

## Advisory Committee to the Director (CDC)

August 9, 2022

9:00 AM – 2:30 PM

Closed Captioning:

<https://www.streamtext.net/player?event=10059MeetingoftheAdvisoryCommitteeDirectorCDC>

Event ID is: 10059



# Welcome, Roll Call

David Fleming, MD

ACD Chair

# Discussion

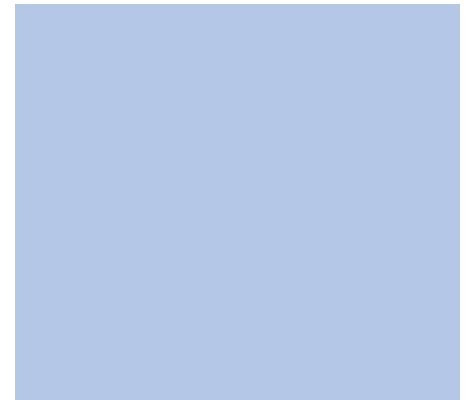
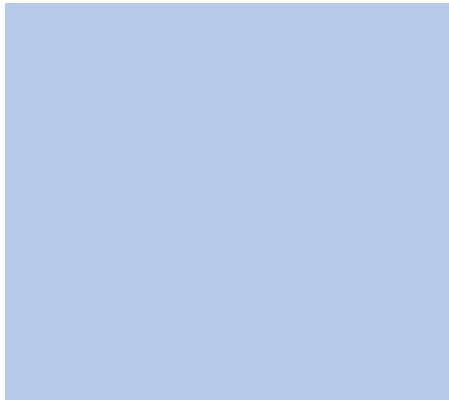
# Data and Surveillance Workgroup

Julie Morita, MD

Nirav Shah, MD, MPH

Co-chairs

# Data and Surveillance Workgroup UPDATE



# DSW Membership

## Co-Chairs:

**Julie Morita, M.D.**

**Nirav R. Shah, M.D., M.P.H.**

## ACD Members:

**David Warren Fleming, M.D.**

**Cristal A. Gary, M.P.H.**

**Lynn R. Goldman, M.D., M.S., M.P.H.**

**Rhonda M. Medows, M.D.**

**James Daniel, MPH** Amazon Web Services (AWS)

**Annie Fine, MD** Council of State and Territorial Epidemiologists (CSTE)

**Bryant Karras, MD** State of Washington, Department of Health, Public Health Laboratories

**Abel Kho, MD, MS, FACMI** Feinberg School of Medicine, Northwestern University

**Kenneth Mandl, MD, MPH** Harvard Medical School

**Deven McGraw, JD, MPH** Invitae Corporation and Ciitizen Corporation

**Valerie Rogers, MPH** Healthcare Information and Management Systems Society (HIMSS)

**Roni Rosenfeld, PhD, MSc** Carnegie Mellon University

**Anne Zink, MD, FACEP** Alaska Department of Health & Social Services

# Meeting 1 (July 11)

1. Orientation
2. Data Modernization Initiative
3. Terms of Reference

## Terms of Reference

- Authorities
- Data Exchange
- Forecasting & Analytics
- Workforce
- Breaking Down Siloes
- Assuring Sustainability

# Meeting 2 (Aug 5)

## 1. Public Health Systems Certification

### US Data Service (USDS)

- Assessment and findings related to system variability, challenges, and impact of standards and certification
- Benefits of certification: efficient data exchange and data sharing

### Office of the National Coordinator (ONC)

- Public Health System Certification
  - Process, value proposition, impact



# Upcoming meetings

- Meeting 3: Aug 29
- Meeting 4: Sept 19
- Meeting 5: Oct 17
- Meeting 6: Nov 14
- Meeting 7: Dec 12

# Discussion

# Laboratory Workgroup

Joshua Sharfstein, MD

Jill Taylor, PhD

Co-chairs

# Laboratory Workgroup (LW) Membership

Name	Organization	Title
Jill Taylor, PhD LW CO-CHAIR	Association of Public Health Laboratories	Senior Advisor for Scientific Affairs
Joshua Sharfstein, MD LW CO-CHAIR	Johns Hopkins Bloomberg School of Public Health	Professor
David Fleming, MD	University of Washington School of Public Health	Clinical Associate Professor
Jay K. Varma, MD	Weill Cornell Medical School	Director, Cornell Center for Pandemic Prevention and Response
Daniel D. Rhoads, MD	Cleveland Clinic	Microbiology Section Head
Angela M. Caliendo, MD, PhD, FIDSA, FAAM	Brown University	Executive Vice Chair, Department of Medicine, Alpert Medical School
Scott Zimmerman, DrPH, MPH, HCLD (ABB)	Lab Corp	Vice President, Department of Science & Technology
Alberto Gutierrez, PhD	NDA Partners LLC	Partner
Jennifer L. Rakeman, PhD	Cepheid	Senior Director, Medical Affairs, Public Health Programs
Robin Patel, MD(CM), D(ABMM), FIDSA, FACP, F(AAM)	Mayo Clinic	Professor; Director, Infectious Diseases Research Laboratory; Co-Director, Bacteriology Laboratory
Grace Kubin, PhD	Texas Department of State Health Services	Director, Laboratory Services Section
Paul B. Kimsey, PhD, MA	California Department of Health	Deputy Director; Director, State Public Health Laboratory
Ruth Lynfield, MD	Minnesota Department of Health	State Epidemiologist, Medical Director
Tim Southern, PhD, MS, D(ABMM)	South Dakota Department of Health	Public Health Laboratory Director
Denise Toney, PhD (HCLD)	Commonwealth of Virginia, Department of General Services	Laboratory Director, Division of Consolidated Laboratory Services

# Inaugural Meeting of the Laboratory Workgroup

Friday June 17<sup>th</sup> 2:00pm – 4:00pm

- **Introduction of Members and FACA Ground Rules**
- **Purpose of the ACD Laboratory Workgroup**
- **Dr. Jim Pirkle** (Acting Director, Office of Laboratory Science and Safety)
  - Detailed review of CDC's Laboratory Quality Plan (LQP)
  - Description of how the LQP will address previous issues and deficiencies
- **Review of the Terms of Reference**
- **Accomplishing the work ahead**

# Laboratory Work Group Terms of Reference (TOR)

# Laboratory Workgroup (LW) Purpose

Provide advice and work products for the ACD, CDC regarding the effective implementation of CDC agency-wide laboratory quality improvements across the agency to meet CDC's ultimate goal of ensuring the agency's laboratories maintain a gold-standard level of quality using advanced laboratory science.

# Terms of Reference (TORs)

**Issue #1:** CDC is sometimes the laboratory of last resort for testing specimens that may have been stored in less-than-acceptable conditions, be an unusual specimen type, or contain less-than-acceptable volume. These specimens would not meet requirements for acceptable specimens and, adhering to CLIA regulations, CDC would have to reject them. In so doing, rare or difficult-to-obtain specimens, whose results could have a meaningful impact on public health, could be rejected.

## Questions:

- Considering CLIA requirements, should CDC support investigation of unknown infectious agents or diseases using less-than-acceptable specimens, when acceptable specimens are not available?
- If so, how should an appropriate disclaimer be worded regarding result interpretation that acknowledges the specimens are outside validated parameters?



## TORs (cont.)

**Issue #2:** CDC is writing a Quality Manual for Microbiological Laboratories (QMML) to be its primary resource for quality standards for infectious disease laboratory operation. LW high-level review of the CDC quality framework described in the QMML could result in insights for the ACD, CDC that may strengthen the overall quality approach and help to ensure that the work done in CDC infectious disease laboratories meets and maintains excellent standards of laboratory quality.

**Question:** Is the CDC quality framework described in the QMML an appropriate quality framework to ensure high quality laboratory standards for infectious disease laboratory operation?

## TORs (cont.)

**Issue #3:** Clinical testing in the U.S. in emergency and non-emergency situations is conducted by government-run public health laboratories, private hospital and commercial laboratories. In addition, new laboratory technologies and laboratory diagnostic tests often spring from academia or small companies. CDC needs excellent collaboration with both public and private-sector laboratories to ensure appropriate laboratory response to emergencies and ensure that CDC is using the best laboratory science advances to protect public health.

**Task:** The LW will provide feedback to the ACD, CDC on how CDC can better collaborate with laboratory partners in state and local public health laboratories and the private sector to 1) respond to test development and analytic capacity needs of large emergencies (e.g., the COVID pandemic); and 2) ensure CDC stays at the forefront of laboratory technology and laboratory science advances that benefit public health.

## TORs (cont.)

**Issue #4:** Excellent laboratory scientists are essential for high-quality, advanced laboratory testing, laboratory research and clinical laboratory testing. The market for such scientists is highly competitive with the private sector offering compensation that is extremely difficult for CDC to match.

**Question:** How can CDC better recruit and retain outstanding laboratory scientists to ensure high-quality, advanced laboratory testing at CDC?

**Issue #5:** In the 2022 budget agreement, Congress requested that the Office of the Secretary, HHS establish a Task Force to evaluate factors contributing to the shortcomings of CDC's first COVID-19 test as well as policies, practices, and systems that should be established to mitigate future issues.

**Question:** Will the new LQP that CDC has developed and begun implementing address previous deficiencies and mitigate future issues in diagnostic test development for public health outbreaks?

# Laboratory Workgroup Priorities



# First Priority: TOR Issue 5 *(pending approval of the TORs by the ACD)*

## Congressional report language:

- *The agreement includes direction in the Office of the Secretary to establish a Task Force, including participation from outside stakeholders and subject matter experts, to evaluate what contributed to the shortcomings of the first COVID-19 tests, including laboratory irregularities, and what policies, practices and systems should be established to address these issues in the future.*
  - ❑ *The Task Force shall also examine CDC's processes for the development and deployment of diagnostics and its ongoing operations, including communications and electronic lab reporting with clinical, commercial, and State and local public health laboratories.*
  - ❑ *Based on the conclusions of this effort, CDC shall develop an agency-wide coordination plan for developing and deploying assays during a public health emergency that engages a nationwide system, as appropriate, and leverages the expertise offered by the public and private sectors.”*

# First Priority: TOR Issue 5 *(pending approval of the TORs by the ACD)*

## The Workgroup will:

- Review reports on the challenges with the SARS-CoV-2 diagnostic assay in the Spring of 2020
- Review the framework established in the Laboratory Quality Plan (LQP)
- Meet on August 24 to
  - Discuss key issues raised by reviews to date
  - Assess LQP in addressing these issues
  - Identify outstanding questions to develop report that meets Congressional request
  - Plan for 1-2 additional meetings on this task
  - Receive guidance on format of the report\*

**\*NOTE:** This report also may address other issues in the TOR.

# Expectations for ACD Meeting November 2022

*(pending approval of the TORs by the ACD)*

Lab Workgroup will report on:

- Progress regarding Issue 5 and the requirements in the Congressional language

# Laboratory Workgroup

## Terms of Reference

## Discussion and Vote

David Fleming, MD, ACD Chair



**Break**

# Health Equity Workgroup

Daniel Dawes, JD

Monica Valdes-Lupi, JD, MPH

Co-chairs

# Health Equity Workgroup Membership

## ACD Members

Name	Organization	Title
Daniel Dawes, JD HEW CO-CHAIR	Morehouse School of Medicine Satcher Health Leadership Institute	Executive Director
Monica Valdes Lupi, JD, MPH HEW CO-CHAIR	The Kresge Foundation	Managing Director of Health Program
Adaora Alise Adimora, MD, MPH	University of North Carolina (UNC) School of Medicine	Sarah Graham Kenan Distinguished Professor
Michelle A. Albert, MD, MPH, FACC, FAHA	University of California, San Francisco School of Medicine	Walter A. Haas-Lucie Stern Endowed Chair in Cardiology and Professor in Medicine
David Fleming, MD	University of Washington School of Public Health	Clinical Associate Professor
Rachel R. Hardeman, PhD, MPH	University of Minnesota School of Public Health	Associate Professor in the Division of Health Policy & Management
Rhonda Medows, MD	Providence Population Health	President of Population Health Management
Julie Morita, MD	Robert Wood Johnson Foundation (RWJF)	Executive Vice President
Octavio Martinez Jr., MD, MPH, MBA, FAPA	Hogg Foundation for Mental Health/University of Texas (Austin)	Executive Director

# Health Equity Workgroup Membership

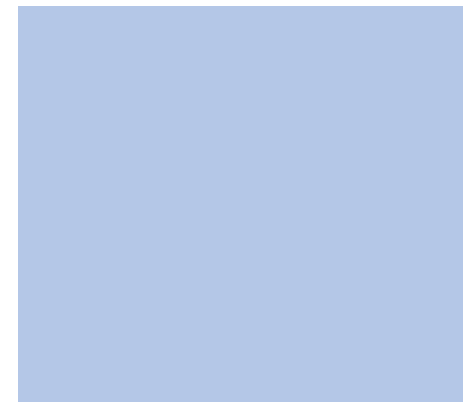
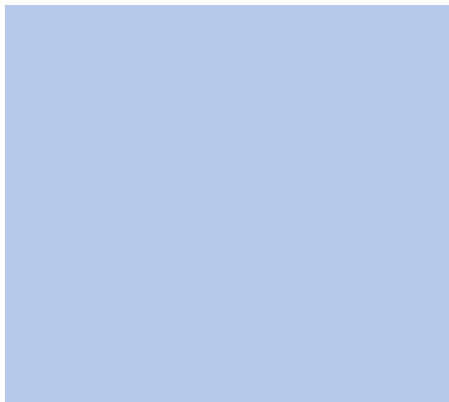
## Outside Experts

Name	Organization	Title
Philip Alberti, PhD	Association of American Medical Colleges	Founding Director
David Brown, MBA	YMCA	President and CEO
Nafissa Cisse Egbuonye, PhD, MPH	Black Hawk County Public Health (Iowa)	Public Health Director
Cary Fremin, BS	Dot Lake Village Council, Dot Lake Village	Director of Health and Social Services
Delmonte Jefferson, BS	Center for Black Health & Equity	Executive Director
Maria Lemus, BA	Visión y Compromiso and Network of Promotoras & Community Health Workers	Founding Executive Director
Mysheika Roberts, MD, MPH	Department of Public Health - Columbus, Ohio	Public Health Commissioner
Bonnielin K. Swenor, PhD, MPH	Johns Hopkins University Disability Health Research Center	Founder and Director
Paula Tran, MPH	Wisconsin Department of Health Services	State Public Health Officer
Mr. G. Robert Watts, MPH, MS	National Health Care for the Homeless Council	Chief Executive Officer

# Health Equity Workgroup Guiding Principles

<b>Presume Good Intent</b>	<p>Provide each person the benefit of the doubt. Assume everyone has positive intentions. Act honestly and in good faith to serve the best interests of the committee and communities we serve.</p>
<b>Foster a Culture of Respect and Appreciation</b>	<p>Ensure that every voice is heard and valued. Provide everyone space to share thoughts, ideas, and recommendations. Listen with empathy and appreciation for the lived experiences of others.</p> <p>Address differences of opinion as opportunities for collaboration, learning, and growth.</p> <p>Remember, the collective voice of this group builds upon community.</p>
<b>Uphold Justice, Equity, and Ethical Standards</b>	<p>Commit to maintaining accountability, declaring any conflicts of interest, and recusal self from discussion or votes which may present a conflict.</p>
<b>Generate Solutions</b>	<p>To truly achieve health equity, employ a collaborative and solutions-based approach by engaging in cross-collaborative efforts with key strategic partners.</p>
<b>Commit to a Community-Centric Approach</b>	<p>Community is at the core of advancing health equity.</p> <p>Advance inclusive programs, policies, and strategies to reduce inequities for all population groups, and do no harm to those most at risk.</p> <p>Exhibit integrity and good stewardship of resources and ideas generated by this group.</p>

# Health Equity Workgroup UPDATE



# Priority Issues

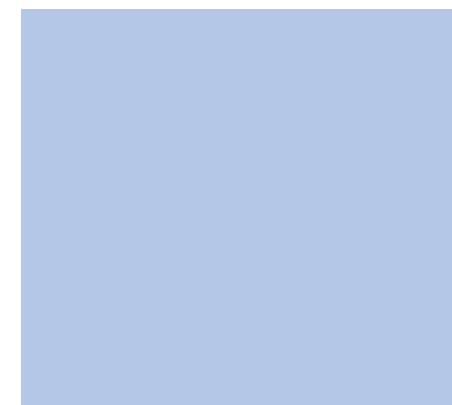
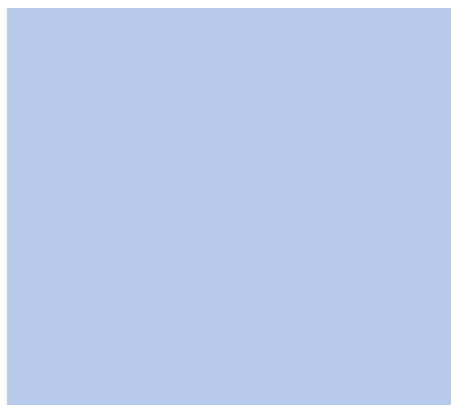
1. Enable and assure the meaningful involvement of communities in agency decision-making, the development of health equity policies, program implementation, and evaluation
2. Align, and restructure as necessary, CDC policies, resource allocation, and program practices so as maximize the ability for staff and partners to address health inequities in their day-to-day work
3. Elevate and expand focused activities to measure and address the upstream factors and their consequences, including social and structural determinants of health, that contribute to and drive health inequities

# Health Equity Workgroup Task Areas

TASK AREA #1	TASK AREA #2	TASK AREA #3
Enable and assure the meaningful involvement of communities in agency decision-making, the development of health equity policies, program implementation, and evaluation	Align, and restructure as necessary, CDC policies, resource allocation, and program practices so as maximize the ability for staff and partners to address health inequities in their day-to-day work	Elevate and expand focused activities to measure and address the upstream factors and their consequences, including social and structural determinants of health that contribute to and drive health inequities
<b>ACD Lead:</b> Daniel Dawes	<b>ACD Lead:</b> Monica Valdes-Lupi	<b>ACD Lead:</b> David Fleming
<b>CDC SME:</b> Euna August and Leandris Liburd	<b>CDC SME:</b> Jennifer Meunier and John Auerbach (DFO)	<b>CDC SME:</b> Becky Bunnell and NaTasha Hollis
MEMBERS	MEMBERS	MEMBERS
Bonnie Swenor	Paula Tran	Philip Alberti
David Brown	Nafissa Cisse Egbuonye	Rachel Hardeman
Bobby Watts	Julie Morita	Cary Fremin
Maria Lemus	Octavio Martinez	Ada Adimora
Delmonte Jefferson	Rhonda Medows*	Michelle Albert*
	Mysheika Roberts*	



# Health Equity Workgroup Task Area Report Out



# Meeting Plans: July – December 2022

- Monthly HEW meetings
- Monthly task area meetings
- HEW in-person meeting – August 8<sup>th</sup>, Atlanta GA
- November 2<sup>nd</sup> ACD meeting with preliminary findings

# Discussion

# Lunch

# COVID-19 Response Update

Ian Williams, PhD, MS

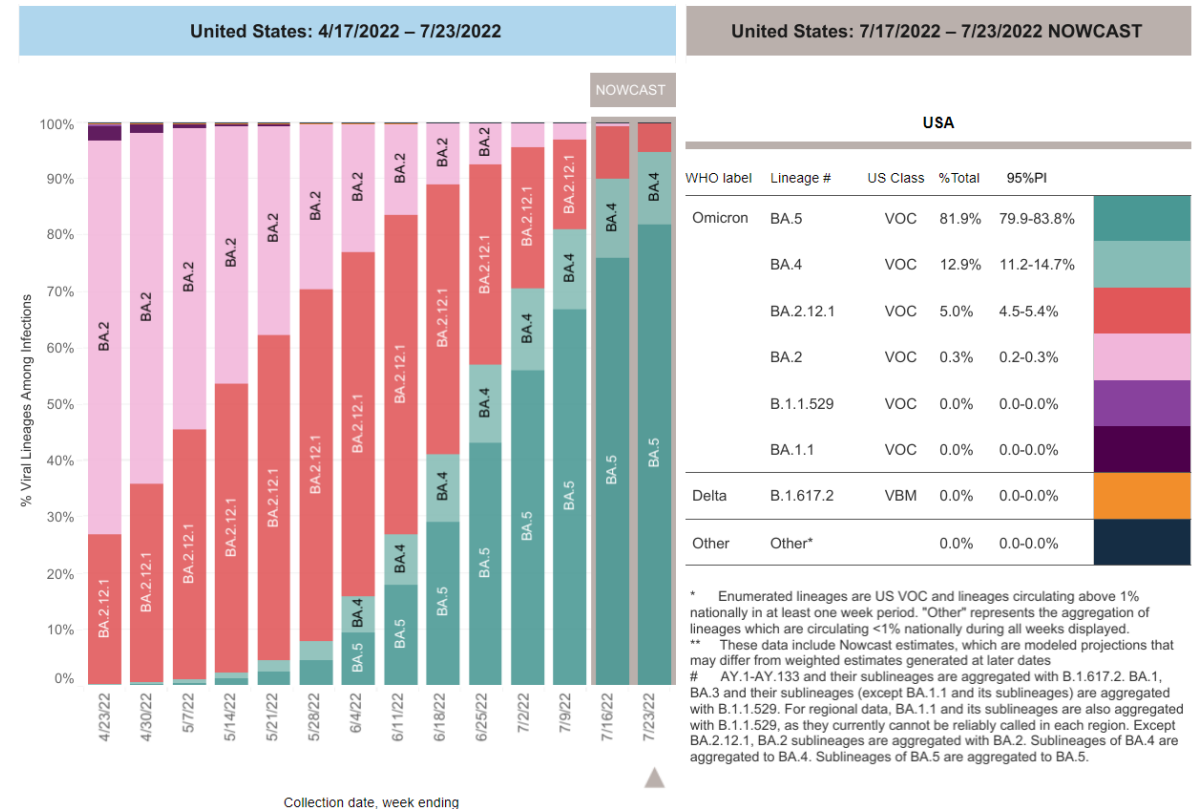
Incident Manager

CDC COVID-19 Response

# COVID-19: Data Summary

# COVID-19 Variants

- Estimated percentage of COVID-19 variants circulating in the U.S. as of July 23, 2022
  - Omicron BA.5: 81.9%
  - Omicron BA.4: 12.9%
  - Omicron BA.2.12.1: 5.0% of cases
  - Omicron BA.2: 0.3% of cases
  - Other variants: 0.17% of cases



# COVID-19 Surveillance Summary: Cases, Hospitalizations, and Deaths

## Daily Change in COVID-19 Cases, United States

January 22, 2020\* - July 26, 2022



**90,597,814**

Total Cases Reported

**171,847**

New Cases Reported\*\*

**127,786**

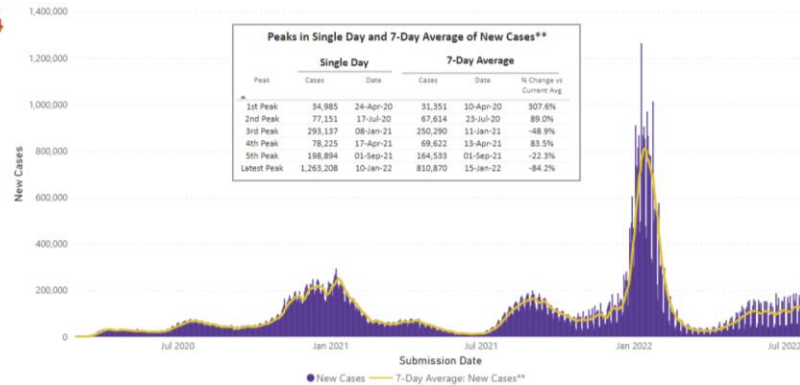
Current 7-Day Average\*\*  
Jul 20, 2022 - Jul 26, 2022

**126,610**

Prior 7-Day Average\*\*  
Jul 13, 2022 - Jul 19, 2022

**0.9%**

Change in 7-Day Average



\*Graph displays data for Mar 01, 2020, to date. The totals include cases reported since Jan 22, 2020.

## New Admissions of Patients with Confirmed COVID-19, United States

August 01, 2020 - July 25, 2022



**5,030,016**

Total New Admissions  
Aug 01, 2020 - Jul 25, 2022

**5,838**

New Admissions  
Jul 25, 2022

**6,509**

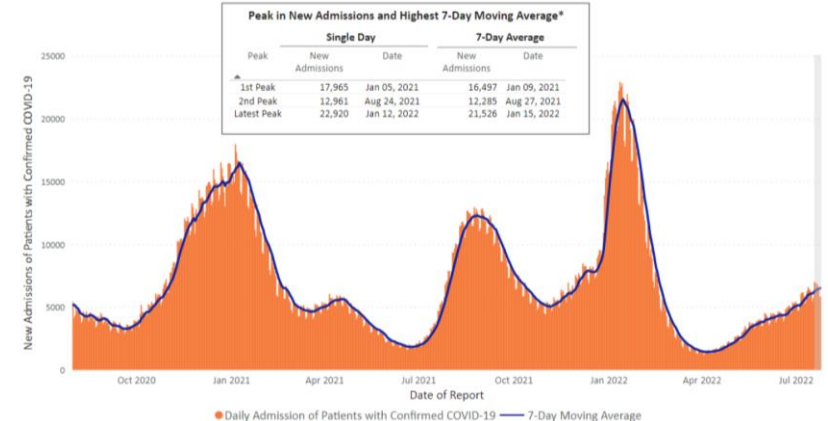
Current 7-Day Average  
Jul 19, 2022 - Jul 25, 2022

**6,136**

Prior 7-Day Average  
Jul 12, 2022 - Jul 18, 2022

**+6.1%**

Change in 7-Day Average



## Daily Change in COVID-19 Deaths, United States

January 22, 2020\* - July 26, 2022



**1,023,382**

Total Deaths Reported

**574**

New Deaths Reported\*\*

**366**

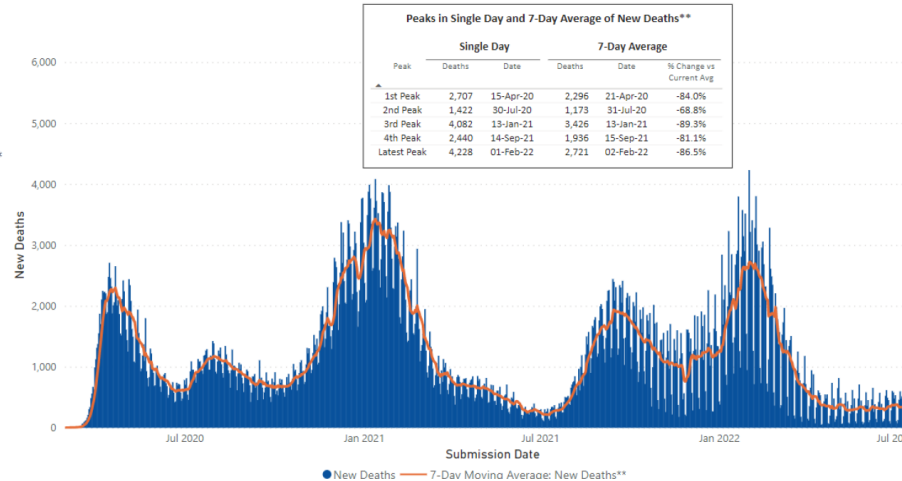
Current 7-Day Average\*\*  
Jul 20, 2022 - Jul 26, 2022

**392**

Prior 7-Day Average\*\*  
Jul 13, 2022 - Jul 19, 2022

**-6.5%**

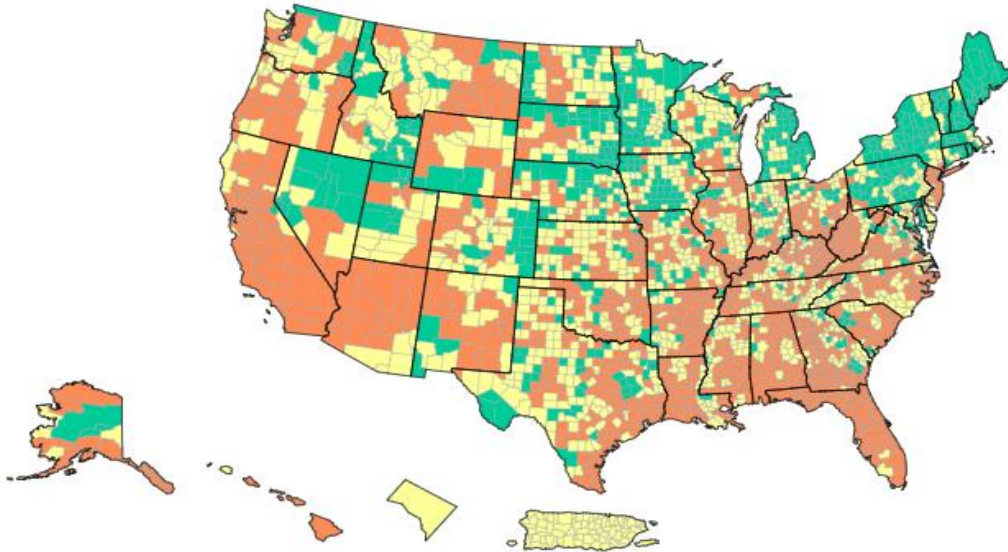
Change in 7-Day Average





# COVID-19 Community Levels (CCLs)

COVID-19 Community Levels in the US by County  
as of July 21, 2022



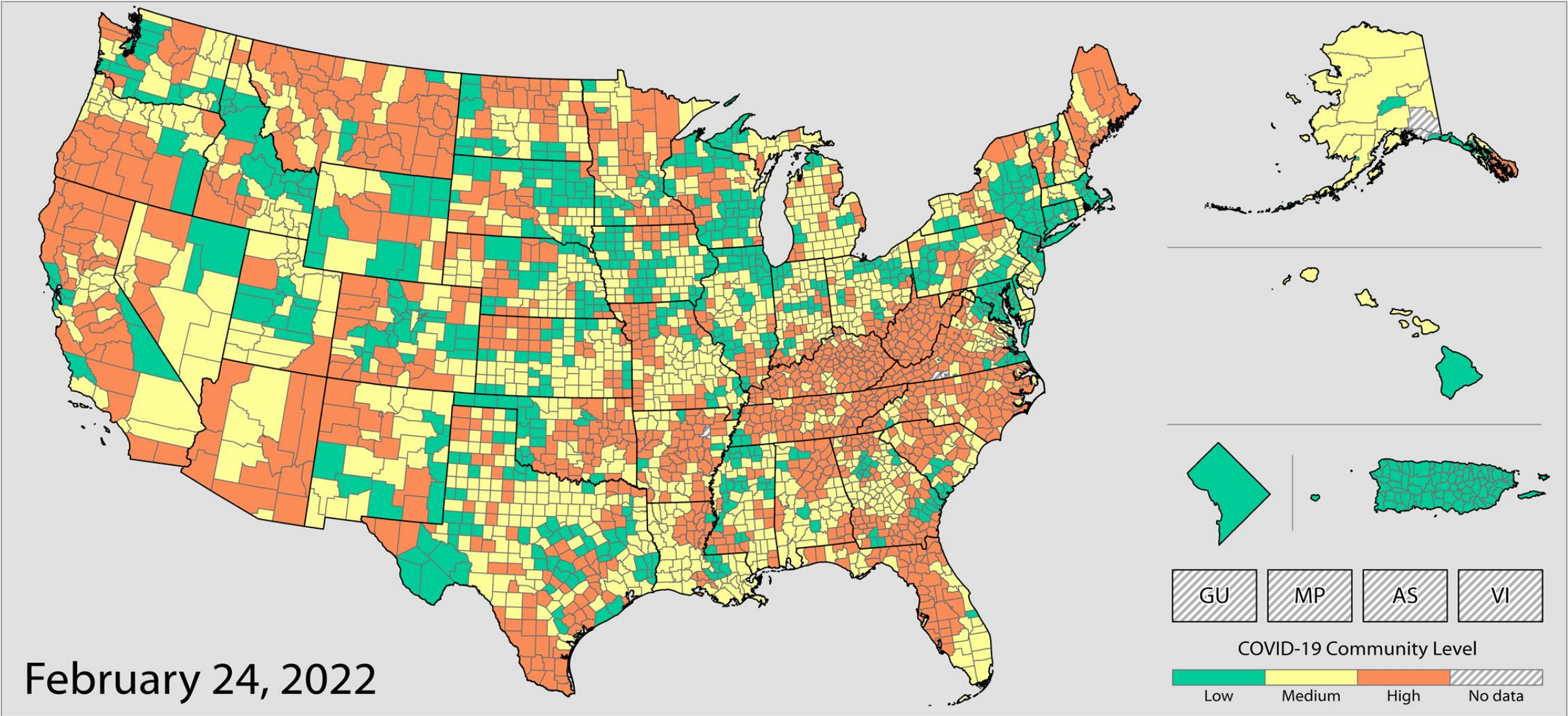
	% of Counties	% of Pop
Low	20.4%	13.1%
Medium	37.6%	26.5%
High	41.9%	60.4%

Time Period: COVID-19 Community Levels were calculated on Thu Apr 21 2022. New COVID-19 cases per 100,000 population (7-day total) are calculated using data from Thu Apr 14 2022 - Wed Apr 20 2022. New COVID-19 admissions per 100,000 population (7-day total) and Percent of inpatient beds occupied by COVID-19 patients (7-day average) are calculated using data from Wed Apr 13 2022 - Tue Apr 19 2022.

Source: [CDC COVID Data Tracker \(County View\)](#)

COVID-19 Community Level by County, United States, 2022-Feb-24

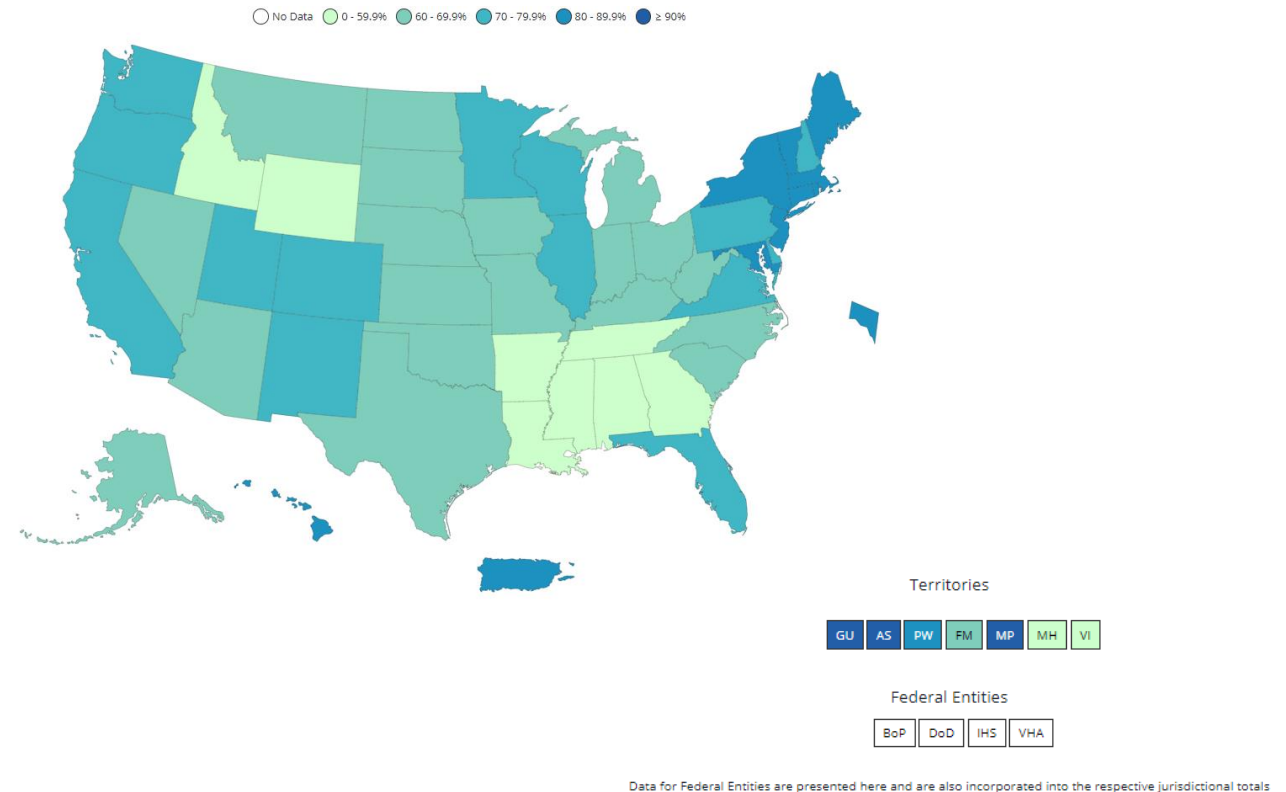
CDC COVID-19 Response, United States COVID-19 Community Levels by County, Data.CDC.gov



# COVID-19 Vaccination: Domestic

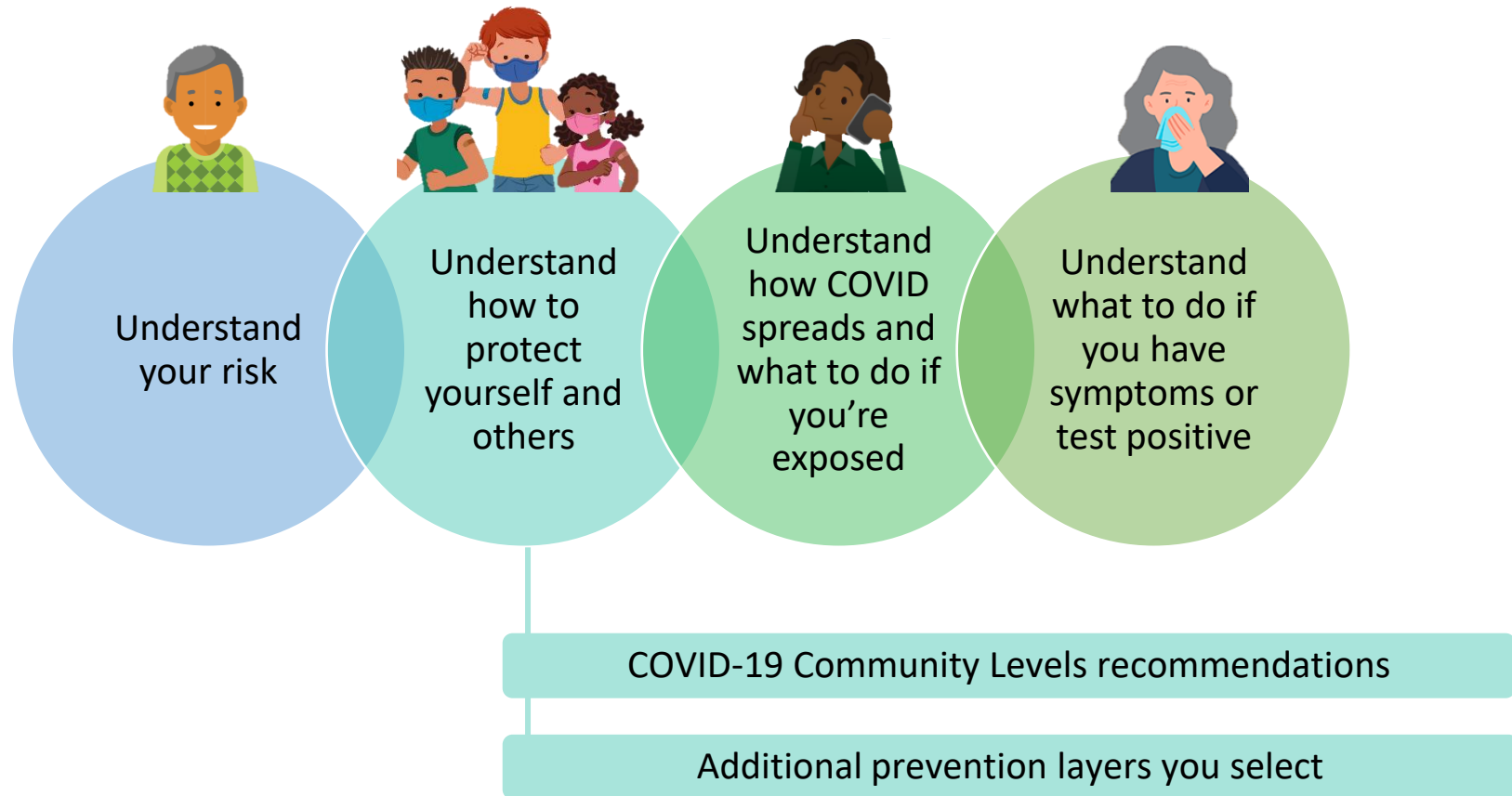
- As of July 26, 2022
  - 78.7% of US population has received at least 1 dose
  - 67.2% of US population fully vaccinated
  - 48.2% of fully vaccinated persons have received one additional dose
  - 29.7% of fully vaccinated persons > 50 years of age have received a second booster dose
- On June 28, 2022, VRBPAC voted to recommend inclusion of Omicron component in COVID-19 booster doses
- FDA advised manufacturers seeking to update their COVID-19 vaccines to create a bivalent vaccine with an omicron BA.4/5 spike protein component added to the current vaccine composition

Percent of Population >=5 Years of Age Fully Vaccinated for COVID-19 by Jurisdiction as of July 26, 2022





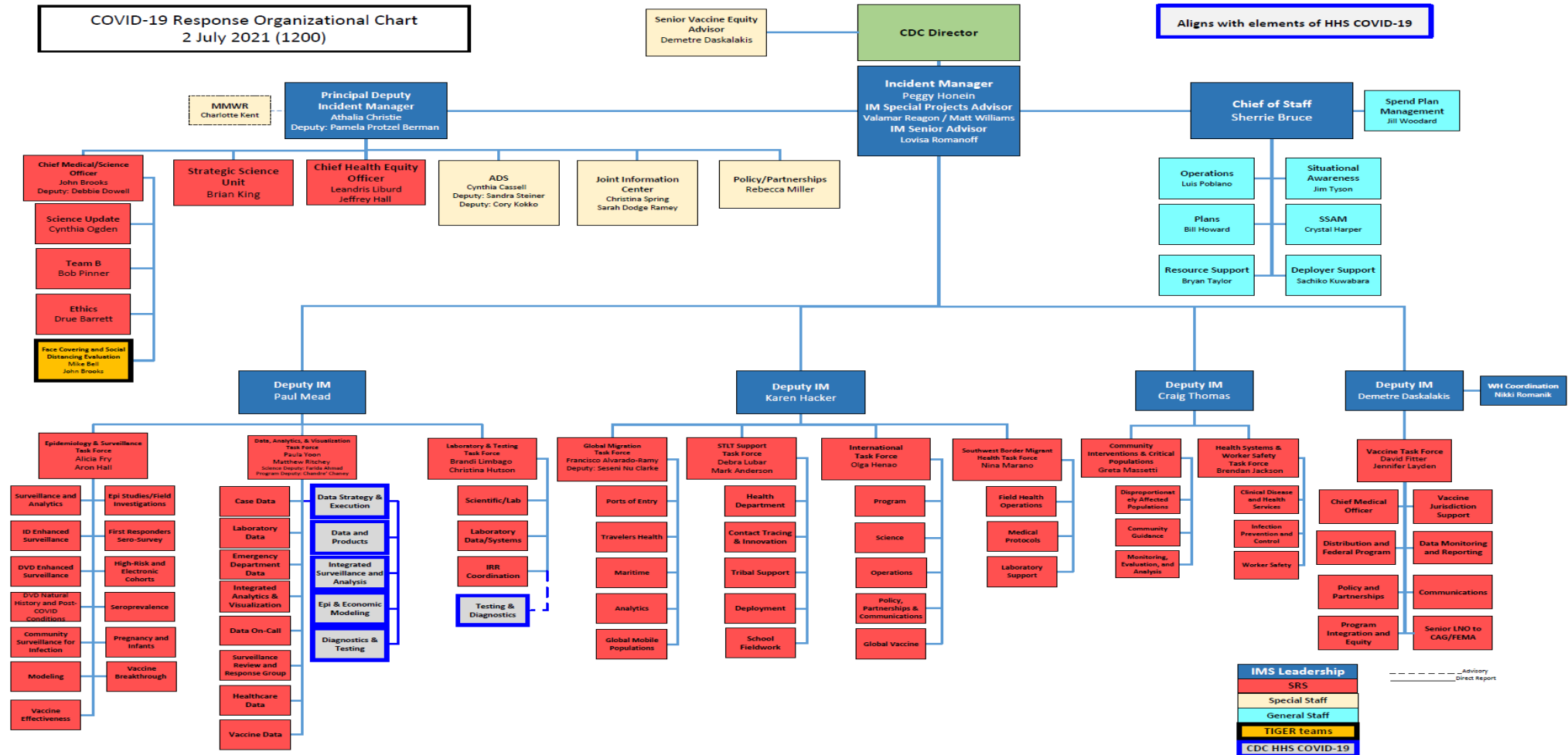
# CDC's Guidance for COVID-19



# Transition of COVID-19 Response Activities to Program



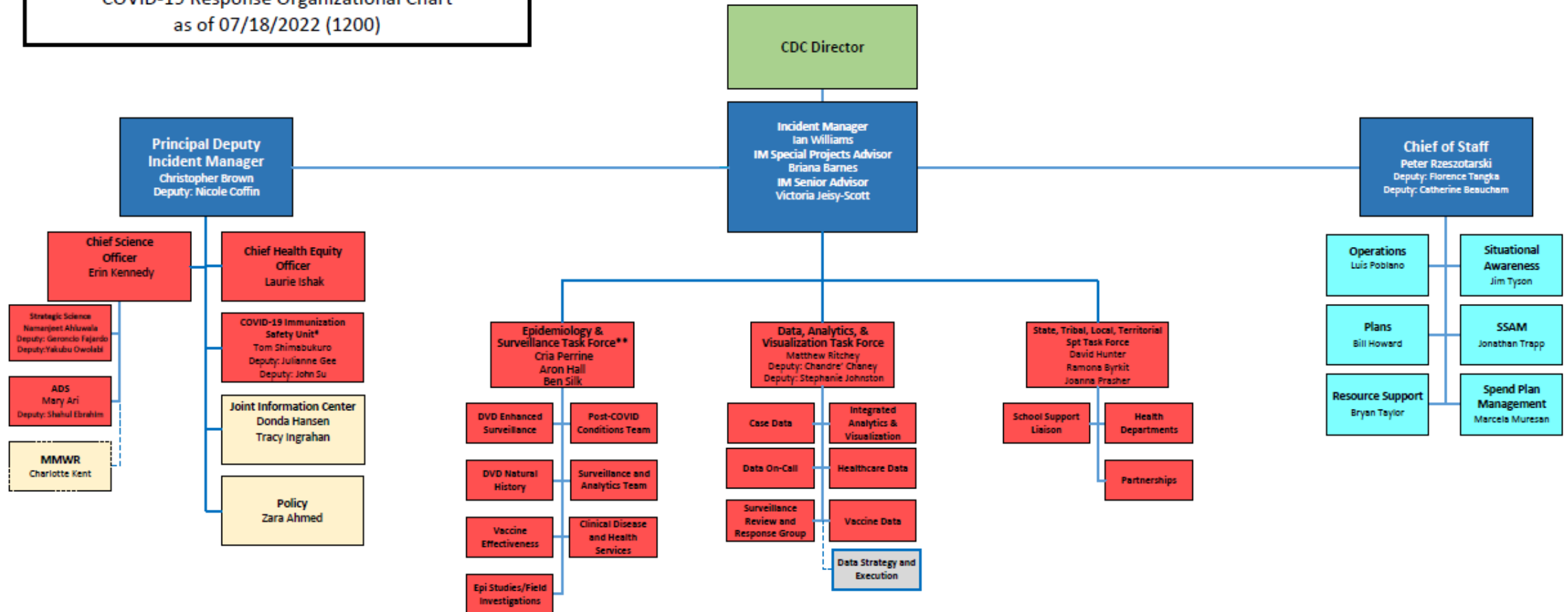
# IMS Organizational Chart 07/02/2021





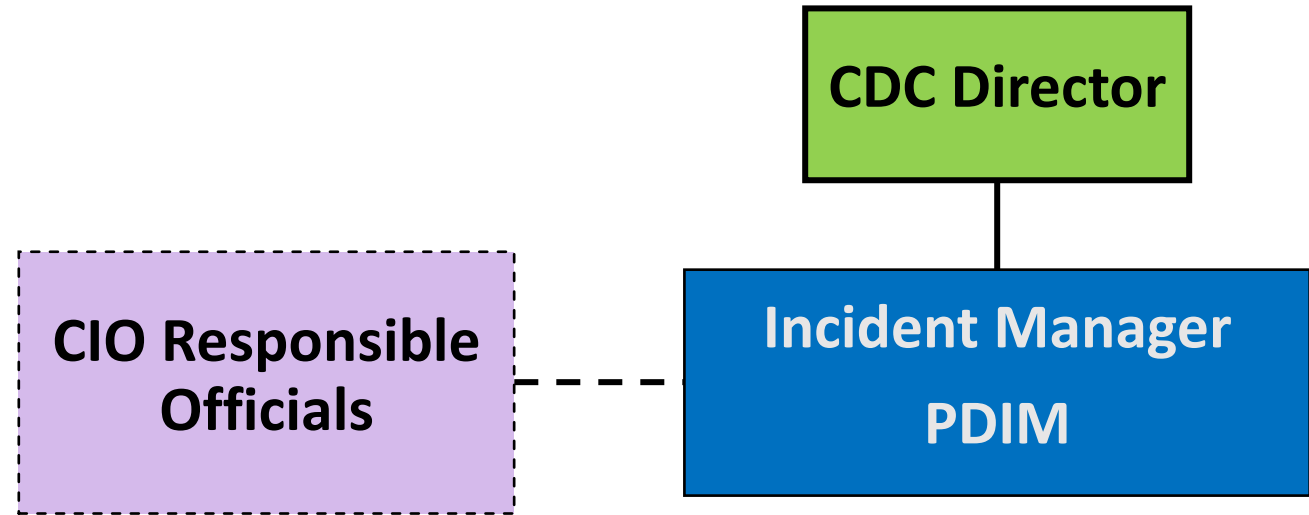
# IMS Organizational Chart 07/18/2022

COVID-19 Response Organizational Chart  
as of 07/18/2022 (1200)



# COVID-19 CIO Responsible Officials

- Each CIO has designated a COVID-19 Responsible Official
- This person is not officially deployed to the response

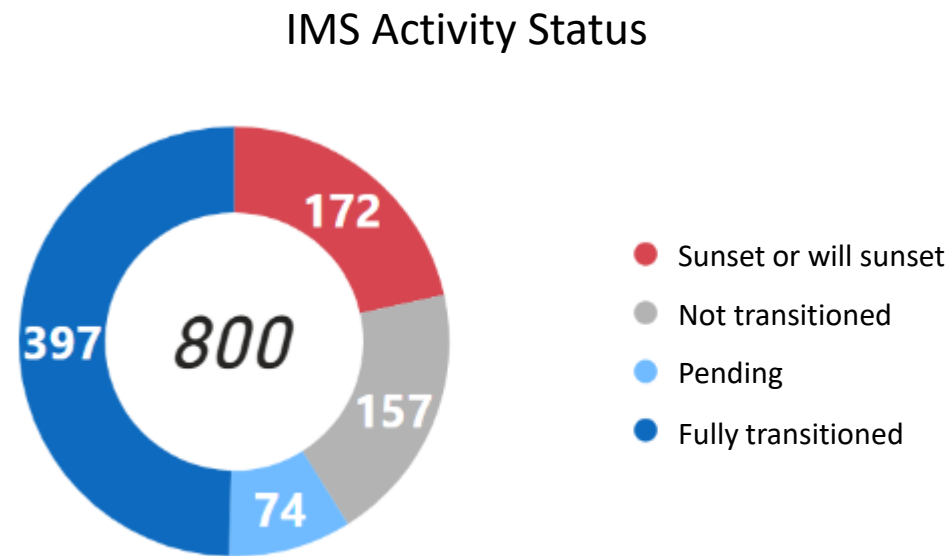
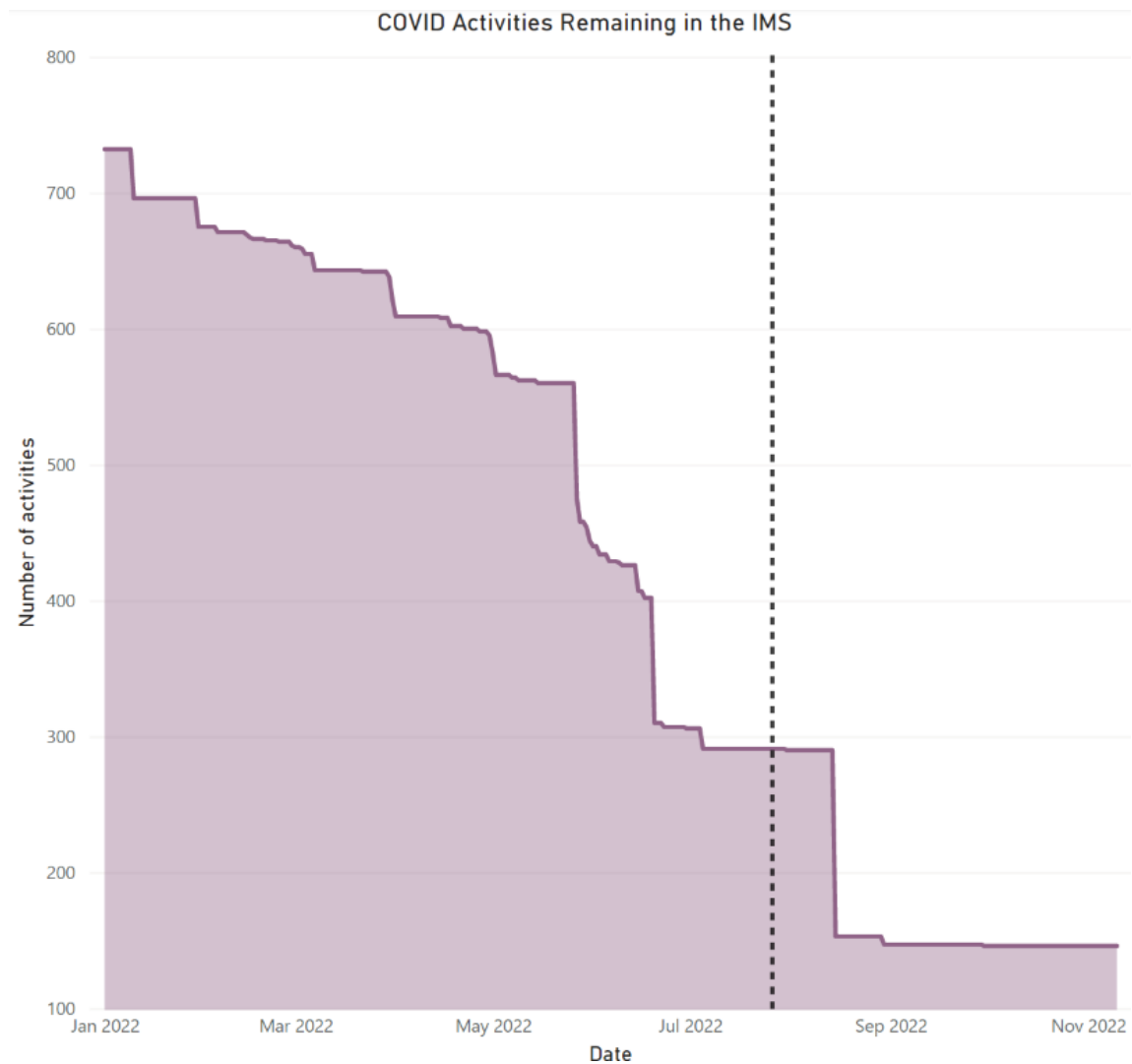


## Responsibilities

- Maintain awareness of COVID-19 activity status within CIO
- Ensure bi-directional communication is occurring between CIO and IMS
- Respond to IMS data calls and other requests



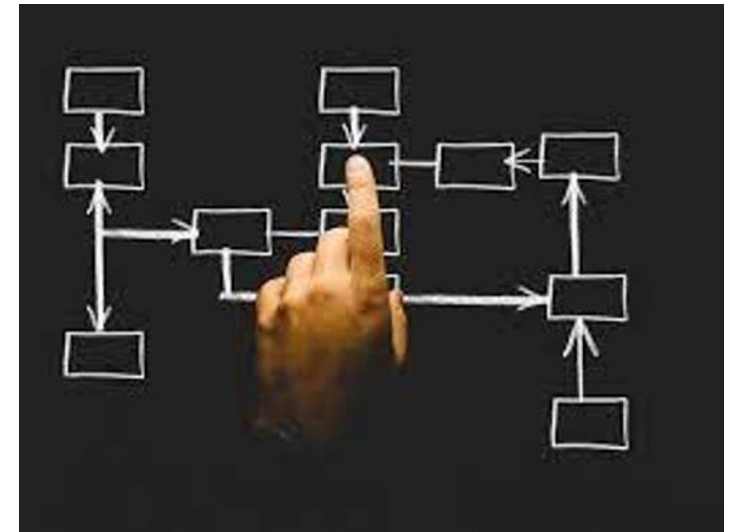
# Transition Progress



[Transition Dashboard](#) visualizes and lists completed and planned transitions

# COVID-19 Response Activity Transition Planning

- Planning for sustainability and incorporation of COVID-19 into routine public health practice
- CDC transitioning majority of programmatic and scientific COVID-19 Response activities to long-term "homes" within the agency
- Streamlined COVID-19 Incident Management Structure (IMS) will remain activated



# MONKEYPOX

## Update on Multi-National Monkeypox Response

Advisory Committee to the Director

Tuesday, August 9<sup>th</sup>, 2022

CAPT Jennifer McQuiston, Incident Manager



# 2022 Multi-National Monkeypox Response

- 1<sup>st</sup> US Case (MA): May 17<sup>th</sup>
- Early cases travel-associated
- Current community spread
- Center-level activation May 23<sup>rd</sup>
- EOC Activation June 28<sup>th</sup>
- Containment Goal:
  - Harm reduction messaging
  - Clinical Awareness
  - Diagnosis/Testing
  - Isolation of cases, treatment
  - Tracing contacts and PEP
  - National Vaccination Strategy

## VISUAL EXAMPLES OF MONKEYPOX RASH



Photo Credit: NHS England High Consequence Infectious Diseases Network

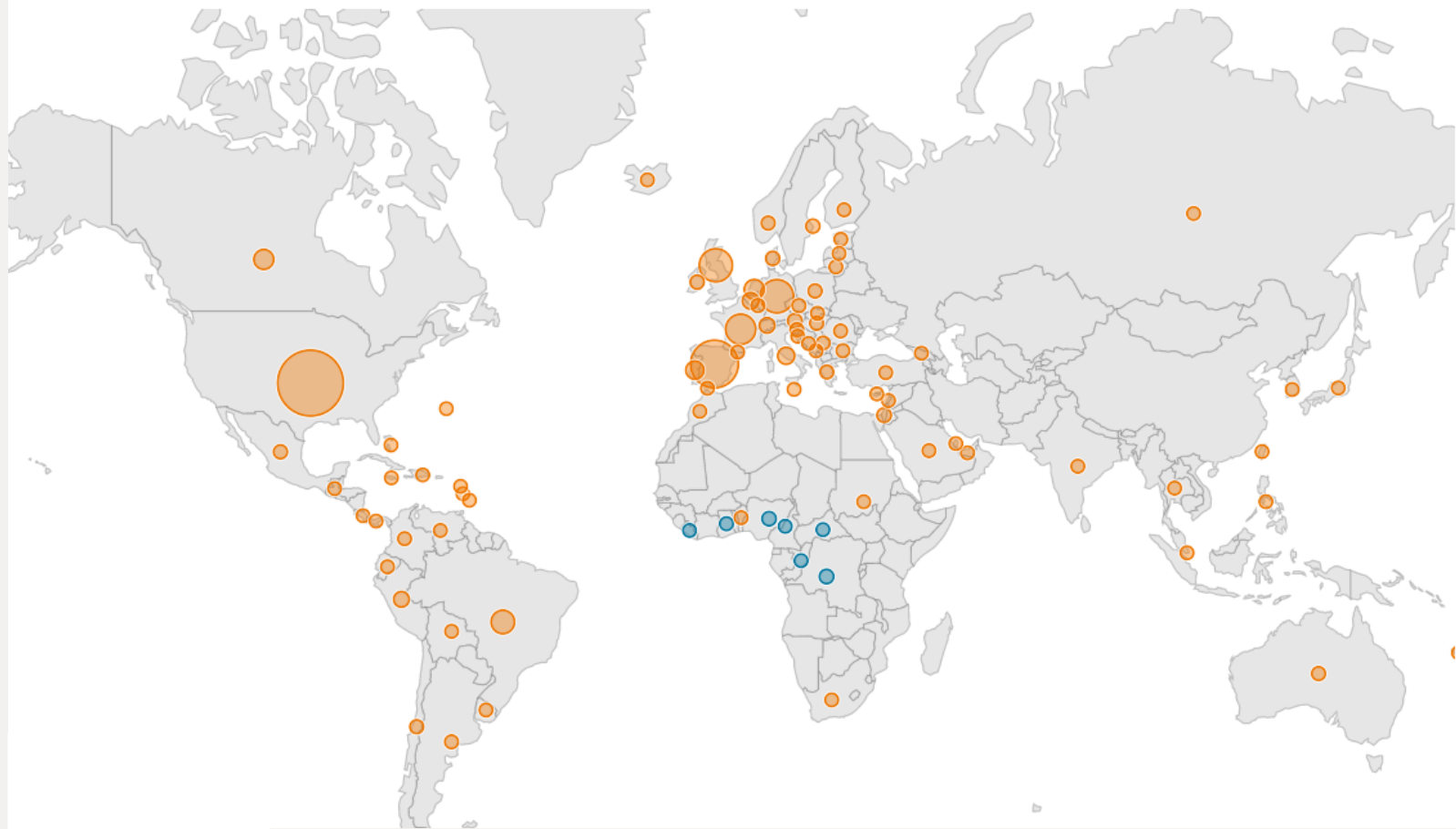


CS328947-EK

# Monkeypox Cases in Non-Endemic Locations

*Data as of August 5<sup>th</sup>, 2022*

- Cumulative Cases: 28,220
- United States (7,509), Spain (4,942), Germany (2,887), United Kingdom (2,859)
- Total Deaths: 5 in non-endemic locations



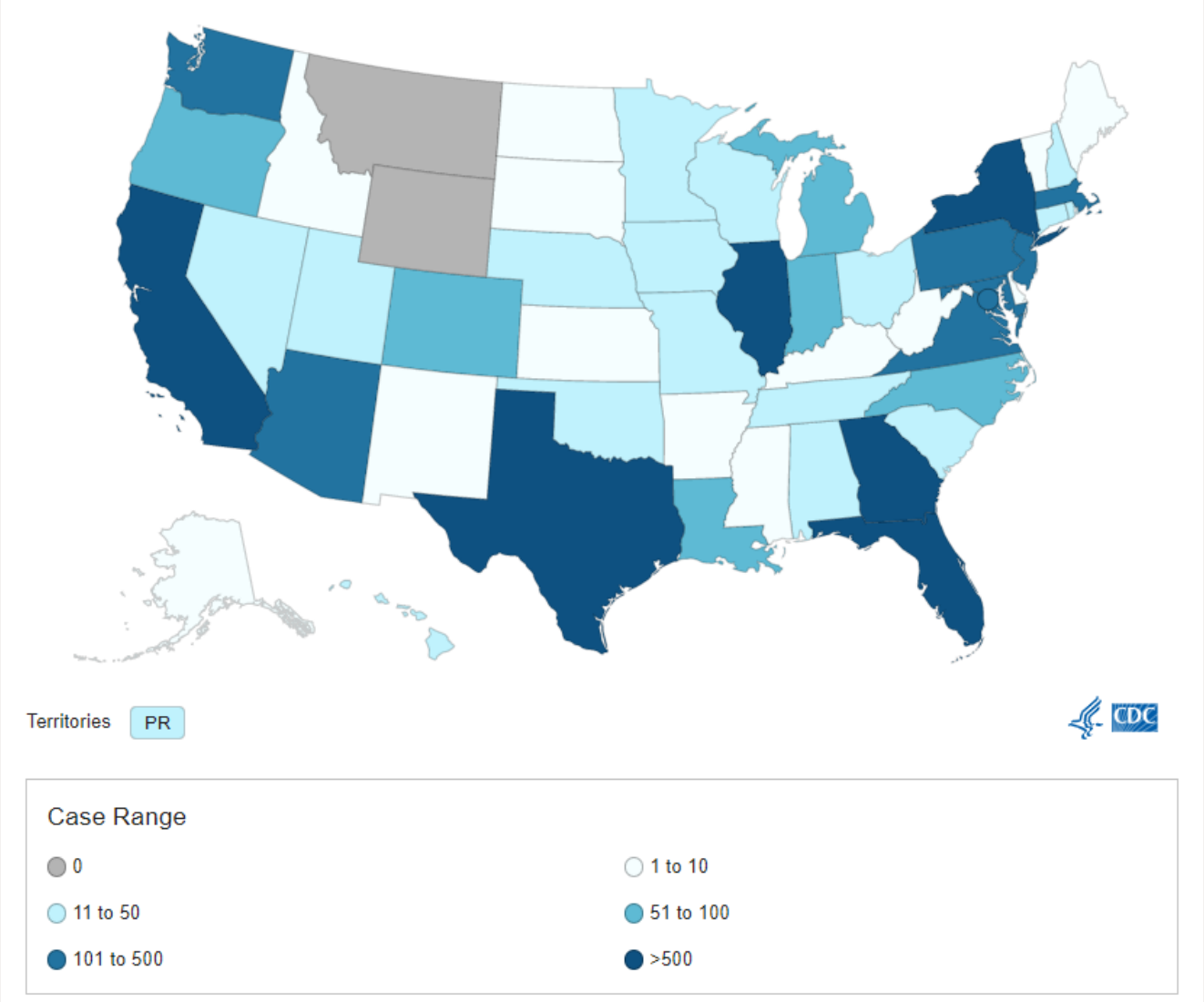


# Monkeypox cases in the United States

*Data as of August 7, 2022*

- Total: 8,067 cases
- 50 jurisdictions (48 states, DC, PR)
- Doubling time: 9.3 days (for areas with > 25 cases, 8.6 days)

STATE	CASE COUNT
New York	1,862
California	1,310
Florida	633
Texas	606
Illinois	602
Georgia	596

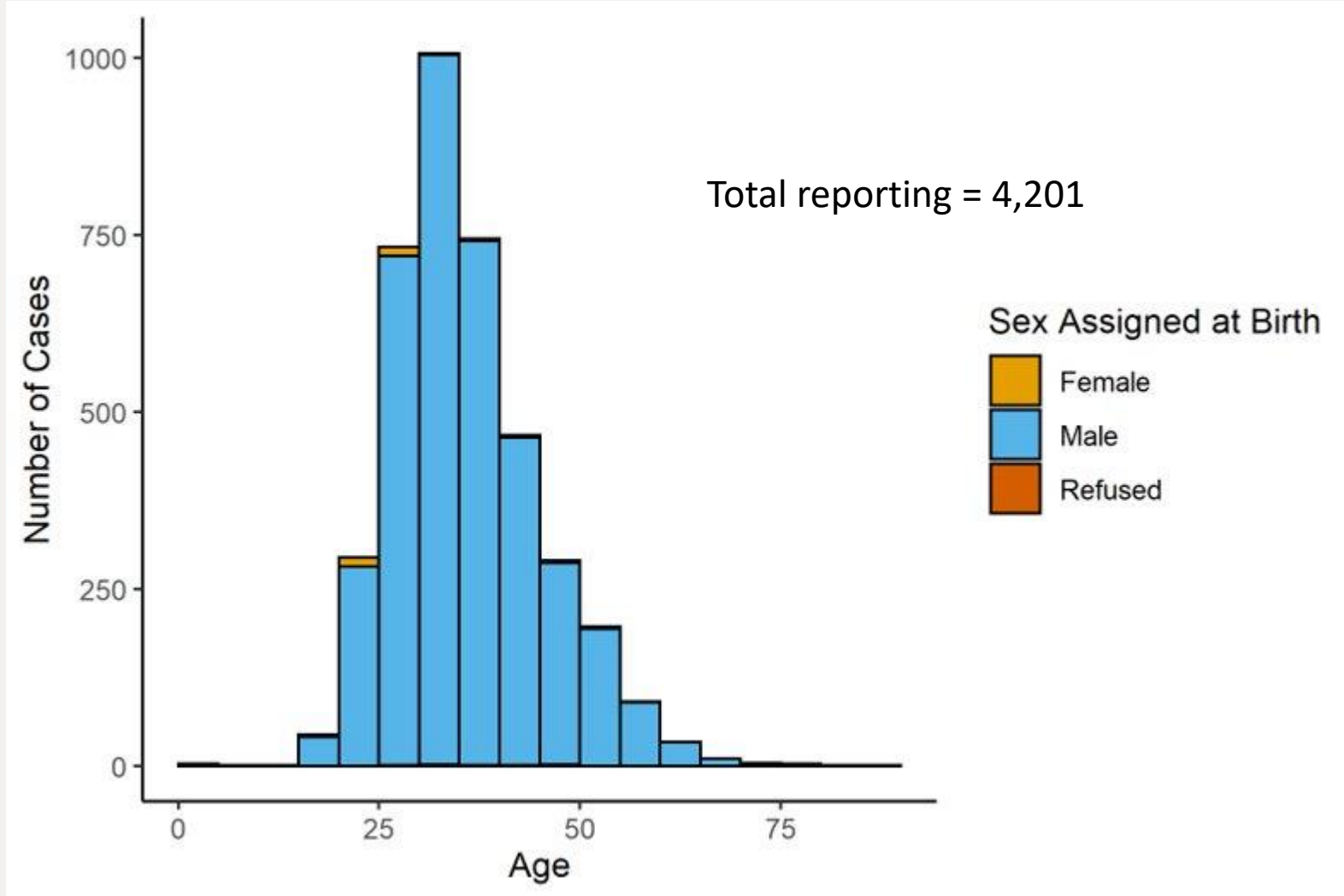


# Demographics of Monkeypox cases in the United States

## *Data as of August 7, 2022, at 2pm EST*

- Age:
  - Median: 35 years
  - Range: 0-89 years
- Sex assigned at birth
  - Male sex at birth: 4,151 (99%)
  - Female sex at birth: 50
- MMSC\*: 945/1,012 (93%)
  - For those reporting data, 41% HIV positive\*\*
- 3 Pediatric cases
  - 1 confirmed
  - 2 probable under investigation

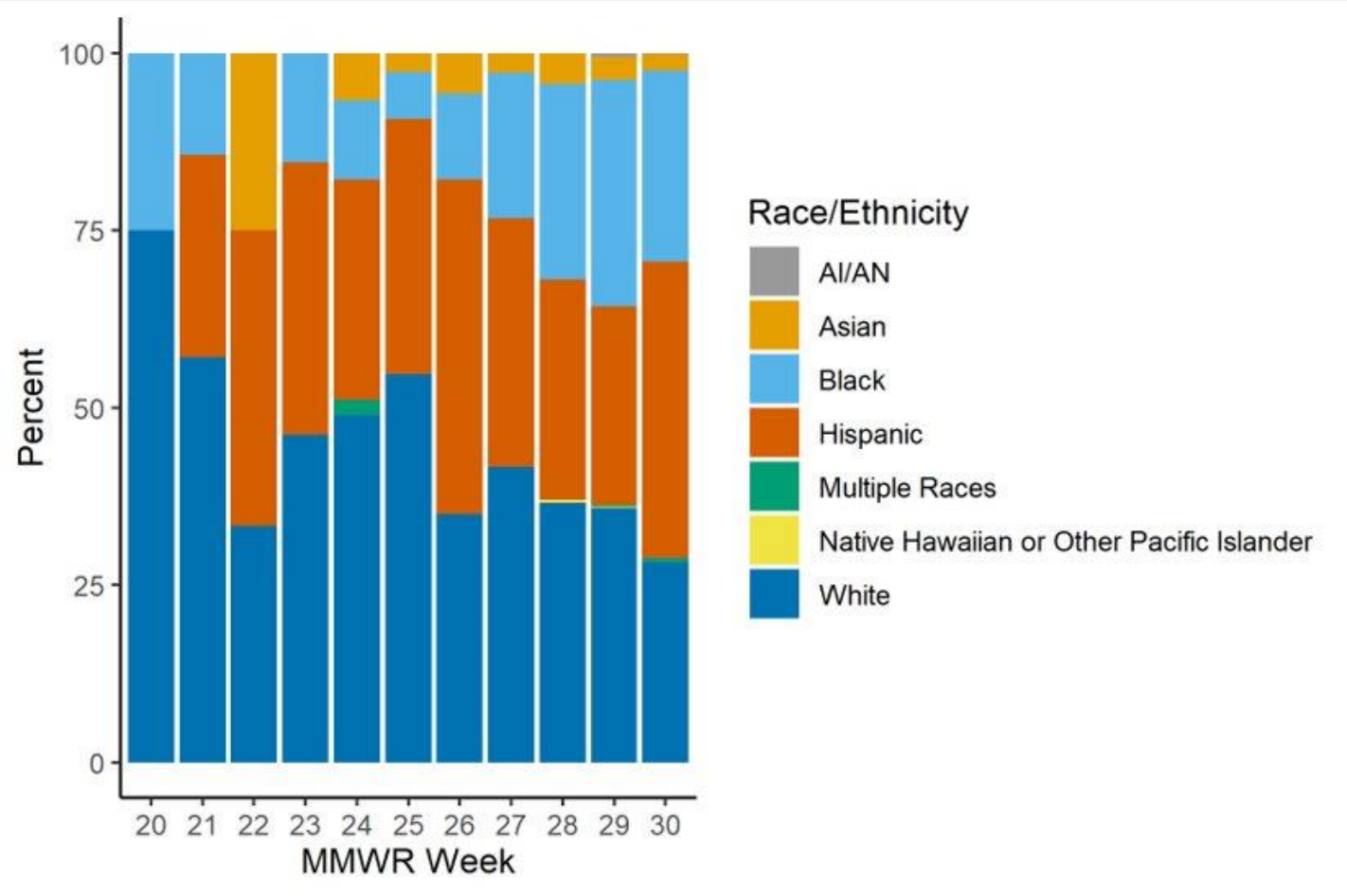
\*MMSC: case reported recent history of male-male sexual contact



# Monkeypox cases reported to CDC: Race/Ethnicity

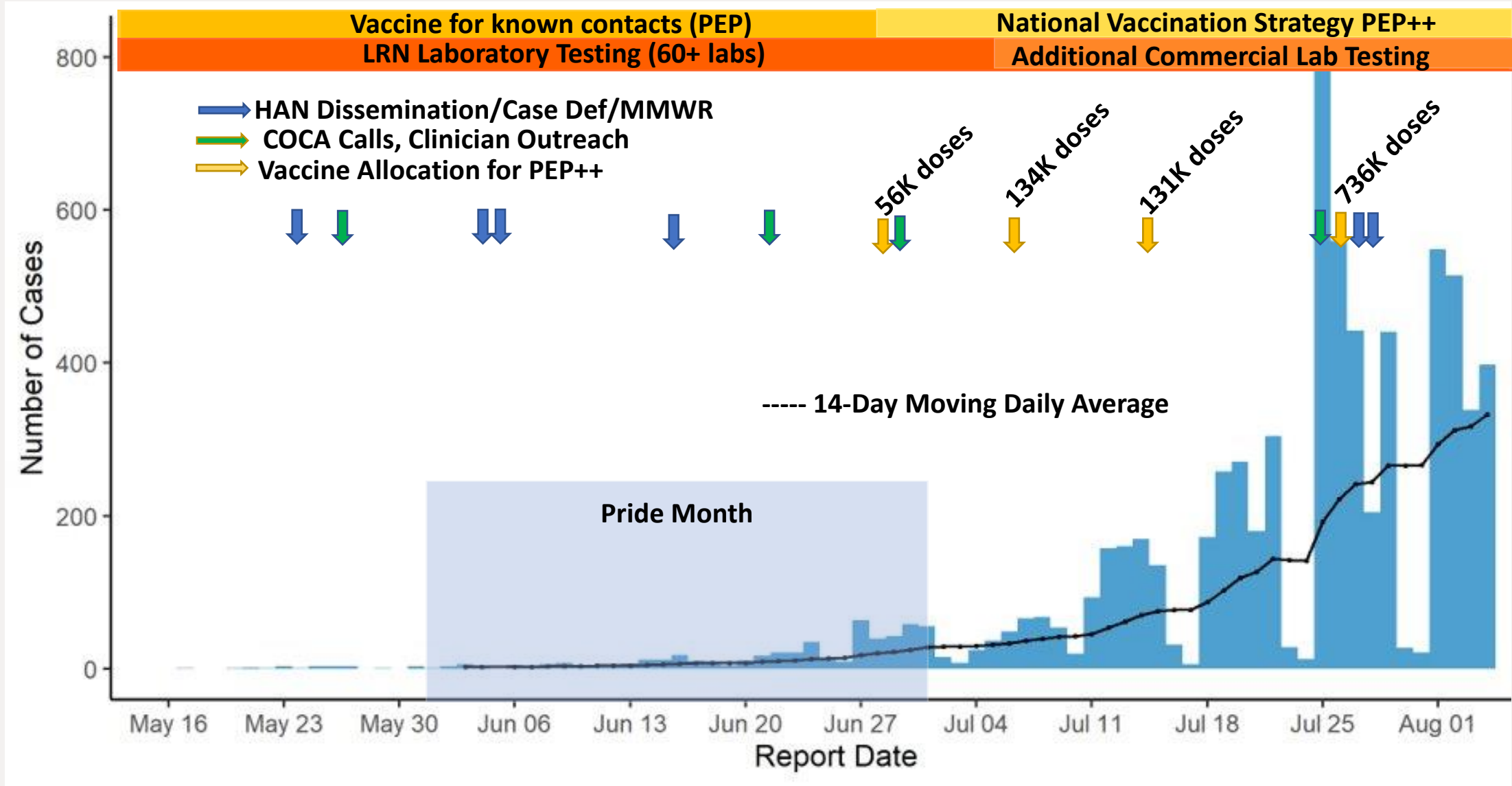
*Data as of August 7, 2022, at 2pm EST*

Race/Ethnicity	Percentage
Hispanic	34.7%
White	33.1%
Black	28.3%
Asian	3.3%
Multiple races	0.3%
American Indian or Alaskan Native	0.1%
Native Hawaiian/other Pacific Islander	0.1%





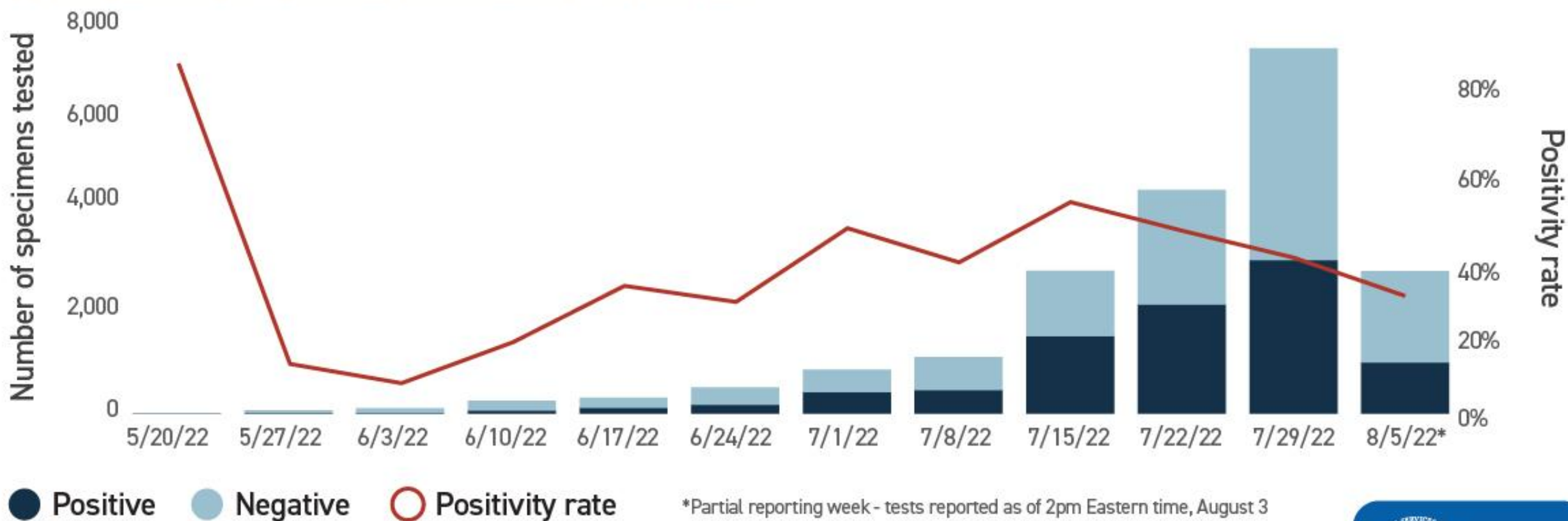
# Monkeypox Mitigation Measures with Epi Curve- Aug 4th



# MONKEYPOX UPDATE

## Monkeypox/Non-Variola Orthopox Testing in the United States

Public Health and Select Commercial Laboratories



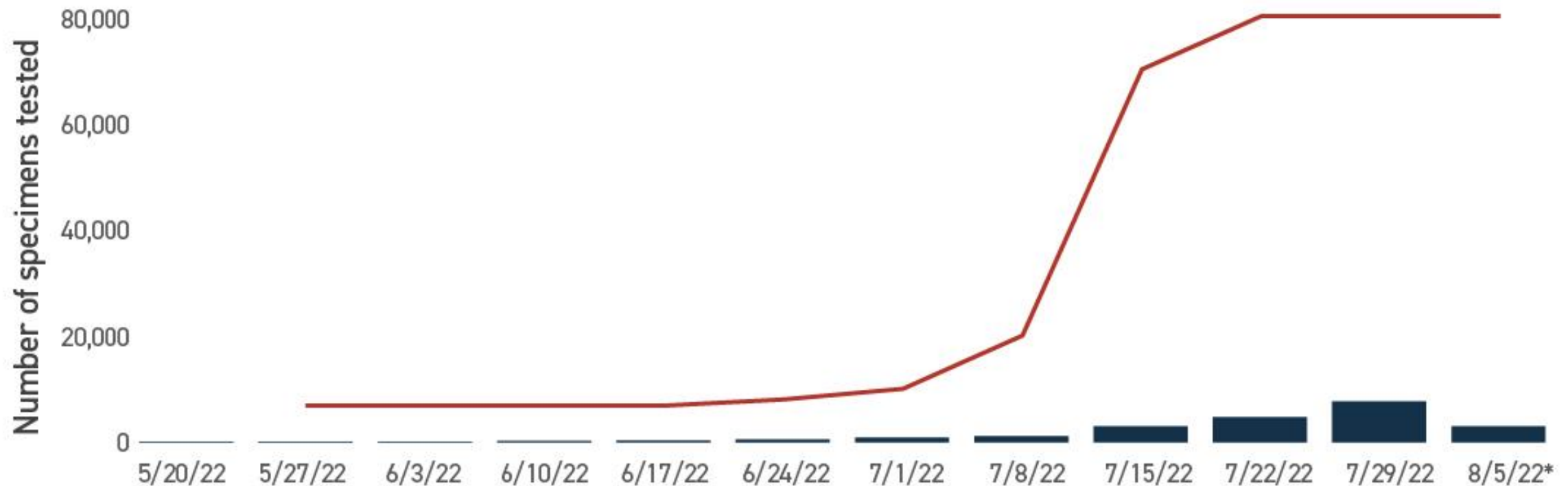
[www.cdc.gov/Monkeypox](https://www.cdc.gov/Monkeypox)



CS332385-J 08/03/2022

# MONKEYPOX UPDATE

## Monkeypox/Non-Variola Orthopox Testing Volume Versus Testing Capacity



● Total testing volume ○ Total testing capacity

\*Partial reporting week - tests reported as of 2pm Eastern time, August 3

[www.cdc.gov/Monkeypox](https://www.cdc.gov/Monkeypox)



CS332385-J 08/03/2022

# National Vaccination Strategy

- JYNNEOS (FDA-licensed 2 dose series)
  - More limited supplies
  - Favorable safety profile
  - Post-Exposure Prophylaxis (PEP) and PEP++
  - Pre-Exposure Vaccination important
  - Over 1 million doses allocated to states
  - 1 dose vs 2 dose discussions
  - Intradermal strategy (dose-sparing)
- ACAM2000
  - Plentiful supply
  - Adverse event profile
  - Available under an EA-IND

## MONKEYPOX

### CDC Recommends Monkeypox Vaccination for People Who

- Are known or possible close contacts of people with monkeypox.
- Know that one of their sex partners in the past 2 weeks has been diagnosed with monkeypox.
- Have had multiple sex partners in the past 14 days in a place with monkeypox cases.
- Have jobs that may expose them to orthopoxviruses.
  - Some designated healthcare or public health workers
  - Laboratory workers who handle specimens related to orthopoxviruses

Contact a healthcare provider for more information.

**Learn more:** [www.cdc.gov/monkeypox](http://www.cdc.gov/monkeypox)



CS 332029-I



# Community Engagement is Critical

- Guidance to ensure equitable distribution/access as part of vaccine strategies
- Fact-based messaging to reduce stigma
- Targeted channels to disseminate messages to gay, bisexual, and other men who have sex with men
- Listening sessions to promote dialogue
  - Affected populations
  - Public health departments
  - Healthcare providers

## Summer 2022 Health Tips for Gay and Bisexual Men

As you celebrate Pride and other events this summer, get a few tips to stay safe and healthy at [www.cdc.gov/msmhealth/summerhealthtips](https://www.cdc.gov/msmhealth/summerhealthtips).



Scan This Code on  
Your Smartphone



# Challenges and Solutions

- Concern over missing early cases— increased clinical outreach
- Lab Testing – discomfort with LRN, stood up five commercial labs
- Challenges with Contract Tracing - shift to PEP++, PrEP vaccine strategies
- TPOXX Access challenges – revised protocol to significantly reduce reporting burden
- JYNNEOS supply challenges –extending interval between first and second doses, considering dose-sparing intradermal strategy
- Messaging and Behavior – New Safer Sex/Large gathering guidance
- Data sharing concerns (state legal concerns, privacy) – Data Use Agreements for Vaccine Administration

# Horizons and Questions

- The media is increasingly portraying the US response to monkeypox as a public health failure. Yet, based on a shared global experience, there is no clear solution. What could/should we be doing differently?
- What would “endemicity” look like for the U.S.? What are the risk factors that might elevate the risk of monkeypox becoming endemic?
- Containment vs. Mitigation – when should CDC shift messaging and response efforts?
- Stigma and Equity are significant concerns. What is CDC getting right? What can we improve?



**For more information, contact CDC**

1-800-CDC-INFO (232-4636)

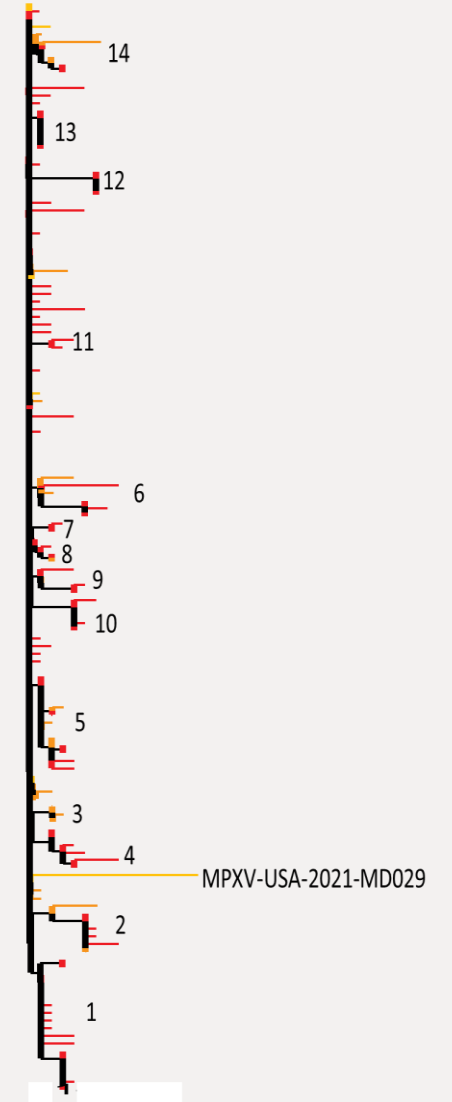
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

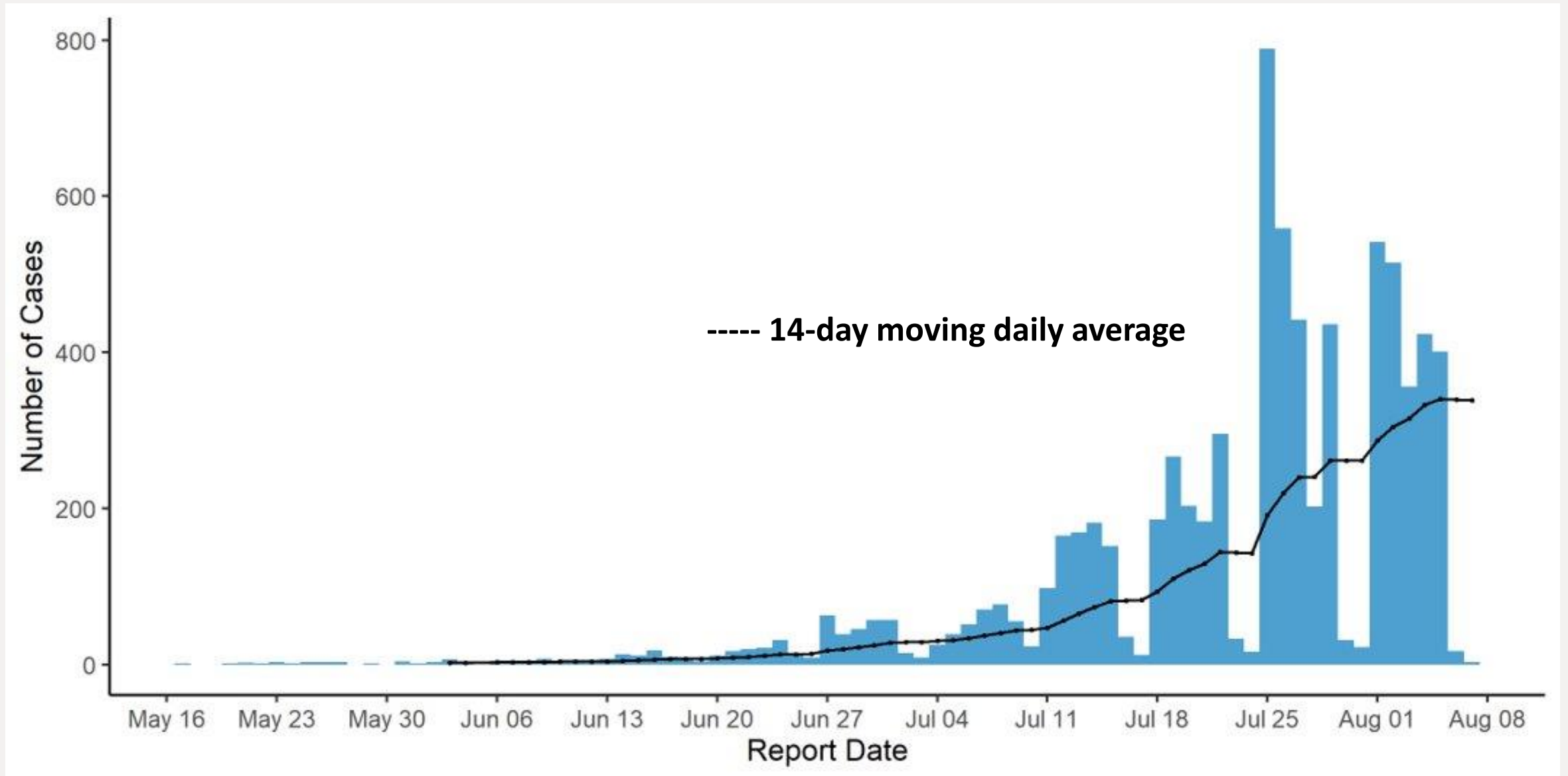


# U.S. Monkeypox Sequence Characterization

- Cluster tree from 143 genome sequences from US cases
- 14 clusters/26 subclusters based on shared unique SNPs
- Almost all belong to the predominant B.1 outbreak lineage
- No additional findings of US 2022 MPXV lineage A.2
- APOBEC3 mutations noted, but no clear phenotypic differences
- Outside of the APOBEC3 changes, mutation rates low
- 27 genomes have no SNPs compared to first 2022 US MPXV case MA001
- We continue generating genome sequences to monitor the cluster changes over time

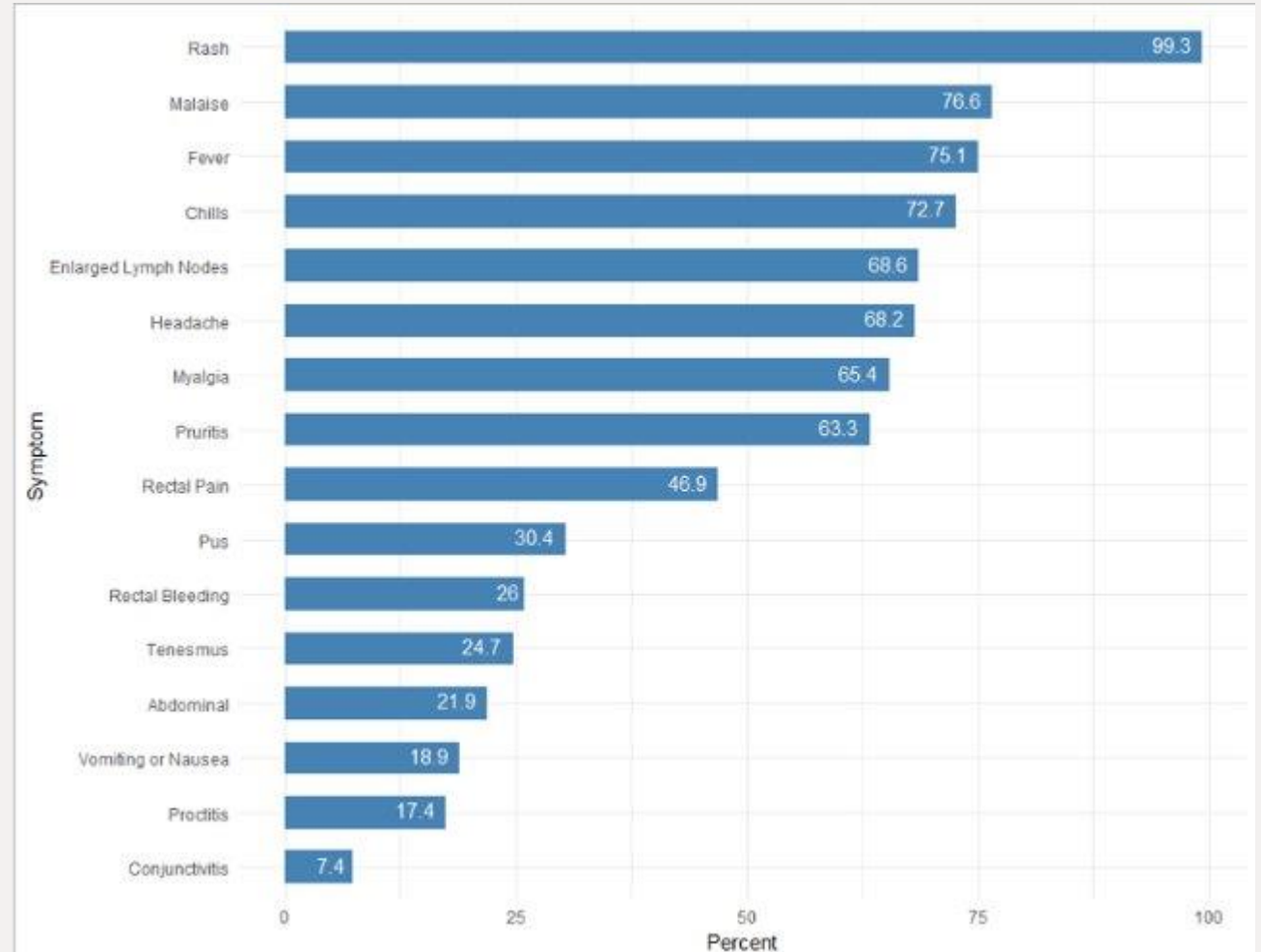


# Reported U.S. Monkeypox cases through Aug 7th

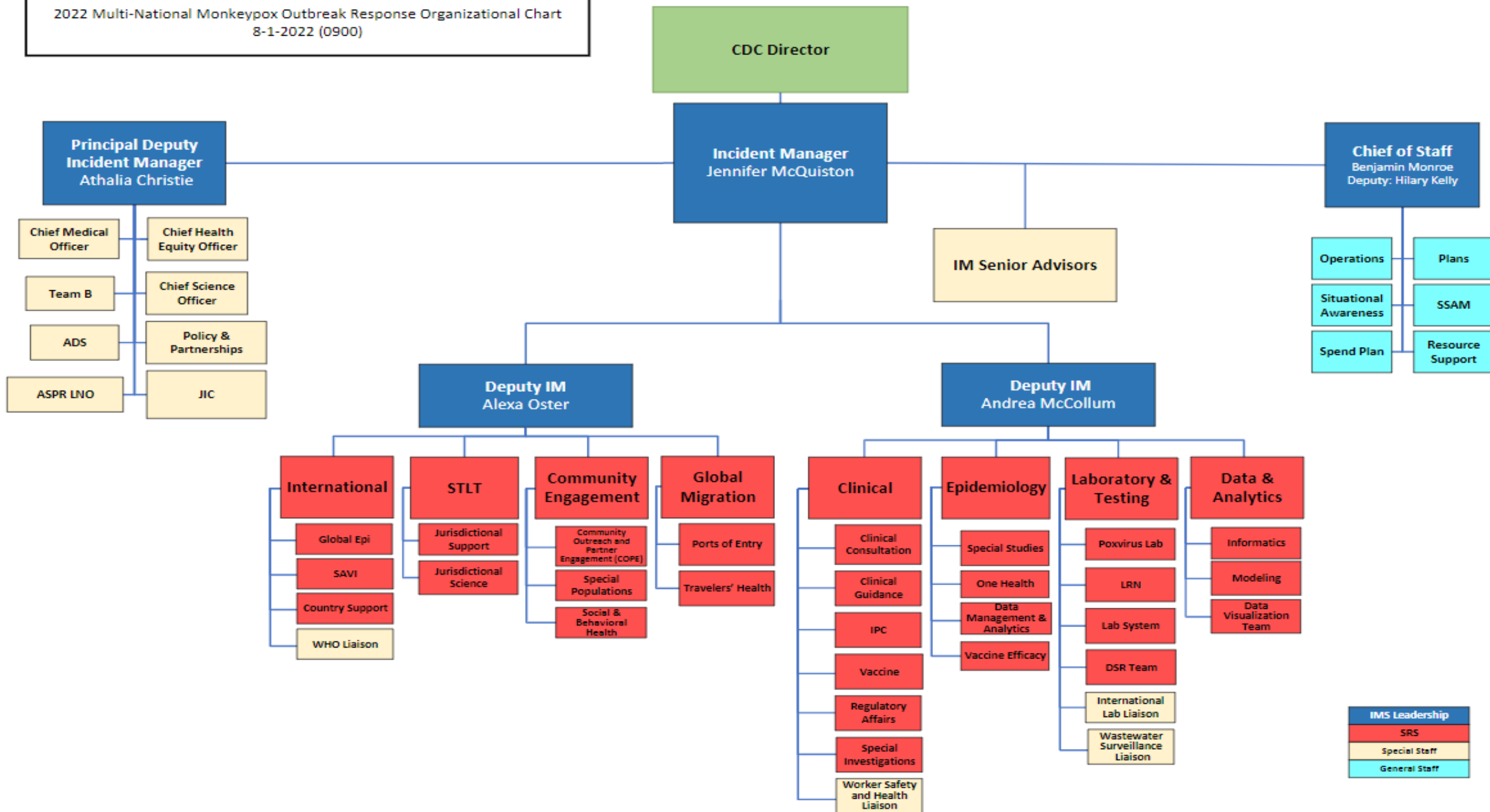


# Monkeypox cases reported to CDC: Symptoms (through August 4<sup>th</sup>)

- Most common symptoms:
  - Rash (99.3%)
  - Malaise (76.6%)
  - Fever (75.1%)
  - Chills (72.7%)
- Less common symptom:
  - Conjunctivitis (7.4%)



2022 Multi-National Monkeypox Outbreak Response Organizational Chart  
8-1-2022 (0900)



# Messaging for Clinicians, State Partners, Public

## Monkeypox



[Español](#)



## Monkeypox Signs and Symptoms

Know the symptoms of monkeypox and when to contact a healthcare professional.

[Learn about Signs and Symptoms](#)

## Highlights

[2022 Monkeypox Outbreak](#)

[How to Prevent Monkeypox](#)

[Sexual Health](#)

[U.S. Map and Case Count](#)

[Pediatric Considerations](#)

[National Vaccine Strategy](#) [↗](#)



# Harm Reduction Messaging

## MONKEYPOX

### Monkeypox and Safer Sex

**Vaccination** is an important tool in preventing the spread of monkeypox. But given the current limited supply of vaccine, consider temporarily changing some behaviors that may increase your risk of being exposed. These temporary changes will help slow the spread of monkeypox until vaccine supply is adequate.

Reducing or avoiding behaviors that increase risk of monkeypox exposure is also important when you are between your first and second shots of vaccine. Your protection will be highest when you are two weeks after your second dose of vaccine.

Make a habit of exchanging contact information with any new partner to allow for sexual health follow-up, if needed.

Talk with your partner about any monkeypox symptoms and be aware of any new or unexplained rash or lesion on either of your bodies, including the mouth, genitals (penis, testicles, vulva, or vagina), or anus (butthole). If you or your partner have or recently had monkeypox symptoms or have a new or unexplained rash anywhere on your body, do not have sex and see a healthcare provider. In some cases, symptoms may be mild, and some people may not even know they have monkeypox.



If you or a partner has monkeypox or think you may have monkeypox, the best way to protect yourself and others is to avoid sex of any kind (oral, anal, vaginal) and kissing or touching each other's bodies – while you are sick. **Especially avoid touching any rash.** Do not share things like towels, fetish gear, sex toys, and toothbrushes.

Even if you feel well, here are some ways to reduce your chances of being exposed to monkeypox if you are sexually active:

- Take a temporary break from activities that increase exposure to monkeypox, until you are two weeks after your second dose. This will greatly reduce your risk.

Continue to Next Page →



Limit your number of sex partners to reduce your likelihood of exposure.

- Spaces like back rooms, saunas, sex clubs, or private and public sex parties where intimate, often anonymous sexual contact with multiple partners occurs – are more likely to spread monkeypox.
- Condoms (latex or polyurethane) may protect your anus (butthole), mouth, penis, or vagina from exposure to monkeypox. However, condoms alone may not prevent all exposures to monkeypox, since the rash can occur on other parts of the body.
- Gloves (latex, polyurethane, or nitrile) might also reduce the possibility of exposure if inserting fingers or hands into the vagina or the anus. The gloves must cover all exposed skin and be removed carefully to avoid touching the outer surface.
- Avoid kissing or exchanging spit, since monkeypox can spread this way.
- Masturbate together at a distance, without touching each other and without touching any rash.
- Have virtual sex with no in-person contact.
- Consider having sex with your clothes on or covering areas where rash is present, reducing as much skin-to-skin contact as possible. Leather or latex gear also provides a barrier to skin-to-skin contact; just be sure to change or clean clothes/gear between partners and after use.

• Be aware that monkeypox can also spread through respiratory secretions with close, face-to-face contact.

- Remember to wash your hands, fetish gear, sex toys, and any fabrics (bedding, towels, clothes) after having sex.



### What should a person do if they have a new or unexplained rash or other symptoms?

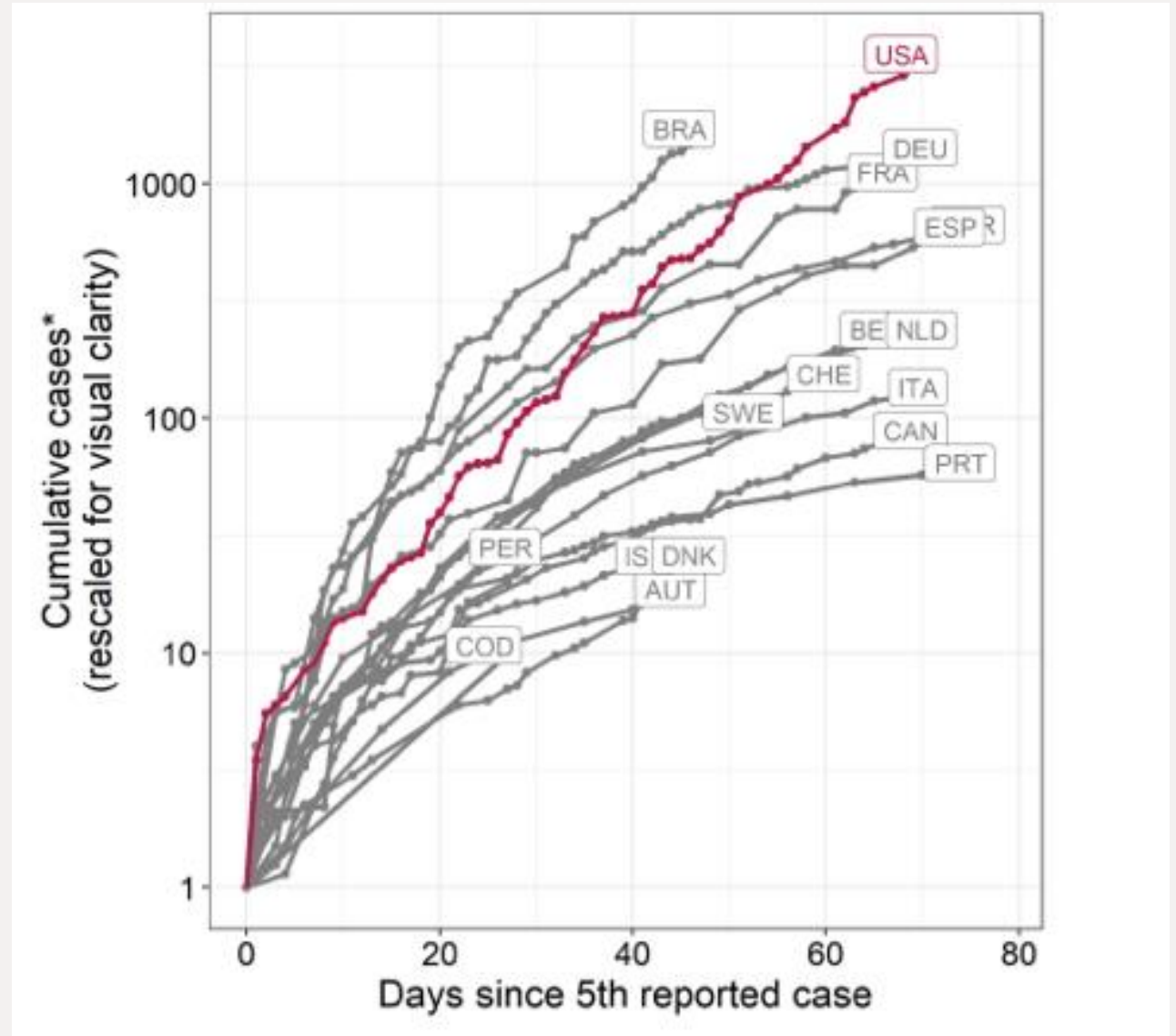
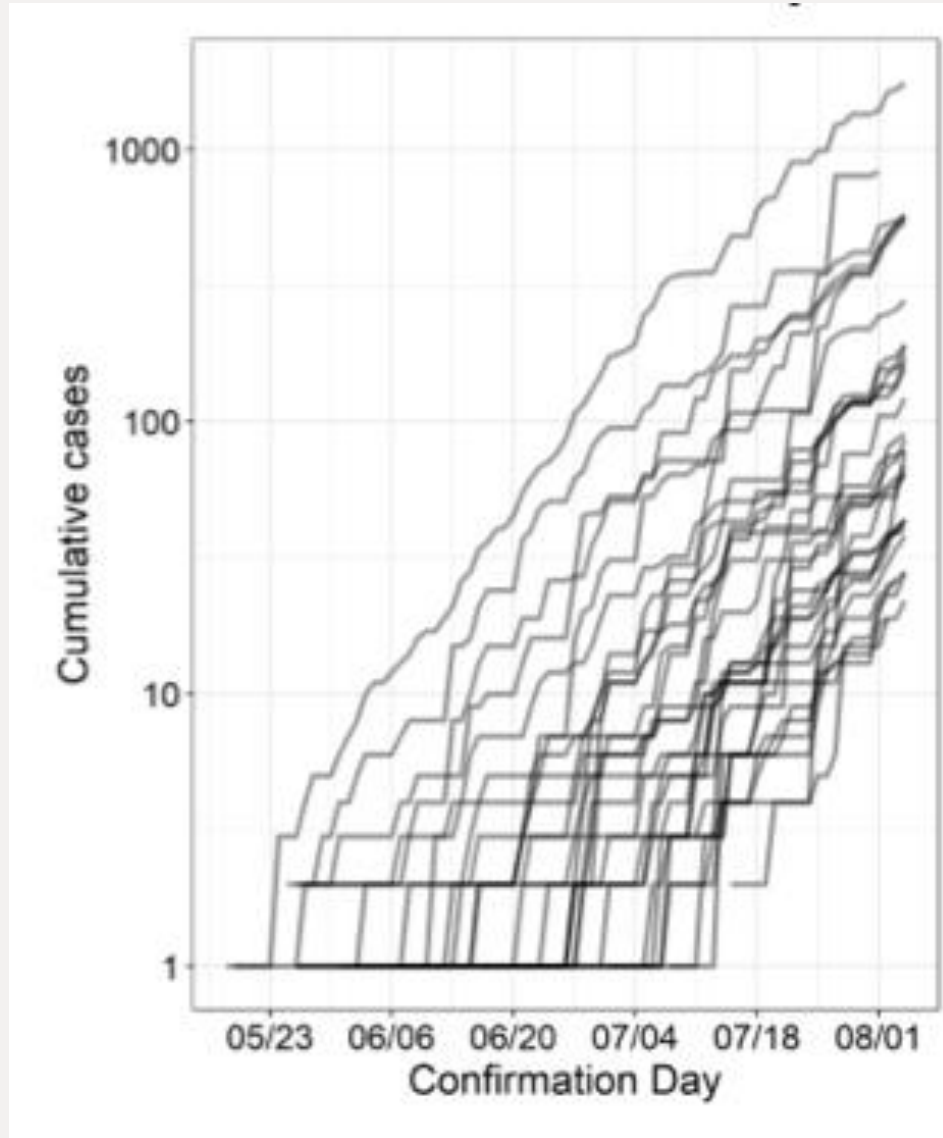
- Avoid sex or being intimate with anyone until you have been checked out by a healthcare provider.
- If you don't have a provider or health insurance, visit a public health clinic near you.
- When you see a healthcare provider, wear a mask, and remind them that this virus is circulating in the area.
- Avoid gatherings, especially if they involve close, personal, skin-to-skin contact.



# Additional Epidemiologic Characteristics US Monkeypox Cases (\*MMWR 8/5/22)

- Among 339 persons with data, 48 (14%) were previously vaccinated
  - 11 received 1 of 2 JYNNEOS doses during the current outbreak
    - ❖ One developed monkeypox >3 weeks after their first JYNNEOS dose.
- Risk Exposures in the 3 weeks prior to Monkeypox Infection
  - 40% reported two to four partners, 33% reported five+ partners
  - 38% reported group sex, defined as sex with more than two persons, at a festival, group sex event, or sex party

# Continued Exponential Growth of Monkeypox





# Discussion

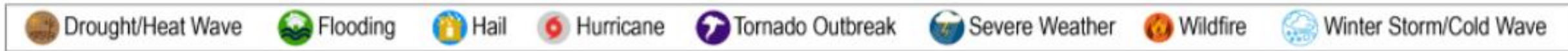
# Climate and Health

Patrick Breysse, PhD, CIH

Director

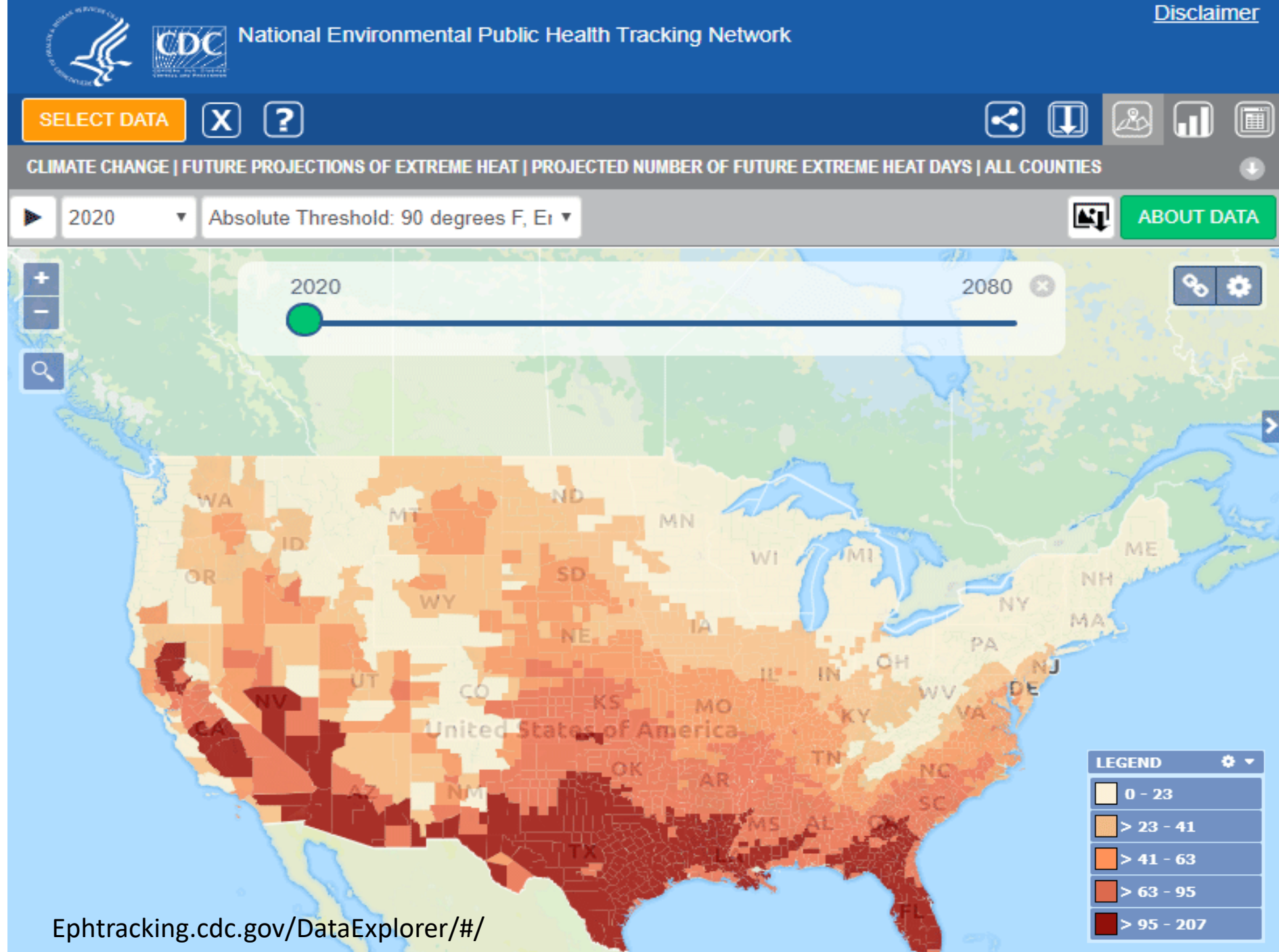
National Center for Environmental Health/Agency for Toxic Substances and Disease Registry

# U.S. 2021 Billion-Dollar Weather and Climate Disasters



This map denotes the approximate location for each of the **20 separate billion-dollar weather and climate disasters that impacted the United States in 2021**

# Projected Number of Annual Extreme Heat Days over the Next 60 Years



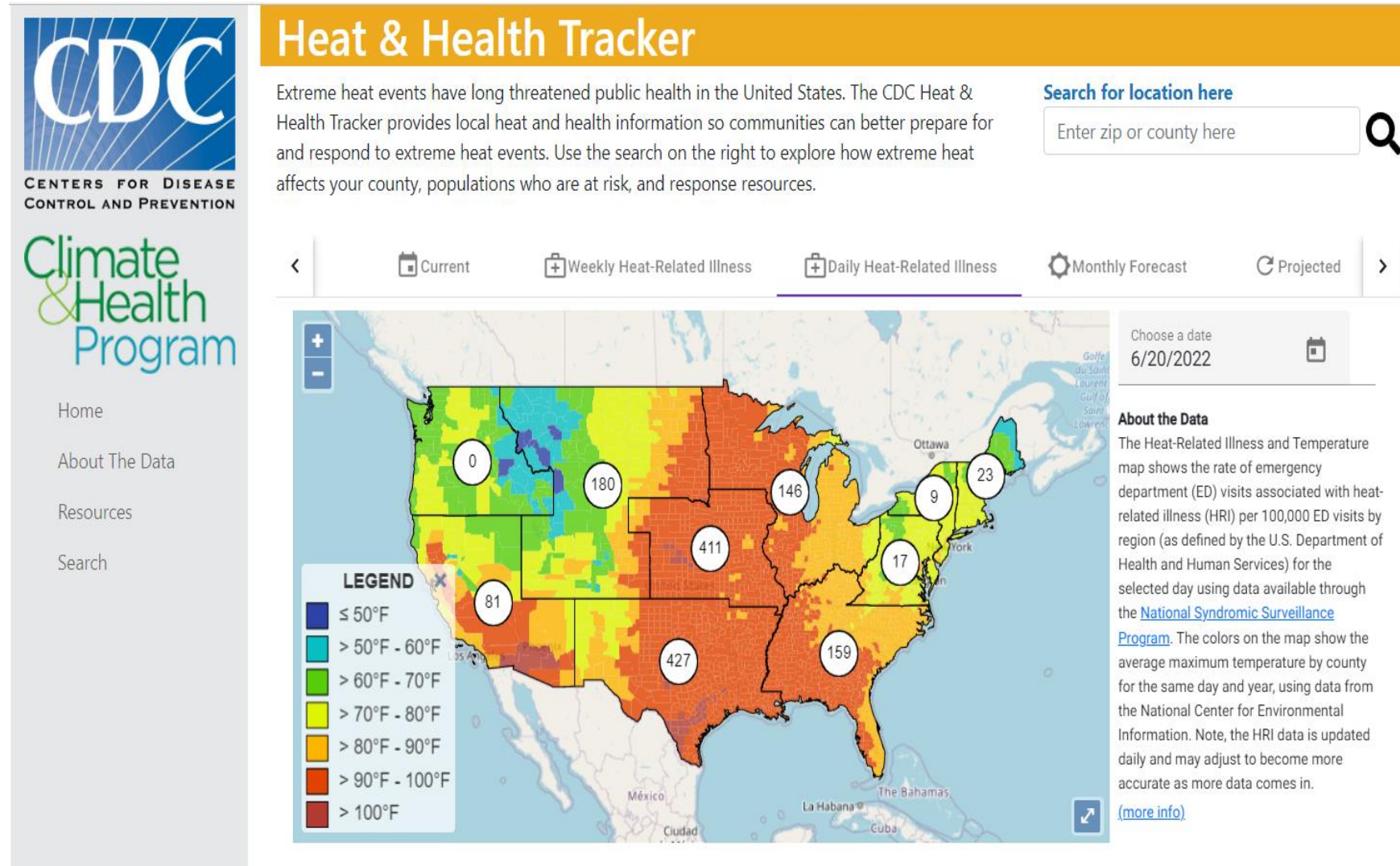


# Data Tools: CDC'S Heat and Health Tracker

## What is it?

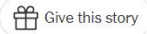
A publicly-available, online tool that provides heat and health data and information at the local level to help communities better prepare for and respond to extreme heat events.

<https://ephtracking.cdc.gov/Applications/heatTracker/>



## *An Extraordinary Heat Wave Exposes the Limits of Protecting People*

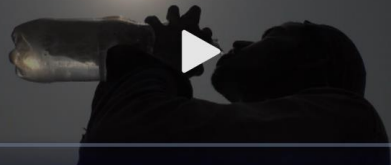
Temperatures are soaring across South Asia, testing dangerous thresholds. How much is climate change to blame? It's becoming an 'obsolete question,' one scientist says.



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### India's early heat wave major implications for agriculture

May 10, 2022 6:35 PM EDT

ASIA

## India tries to adapt to extreme heat but is paying a heavy price

Summer hasn't arrived yet, but early heat waves have brought the country to a standstill

By [Gerry Shih](#) and [Kasha Patel](#)

May 9, 2022 at 2:00 a.m. EDT



Residents fill water from a Delhi Municipal Corp. truck in New Delhi on April 30. (Anindita Mukherjee/Bloomberg News)

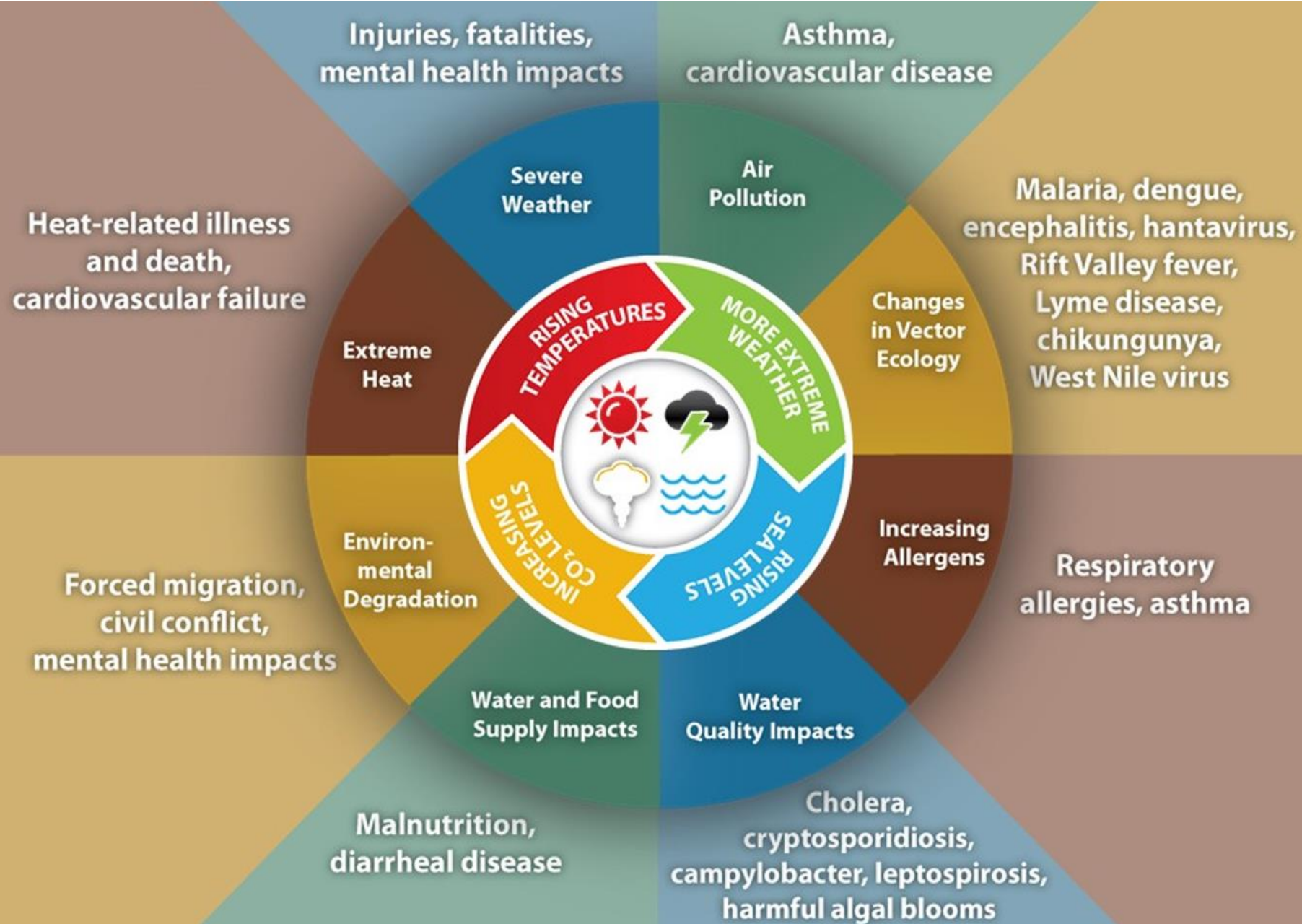




**Where you live matters**



# Impact of Climate Change on Human Health







Harvard  
Business  
School

# WORKING KNOWLEDGE

Business Research for Business Leaders

Topics ▾ Sections ▾ Browse All

IN PRACTICE

## What's the Role of Business in Confronting Climate Change?

30 NOV 2021 | by Lynn Schenk and Dina Gerdeman



# CDC Collaborates on Climate and Health Across the US Government

- HHS Office of Climate Change and Health Equity along with NASA, NOAA, EPA, USDA and many others
- Leadership role on multiple cross-USG workgroups
  - Climate Change and Human Health Group (CCHHG)
  - National Integrated Heat Health Information System (NIHHIS)
  - Global Heat Health Information Network (GHHIN)
  - National Drought Resilience Partnership (NDRP)
  - Wildland Fire Leadership Council (WFLC)
- Authors on each of the 4 published National Climate Assessments



## National Climate Assessment

The National Climate Assessment summarizes the impacts of climate change on the United States, now and in the future.

A team of more than 300 experts guided by a 60-member Federal Advisory Committee produced the report, which was extensively reviewed by the public and experts, including federal agencies and a panel of the National Academy of Sciences.



GlobalChange.gov

U.S. Global Change Research Program



# CDC Priorities are Climate Priorities



**Public Health  
Workforce**



**Data  
Modernization**



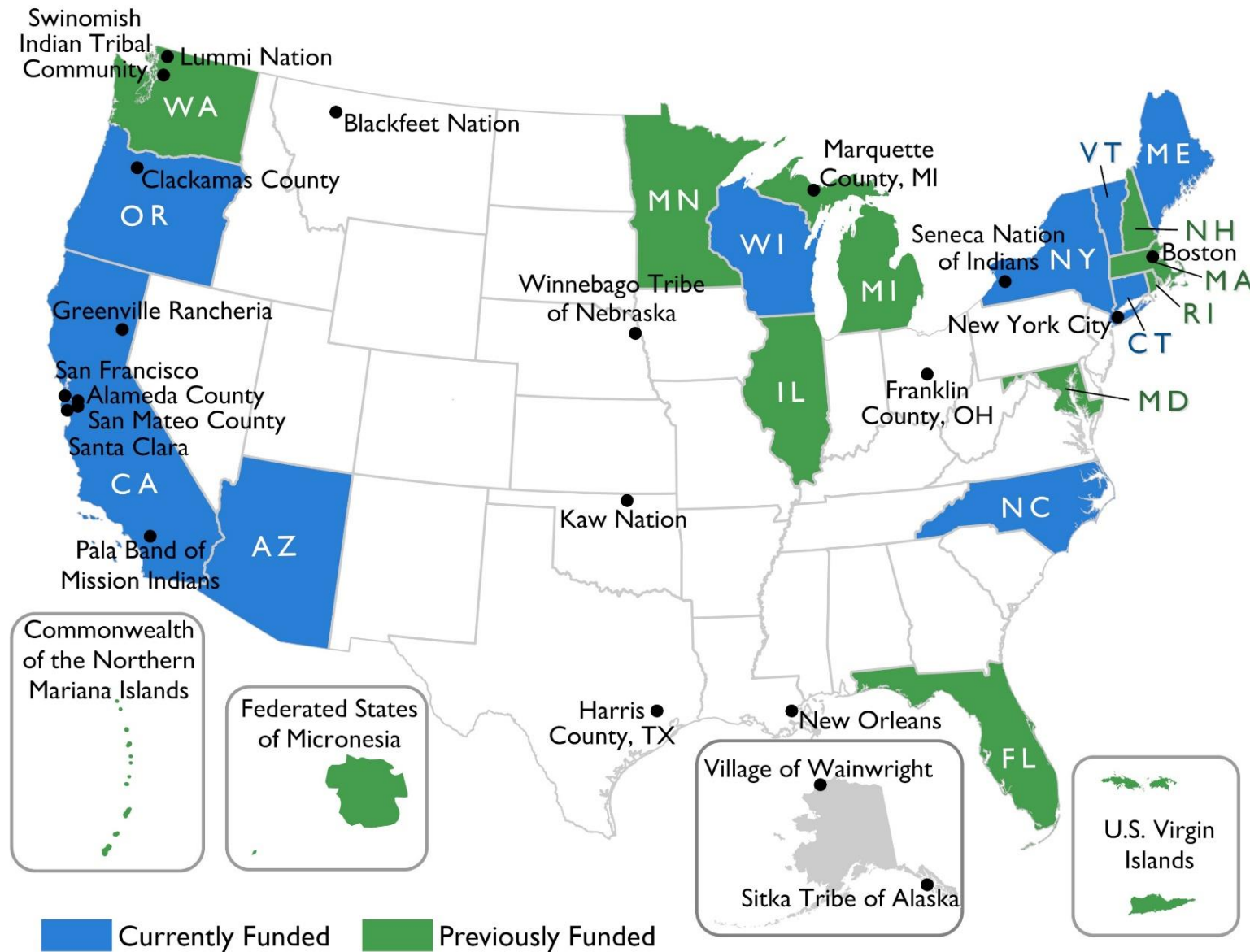
**Health Equity &  
Climate Justice**



**Social  
Determinants  
of Health**



# Climate and Health Programs



# Climate and Health Strategic Framework

## Our Mission

To detect, investigate, forecast, track, prevent and respond to the public health threats of climate change, addressing health inequities and strengthening community resilience.

## Our Vision

A nation prepared to respond to the public health threats of climate change, at home and abroad.

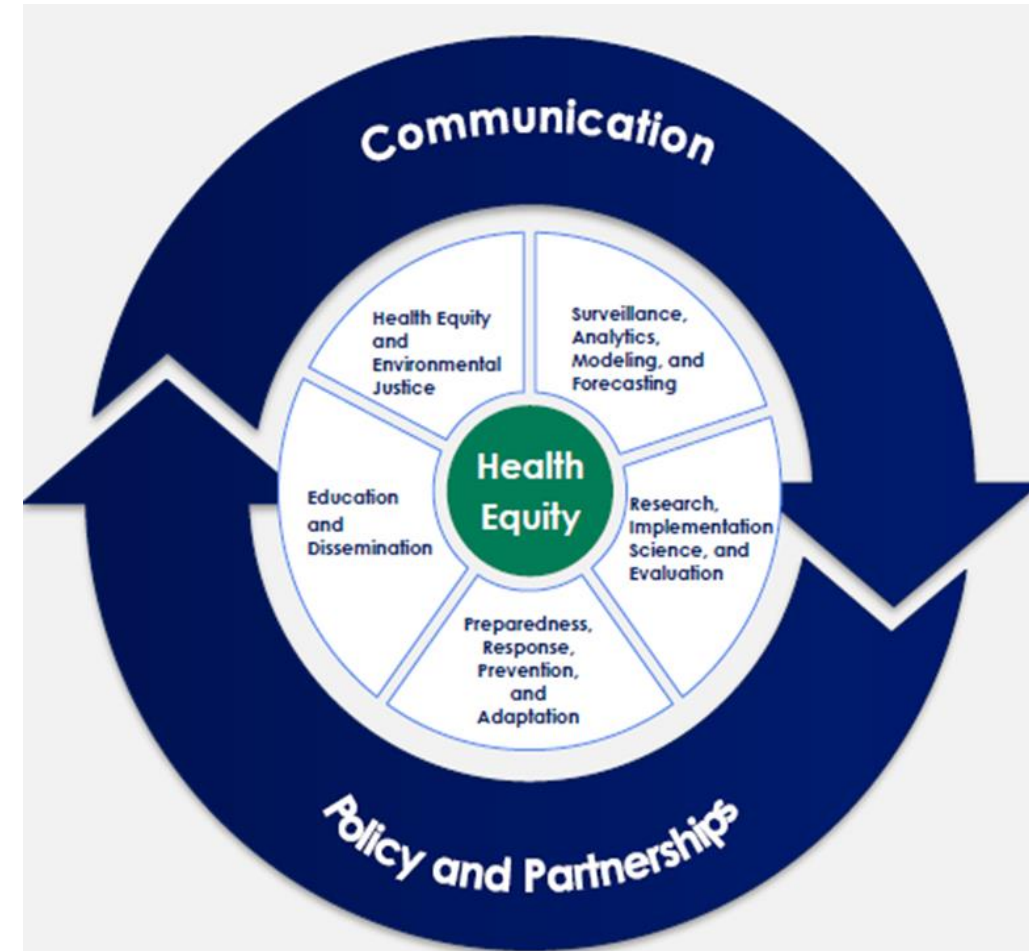


Figure 1: The CDC is leveraging an intersectional, whole agency approach to climate change and health that is centered on health equity, and accelerated by communication, policy, and partnerships.

# Climate and Health Strategic Framework

## Focus Areas and Overarching Goals

### Health Equity and Environmental Justice

Health inequities and environmental injustices are systematically addressed in efforts to prevent and reduce the health impacts of climate change through a multi-level, multi-sectoral approach.

### Surveillance, Analytics, Modeling, and Forecasting

Data are available via the new, modernized public health data and IT infrastructure to identify, track, prevent, and respond to the public health threats of climate change.

### Research, Implementation Science, and Evaluation

Scientific evidence and evidence-based guidance are available for action to minimize the health impacts of climate change.

### Preparedness, Response, Prevention, and Adaptation

Communities, especially those that are disproportionately affected, are prepared to respond, and have the capacity to prevent and adapt to the health impacts of climate change.

### Education and Dissemination

Key audiences are educated and equipped to minimize and adapt to the health impacts of climate change in their communities.

# Partnering with CDC Foundation to Amplify and Advance Climate and Health Impact



“We in this room are devoted and dedicated to health, but we can’t do this alone. This has to be cross-sector; this has to be multi-disciplinary. We have health-related impacts, but the answers have to be much bigger than health. The prevention” has to be much bigger than health.”

- Dr. Walensky at Aspen Ideas Festival, June 2022



SUPPORTING LOCAL  
COMMUNITIES THAT  
HAVE EXPERIENCED  
MARGINALIZATION



CREATIVE  
WORKFORCE  
STRATEGIES



PARTNERING WITH  
HEALTHCARE



SOCIAL MARKETING  
AROUND CLIMATE  
AND HEALTH

# What's Needed

- Expanding our Climate-Ready program to the entire nation
- A climate ready workforce - from youth ambassadors to climate leaders
- Climate resilient communities with actions designed and led by members
- State-of-the-art data systems
- Enhancing climate and health communications to highlight impacts and solutions
- Expanding multi-sector partnerships and whole of government approaches
- Innovation!



# Discussion

# Public Comment



# Plans for Future Meetings

David Fleming, MD

ACD Chair

# Closing Remarks

David Fleming, MD

ACD Chair

# Adjourn

