

Wisconsin HAI Education Series

September 24, 2026



WISCONSIN DEPARTMENT
of HEALTH SERVICES



WISCONSIN DEPARTMENT
of HEALTH SERVICES

Measles Readiness

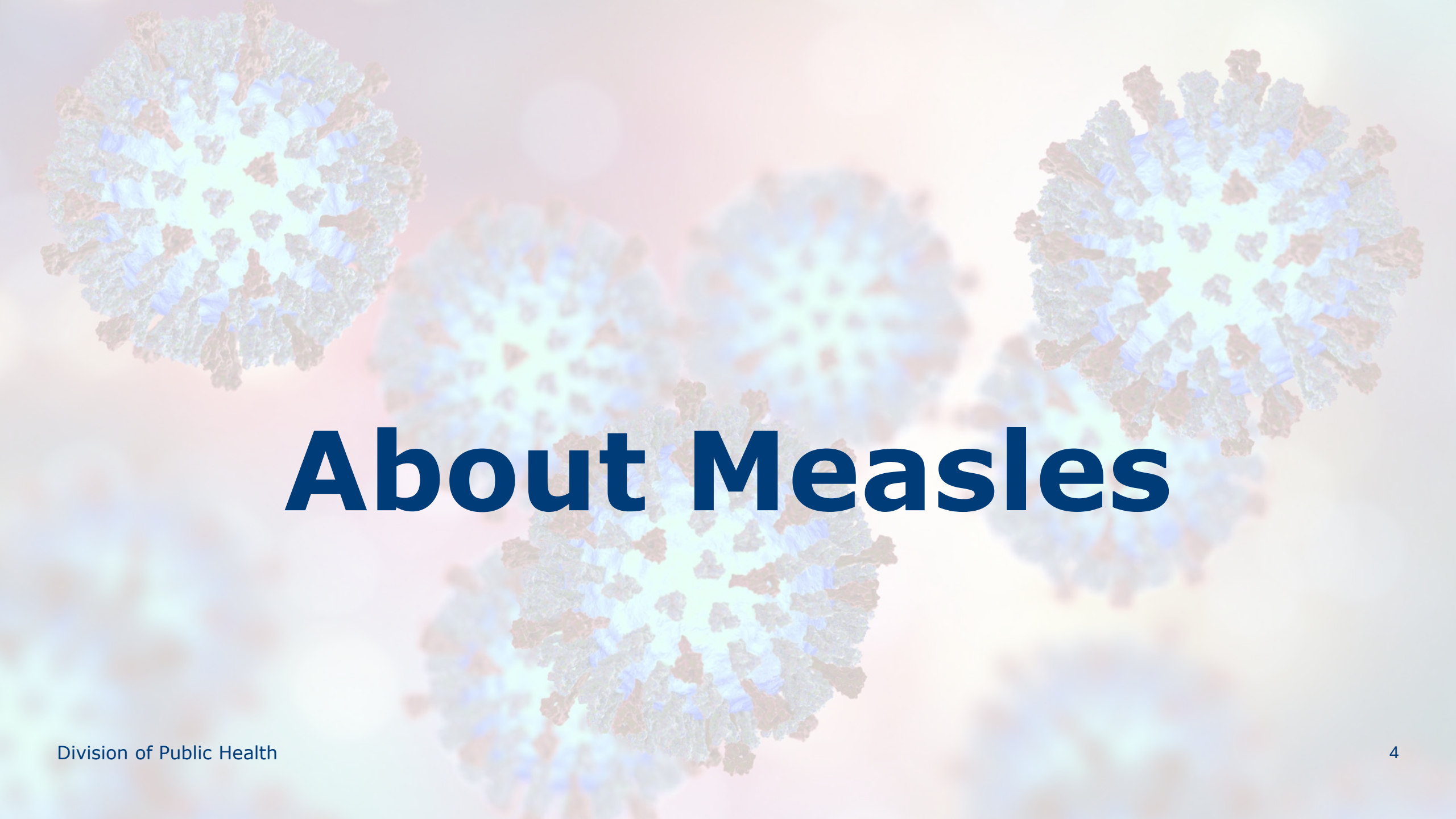
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Wisconsin Immunization Program

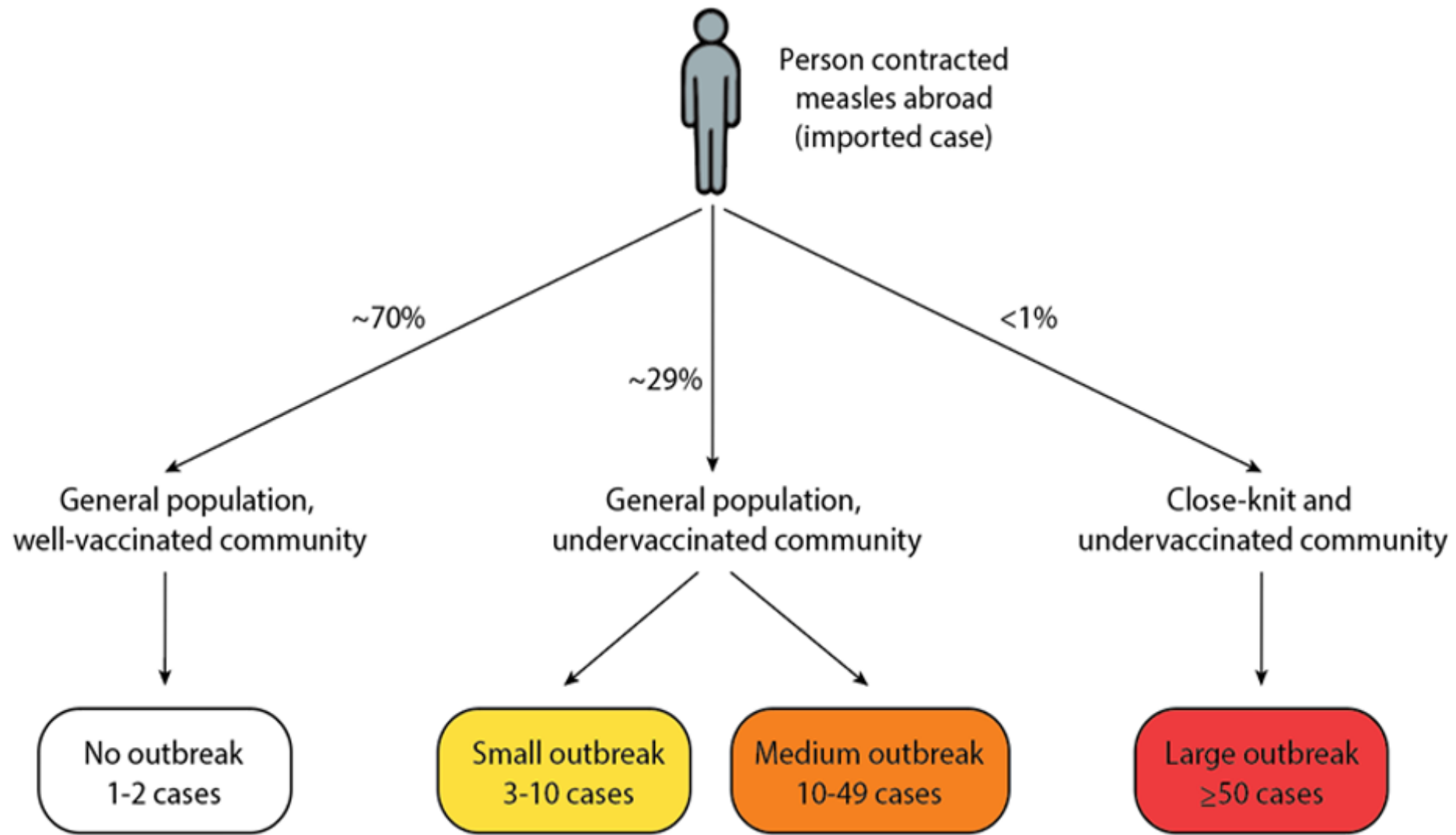
Agenda

- Review current epidemiology of measles
- Recognize measles disease
- Understand measles testing in Wisconsin
- Review lessons learned and next steps

The background of the slide features several 3D renderings of measles virus particles. These particles are spherical, with a prominent outer layer of red, spike-like glycoproteins. The interior of the virus is depicted with a blue and white geometric pattern, representing the internal structure of the nucleocapsid. The particles are arranged in a cluster, with some in sharp focus and others blurred in the background, creating a sense of depth. The overall color palette is soft, with pastel shades of pink, blue, and white.

About Measles

**Measles is a
vaccine preventable
disease.**



Measles Disease Timeline

Measles Timeline

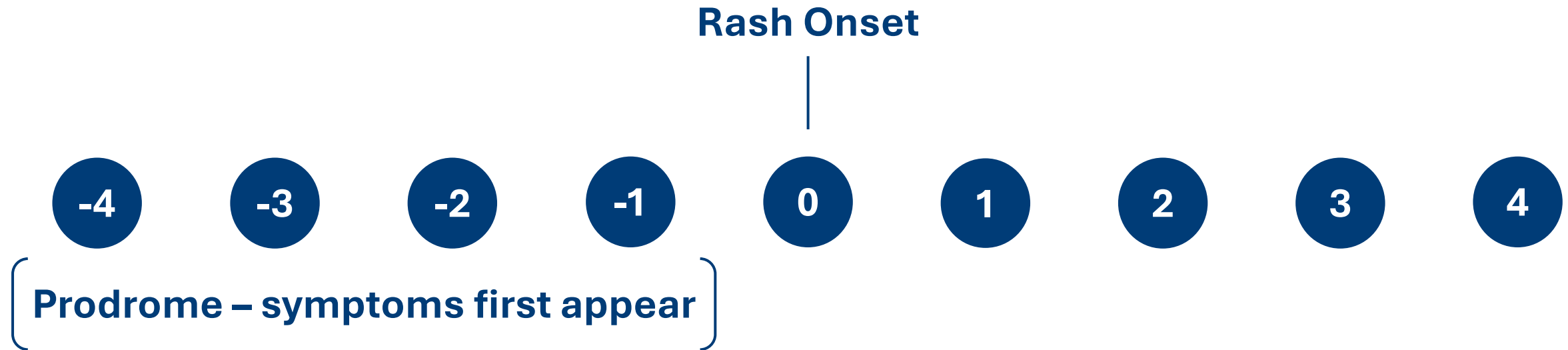


Measles Rash

- Fever peaks at time of rash onset
- Begins on head and spreads downward
- Rash resolves in order it appeared



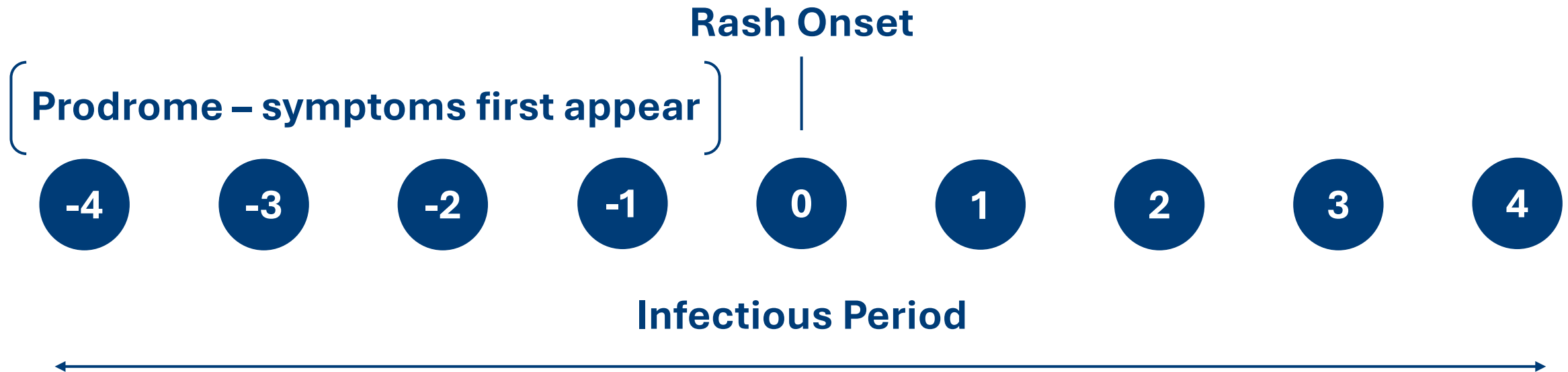
Measles Timeline



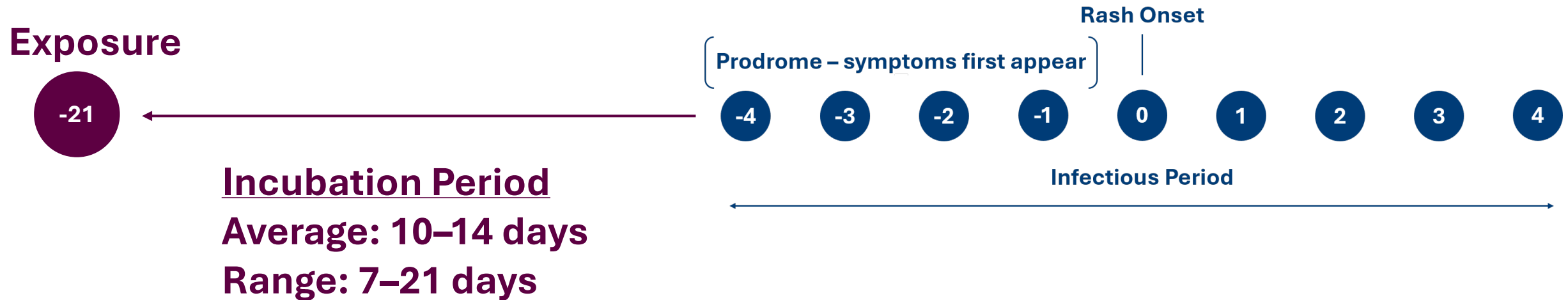
Measles Prodrome

- 2–4 days before rash onset
- Fever: which increases in a stepwise fashion
- 3 C's: cough, coryza and conjunctivitis appear
- Koplik spots: resemble “grains of salt on a red background”

Measles Timeline



Measles Timeline



Measles Epidemiology

Other Surveillance Tools

EpiX

A system that provides rapid reporting, notification, and coordination for public health.

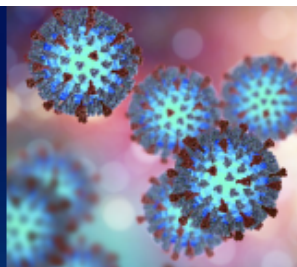
Wastewater Monitoring

A program that tests untreated wastewater in communities across the state to track levels of certain viruses that cause illnesses, such as measles.

The background of the slide features several large, semi-transparent, 3D-rendered images of measles virus particles. These particles are spherical with a distinct outer shell covered in red, spike-like glycoproteins. The interior of the particles shows a blue, helical structure representing the viral RNA. The particles are arranged in a cluster, with some in sharp focus and others blurred in the background.

When to Suspect Measles

When to Suspect and Test for Measles



Measles risk criteria

Clinically compatible illness

All the following are met:

- Fever
- Maculopapular rash
- At least one of the following:
 - Cough
 - Coryza
 - Conjunctivitis

Susceptibility

Any of the following are met:

- No history of vaccination
- No documentation of previous infection or immunity (IgG)

Exposure

Any of the following are met:

- Contact with a measles case within 21 days
- Travel within 21 days

Criteria	Risk	Recommendations
Meets all criteria: • Clinically compatible • Susceptible • Exposure	High	Act immediately: isolate, test, and report
Clinically compatible and one other criteria: • Susceptible • Exposure	Moderate	If there is not a more likely diagnosis: isolate, test, and report
Meets one or no criteria: • Clinically compatible • Susceptible • Exposure	Low	Testing not recommended, consider alternative diagnosis or discuss testing options with public health

Additional considerations

- Testing during the prodromal phase, prior to rash onset is not recommended.
- If an individual received a measles-containing vaccine within 3 months and now has a fever and rash but no risk factors, measles is unlikely and testing is not recommended.
- For immunity testing only, the specimen should be sent to a commercial laboratory.

If measles risk is high or moderate: isolate, test, and report

Isolate Take airborne precautions in the clinic and notify your infection preventionist. The patient should isolate at home until measles is ruled out or through 4 days after rash onset.

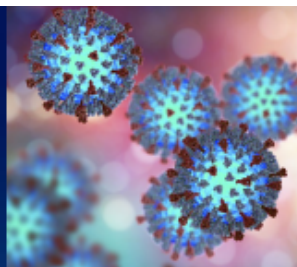
Test Obtain both a nasopharyngeal and/or throat swab and a serum sample. All testing for suspect measles cases should be sent to the Wisconsin State Laboratory of Hygiene (WSLH).

For testing information and specimen collection instruction, search the [WSLH clinical testing services](#).

- **PCR testing (preferred):** NP and/or OP swabs should be collected within 3 days of rash onset but no later than 10 days after rash onset.
- **Serology IgM/IgG (recommended):** Collect serum specimens for IgM at least 72 hours after rash begins. IgG should be collected in conjunction with IgM.

Report Measles is a Category I Reportable Disease. Health care providers should immediately report by telephone the identification of a suspect case to the [local health department](#) in which the patient resides. For after-hours, weekends, and holidays contact the DHS epidemiologist on call at 800-943-0003 option 4.

When to Suspect and Test for Measles



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Clinically Compatible Illness

All of the following are met:

- ☐ Fever
- ☐ Maculopapular rash
- ☐ At least one of the following: cough, coryza, or conjunctivitis

Susceptibility

Any of the following are met:

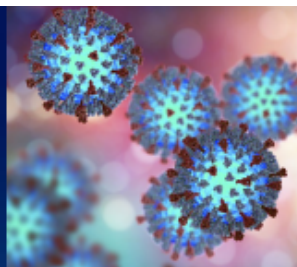
- ☐ No history of vaccination
- ☐ No documentation of previous infection or immunity (IgG)

Exposure

Any of the following are met within the last **21 days**:

- ☐ Contact with a measles case
- ☐ Travel

When to Suspect and Test for Measles



Measles risk criteria

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High Risk

Meets **all**:

- Clinically compatible
- Susceptible
- Exposure



Act immediately:

- Isolate
- Test
- Report

Moderate Risk

Clinically compatible and meets either:

- Susceptible
- Exposure



If there is not a more likely diagnosis:

- Isolate
- Test
- Report

Low Risk

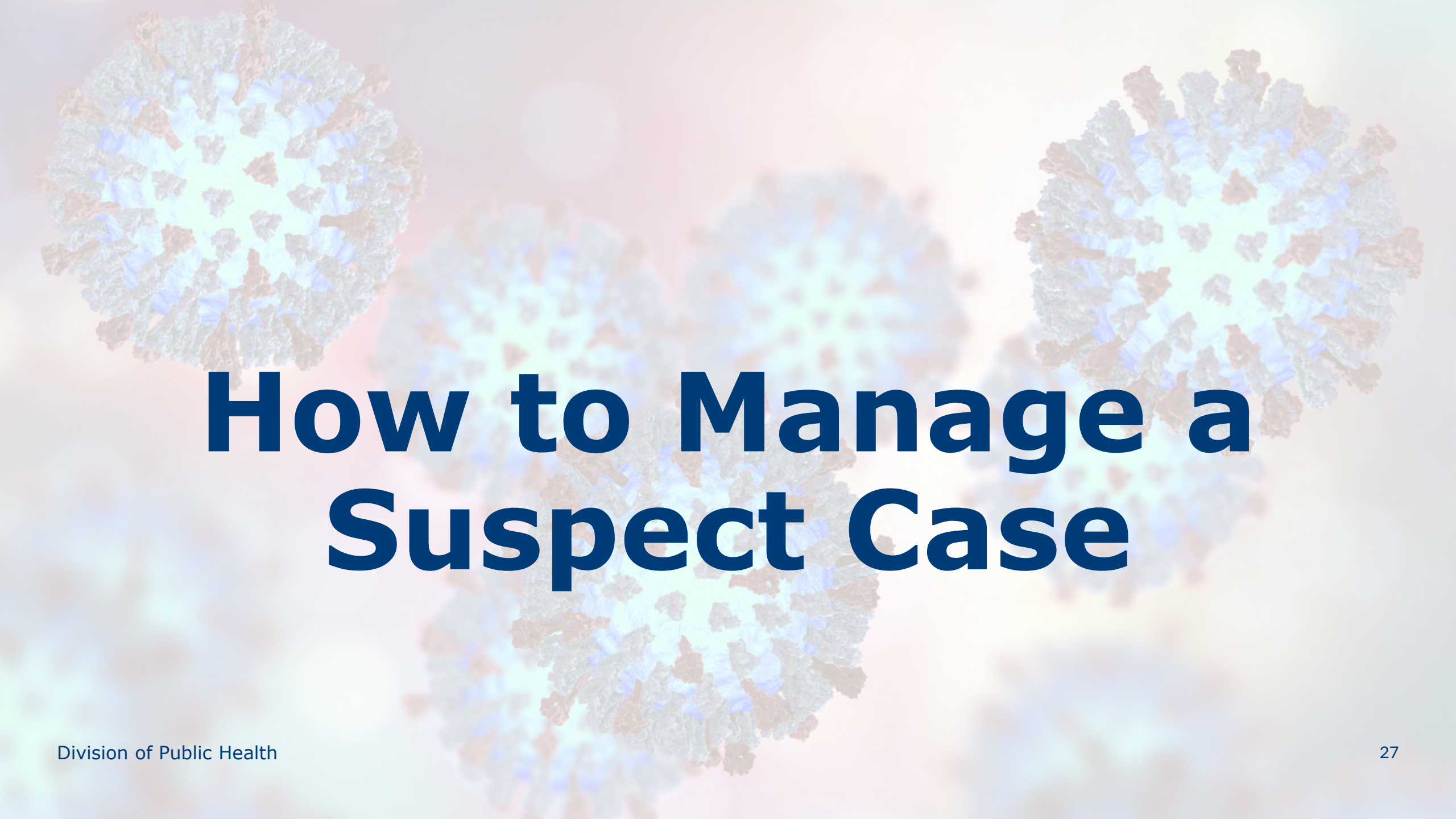
Meets one or none:

- Clinically compatible
- Susceptible
- Exposure



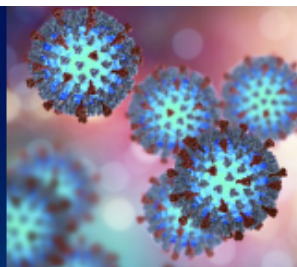
Testing usually not recommended

Case Study



How to Manage a Suspect Case

When to Suspect and Test for Measles



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Isolate

- Airborne plus standard precautions
- HCP with evidence of immunity
- Notify infection prevention

Infection Prevention at the Clinic

- Use a negative pressure airborne infection isolation room.
- All HCP should wear a N95 or higher respirator.
- Keep room vacant for required timeframe.

Test

Collect

- Nasopharyngeal (NP) and throat (OP) swab for PCR testing
- Serum for serology, IgM with IgG

Submit

All samples for suspect cases should be sent to WSLH

Collection Timing

PCR

Within 3 days of rash onset

- Can be collected up to 10 days after rash onset
- After 10 days PCR testing is generally not recommended

Serology

Collect with PCR

- Can be negative up to 3 days after rash onset
- IgM can be detectable for 6–8 weeks after infection

Why WSLH?

Technical advantages

- WSLH is a CDC reference public health laboratory
- Has capacity to do specialized public health testing

Logistical advantages

- Most health systems in WI send out PCR tests to commercial labs
- Daily communication between DPH and WSLH

Case Study

Report

Category I reportable condition:

- Report upon suspicion.
- Report by phone to the health department in which the patient resides.
- DHS can be contacted after-hours, weekends, and holidays.



What Happens Next?

Public Health Investigation Begins

Case Investigation

- Investigate the source.
- Ensure isolation.

Contact Tracing

Identifying and managing individuals who were exposed:

- LHD will usually manage community contacts.
- IP will usually manage internal contacts.

Tools for Control

Post-exposure prophylaxis (PEP), quarantine, and exclusion

2026 Case Study

Post-Exposure Prophylaxis (PEP)

Immunization

Immune globulin (IG)

Under 5 doses of PEP

Over 1,500 contacts identified

2026 Case Study

Quarantine and Exclusion

18 Released

20 Quarantined

5621 Contacts Identified

Measles Readiness

Medical Facilities

- Signage and screening for measles
- Ensure evidence of immunity is available for all staff.
- Consider updating EHR “hard stops” for measles testing.
- Know institutional process to send samples to WSLH.
- Think about how or where to examine and test suspect cases.

Laboratories

Review process to send samples to WSLH.



Prevention is the Best Readiness

Vaccine Recommendation & Efficacy

Children

2 doses of MMR vaccine:

- **First dose** at age 12 through 15 months.
- **Second dose** at age 4 through 6 years.

Adults

- All adults should have at least **1 dose of MMR** or other evidence of immunity.
- College students, international travelers, and health care personnel should receive **2 doses of MMR**.

Resources

- [When to Suspect and Test for Measles](#)
- [Measles Guidelines](#)
- [DHS Measles Website](#)
- Contact [Local Public Health](#)
- Contact the Immunization Program: Immunization Program: DHSImmProgram@dhs.wisconsin.gov or 608-267-9959
- DHS after-hours phone number: 800-943-0003 option 4



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Questions?

HAI Prevention Program IPs

Region 1: Anna Marciniak; Phone: 608-590-2980

Region 2: Jennifer Kuhn; Phone: 608-772-4768

Region 3: Tess Hendricks; Phone: 608-338-9071

Region 4: Rebecca Hellen; Phone: 608-609-1918

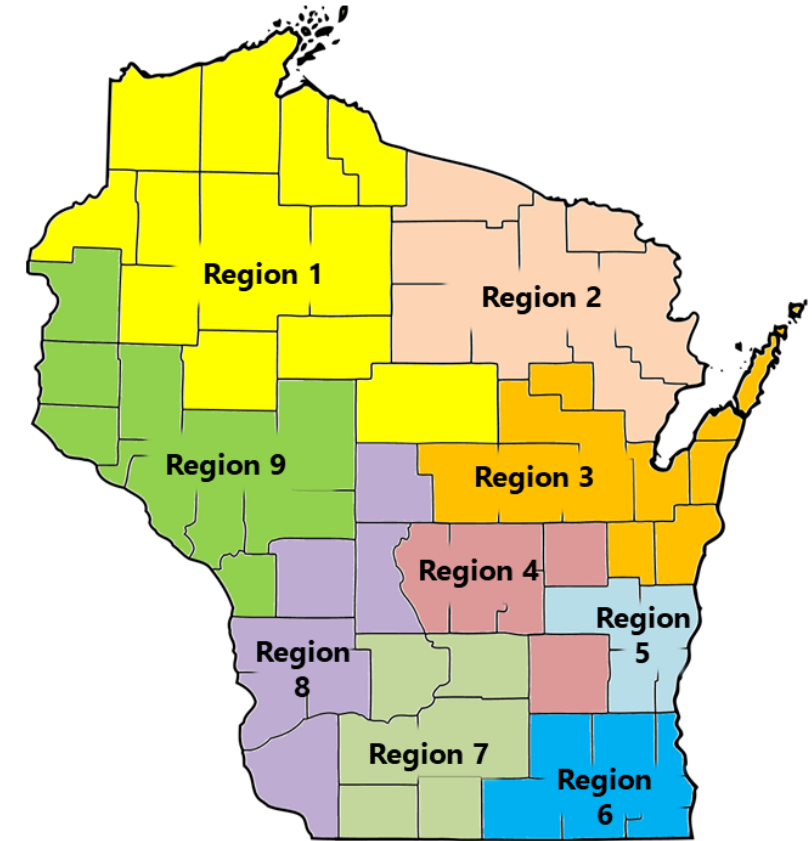
Region 5: Greta Starr; Phone: 608-867-4647

Region 6: Paula Pintar; Phone: 608-471-0499

Region 7: Beth Ellinger; Phone: 608-219-3483

Region 8: Ashley O'Keefe; Phone: 608-556-8608

Region 9: Nikki Mueller; Phone: 608-628-4464



HAI Prevention Program Contacts



Email: dhswhaipreventionprogram@dhs.wisconsin.gov



Phone: 608-267-7711



Website: www.dhs.wisconsin.gov/hai/contacts.htm

HAI Infection Prevention Education webpage



WISCONSIN DEPARTMENT
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HAI Infection Prevention Education

IPs play an essential role in facility infection prevention policy development, surveillance, and risk assessment. IPs also serve as a resource to other staff and programs within their facilities. The resources on this page are intended to connect health care facility infection preventionists (IP) with education materials to support their role in preventing, detecting, and responding to healthcare-associated infections (HAI).

Webinars

HAI Education Series

The HAI Education Series provides educational presentations on topics including infection prevention, HAIs, antibiotic stewardship, disease surveillance, and outbreak response for health care staff in all setting types, local and Tribal health departments, and other health care partners. Each session features a new, timely topic presented by the Department of Health Services (DHS) program staff, HAI infection preventionists, partner organizations, or other external subject matter experts.

The HAI Education Series is a monthly webinar series, typically held the fourth Thursday of each month. Register for the [HAI Education Series](#).

HAI Education Series recordings



Upcoming HAI Education Session

Date: October 22, 2026

Topic: Respiratory Virus Season



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