathogenic Avian Influenza A in animals is monitoring humans to exposure.
The effectiveness of this is state, local health departments. I want to emphasize how important they've been in doing the work in monitoring individuals on farms who have been exposed to dairy cows detected to have Highly Pathogenic Avian Influenza A.
And in general, the guideline we have for monitoring is that individuals who are exposed to poultry or other animals with Highly Pathogenic Avian Influenza A should be monitored for ten days of last exposure.
Asof today, at least 44 people have been tested and more than 390 people have been maurbted.
It's one of the reason why the cases were identified in Michigan. Those individuals were engaged in monitoring and when symptoms emerged were referred to testing and leading it diagnosis.
A great example of how important the public health infrastructure is to industries the novel influenza viruses.

As we're doing the work with the local and state health departments of monitoring, we're taking industrial strength strategies to increase surveillance.
CDC has developed a Summer surveillance strategy that enhances the nation wide surveillance. There's a strategy for surveillance. This is about extending that deeper into the summer.
And including the sub type in public health laboratories across the U.S. And we're asking state and local health departments to increase outreach to their healthcare providers to raise awareness about H5N1 so that individuals who are detected with conjunctiveites are screening.
And so the testing during the summer months generally we tend to see lower activity for influenza.
Additionally, beyond that industrial strength, we are also working with local jurisdictions on identifying the appropriate opportunity to do field studies. And so this is -- these are more in depth epidemiologyic protocols which include testing on cereology and varietied detection.
And we're working with the local health departments and working with the local state agriculture colleagues to identify the best time and place and environment that is conducive for us to be able to do this work
And progress continues to achieve this goal. Next slide.
So along with those, we have our standard influenza surveillance systems that we use anyway during the year. And these have been important for us to understand what is happening as we're seeing more of these herds detected and human detections of H5N1.
So, we are using our syndromic surveillance. So looking at emergency department visits. When we identify areas where a herd is detected, we really look carefully at what we're seeing in our syndromic surveillance, more ER visits for influenza like illness?
And then we add to the surveillance of testing. We're looking at public health lab for influenza and commercial testing of influenza to identify any changes in trend.
The big message is across syndromic surveillance and cross influenza testing, we aren't seeing anything testing this time of the year for Highly Pathogenic Avian Influenza A nor nationally across the board.
Our systems we use to monitor influenza has now expanded. And on May 25th, before May 25th, we were able to put on the website our waste water surveillance of Influenza A.
We were able the monitor sites from 37 states. Able to see if seeing Influenza A activity. And when we do see a thing, we look back at the surveillance systems, looking at syndromic surveillance and test positive and looking at our colleagues in agriculture and public health departments to see if there's an explanation for the detection.
Today, the explications have ranged from there's a dairy in the sor set area and barns. And we're have a late blip in the flu season. As we're seeing the detections and looking at our surveillance systems.
The constellation I described here testing in syndromic surveillance. Next slide, please.
So this is, I think a great opportunity to just highlight how important our seasonal preparedness is for an event such as this.
Where we have a new scenario. I'm not going to call this a novel threat. Because H5N1 Highly Pathogenic Avian Influenza A is something we've been tracking very closely for over two decades.
But highlighting how important it is domestic and international effort, to monitor what's happening with CDC flu.

CDC servings as a national influenza center and epidemiology control of influenza with the global control of influenza and response system. And it's largest global resource center to help control pandemic and seasonal flu.
Our global seasonal efforts keep the system warm. And I include our commercial and public health labs and how they feed it in. It allows us to monitor the flu virus with candidate vaccine virus.
And that gets us to the plates where we can say the H5N1 vaccine viruses that appear to be useful in the situation.
That work is reflected in the vaccine viruses which shave up to 8 to 10 weeks off a process oin creating a vaccine to address a novel or emerging influenza.
What's the flu vaccine going to be next year? Is the vaccine viruses in our preparedness in our novel influenzas. Next slide, please.
I like this slide, we could stay longer. There we go [Chuckles]
So in terms the work that we're doing, our objectives as we continue the HPAI response is to make sure we are able to detect cases of H5N1 in the community
And so that does include the work that we are doing to so after right size what we're seeing in terms of typing.
Again, that summer surveillance enhancement we made lives in a universe where we had plans and know what to do to be able to detect even rare circumstanceings like a novel influenza virus that circulates at a 0.5 prevalence.
That is industrial strength. And remember the work we're doing with the local health departments to monitor individuals with exposure and with the long-term intervention, we have an epidemiology approach to detect individuals and cycle them to testing as appropriate.
So, we're also working to expand public health lab specimen sources. This is a bit of an area.
And we're doing commercial and clinical health labs to get the critical specimens preparing for seasonal flu and preparing for an emerging threat like this.
And that's ICUs and hospital specimens.
We are all learning about influenza waste water together. So we have areas that flag our data area. And it spans one health. So looking what we can do with our colleagues anding aingture and talking to the local health departments to see if they have explanation and what additional explanation is needed if identified.
We will continue to do the work we always do for flu. Extending? The season. And continue to do the outreach that we need to make sure that providers are aware that if they're meeting people with symptoms think of exposure history.
We're meeting with networks, HRSA networks and our networks, to continue to drum beat to make people aware if they have symptoms, it's critical to reach out to their local health department to get tested.
So, I think, I'm happy to take questions, I also want to put questions outs there for discussion. I'll read and then we can jump. David, if that's okay?
I think this is a great example how can we best communicate with sensitive out breaks like H5N1 with partners and industry. Love to get your advice on that's.
How do we collaborate our response that may pose little risk to the public at large but how to do that without creating alarm or fear beyond what's necessary but still creating awareness of

the situation. What advice you have for us? Since we're in the midst, that is critical on collaborating on what we have tomorrow.
And what's the prevalence of human infections. There's the EPI studies but other ideas are welcomed.
What are the science questions you think would be good for us to pure sue or answer. Thank you.
>> DR. DAVID FLEMING: Let's remove the slide for a gallery ree view and open to the committee. Demetre, I have a couple of. It's has to do what's commonly reported as you presented at the beginning, H5N1 is uncommon in humans but most highly legal.
Since that's global health surveillance, how to caveat that? It's the most severe to be recognizing and diagnosed so that conclusion about the rareness and lethat. Is that a science question and to be more caution s about the history of this disease.
>> DR. DEMETRE DASKALAKIS: There's a detection bias for more severe cases for sure. We do have some data from the poultry experience with serology was done with individuals with high exposures. There wasn't a lot to say with the poultry exposures. With that said, this is why we're so interested in doing the our EPI studies with individuals exposed in this situation.
The dynamic here is a bit different. I'll give one example. When looking at where this virus is sort of being found, I think that the cal mammary gland is where it's frequently identified. And most people have heard the data of the FDA that up the 20% of retail milk had remnants of Highly Pathogenic Avian Influenza A but the pasteurization address it.
We are interested in doing serology and knocking on different doors and strategies to better assess if there are critical illnesses not being detected.
This is a complex situation in terms of reaching farm workers. This maybe mild illness that folks are not associate would exposure to cows dhv.
The epidemiological study CDC doesn't do itself but collaboratively with local health departments with standard survey and standardized strategies to compare apples to apples.
So if you see one series, you see one flu.
>> DR. DAVID FLEMING: Quick follow-up, it seems like the FDA in milk samples is closer to the infection than waste water. Is there any plans to continue that surveillance?
>> DR. DEMETRE DASKALAKIS: The FDA is working closely with the FDA to identify strategies for more surveillance, the USDA also announced a program I think called status. The technical name? Where they're looking on milk on farms for a pilot of this response.
I'm from the HIV world and it's like pool testing for HIV and then backwards. USDA has announced the pilot and FDA is looking at milk surveillance.
>> DR. DAVID FLEMING: Jill and then Josh.
>> Jill: Hi, Demetre, good to see you, two things, I think I saw yesterday or the day before Canada had done some work and could find no evidence of the virus in milk? Am I right?
>> DR. DEMETRE DASKALAKIS: That correlates to what we heard as well. They've done their own milk surveillance and something that have not detected.
>> Jill: Which is interesting with Michigan and the Great Lakes and birds.
>> DR. DEMETRE DASKALAKIS: It's an interesting questioning. I'm going to put my not from USDA badge on. [Chuckles] but the thought of this it's a cow to cow phenomenon and not -- (cross talk)

>> DR. DEMETRE DASKALAKIS: With that said, they have reported on scenarios with a poultry barn not far from the dairy farm and that's may express the outbreak. It's being explored in great detail.

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>> Jill: My second question, serology questions, I know CDC has left over serum samples from the commercial labs. The other possibility is newborn screening blood spots taken from rural areas.

We recently did that for Coronavirus. It ought to be feasible on the certainly Midwest and rural states if you could target the non-city and get a selection of blood spots not the whole thing. But just an idea.

>> DR. DEMETRE DASKALAKIS: When we definitely take that back and discuss.

>> DR. DAVID FLEMING: Josh, then Octavio.

>> JOSHUA SHARFSTEIN: Thank you, for that great presentation Demetre. And I'm one of many people who sleep better at night knowing you're tracking the H5N1 situation out there.

Three specific questions for you. One, is whether -- where you have had the most success getting on the to the farm? Which partners?.

I recently met with people who do agricultural extension, puts them in the farm all the time and they have the trust with the dairy farm. Sometimes health departments do similar work. Are there themes emerging? Of who is just saying stay away or open to it? What makes the difference?

The second question, for the vaccine, how far along do you think the development of a vaccine for this particular strain would go? You could conceivably do a vaccine and do phase 1 and phase 2 trials. What are you thinking at this point and what would trigger that?

And the second question on your slide about communications and how to do that. It reminded me being a health officer in the Ebola West Africa situation and people were afraid of huge risk. Even though you're taking it seriously, how do you reassure? We found it helpful not to do the conferences ourselves but had people with us.

I think Tom freedman said we don't have to worry, and someone said that's the first scene of every horror movie! But we had those from the immigrant communities with us.

What is your strategy? I don't know who is the most trusted name in dairy farms, you know? The most trusted name to dairy farm workers. But having a communication so it's not just you for this particular one.

>> DR. DEMETRE DASKALAKIS: Correct me if I miss your questions.

The first is where you have experienced more success in terms of getting on public health connecting with farm workers? Or I'll call that getting on the farm. That's 390 folks we're monitoring is we're engaged with them.

I feel like based on what we've seen, like one is, prior exercise ised relationship has been an important markers for success on getting engaged with farm workers and the farms they work on.

That's one.

And I think the other part is also sort of seeing public health really trying to meet the sort of concerns of the dairy farmers and addressing them in a way that works.

There's some places as an example don't want to engage in active monitoring. Active maurbting is great. It's helpful.

But seeing health departments come up with different strategies that allow them to still keep connect to the farm workers without getting the information that is sensitive has been important.
Those are the two things for me. That good relationship between AG and public health. Some of which was preexisting and some which developed quickly, I think is number one.
In terms of vaccine development, we have two CBBs, both we have seen in neutralization settings. I'll put my asper hat on, and move forward with finishing 7 million doses of vaccine.
>> JOSHUA SHARFSTEIN: Any human trials plan?
>> DR. DEMETRE DASKALAKIS: I think there is already. There's serm for instudies. Yes. In terms of what's next, I think this is happening in a preparedness stance. There's no vaccination for anybody in the U.S. to date. But for the vaccine development and next steps manufacturer, I think the U.S. government and asper is making sure we have the vaccine viled up.
And making sure there's vaccine already in vials but not the manufacturer step but also regulatory. We're not there yet but the cogs are moving to get to the clinical public health indication to get to slides.
Last one is communications and engaging with the community. One thing we found that's important is leveraging our rural health experience within CDC as well as our partnerships. I'll say ours, broadly, not just CDC but HHS also. We have touch bases with organizations that represent farm workers and organizations that are mainly focused on rural, health, and actually also mygrant health since this is an overlap as well.
Those things are happening and working to be linguistically appropriate is also important for us. Right now we have info graphics in two languages so far. But we have many languages in queue that deal with direct outreach and I think we're already up to three or four with our info graphic for Personal Protective Equipment.
>> JOSHUA SHARFSTEIN: On the last point, something to think about. It's unusual though, to have those people you're now meeting with, CDC and outside world, invite them a little bit behind the microphone with you so you're blending with them and your message is reinforced. That's a strategy.
It's not public health vs. the world but the worldl is part of the public health messaging approach.
>> DR. DEMETRE DASKALAKIS: Advites to the messaging with our partners.
>> DR. DAVID FLEMING: Last question, Octavio.
>> DR. OCTAVIO MARTINEZ: Thank you, the last point for the communications. Wanted to add, your tailor of the message. Depends on the audience. For the workers, I think make sure that they're conveying what you're telling to plain language.
That I need ensure it's being delivered honestly and transparency. That it was one thing that was a big concern during COVID. And has added unfortunately to the trust issue at the CDC.
And keep it simple. Don't forget to ensure the local media is given plain language to use. Using human trials that gives people out the research arena, they don't know what that means. They're going to experiment on us. That's not the message.
Human behavior, being what it is, if they don't know something, what we do, it's never positive and always negative. Answer the gaps with plain language. And what you're telling us is fantastic. Glad to hear you're going after the migrant workers with the calm approach. Thank you.

>> DR. DEMETRE DASKALAKIS: Thank you.
>> DR. DAVID FLEMING: Thank you, Demetre. That was great and we really appreciate your time and expertise. And glad you're working on the issue. I feel a lot more comfortable.
>> DR. DEMETRE DASKALAKIS: Thank you for the great insights. I'll take it be back to the response. It'll help guide our next steps. Thank you.
>> DR. DAVID FLEMING: We have the close to our meeting. We have a couple of minutes. Not trying to summarize the meeting but thanks to the CDC, Dr. Mandy Cohen and to Deb Houry and to those folks behind the scenes who work at CDC to make these meetings happen. They have done a tremendous job and they deserve our thanks and respect.
Deb an opportunity for the very at last word in a moment. Looking forward to our meeting ing October.
Send ideas you have. There's lots to talk about. We have work reports from CPEW work group and don't forget if you have ideas for nominees for future members of this committee as Deb said, to please let CDC know.
Thanks so much, folks. A special thanks to the committee members and putting up with me over the last five hours. Over to you, Deb.
>> DR. DEB HOURY: Thanks David and a huge thanks for helping us steer the ship. We were worried we would end early. But thank you for your thoughtfulness and robust engaged. It's been a pleasure to work with you. And thank our staff and team as well. I know a lot of work goes on behind the scenes to make it come off seamlessly.
See you in the follow. Try to get AI on the schedule. If you have ideas for topics let Dave and I know. Thank you all.
>> DR. DAVID FLEMING: Thanks, and we're adjourned.
[End of meeting]