

Advisory Committee to the Director (CDC)

June 6, 2024

10:00 AM – 3:00 PM

Closed Captioning: <https://tinyurl.com/June6ACD>

Event ID: 17650



Welcome

David Fleming, MD

ACD Chair

Deb Houry, MD, MPH

ACD Designated Federal Official

Advisory Committee to the Director Solicitation for Membership

- Submit nominations by July 8, 2024
- Email nominations to the ACDirector@cdc.gov mailbox with subject line “Nomination for CDC ACD.”
- What to include:
 - Cover letter
 - Reference letter(s)
 - Curriculum vitae/resumes

Director's Update

Mandy K. Cohen, MD, MPH

Director, Centers for Disease Control and Prevention

Administrator, Agency for Toxic Substances and Disease Registry

Heat and Health

Ari Bernstein, MD, MPH

Director, National Center for Environmental Health



Which of these does heat *not* affect?



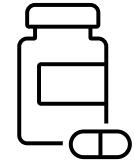
Pregnancy outcomes



Learning



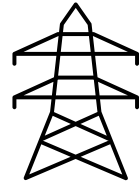
Heart disease



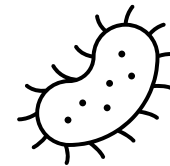
Medication safety/
efficacy



Suicide



Power outages



Bacterial infections



Substance use

How we used to try to protect people from heat



Weather forecast



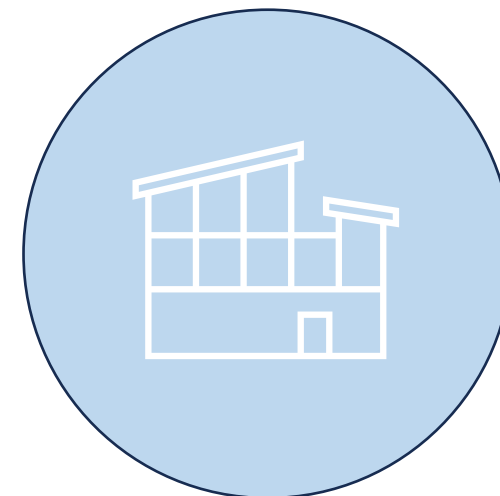
Heat alert

*How hot is
too hot for health?*



Comms
(TV, radio, etc.)

*How do we reach
those most at risk?*



Cooling centers

Can they get there?

Patient Tip Sheets and Action Plans

5 Steps to Prepare for Hot Days For Pregnant Women

Being outside can be good for your health, but for pregnant women, heat can increase health risks. Use these tips and action items, when possible, to stay safe on hot days.

1 Stay cool

- Check your local HeatRisk by entering your zip code on the **CDC HeatRisk Dashboard**.
- Most pregnant women are sensitive to heat on **Orange** heat risk days, but some are sensitive on **Yellow** days. Work with your doctor to know when to take action. Actions include:
 - If you are outside, especially for a long time:
 - Stay in the shade as much as possible; take breaks when you can.
 - Check the local weather forecast and do outdoor activities during the coolest parts of the day or evening, if possible.
 - When you are indoors:
 - Use air conditioning, if available, or find and go to a location with one.
 - Use a fan to cool your body off, only when indoor temperatures are less than 90°F.
- On **Red** and **Magenta** days, limit your time outside if possible and check the HeatRisk dashboard for additional actions.



If I need to stay cool, I can go here:

I need to start taking action to stay safe (circle):

- Yellow HeatRisk
- Orange HeatRisk

Here's who can check on me on hot days:

2 Stay hydrated

- Carry a water bottle. Drink and refill the water bottle throughout the day.
- Limit beverages high in sugars, sodium, and caffeine, if possible.
- Check your urine color. When it's light yellow or clear, it usually means you are drinking enough water.
- Talk to your doctor about how to manage fluids given your pregnancy.

3 Check for heat-related symptoms

If your body gets too hot, you can get sick. Know signs of worsening pregnancy complications. Know when to seek care.

Unusually heavy sweating Headache Cramping



Other signs can include shortness of breath, tiredness, weakness, nausea, and dizziness.

I will seek medical attention when:

If I am feeling overheated, I will:

4 Check air quality

Heat can make air quality worse. Poor air quality can worsen symptoms.

You can check local air quality on the **HeatRisk Dashboard**. The Air Quality Index (AQI) indicates how healthy your outdoor air is to breathe, ranging from 0 (good) to 500 (hazardous).

Less than 100

For most people, this is a good day to be active outside. Some pregnant people are sensitive to air pollution when the air quality is 51-100. Talk to your doctor to see if this applies to you.

More than 100

Outdoor air is unhealthy. Consider limiting outdoor activity. When indoors, use a portable air purifier, if available. Reduce sources of indoor air pollution, like cigarette smoke.

Steps I can take to keep air in my home clean:

- Reduce indoor pollutants, like candles, air fresheners, and cigarette smoke
- Bring outdoor air in when cooking (when AQI less than 100)
- Use a portable air purifier

5 Have a medication plan

Many medicines can make you dehydrated or overheated on hot days. Also, some need to be kept out of hot places.

- Don't stop or change your medicines until you talk to your doctor.
- Heat can cause power outages. Have a plan for what to do with refrigerated medications and electronic medical devices.
- Store your medicines properly- some may need to be kept out of hot places.

When HeatRisk is orange or higher:

- No need to change my medications
- I need to make the following changes to my medications:

My backup plan for a power outage is:

5 Steps to Prepare for Hot Days For People with Heart Disease

Being outside can be good for your health, but for people with cardiovascular disease (CVD), heat can increase health risks. Use these tips and action items, when possible, to stay safe on hot days.

1 Stay cool

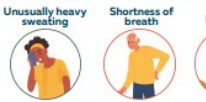
- Check your local HeatRisk by entering your zip code on the **CDC HeatRisk Dashboard**.
- Most people with CVD are sensitive to heat sensitive on **Yellow** days. Work with your doctor to know when to take action. Actions include:
 - If you are outside, especially for a long time:
 - Stay in the shade as much as possible; take breaks when you can.
 - Check the local weather forecast and do outdoor activities during the coolest parts of the day or evening, if possible.
 - When you are indoors:
 - Use air conditioning, if available, or find and go to a location with one.
 - Use a fan to cool your body off, only when indoor temperatures are less than 90°F.
- On **Red** and **Magenta** days, limit your time outside if possible and check the HeatRisk dashboard for additional actions.

2 Stay hydrated

- Carry a water bottle. Drink and refill the water bottle throughout the day.
- Limit beverages high in sugars, sodium, and caffeine, if possible.
- Check your urine color. When it's light yellow or clear, it usually means you are drinking enough water.
- Talk to your doctor about how to manage fluids given your pregnancy.

3 Check for heat-related symptoms

If your body gets too hot, you can get sick. Know signs of worsening pregnancy complications. Know when to seek care.



4 Check air quality

Heat can make air quality worse. Poor air quality can worsen symptoms.

You can check local air quality on the **HeatRisk Dashboard**. The Air Quality Index (AQI) indicates how healthy your outdoor air is to breathe, ranging from 0 (good) to 500 (hazardous).

Less than 100

For most people, this is a good day to be active outside. Some people with CVD are sensitive to air pollution when the air quality is 51-100. Talk to your doctor to see if this applies to you.

More than 100

Outdoor air is unhealthy. Consider limiting outdoor activity. When indoors, use a portable air purifier, if available. Reduce sources of indoor air pollution, like cigarette smoke.

5 Have a medication plan

Many medicines can make you dehydrated or overheated on hot days. Also, some need to be kept out of hot places.

- Don't stop or change your medicines until you talk to your doctor.
- Heat can cause power outages. Have a plan for what to do with refrigerated medications and electronic medical devices.
- Store your medicines properly- some may need to be kept out of hot places.

5 Steps to Prepare for Hot Days For Caregivers of Children with Asthma

Being outside is good for your child's health, but for children with asthma, heat and poor air quality can increase health risks. Use these tips and action items, when possible, to stay safe on hot days.

1 Stay cool

- Check your local HeatRisk by entering your zip code on the **CDC HeatRisk Dashboard**.
- Most children with asthma are sensitive to heat sensitive on **Yellow** days. Work with your doctor to know when to take action. Actions include:
 - If your child is outside, especially for a long time:
 - Stay in the shade as much as possible; take breaks when you can.
 - Check the local weather forecast and do outdoor activities during the coolest parts of the day or evening, if possible.
 - When your child is indoors:
 - Use air conditioning, if available, or find and go to a location with one.
 - Use a fan to cool your body off, only when indoor temperatures are less than 90°F.
- On **Red** and **Magenta** days, limit your time outside if possible and check the HeatRisk dashboard for additional actions.

2 Stay hydrated

- Carry a water bottle. Drink and refill the water bottle throughout the day.
- Limit beverages high in sugars, sodium, and caffeine, if possible.
- Check your urine color. When it's light yellow or clear, it usually means you are drinking enough water.
- Talk to your doctor about how to manage fluids given your pregnancy.

3 Check for heat-related symptoms

If your child's body gets too hot, you can get sick. Know signs of worsening pregnancy complications. Know when to seek care.



4 Check air quality

Heat can make air quality worse. Poor air quality can worsen symptoms.

You can check local air quality on the **HeatRisk Dashboard**. The Air Quality Index (AQI) indicates how healthy your outdoor air is to breathe, ranging from 0 (good) to 500 (hazardous).

Less than 100

For most people, this is a good day to be active outside. Some people with asthma are sensitive to air pollution when the air quality is 51-100. Talk to your doctor to see if this applies to you.

More than 100

Outdoor air is unhealthy. Consider limiting outdoor activity. When indoors, use a portable air purifier, if available. Reduce sources of indoor air pollution, like cigarette smoke.

5 Have a medication plan

Many medicines can make you dehydrated or overheated on hot days. Also, some need to be kept out of hot places.

- Don't stop or change your child's medicines until you talk to your doctor.
- Heat can cause power outages. Have a plan for what to do with refrigerated medications and electronic medical devices.
- Store your medicines properly- some may need to be kept out of hot places.

5 Steps to Prepare for Hot Days For Teens with Asthma

Soaking up some sun is usually good for you, but for those with asthma, the heat can be a health hazard. Follow these tips to keep safe when the sun's on full blast.

1 Stay cool

- Check out your local HeatRisk by popping in your zip code on the **CDC HeatRisk Dashboard**.
- Most teens with asthma are sensitive to heat on **Orange** heat risk days, but some are sensitive on **Yellow** days. Work with your doctor to know when to take action. Actions include:
 - If you are outside, especially for a long time:
 - Stay in the shade as much as possible; take breaks when you can.
 - Check the local weather forecast and do outdoor activities during the coolest parts of the day or evening, if possible.
 - When you are indoors:
 - Use air conditioning, if available, or find a location with one.
 - Use a fan to cool your body off, only when indoor temperatures are less than 90°F.
- When the dial hits **Red** or **Magenta**, limit your time outside if possible and check the HeatRisk dashboard for additional actions.

2 Stay hydrated

- Carry a water bottle. Drink and refill the water bottle throughout the day.
- Reduce drinks loaded with sugar, salt, or caffeine, if possible.
- Keep an eye on your pee- if the color is light yellow or clear, it usually means you are drinking enough water.

3 Check for heat-related symptoms

If your body gets hot, you can get sick. Look for asthma warnings and know when to get medical help.



Other signs can include unusual sweating, dizziness, tiredness, weakness, and nausea.

4 Check the air quality

Heat can make air quality worse. Poor air quality can worsen asthma symptoms.

You can check local air quality on the **HeatRisk Dashboard**. The Air Quality Index (AQI) indicates how healthy your outdoor air is to breathe, ranging from 0 (good) to 500 (hazardous).

Less than 100

Today's a great day to be outside for many folks! Keep in mind, some people with asthma might be sensitive when the air quality hits 51-100. Talk to your doctor if this applies to you.

More than 100

Outdoor air is unhealthy. Consider limiting outdoor activity. When indoors, use a portable air purifier, if available. Reduce sources of indoor air pollution, like cigarette smoke.

5 Get a game plan ready for your meds

Some medicines might be sensitive to heat, so keep those heat-sensitive ones cool.

- Don't stop or change your medicines until you talk to your doctor.
- Heat can cause power outages. Have a plan for what to do with refrigerated medications and electronic medical devices.
- Store your medicines properly- some may need to be kept out of hot places.

When HeatRisk is orange or higher:

- No need to change my medications
- I need to make the following changes to my medications:

My backup plan for a power outage is:

CDC's HeatRisk Dashboard

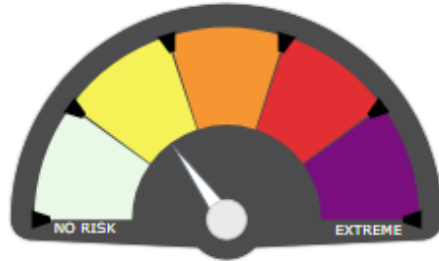
Get Your Local *HeatRisk*

98133: King County, WA



Today's *HeatRisk*

King County, WA



Minor

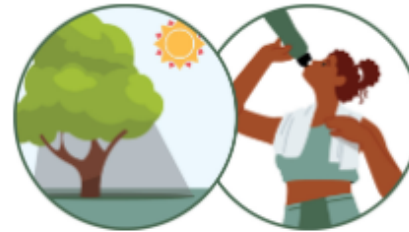
Wednesday, May 15, 2024

Source: [NOAA/NWS](#)

Today's *HeatRisk* is **Minor**.

Today is a good day to be outside for most people. People who are very [sensitive to heat](#) may have health impacts, especially if the air quality is poor.

Check the [air quality](#) in your area before heading out.



Thursday	Friday	Saturday	Sunday	Monday	Tuesday
May 16	May 17	May 18	May 19	May 20	May 21
Little to None	Little to None	Little to None	Little to None	Minor	Little to None

Discussion

- 1) How can we get these tools and guidance out through your networks?
- 2) How can we get feedback from healthcare providers?
- 3) Who else, outside government, should we engage with to address heat and health?
- 4) How can we integrate this into EHRs, apps, etc.? Where else should this be incorporated?

Data and Surveillance Workgroup (DSW)

Julie Morita, MD
DSW Co-Chair



Terms of Reference: Background

- Proliferation of disparate data reporting systems within CDC
- Fragmentation hinders efficient data management, analysis, and timely decision-making
- Streamlining and consolidating reporting systems could improve system effectiveness and efficiency

Terms of Reference: DSW Charge

- How can CDC implement a process to comprehensively assess data reporting systems, aiming to enhance sustainability, alleviate partner burdens, and minimize potential redundancies?
- How can this process streamline the technical, system, and procedural aspects of CDC's data reporting systems, while establishing clear criteria for identifying and eliminating redundancies?

Previous DSW Meeting Highlights

- Office of the Chief Information Officer staff reviewed current data reporting systems, migration of data to the cloud, ongoing efforts to streamline/consolidate or rationalize systems, and IT data governance
- Tennessee Department of Health staff described redundancies in national notifiable disease reporting mechanisms and the burden on state, territorial, local, and tribal (STLT) agencies
- Immediate Office of the Director (IOD) staff described Military Branch Closure Model as a potential approach for data system rationalization
- OPHDST staff described the hospitalization data sprint as a successful example of system streamlining/consolidation and modernization prioritization

DSW Next Steps

- Assess hospital-system sprint rationalization framework's applicability for streamlining/consolidating or rationalizing other disease reporting systems
- Identify criteria for a general system rationalization framework, including considerations, which could be applied across the agency
- Common themes emerging for consideration:
 - Need for support for one CDC approach, which is occurring within the context of other HHS collaboration efforts. HHS constructs can constrain or enable CDC efforts.
 - Leverage Health IT related standards and work with other federal agency partners on policy levers.
 - Need to incorporate STLT and healthcare input and impact into approaches.
 - Ideally should rationalize systems or enabling technology to have STLTs and healthcare send similar data only once.
 - Leverage enterprise-wide data and technical standards to decrease the burden on STLTs and healthcare.
 - Leverage and strengthen existing CDC governance mechanisms including ITDG and grant governance to support adoption across the agency.

DSW Approach

- DSW writing team will summarize findings and observations.
- DSW anticipates sharing findings and observations with the ACD to inform formal recommendations.

Discussion

Break



Laboratory Readiness

Ren Salerno, PhD

Acting Associate Director, Laboratory and Science

Acting Director, Office of Laboratory Science and Safety

Acting Director, Center for Laboratory Systems and Response

Moving Forward Laboratory Support Actions

Six actions to increase laboratory capacity and quality

ORGANIZATIONAL ACTIONS	LABORATORY QUALITY ACTIONS
<p>Create unified organization providing cross-cutting laboratory systems support.</p>	<p>Develop a Quality Manual for Microbiological Laboratories (QMML) that provides quality standards for all infectious disease clinical laboratories and separate quality standards for infectious disease surveillance and research laboratories.</p>
<p>Identify partners and create agreements for laboratories who will participate in parallel test development efforts to expand developing emergency tests for new pathogens.</p>	<p>Sustain and improve the Infectious Disease Test Review Board (IDTRB) to provide a thorough review of newly developed infectious disease diagnostic tests, ensuring their performance is fit-for-purpose before CDC shares the test with external partners.</p>
	<p>Pilot a new CDC test development workflow for public health emergencies internal to CDC to identify risks prior to full implementation. The test development workflow will include appropriate SMEs, laboratory space, instruments, reagents, and supplies.</p>
	<p>Develop an electronic Quality Management System (eQMS) with six core modules for effective use within CDC laboratories and implement to a pilot set of laboratories for evaluation.</p>

Laboratories are core public health infrastructure

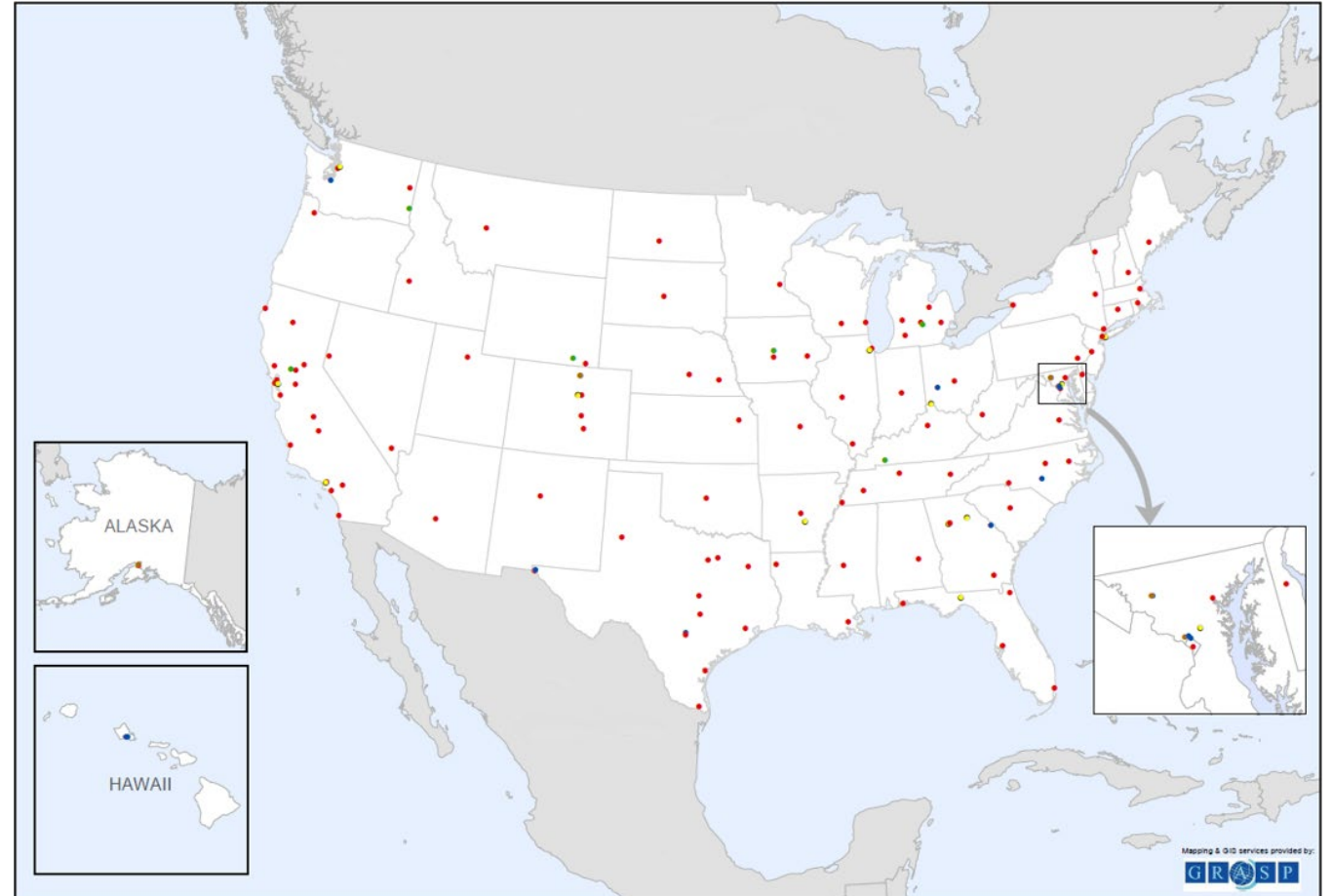


Laboratory Systems: Fundamental Components of Core Public Health Infrastructure

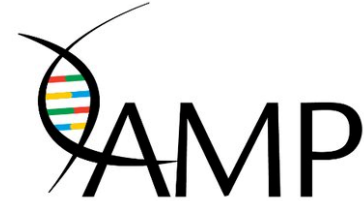


Laboratory Response Network (LRN)

- Nationwide rapid laboratory response to threats
- 120 LRN-B laboratories
- 60 LRN-C laboratories



MOU Partners – Surge Testing Capacity During PHEs



Discussion

- 1) What other factors should we consider to ensure we can be successful in increasing laboratory capacity and quality during a response?
- 2) Are there other partners we should be including in this critical core focus area?

Social Determinants of Health

Karen Hacker, MD, MPH

Director, National Center for Chronic Disease Prevention and Health Promotion



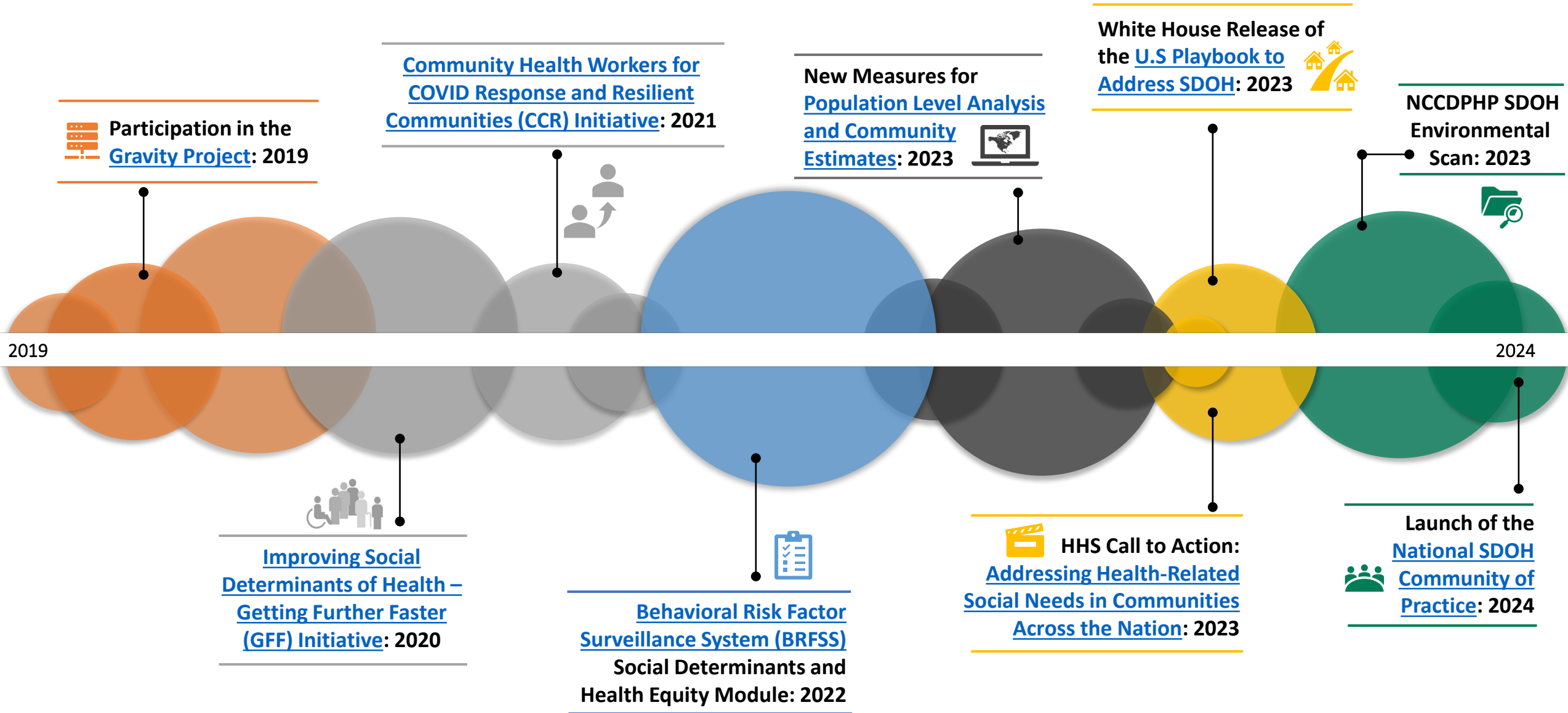
CDC SDOH Framework



SDOH Task Force Accomplishments since 2022

-  cdc.gov website refresh and new intranet 
-  Competencies review and training recommendations 
-  Partnerships analysis tool 
-  List of various internal SDOH working groups 
-  Deep dive into SDOH variables 
-  Rewrite of *Principles* introductory chapter 
-  Synthesis report on braiding funding 
-  Four internal webinars to share findings 

Examples of Recent SDOH Activities



Supporting Communities to Address SDOH



**Closing the Gap –
SDOH Accelerator
Plans**

[DP22-2210](#)

Developing multi-sector
action plans to
address SDOH



**Planning
Grants**

[CDC-RFA-DP-23-0077](#)

Continuation of Accelerator
Plans



**Addressing Conditions To
improve population
health Project (*ACTion*)**

[CDC-RFA-DP-23-0058](#)

Supporting the
implementation of
established plans

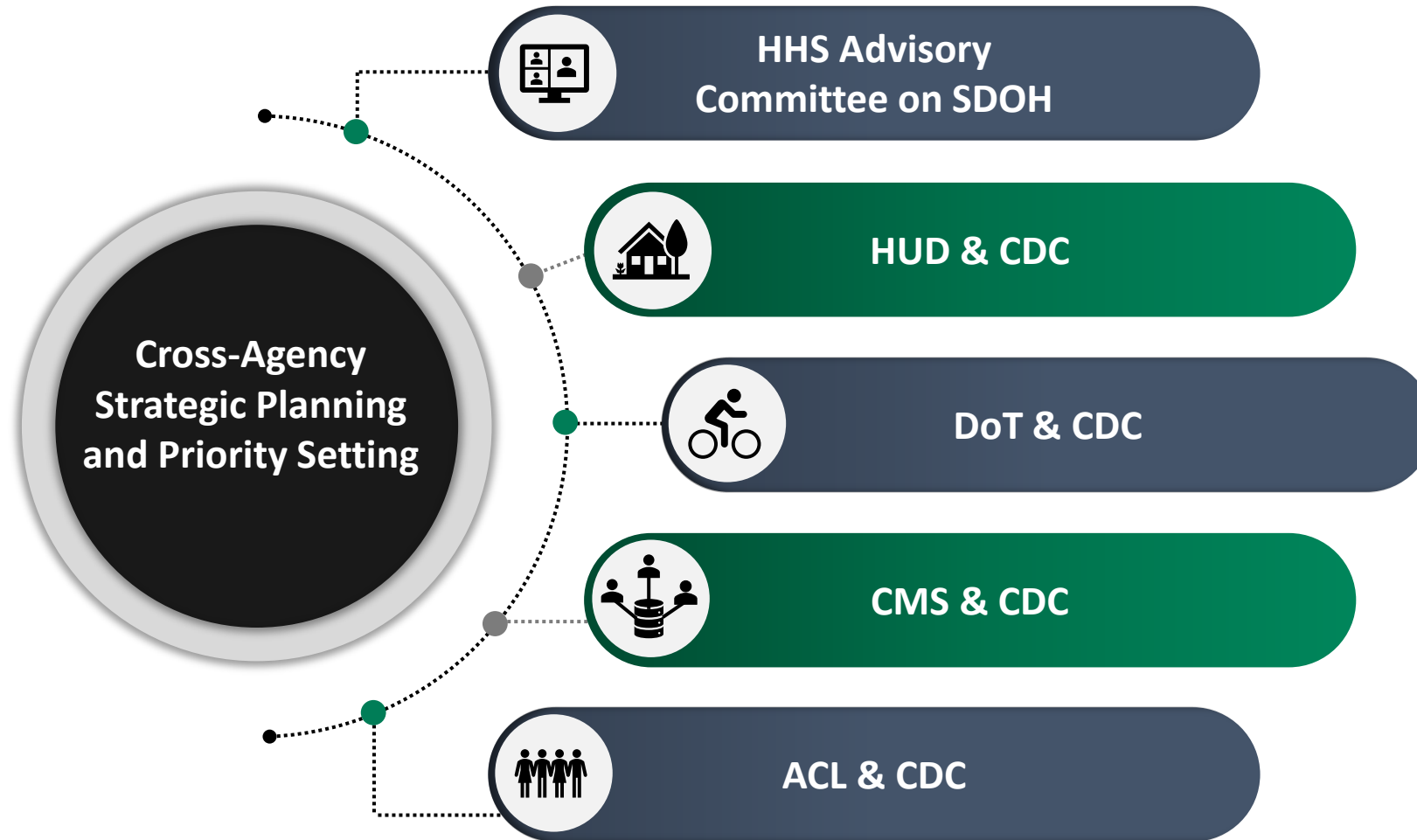


**Simulation Model
of Interventions Linking
Evidence to SDOH (*SMILES*)**

[CDC-RFA-DP-23-001](#)

Simulation model of the
interplay of SDOH & chronic
disease outcomes

Whole of Government Approach and Future CDC Efforts



Discussion

- 1) What are the next areas for amplification to keep this work going?
- 2) How do we effectively link public health to the activities happening in the clinical system and the community?

Communications and Public Engagement Workgroup (CPEW)

Rhonda Medows, MD

Octavio Martinez, MD, MPH, MBA, FAPA

CPEW Co-Chairs

CPEW Updates

- **Extended nomination period – closed April 26**
- **Received 33 complete packages by the deadline**
- **Panel review (complete)**
 - CPEW co-chairs, ACD chair & CPEW DFO
- **Next Steps:**
 - Notify selected candidates and call first meeting (by July 2024)

Discussion

Break



Highly Pathogenic Avian Influenza A(H5N1)

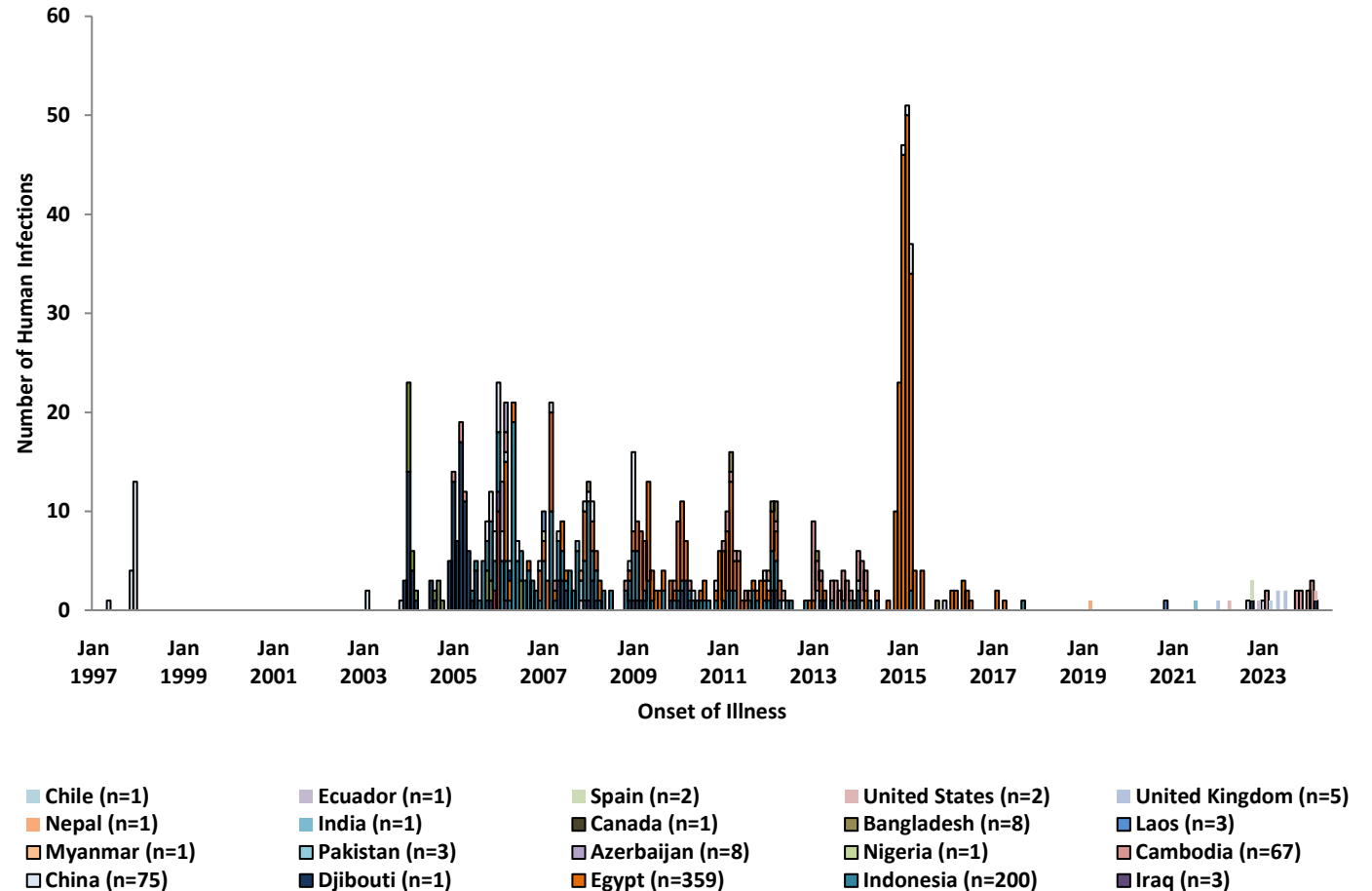
Demetre C. Daskalakis, MD, MPH

Director, National Center for Immunization and Respiratory Diseases

Highly Pathogenic Avian Influenza (HPAI)

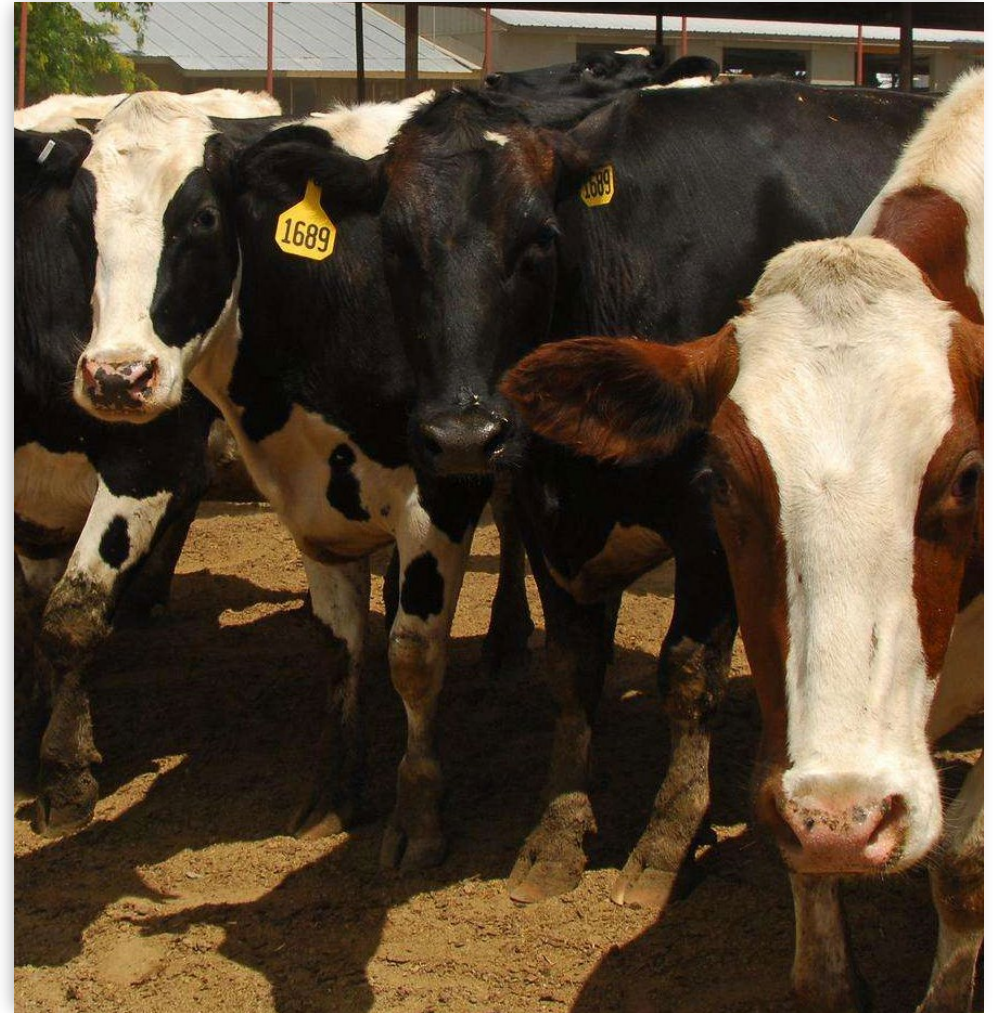
- Influenza A(H5N1) “bird flu” is widespread in wild birds worldwide
- Has resulted in outbreaks among commercial poultry, backyard bird flocks, wild terrestrial and marine mammals, and domesticated animals
- Human infections with H5N1 viruses are rare but can occur
 - Usually after close contact with infected birds
 - Very rarely, human infections with bird flu have happened after exposure to other infected animals
- Sporadic infections have been reported in 23 countries since 1997 with a case fatality proportion of >50%; only a small number of human cases reported since 2022

Figure 1. Epidemic Curve of Human Cases of A(H5N1) by Illness Onset Date, 1997-2023 by Country (N=909)



One Health Epi

- **As of June 3, USDA has confirmed 68 herds of dairy cows infected with HPAI across 9 states**
- **Other animals reported:** wild birds, cats, racoon, opossums
- **April 1 – Texas announced first human infection of HPAI A(H5N1) virus in an adult working at a commercial dairy farm**
 - Developed conjunctivitis on approx. March 27, 2024; provided antiviral treatment and recovered
 - No illness reported in household contacts; provided influenza antiviral medications
- **May 22 – Michigan announces second case of H5N1 associated with dairy cow outbreak**
- **May 30 – Third case identified, also in Michigan**
 - First case in US to report more typical symptoms of respiratory illness associated with influenza



[Highly Pathogenic Avian Influenza \(HPAI\) Detections in Livestock; WAHIS \(woah.org\) | USDA Support for Producers with Affected Dairy Premises | Health Alert: First Case of Novel Influenza A \(H5N1\) in Texas, March 2024 | Texas DSHS](#)

Monitoring, Testing and Field Studies

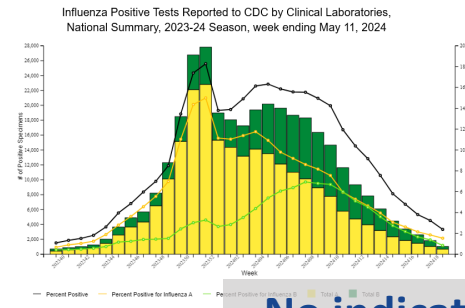
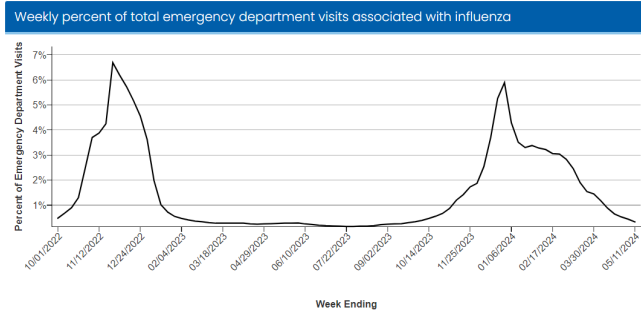
- **Human Monitoring and Testing Update**
 - Since March 24, >390 people monitored from affected farms, >40 tested
- **Enhanced summer surveillance**
- **Continued engagement with impacted states on field studies**



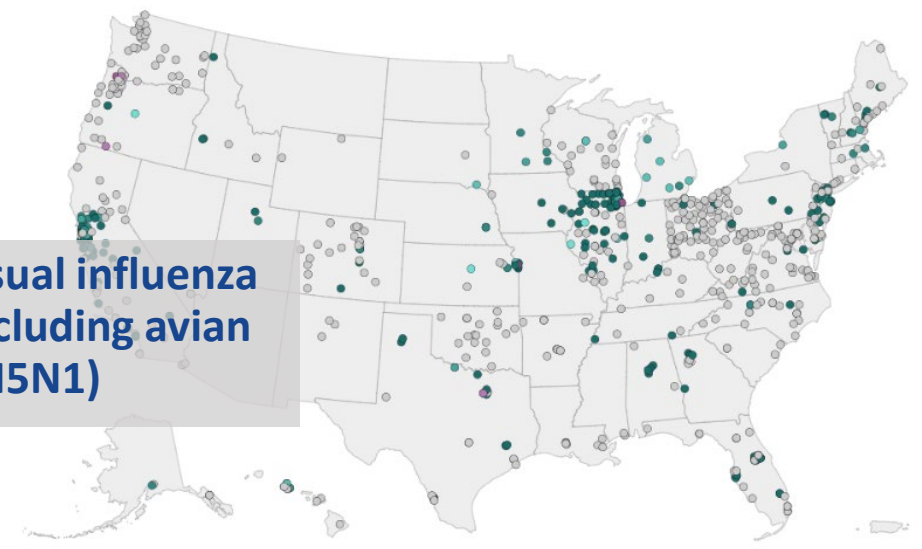
[How CDC is monitoring influenza data to better understand the current avian influenza A \(H5N1\) situation in people | CDC](#)

Surveillance

Influenza Surveillance Systems



Wastewater Surveillance Influenza A Detections

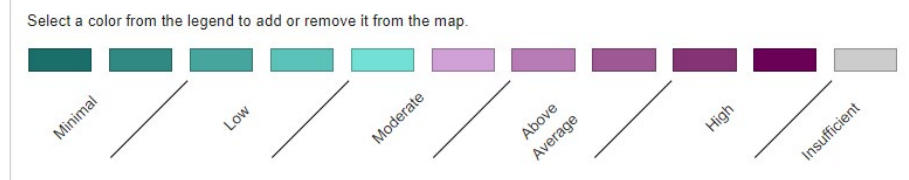
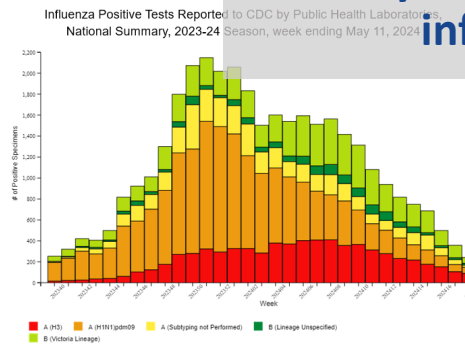
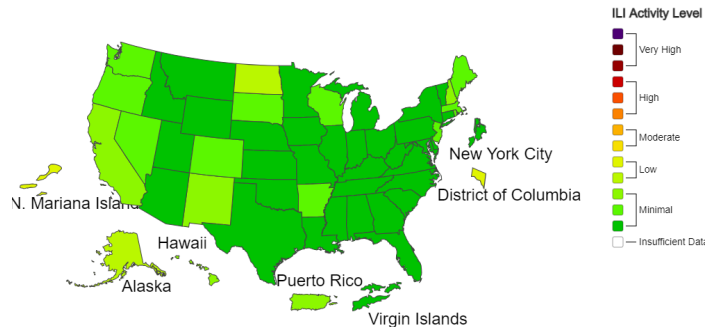


No indicators of unusual influenza activity in people, including avian influenza A(H5N1)

Outpatient Respiratory Illness Activity Map Determined by Data Reported to ILINet

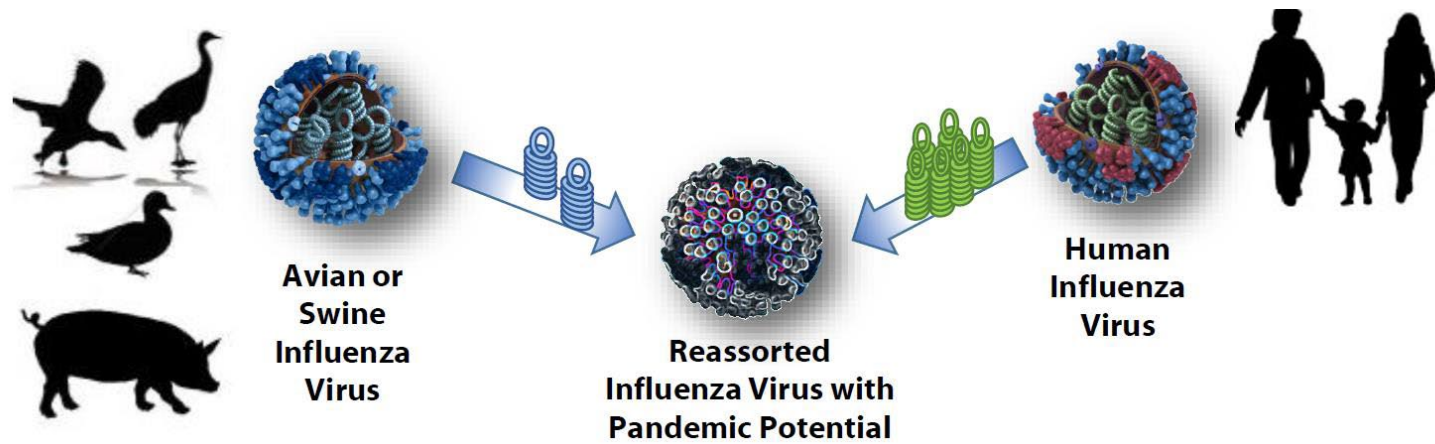
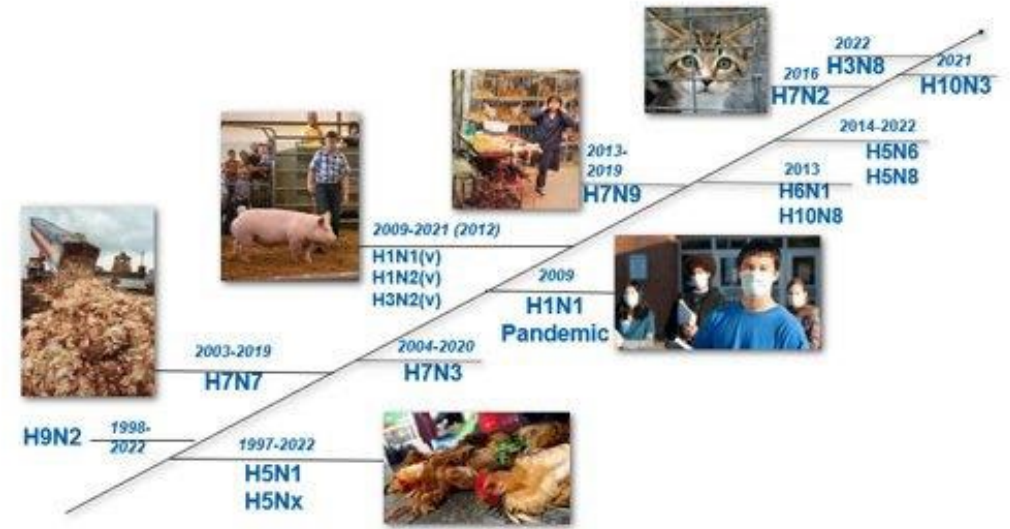
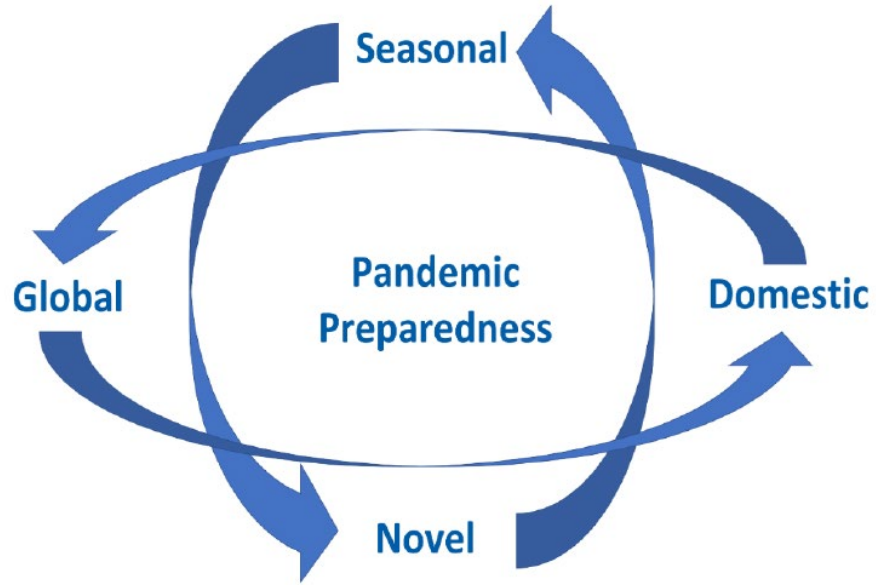
This system monitors visits for respiratory illness that includes fever plus a cough or sore throat, also referred to as ILI, not laboratory confirmed influenza and may capture patient visits due to other respiratory pathogens that cause similar symptoms.

2023-24 Influenza Season Week 19 ending May 11, 2024



[How CDC is monitoring influenza data to better understand the current avian influenza A \(H5N1\) situation in people | CDC](#)
[Influenza A Virus Wastewater Data | National Wastewater Surveillance System | CDC](#)

Seasonal Preparedness Is Pandemic Preparedness



Next Steps for the HPAI Response

- **Sustaining seasonal surveillance efforts to ensure rare cases of A(H5N1) in the community would be detected**
- **Maintain higher right-sizing goals for influenza positive specimens characterized in public health laboratories** (detect a novel influenza virus circulating at 0.5% prevalence)
- **Expand Public Health Lab specimen sources**
 - Commercial & clinical labs – increased influenza positive specimens for subtyping at PHLs
 - ICU/hospitalized specimens
 - Outreach to local/HRSA clinics in impacted states
- **Continued follow-up for areas that flag in syndromic/ wastewater data**
- **Continued lab-confirmed influenza associated hospitalization surveillance through FluSurv-NET**
- **Continued monitoring of workers with recent exposure on A(H5N1) confirmed farms**
- **Provider outreach to continue influenza testing beyond influenza season, particularly for patients with recent history of relevant exposures**

Discussion

- 1) Do you all have any recommendations for how best to communicate about sensitive outbreaks like H5N1 with the public, partners, industry, and other groups?
- 2) How do we appropriately respond to outbreaks like H5N1 that may initially pose little risk to the public at large, but there is high public alarm/fear of the illness or, alternatively, general lack of concern among the public? We want to protect the public's health and respond appropriately considering the public's risk, vaccine fatigue, and other concerns.
- 3) What are ways to assess prevalence of human infections?
- 4) What are priority research questions we should be asking to better understand this outbreak?

Closing Remarks

David Fleming, MD
ACD Chair



Adjourn

