Laboratory Outreach Communication System (LOCS) Call

Monday, June 16, 2025, at 3:00 P.M. ET

- **Welcome**
  - Sean Courtney, CDC Division of Laboratory Systems
- **Mpox Update**
  - Whitni Davidson, CDC Division of High-Consequence Pathogens and Pathology
- **COVID Variants Update**
  - Natalie Thornburg, CDC Coronavirus and Other Respiratory Viruses Division
- **Measles Response Update**
  - Brian Wakeman, CDC Division of Viral Diseases
- ***Brucella* Updates: Delisting, 2025 Case Definition, Exposure Monitoring and Sequencing**
  - Rebekah Tiller and Zachary Weiner, CDC Division of High-Consequence Pathogens and Pathology

Thank you for joining, we'll begin the call momentarily.

About DLS

Vision

Exemplary laboratory practice and systems strengthen clinical care, public health, and emergency response.

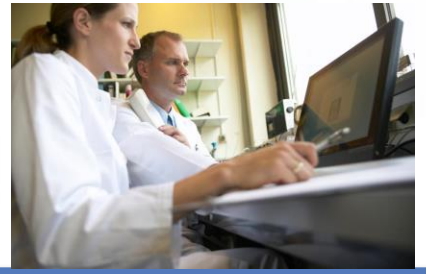
Four Goal Areas

Quality Laboratory Science

- Improve the quality and value of laboratory medicine for better health outcomes and public health surveillance

Highly Competent Laboratory Workforce

- Strengthen the laboratory workforce to support clinical and public health laboratory practice



Safe and Prepared Laboratories

- Enhance the safety and response capabilities of clinical and public health laboratories

Accessible and Usable Laboratory Data

- Increase access and use of laboratory data to support response, surveillance, and patient care

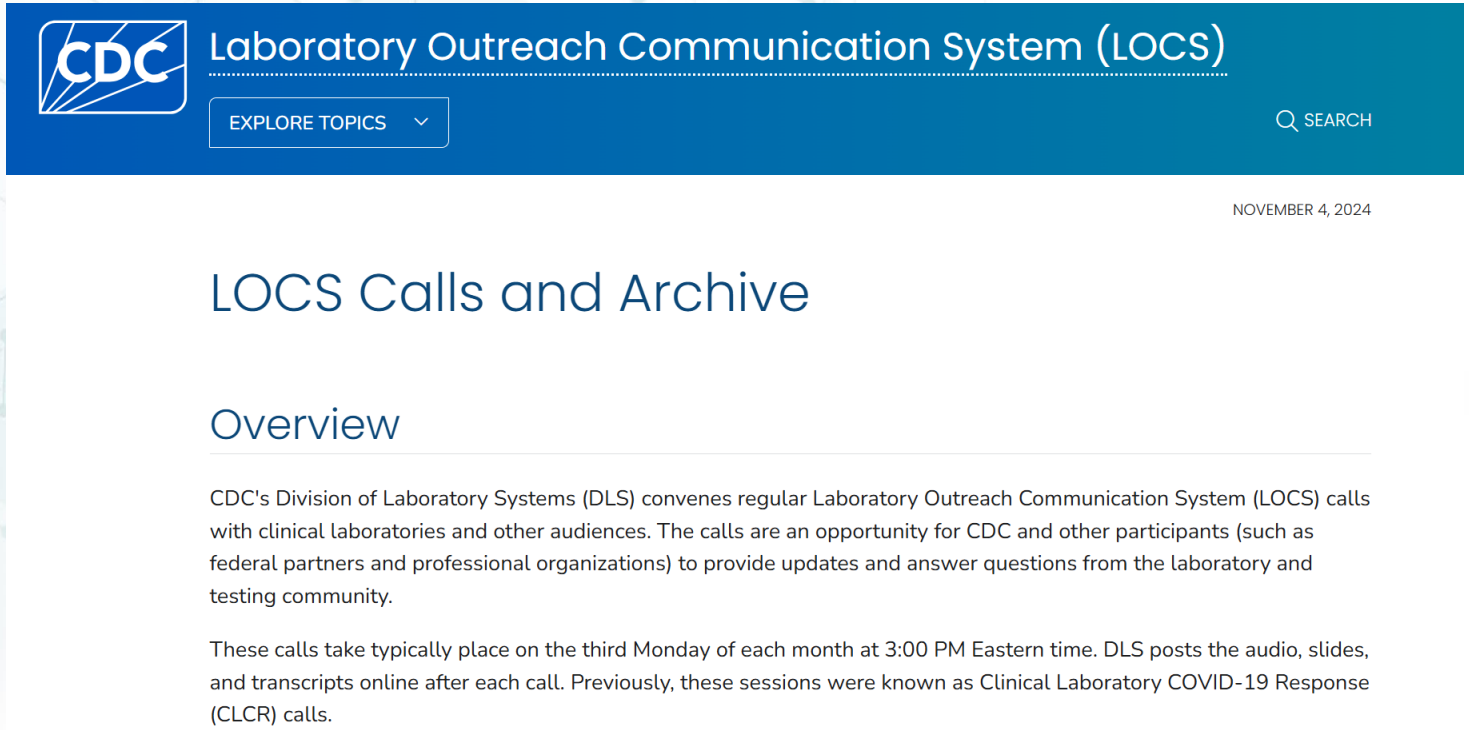
We Want to Hear From You!

Training and Workforce Development

Questions about education and training?

Contact LabTrainingNeeds@cdc.gov

LOCS Calls



On this page, you can find:

- LOCS Call information
- Transcripts
- Slides
- Audio Recordings

https://www.cdc.gov/locs/php/calls/index.html

How to Ask a Question

- **Using the Microsoft Teams System**
  - Click the **Q&A button** in the Microsoft Teams meeting
  - Type your question in the **Q&A box** and submit it
  - Please do not submit a question using the chat button

- For non-laboratory testing questions, please contact CDC-INFO at cdc-infostaff@cdc.gov
- For media questions, please contact CDC Media Relations at media@cdc.gov
- If you are a patient, please direct any questions to your healthcare provider

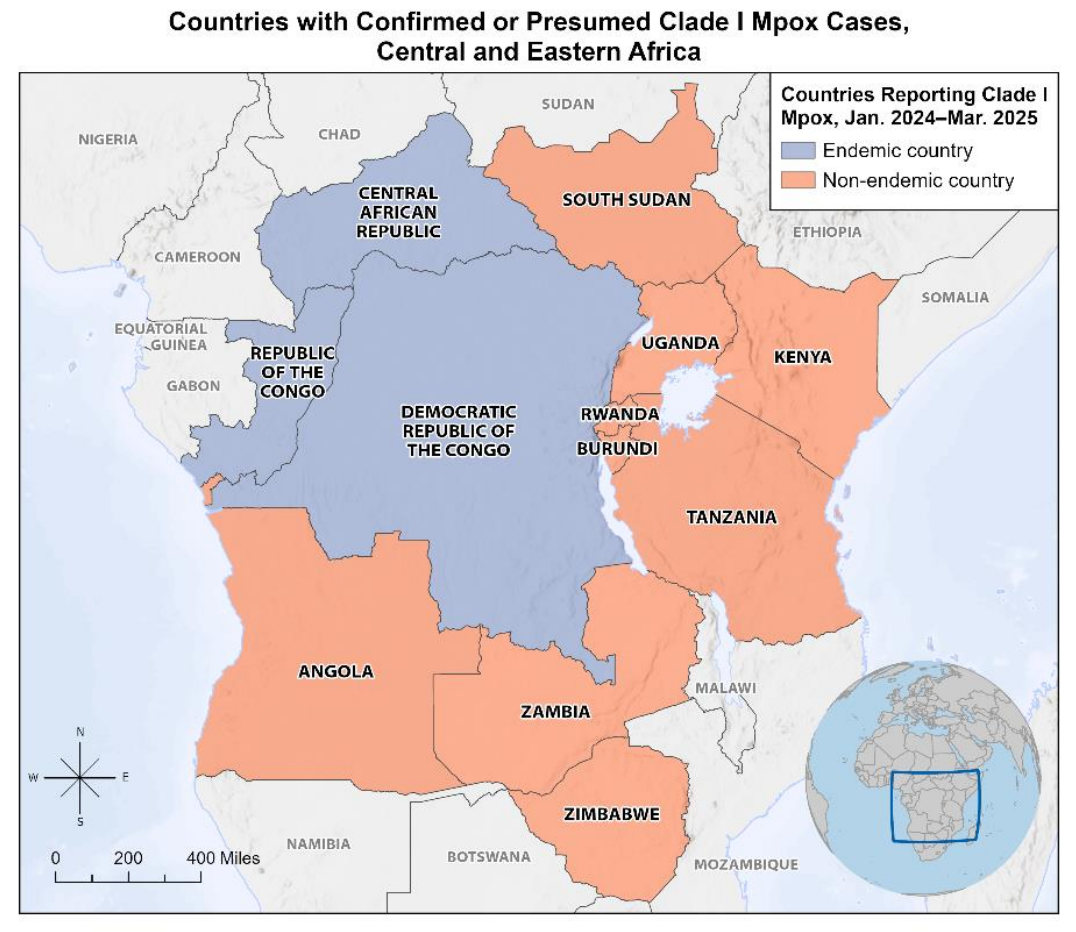
The findings and conclusions in these slide decks are those of the authors and may not necessarily represent CDC's official position on the topic(s) covered.

Mpox Update

Whitni Davidson, MPH
Division of High-Consequence Pathogens and Pathology
Centers for Disease Control and Prevention

June 16, 2025

Clade I mpox in the United States



- **Four cases of clade I mpox in the U.S. since November 2024**
  - All associated with travel from areas experiencing clade I mpox transmission; all sought medical care for mpox symptoms after arriving in the U.S.
  - Additional cases are likely to be confirmed as the outbreak continues
- **CDC continues to assess the risk of clade I mpox to the U.S. general population as low**

Affected states

- **California, November 2024**
- **Georgia, January 2025**
- **New Hampshire, February 2025**
- **New York, February 2025**

https://www.cdc.gov/mpox/situation-summary/index.html

Laboratory testing

- **CDC continues to recommend that:**
  - Laboratories using an orthopoxvirus or monkeypox virus (MPXV) generic test without additional clade-specific testing send all orthopoxvirus or MPXV positive clinical specimens for clade-specific testing
  - Laboratories using CDC's NVO test that are not performing their own MPXV clade-specific testing should continue submitting the duplicate specimen from patients with positive NVO test results to CDC
  - Specimens should be submitted to CDC under surveillance OR for Clinical Laboratory Improvement Amendments (CLIA) testing

https://www.cdc.gov/mpox/hcp/diagnosis-testing/index.html

Laboratory testing continued

- If clade-specific testing is not available in a jurisdiction, specimen submission to a capable public health laboratory or to CDC is encouraged. Your state or local health department can coordinate specimen submission to CDC
- Expedited clade testing should be performed for mpox cases that have known international travel to countries with clade I mpox cases

COVID Variants Update

Natalie Thornburg
CDC Coronavirus and Other Respiratory Viruses Division

2025 Measles Response General Slide Deck

Brian Wakeman, PhD

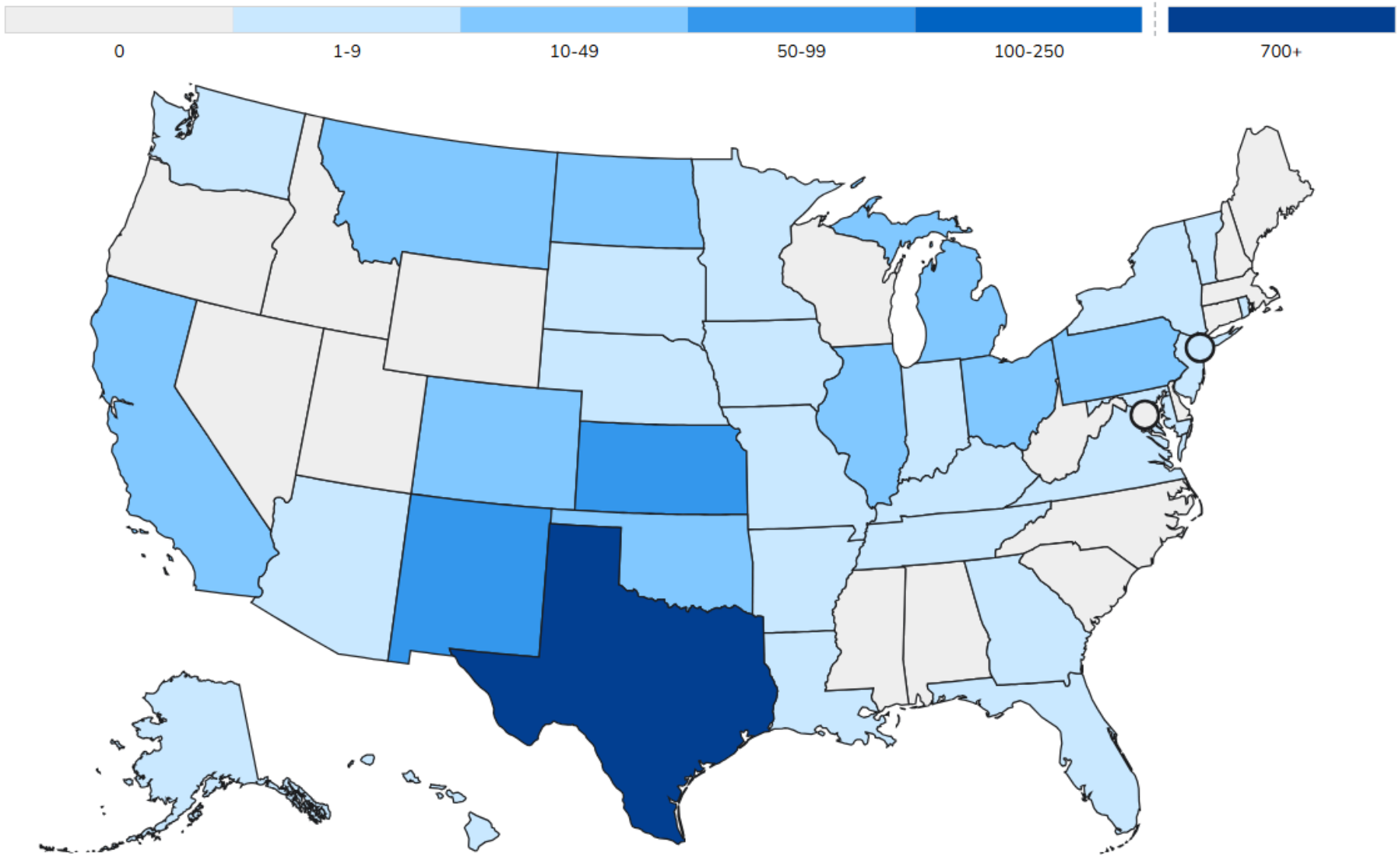
Deputy Lead Measles Laboratory Taskforce
National Center for Immunization and Respiratory Diseases
US Centers for Disease Control and Prevention (CDC)

Last Updated June 13, 2025

Situational Update – updated weekly

Update weekly: https://www.cdc.gov/measles/data-research/index.html

As of June 12, 1,197 confirmed measles cases have been reported by 35 jurisdictions in 2025



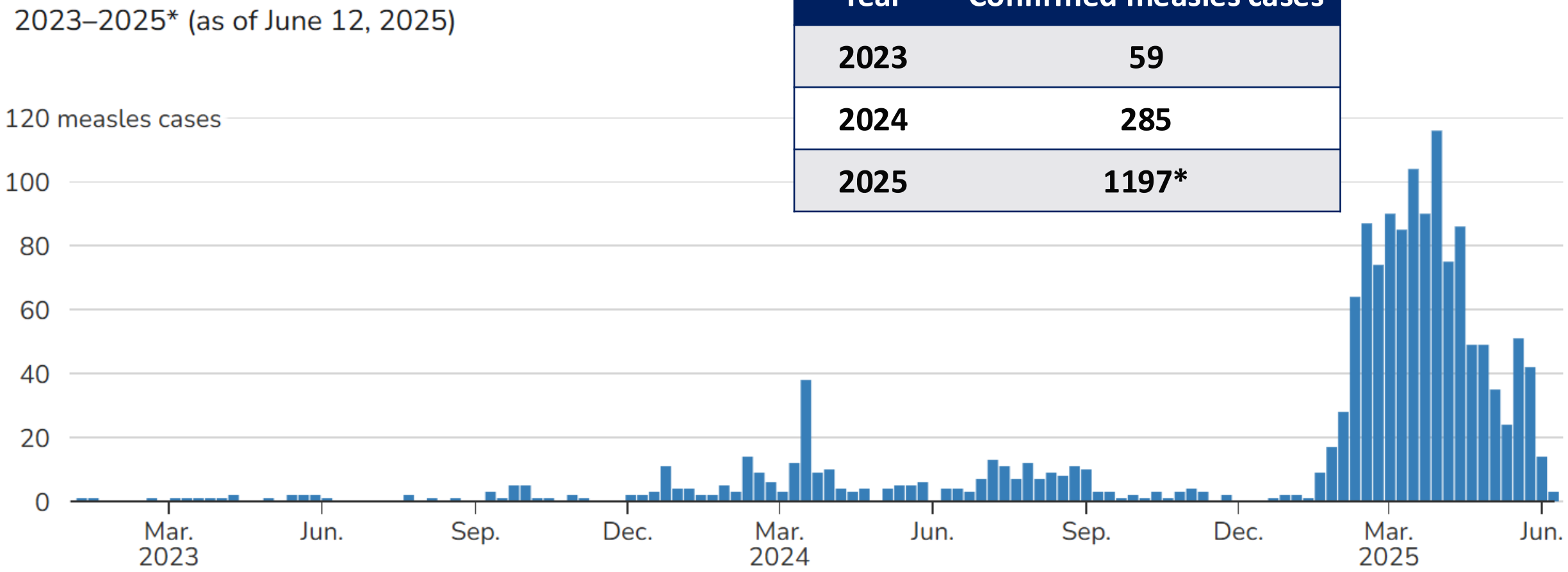
Epidemiology of U.S. measles cases in 2025 (n=1197)

(As of June 12, 2025)

- **Age**
  - Under 5 years: 347 (29%)
  - 5-19 years: 446 (37%)
  - 20+ years: 393 (33%)
  - Age unknown: 11 (1%)
- **Vaccination Status:**
  - Unvaccinated or Unknown: 95%
  - One MMR dose: 2%
  - Two MMR doses: 3%
- **Hospitalizations**
  - 12% of cases (144 of 1197) for management of measles complications
    - Deaths – 2 in Texas and 1 in New Mexico

Weekly measles cases by rash onset, 2023–2025

Year	Confirmed measles cases
2023	59
2024	285
2025	1197*

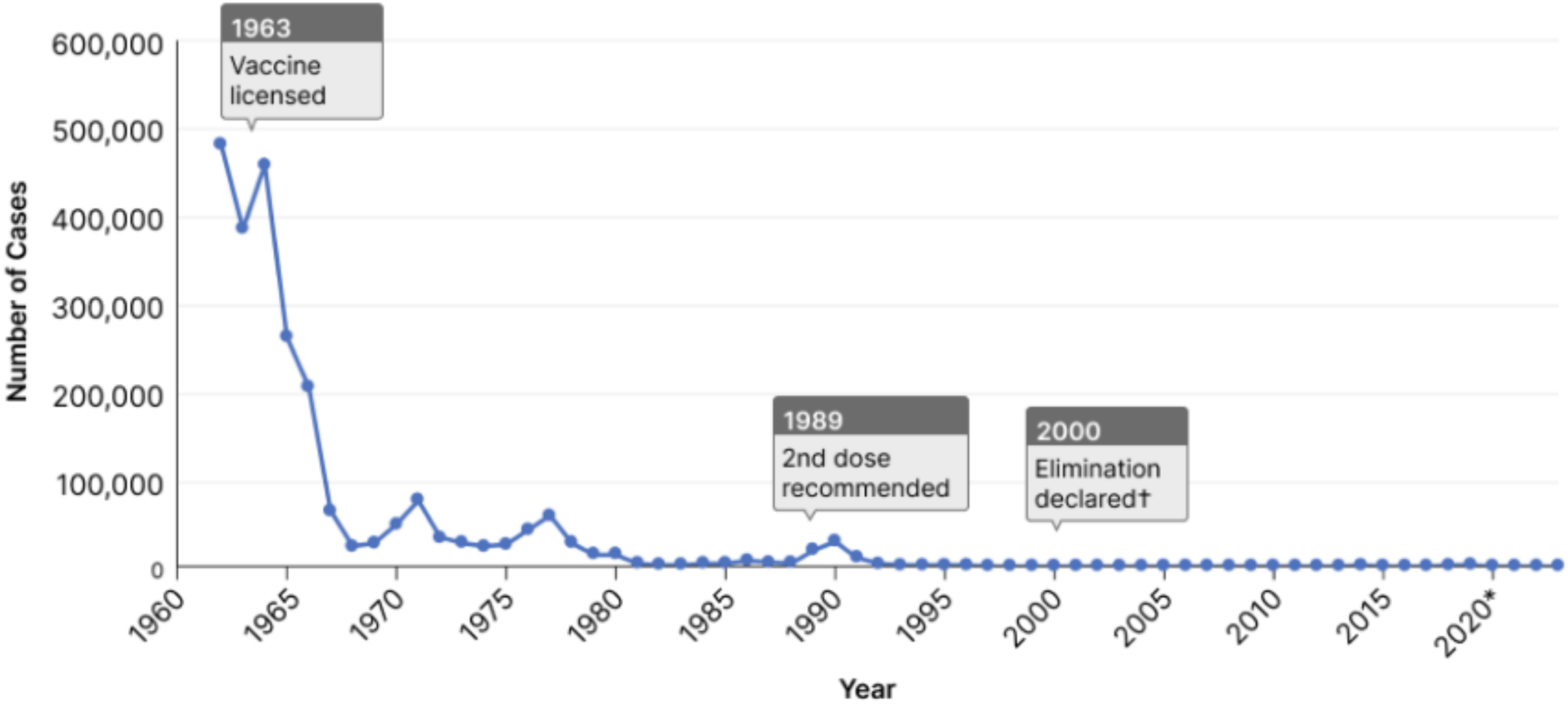


*2023–2025 case counts are preliminary and subject to change.

Measles Cases and Outbreaks | Measles (Rubeola) | CDC

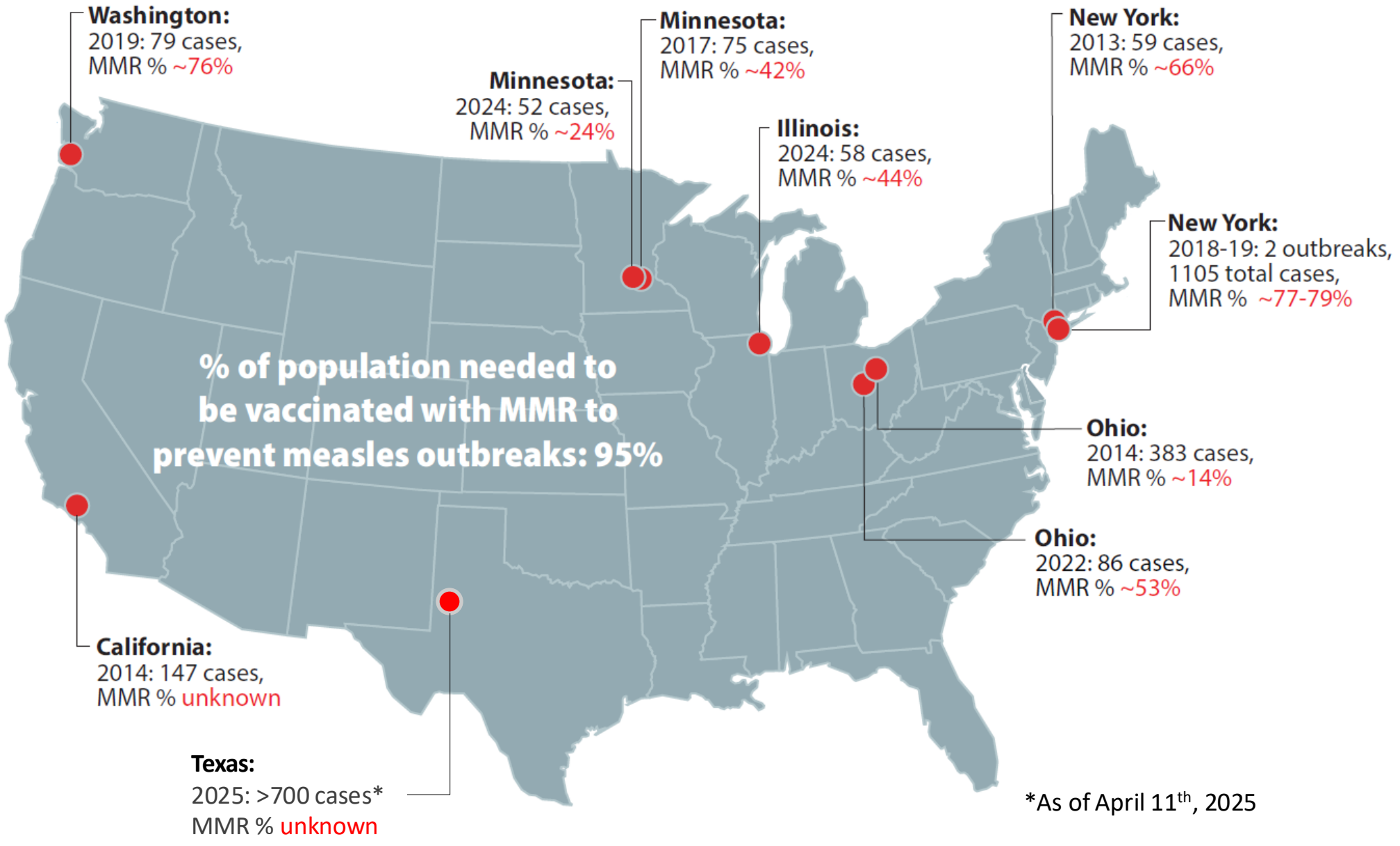
Epidemiology

History of measles cases in the U.S., 1962–2023



†Measles was declared eliminated in the U.S. in 2000 by WHO/PAHO. Elimination is defined as the absence of endemic measles transmission in a region for ≥ 12 months in the presence of a well-performing surveillance system

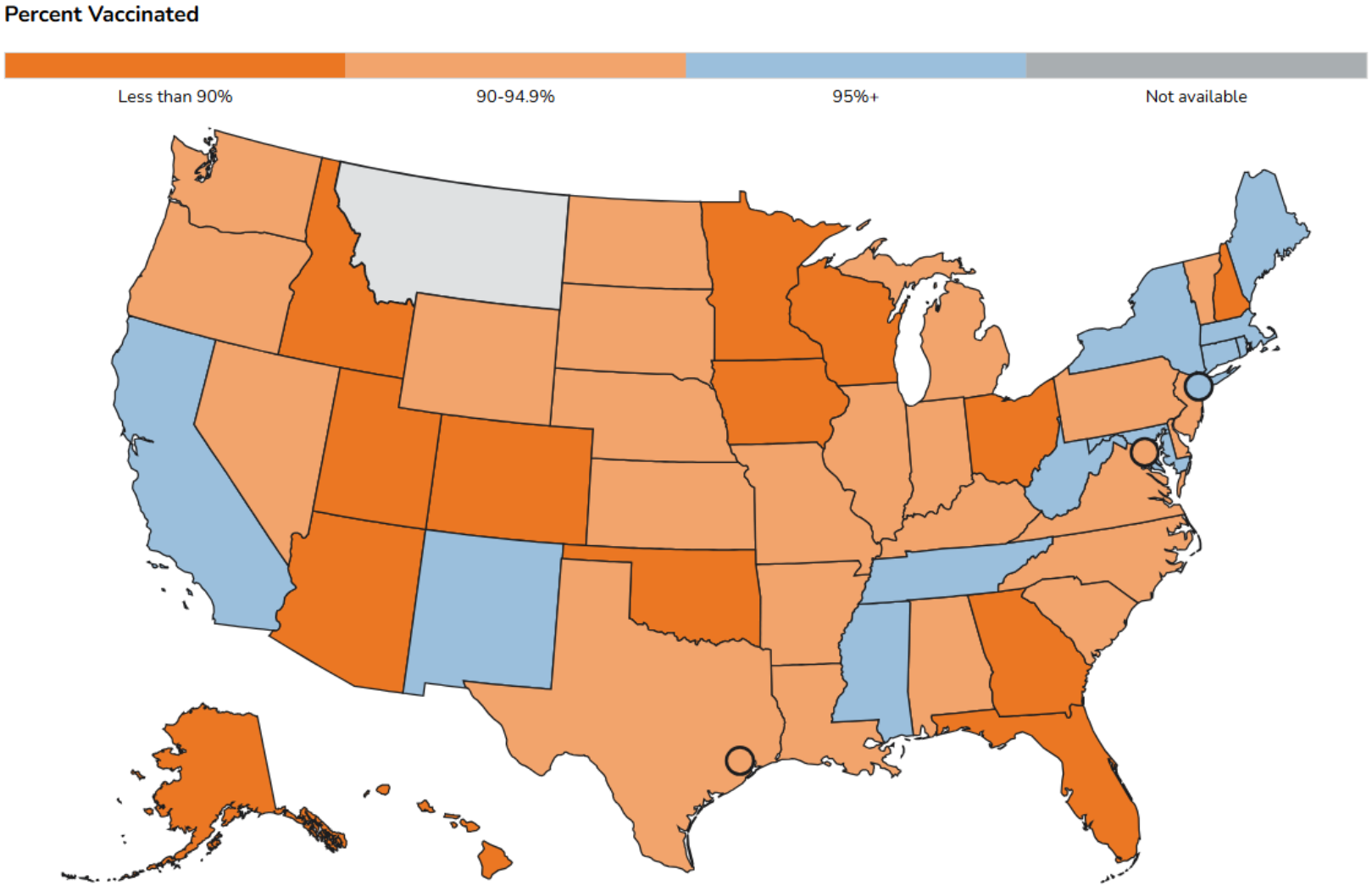
Measles outbreaks with 50+ cases and MMR vaccine coverage among affected populations – U.S. 2001–2025



*As of April 11th, 2025

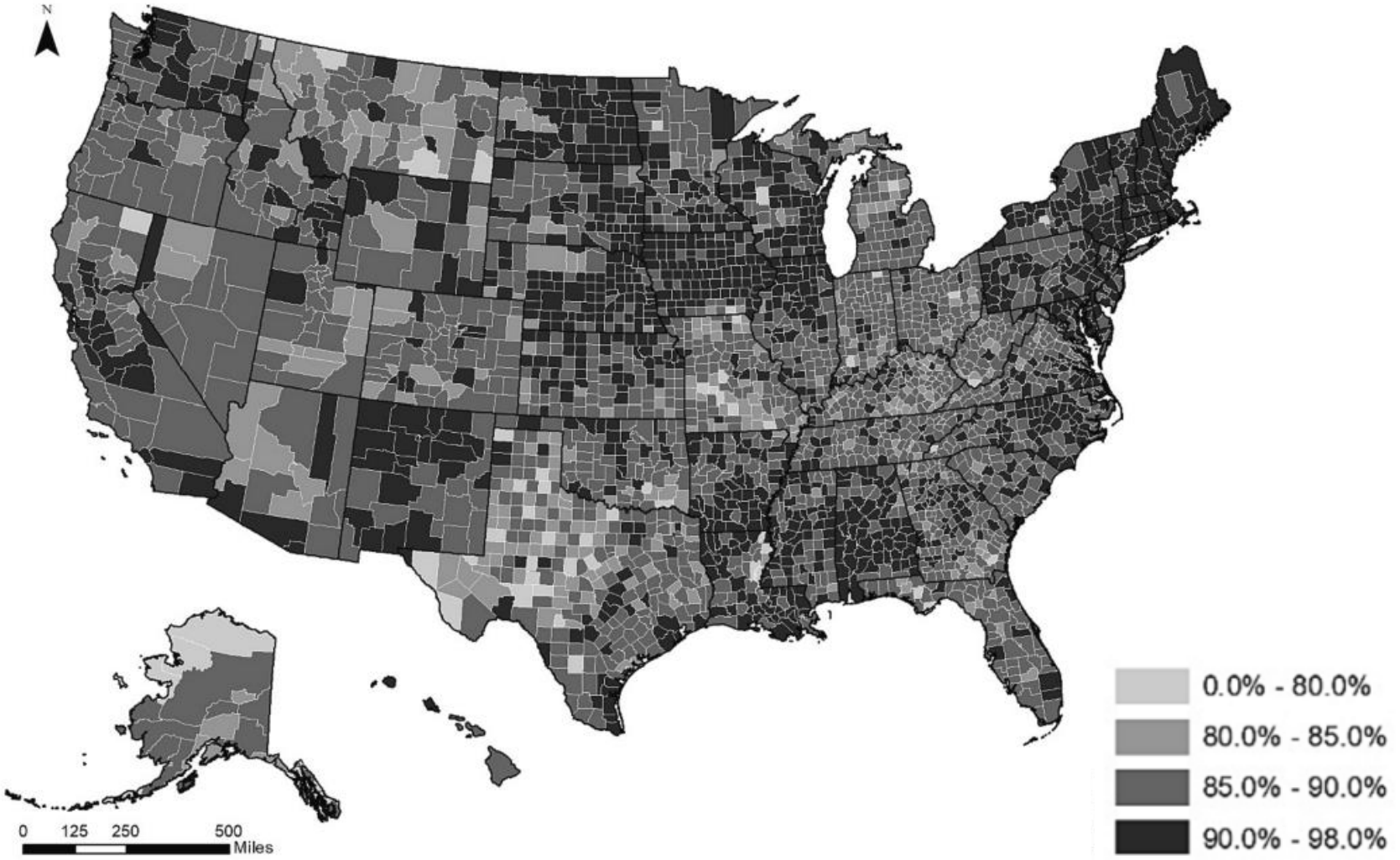
National and State Level 2-dose MMR Coverage among Kindergartners: 2023–2024

	MMR (2 doses)
2019-20	95.2%
2020-21	93.9%
2021-22	93.0%
2022-23	93.1%
2023-24	92.7%



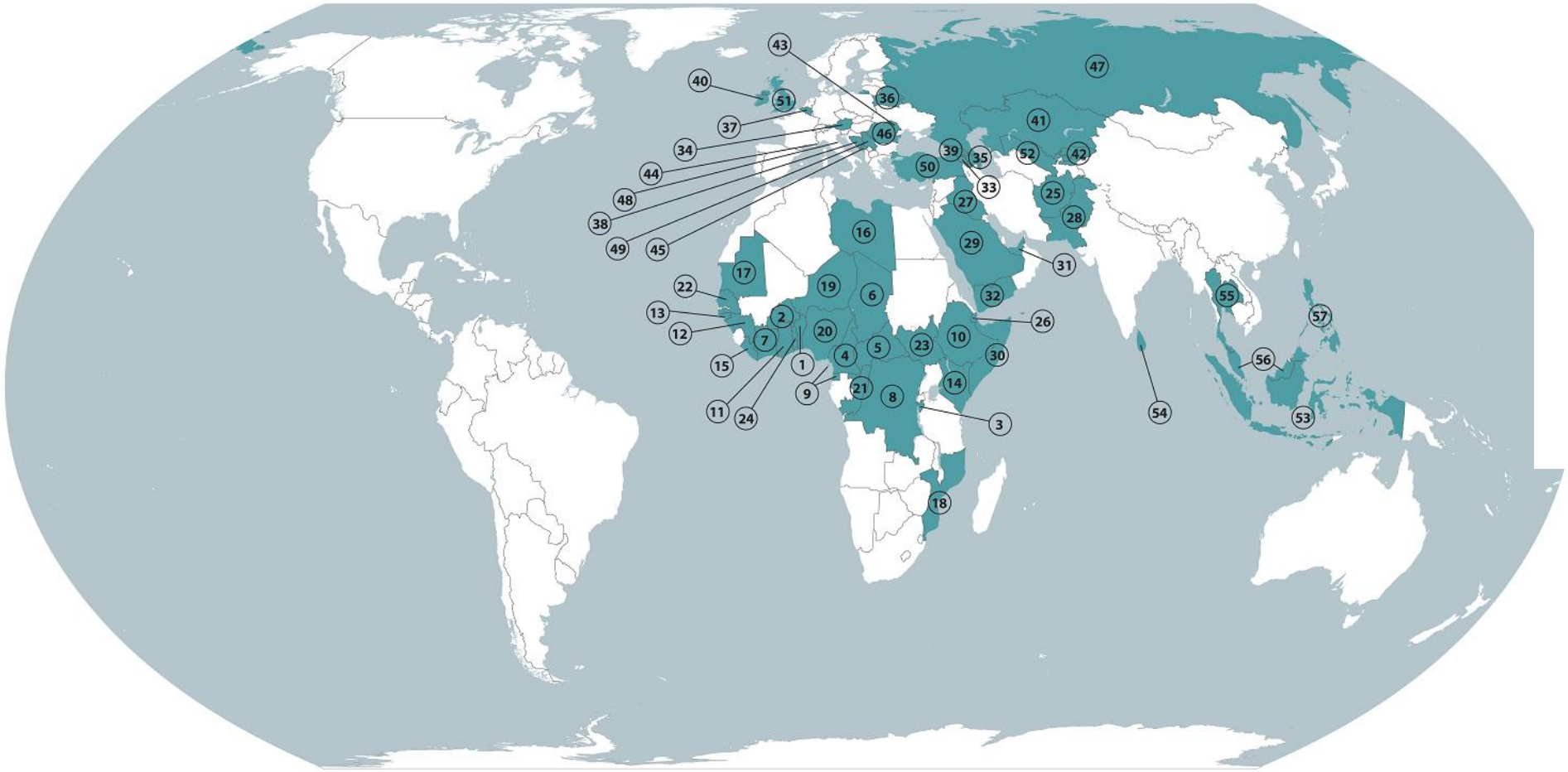
Seither R, Yusuf OB, Dramann D, et al. Coverage with Selected Vaccines and Exemption Rates Among Children in Kindergarten — United States, 2023–24 School Year. MMWR Morb Mortal Wkly Rep 2024;73:925–932. DOI: http://dx.doi.org/10.15585/mmwr.mm7341a3.

County-level coverage with ≥ 1 dose of MMR vaccine



Seeskin, ZH et al. Estimating county-level vaccination coverage using small area estimation with the National Immunization Survey-Child, Vaccine, Vol 42, Issue 3,2024, Pages 418-425.

Countries in the World with Reported Current Measles Outbreaks



Measles THN

AFRICA

1. Benin
2. Burkina Faso
3. Burundi
4. Cameroon
5. Central African Republic
6. Chad
7. Cote d'Ivoire
8. Dem. Rep. of the Congo
9. Equatorial Guinea
10. Ethiopia
11. Ghana
12. Guinea
13. Guinea-Bissau
14. Kenya
15. Liberia
16. Libya
17. Mauritania
18. Mozambique
19. Niger
20. Nigeria
21. Rep. of the Congo
22. Senegal
23. South Sudan
24. Togo

EASTERN MEDITERRANEAN

25. Afghanistan
26. Djibouti
27. Iraq
28. Pakistan
29. Saudi Arabia
30. Somalia
31. United Arab Emirates
32. Yemen

EUROPE

33. Armenia
34. Austria
35. Azerbaijan
36. Belarus
37. Belgium
38. Bosnia and Herzegovina
39. Georgia
40. Ireland
41. Kazakhstan
42. Kyrgyzstan
43. Moldova
44. Monaco
45. Montenegro
46. Romania
47. Russia
48. San Marino
49. Serbia
50. Türkiye (Turkey)
51. United Kingdom
52. Uzbekistan

SOUTH-EAST ASIA

53. Indonesia
54. Sri Lanka
55. Thailand

WESTERN PACIFIC

56. Malaysia
57. Philippines

Measles Travel Health Notice

Names and boundary representation are not necessarily authoritative.

[Measles in Globe - Level 1 - Practice Usual Precautions - Travel Health Notices | Travelers' Health | CDC]

Measles risk in the U.S.

- The risk for widespread measles in the United States remains low due to robust U.S. immunization and surveillance programs and outbreak response capacity supported by federal, state, tribal, local, and territorial health partners.
- Measles-mumps-rubella (MMR) vaccination remains the most important tool for preventing measles.

Expanding Measles Outbreak in the United States and Guidance for the Upcoming Travel Season: https://www.cdc.gov/han/php/notices/han00522.html

Reporting measles cases

- **State and local health departments have the lead** in investigating measles cases and outbreaks.
- Measles is a **nationally notifiable** disease.

Report measles immediately (within 24 hours)

1. **Directly to CDC (measlesreport@cdc.gov) and**
2. **Through the National Notifiable Disease Surveillance System (NNDSS).**

For Public Health Professionals: https://www.cdc.gov/measles/php/guidance/index.html

Measles Testing

Measles testing with RT-PCR is preferred.

Acute Disease

	Measles Tests	When to Collect?
PCR	**Nasopharyngeal (NP) or Throat (OP) Swab** 	As soon as possible upon suspicion of measles: ideally **0-3 days** after rash onset, up to **10 days** after rash onset.
PCR	**Urine** 	**Within 10 days** of rash onset **Collecting a urine specimen along with an NP/OP swab may improve test sensitivity, especially if at the end of the PCR detection window.*
IgM	**Serum**	Collect with specimen for PCR. Can be negative up to 3 days after rash onset. IgM **can be detected for 6–8 weeks** after acute measles.

Measles IgM antibody testing has limitations and should be used with RT-PCR.

	Measles Tests		When to Collect?
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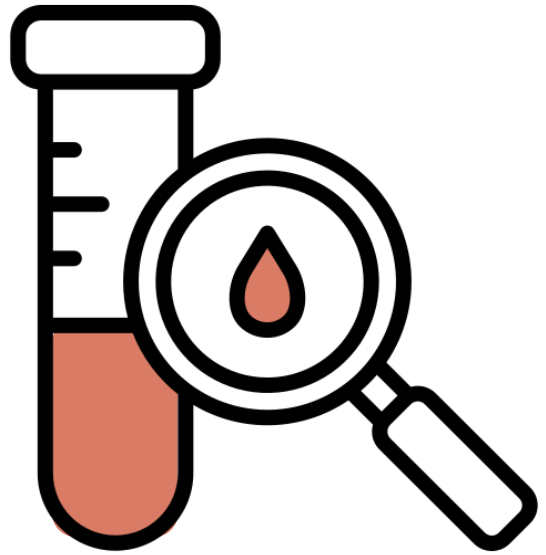
	IgM	**Serum** 	Collect with specimen for PCR. Can be negative up to 3 days after rash onset. IgM **can be detected for 6–8 weeks** after acute measles.

IgM testing alone can pose challenges in settings with low measles incidence.

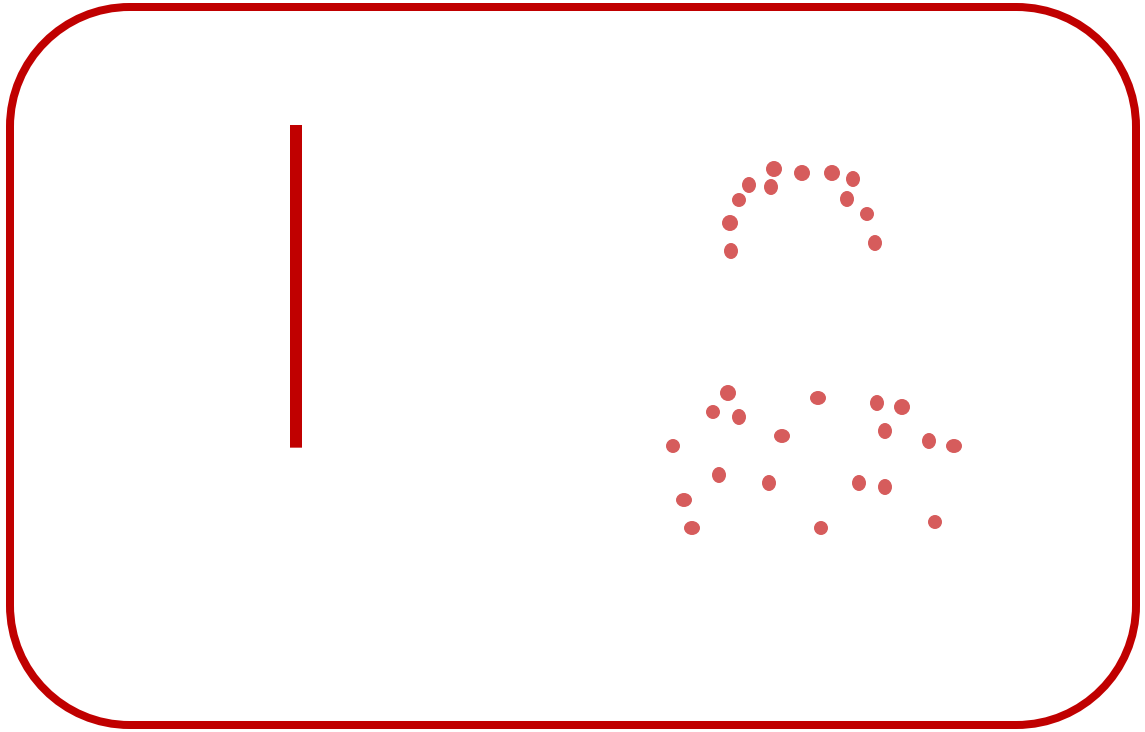
- **Cross-reactivity with other causes of febrile rash illness has been documented***
- **False positive results are more common when the likelihood of measles is low:**
    - **There isn't local active transmission and patients have not traveled†**
    - **Patients without known exposure have been fully vaccinated**



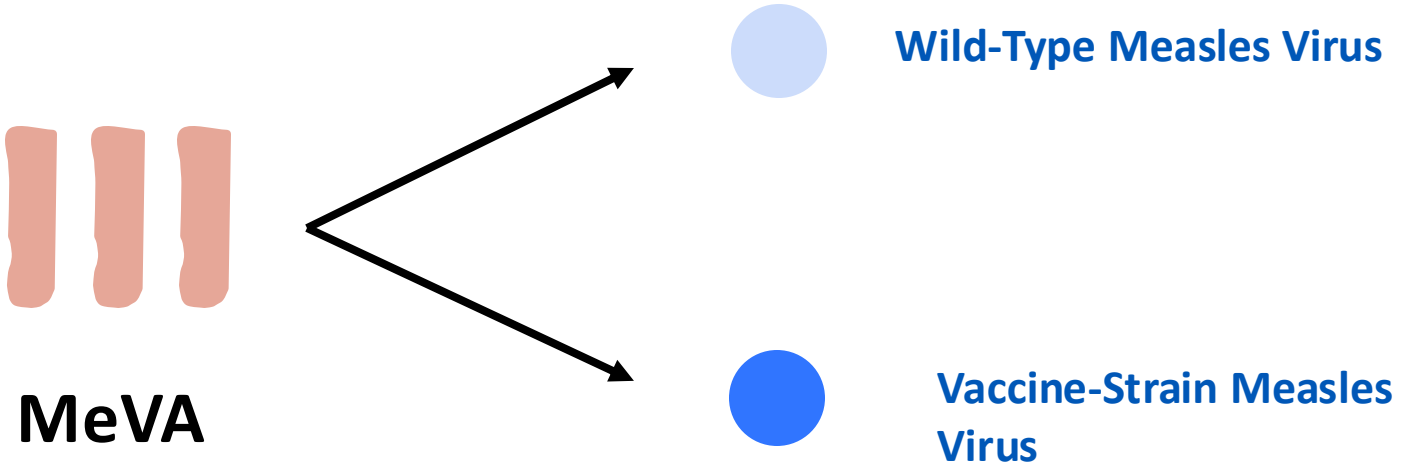
*Jenkerson SA et al. *N Engl J Med*. 1995;332(16):1103-1104.
† Ciccone FH et al. *Rev Soc Bras Med Trop*. 2010;43(3):234-239.
Hiebert J et al. *J Clin Microbiol*. 2021;59(6):e03161-20.

After MMR vaccination, some people develop fever and rash that appears similar to a measles infection.

~1–5% of persons

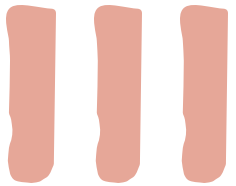


Measles Vaccine Assay (MeVA) detects vaccine-strain measles virus and can distinguish between detection of vaccine strain vs wild-type virus



MeVA testing should be performed when there is epidemiologic risk of measles infection in a recent vaccine recipient.

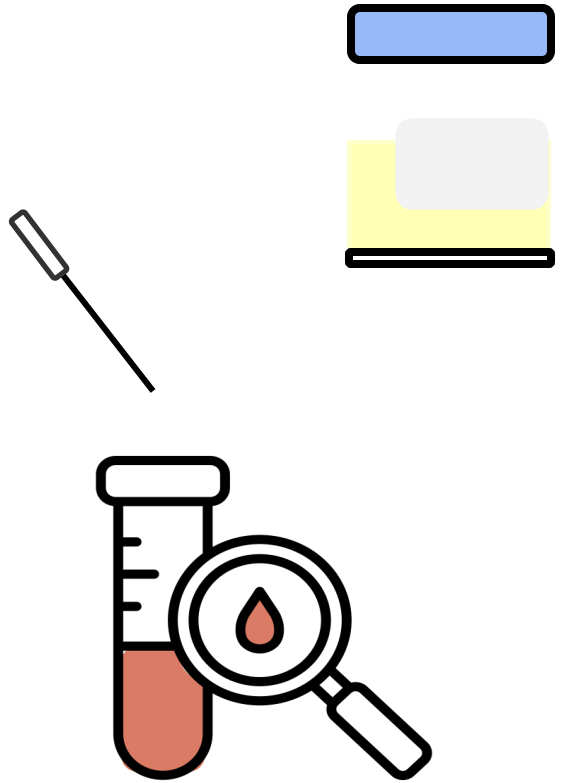
- Testing a person with mild fever and rash after recent vaccination is not necessary if there is no epidemiologic risk of measles
- If there is epidemiologic risk (international travel, local outbreak, known exposure), MeVA should be performed after standard RT-PCR



MeVA

Measles Testing Summary

- Collect NP, OP and/or urine specimen for **measles RT-PCR testing**.
- Serology (IgM) should not be used alone but can be used **with RT-PCR**.
- Measles IgG antibodies show immunity to measles, either from prior infection or vaccination.



Ensure all Healthcare Personnel (HCP) have Presumptive Evidence of Immunity to Measles

Presumptive evidence of immunity to measles for HCP includes:

Documentation of vaccination with 2 doses of live measles virus-containing vaccine

Laboratory evidence of immunity

Laboratory confirmation of disease

Born before 1957*

Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps, 2013

[redacted]vaccinated personnel born before 1957 who lack laboratory evidence of measles immunity or laboratory confirmation of disease, consider [redacted]ing personnel with 2 doses of MMR vaccine at the appropriate interval. During a measles outbreak, 2 doses of MMR are recommended for all [redacted]gardless of birth year

Measles Laboratory Specific Questions

- **Contact: CDCMeaslesLab@cdc.gov**

Thank you

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

Brucella Updates: Delisting, Case Definition, Exposure Monitoring and Sequencing

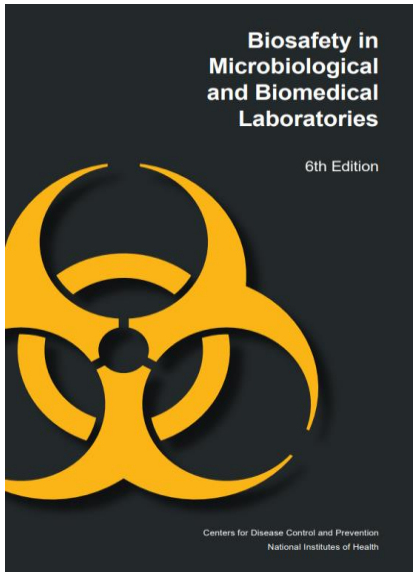
LOCS

Rebekah Tiller and Zachary Weiner

CDC Division of High-Consequence Pathogens and Pathology

June 16, 2025

Delisting from Select Agent Registry



- *Brucella* is still a Risk Group 3 pathogen and should be handled and maintained as such (i.e. in BSL3)
- *Brucella* isolates should still be shipped Category A
- Update laboratory protocols to reflect regulatory changes
- Maintain inactivation protocols and validations to move DNA or other derivatives out of the BSL3.

Changes to the Select Agent and Toxin List – Publication of HHS/USDA Final Rules

Print

On December 17, 2024, the U.S. Departments of Health and Human Services (HHS) and Agriculture (USDA) published parallel Final Rules in the Federal Register which set forth changes to the select agent and toxin list, including the removal of five agents from the list. These changes will take effect on January 16, 2025.

Highlights of the Changes

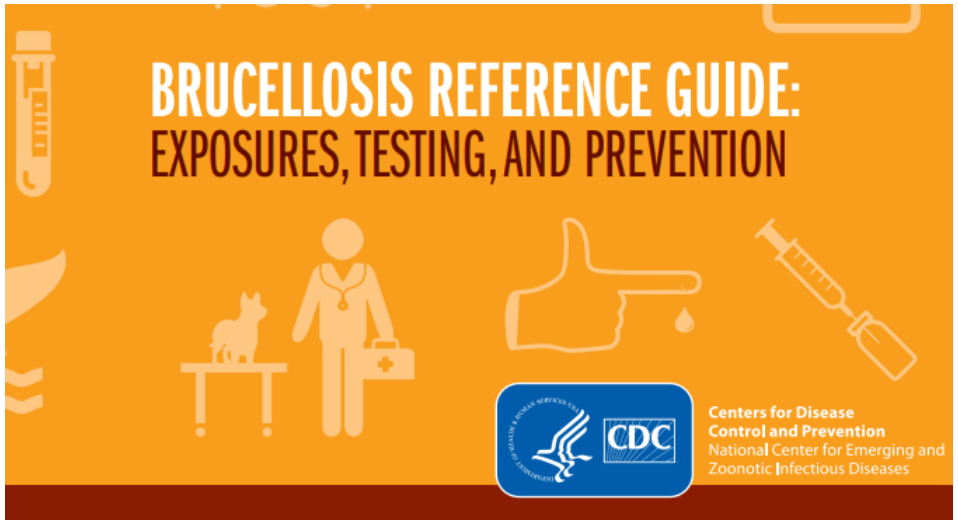
Key changes as set forth in the Final Rules are as follows:

- **Five select agents, including three of the *Brucella* species, are being removed from the list of regulated select agents and toxins**
  - USDA and HHS are removing three biological agents from the list of Overlap Select Agents and Toxins – *Brucella abortus, Brucella melitensis,* and *Brucella suis*

Changes to the Select Agent and Toxin List – Publication of HHS/USDA Final Rules | Regulations | Federal Select Agent Program
Biosafety in Microbiological and Biomedical Laboratories (BMBL) 6th Edition | CDC Laboratories

Occupational and Lab Exposures

- Still important to recognize potential exposures in the laboratory so that appropriate next steps can be taken.
- The laboratory should conduct a risk assessment after a potential exposure.
- CDC has a Brucellosis Reference Guide (publicly available online)
- Depending on the exposure scenario, symptom watch, serological monitoring or PEP may be recommended.
- If serological monitoring is performed, agglutination testing is preferred (over ELISA) as it's easier to compare results over time with the semi-quantitative assay.
- Sera is drawn at 0 (baseline), 6-, 12-, 18- and 24-weeks post-exposure.
- No serology testing available for *B. canis* or RB51 exposures .
- CDC's BSPB is available to consult on specific exposure situations as needed. BSPB@cdc.gov



Brucellosis Reference Guide: Exposures, Testing and Prevention

Updated CSTE Brucellosis Case Definition

CSTE PD: 09-ID-14

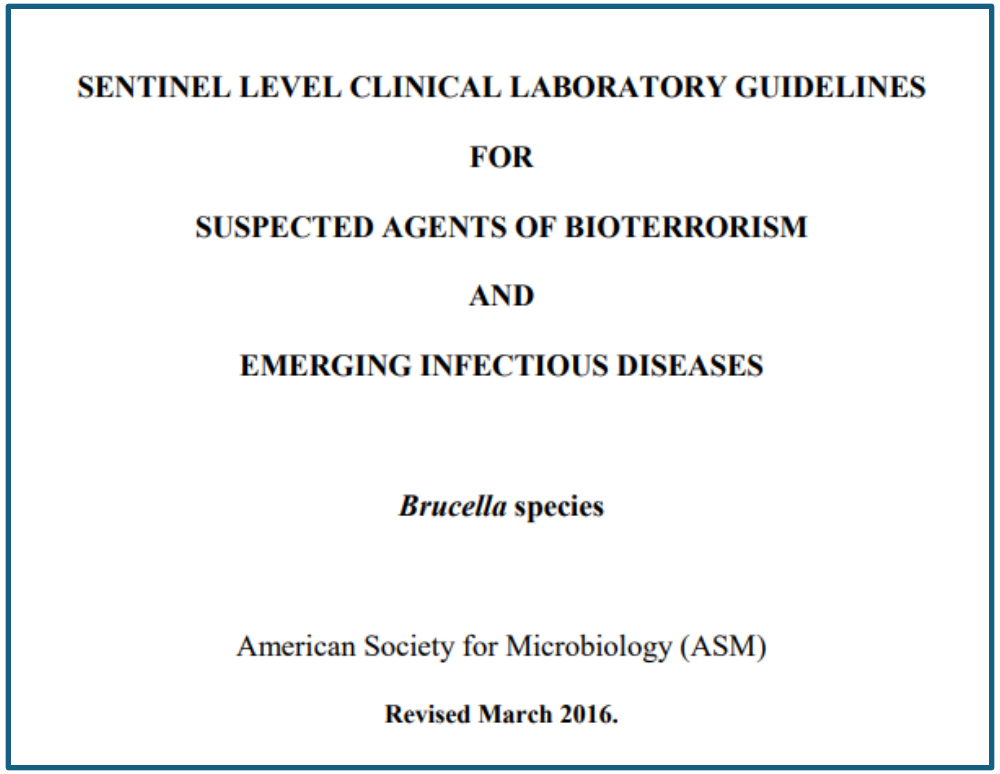
- Defines BBS and nBBS
- Removes direct detection (PCR) of *Brucella* DNA in clinical specimens as laboratory criteria
- Adds detection of IgG antibodies by ELISA as supportive laboratory evidence

Brucellosis (Brucella spp.) 2025 Case Definition | CDC

Sentinel Level Clinical Laboratory Guidelines

- In collaboration with ASM and APHL
- Updated to align with current taxonomy
- Removed language and guidance applicable to select agents
- Updated general testing workflow and language

Laboratory Response Network (LRN) Sentinel Level Clinical Laboratory Protocols



SENTINEL LEVEL CLINICAL LABORATORY GUIDELINES

FOR

SUSPECTED AGENTS OF BIOTERRORISM

AND

EMERGING INFECTIOUS DISEASES

Brucella species

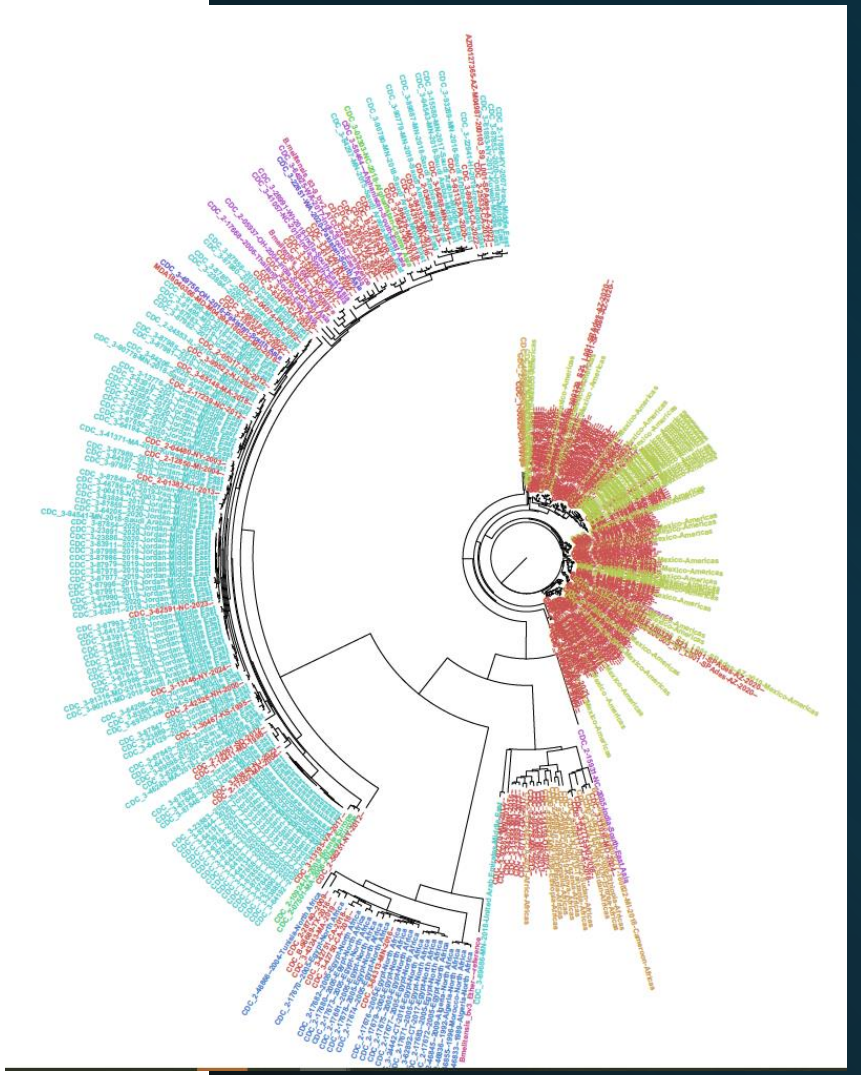
American Society for Microbiology (ASM)

Revised March 2016.

LRN Sentinel Level Clinical Laboratory Protocols

Sequencing and Surveillance of *Brucella* in the US

- Isolate submissions are welcome- before or after confirmation
- Completely voluntary- time and cost permitting- can also submit in batches
- Test order code: CDC-10209 *Brucella* species Study
- Submit samples de-identified
- Sequencing results have been used in many recent cluster investigations
- Gives greater overall picture of geographic origins and high-risk areas
- Pathogen discovery and new environmental/animal reserviors



Contacts Us With Questions

- Bacterial Special Pathogens Branch, BSPB@cdc.gov
- Zoonoses and Select Agent Laboratory, ZSAL@cdc.gov
- Rebekah Tiller, eto3@cdc.gov
- Elke Saile, csx2@cdc.gov
- Zachary Weiner, xxd7@cdc.gov

Next Scheduled Call

Monday, July 21
3 PM - 4 PM ET

https://www.cdc.gov/locs/php/calls/index.html

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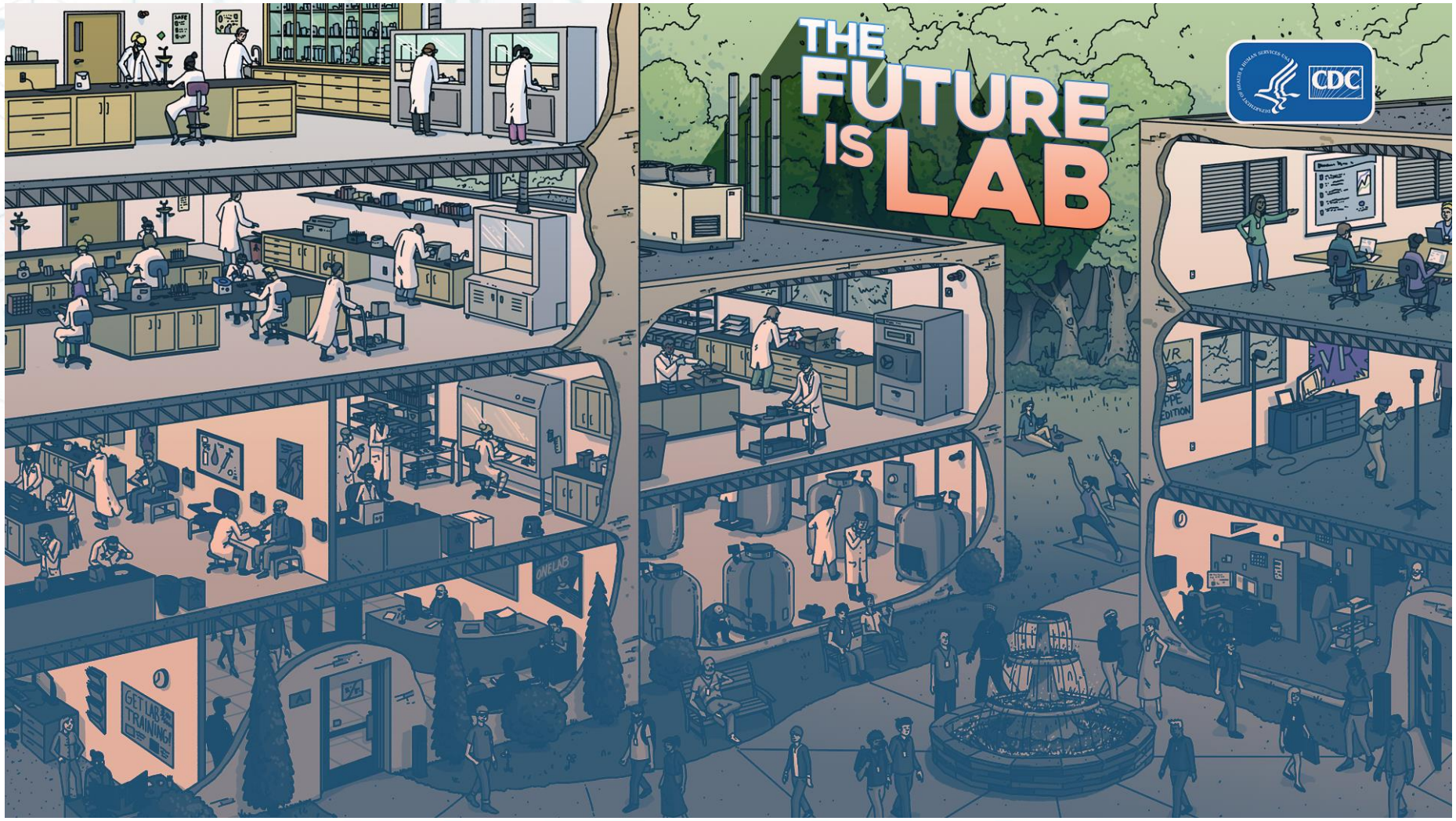
https://www.linkedin.com/company/cdc

Thank You For Your Time!



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