Measles Reporting, Testing, Infection Prevention, and Vaccination

Rock Island County Health Department, Clinicians, Infection Preventionists, and Laboratory Professionals,

Please read the guidance below and reference the Centers for Disease Control and Prevention (CDC) and Illinois Department of Public Health (IDPH) web pages for measles diagnostic testing, infection prevention, and vaccination resources, and share this information with providers and colleagues as relevant.

For situational awareness:

- IDPH News Release, "State of Illinois and IDPH are Supporting City of Chicago and Cook County Response to Measles Cases" Issued March 12, 2024
- IDPH Measles Update, Health Advisory Issued March 8, 2024

Reporting

Healthcare providers and facilities need to immediately report suspect measles cases to their local health department (in the jurisdiction where the patient resides), or to IDPH. **This means reporting at earliest clinical suspicion and at the point testing is requested; do not wait on laboratory confirmation or rely on laboratory reporting.** Delays in reporting might result in avoidable transmission and exposures, as well as missed prophylaxis options for non-immune close contacts.

Please contact Rock Island County Health Department (RICHD) at 309-794-7080 and request to speak with Communicable Disease to begin the approval process.

If unable to reach their local health department after-hours, providers can call IEMA at 217-782-7860 to reach someone at IDPH.

Testing

IDPH Laboratory provides PCR testing of throat or nasopharyngeal swabs for measles at no cost to the patient or provider, following consultation by the local health department with IDPH for pre-authorization of testing by the IDPH Lab. **Please contact RICHD at 309-794-7080** and request to speak with Communicable Disease **to begin the pre-authorization process.**
It is recommended that testing of suspect measles cases by PCR be conducted at the state lab as testing at commercial laboratories can delay results which then delays response if the case is positive (see instructions for submission).
Commercial laboratories can also perform measles testing by detecting measles-specific IgM antibodies from serum and measles RNA by real-time reverse transcriptase polymerase chain reaction (RT-PCR). Healthcare providers should obtain both a serum sample and a throat swab (or nasopharyngeal (NP) swab) from patients suspected to have measles.
Excerpt from IDPH Instructions for Measles Virus Submission:

1. Do not use expired media or swabs. Store viral transport media (VTM) or universal transport media (UTM) in the refrigerator until use. Use Dacron- or Nylon-tipped swabs for collecting samples. Flocked swabs are preferred. Examples of acceptable swabs include FLOQSwabs™ (Copan) and BD flocked swabs. Do not use cotton-tipped, wooden-shafted, or calcium alginate swabs, as these contain PCR inhibitors. Samples collected using unapproved materials will be rejected for testing.
2. Obtain specimens early in the acute phase of illness, preferably within three days of onset of symptoms.

Please read through additional specimen collection and transport instructions and fill out the IDPH Communicable Diseases Laboratory Test Requisition form.

For additional information on measles testing: CDC Guidelines for Diagnosis and Laboratory Testing for Measles
Patient Instructions: Patients with suspected or known measles should be advised to **isolate** until results are known **Patients are contagious starting four days before through four days after rash onset (with rash onset date being day zero).** Anyone with measles should **isolate** during that time except to seek necessary medical care. If medical care is required, patients should call to notify the facility of their diagnosis in advance.

Infection Prevention

If you suspect measles, immediately place the patient in airborne isolation, and notify infection control personnel. Infected people should be isolated for four days after they develop a rash; airborne precautions should be followed in healthcare settings. Because of the possibility, albeit low, of MMR vaccine failure in healthcare providers exposed to infected patients, they should all observe airborne precautions in caring for patients with measles. The preferred placement for patients who require airborne precautions is in a single-patient airborne infection isolation room (AIIR). Regardless of presumptive immunity status, all healthcare staff entering the room should use respiratory protection consistent with airborne infection control precautions (use of an N95 respirator or a respirator with similar effectiveness in preventing airborne transmission).

Healthcare facilities should ensure that all persons who work in their facilities should have presumptive evidence of immunity to measles.

For more information, visit Interim Guidance on Infection Prevention and Control Recommendations for Measles in Healthcare settings.

Vaccination

- Measles Vaccine Information for Healthcare Professionals
- MMR vaccine is available at most clinics, medical provider's offices, and pharmacies. For additional information on getting vaccinated: https://www.hhs.gov/immunization/diseases/measles/index.html
- VFC-eligible children and adolescents can schedule an MMR (measles, mumps, and rubella) vaccination appointment with RICHD by calling 309-794-7080.

Post-exposure prophylaxis

People exposed to measles who cannot readily show that they have evidence of immunity against measles should be offered post-exposure prophylaxis (PEP). To potentially provide protection or modify the clinical course of disease among susceptible persons, either administer MMR vaccine within 72 hours of initial measles exposure, or immunoglobulin (IG) within six days of exposure. Do **not** administer MMR vaccine and IG simultaneously, as this practice invalidates the vaccine.
Please refer to the following references for additional information on post-exposure prophylaxis:

- CDC: Post-exposure prophylaxis
- Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps, 2013: Summary Recommendations of the Advisory Committee on Immunization Practices (ACIP). June 14, 2013.
- General Recommendations on Immunization: Recommendations of the Advisory Committee on Immunization Practices (ACIP). January 28, 2011

Footnote

1. Siegel JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, 2007 Guidelines for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings.

Treatment

There is no specific antiviral therapy for measles. Medical care is supportive and to help relieve symptoms and address complications such as bacterial infections.

For more information, see page 351 of the World Health Organization measles and vitamin A guidance [12 pages]. Also see Red Book Online: Measles.

Additional Resources

- IDPH SIRENs:
  - IDPH Measles Update for Daycares and Schools, Health Advisory Issued March 8, 2024
  - IDPH Measles Guidance for EMS, Health Advisory Issued March 11, 2024
- IDPH: Measles Testing Instructions
- CDC: Project Firstline - Think Measles
- CDC: Measles
- CDC: Measles Vaccination Information
- CDC: Plan for Travel
- CDC: Infection Control Guidelines
- CDC Measles Fact Sheet
- CDC: Measles Cases and Outbreaks
- CDC: Global Measles Outbreaks