

Updates (in red) to the Health Advisory Issues March 26, 2024

Summary and Action Items

- 1) Provide an update on the current measles outbreak and awareness of cases in Lake and Will Counties.
- 2) Provide more detailed instructions on measles swab collection and submission, especially with small children.
- 3) Remind providers to **immediately report to their [local health departments](#)** any suspect measles cases at the time it is first suspected and prior to submission on specimens for clinical testing, and to take appropriate steps for diagnosis, infection control and isolation.
- 4) Review current vaccine and isolation/quarantine guidance for children, adults, and healthcare personnel.
- 5) Suggest providers review patients' vaccination records prior to international travel due to global measles outbreaks and provide needed vaccinations as per recommendations.
- 6) Recommend that healthcare providers and facilities take steps to ensure that their patient populations are up to date on their measles vaccines.
- 7) Remind health-care facilities that all persons who work in their facilities should have [presumptive evidence of immunity to measles](#).

Background

The Illinois Department of Public Health, along with the Chicago, Lake County and Will County health departments, have confirmed 28 cases of [measles](#) since March 5, 2024. All but two cases are linked to the [Chicago measles outbreak](#). Thus far in 2024, the CDC has already confirmed [64 cases of measles in the U.S.](#), compared to 58 cases for all of 2023. This is reflective of a [rise in global measles](#) cases and a growing global threat from the disease. The public health response to the Indiana case reported last month has ended with no secondary cases identified in Illinois.

Diagnosis and Treatment

Healthcare providers and facilities should be alert for possible [measles cases](#). The measles prodrome usually lasts for two to four days but may persist for as long as eight days. Symptoms typically include fever, malaise, and anorexia, followed by conjunctivitis, coryza, and cough. The prodromal symptoms typically intensify a few days before the rash appears. The measles rash is typically maculopapular and starts on the head or hairline and spreads down the body and can appear up to 8 days after symptoms emerge. Providers should also be suspicious in those that are ill and had recent travel to countries where there are [measles outbreaks](#). **If you suspect measles, immediately place the patient in airborne isolation and notify infection control.** Non-immune (see below in Prevention section for definition of measles immunity) contacts of measles cases can be vaccinated within three days of exposure, or in some special situations be given immune globulin within six days of exposure to prevent or ameliorate the illness. Providers should implement enhanced vaccination strategies as outlined in the Prevention section and also implement Post-Exposure Prophylaxis as discussed below.

[Post Exposure Prophylaxis](#): People exposed to measles who cannot readily show that they have evidence of measles' immunity 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.

Reporting

Healthcare providers and facilities need to immediately report suspect measles cases to their [local health department](#) 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 exposures as well as missed prophylaxis options for non-immune close contacts. 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 authorized PCR testing of throat or nasopharyngeal swabs for measles at no cost to the patient or provider. 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 further delays response to positive cases (see [instructions for submission](#)). All patients suspected of having measles infection should also have a blood test for serology.

Due to limited resources, IDPH Division of Labs is asking providers to submit either an oropharyngeal (OP) **or** nasopharyngeal (NP) swab for measles rRT-PCR to the IDPH lab. Please avoid sending duplicate samples on the same patient from the same visit unless poor sample collection at one site warranted repeat testing from the other site. Please note that if BOTH NP and OP swabs are warranted for any specific clinical reason on the same person at the same visit, please place both NP and OP swabs in a SINGLE VTM container.

For questions on sample collection and submission, please contact:

Name	IDPH Position	Phone Number	Email
Leslie Chapman	Assistant Chief, Division of Laboratories	618.559.3095	Leslie.Chapman@illinois.gov
Casey Dexter	IDPH Laboratories Liaison	217.836.3760	Casey.Dexter@illinois.gov

Swabs should be placed in viral transport media (VTM). If oral or throat swabs are not obtainable, urine samples can also be used for PCR testing. Turnaround time at the IDPH lab can be same day if authorized specimens are received in the morning. **Further details from IDPH regarding collection and submission of throat and nasopharyngeal swabs for the detection of measles can be found [here](#).**

Transmission

The measles virus spreads easily through contact with respiratory droplets and via airborne spread. The virus can remain airborne for up to two hours after an infectious person leaves an area. Measles is highly contagious. Up to 90% of susceptible people who have contact with someone with measles will develop measles. **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 suspected diagnosis in advance, before arrival, to avoid preventable exposures at the healthcare facility.

Prevention

[Vaccination](#) is the best protection against measles. MMR is a measles containing vaccine that is highly effective in providing measles immunity. It is recommended that facilities keep records of their employees' vaccinations to facilitate a prompt response to a measles exposure, should one occur.

During an outbreak, the following measures should be considered:

- Infants 6-11 months should be given an MMR prior to any international travel, or if they are at risk of coming in contact with any known person with measles, such as in an outbreak area.
- Children over 12 months who have received their first dose, a second dose MMR it is reasonable to give as long as it is 28 days since the prior dose.
- Teenagers and adults who are unvaccinated should receive two doses of MMR, at least 28 days apart.
- Persons traveling internationally, especially to countries where there are known [measles outbreaks](#), should ensure they are up to date on all of their vaccinations.

Before administering an MMR, providers should screen patients for contraindications (e.g., pregnancy, some immunocompromising conditions, history of severe allergy to MMR). More information on contraindications and precautions to MMR vaccine can be found at [Routine MMR Vaccination Recommendations: For Providers | CDC](#),

Health care personnel should follow [CDC's Interim Guidelines on Measles Infection Control in Healthcare settings](#) when dealing with potential measles cases and determining degree of exposure (Appendix A in the guidance document).

Health care providers should ensure all patients are up to date on MMR vaccine.

- 1) **Children:** Continue to give MMR vaccine at 12-15 months of age, and 4-6 years of age.
- 2) **Adults (non-high risk, not an exposed contact and no travel indication):** Adults born during or after 1957 should have at least one dose of the MMR vaccine, or presumptive evidence of immunity. **Providers generally do not need to actively screen adult patients for measles immunity in non-outbreak areas in the U.S. During an outbreak, providers of prenatal care should consider including measles serology in their prenatal labs. After vaccination, it is also not necessary to test patients for antibodies to confirm immunity. There is no recommendation for a catch-up program among adults for a second dose of MMR.**

Additional recommendations for certain at-risk populations include:

- 1) Students at post-high school educational institutions: Should have two doses of MMR, spaced out by at least 28 days, or evidence of immunity.
- 2) For individuals who are traveling internationally:
 - a) Infants 6 through 11 months of age should be given one dose of MMR vaccine. These children will still need their regularly scheduled MMR doses.
 - b) Individuals 12 months of age or older should have two doses of MMR, separated by at least 28 days. These two MMRs given after 12 months of age will satisfy school entry requirements even if the second is given before age 4 years.
- 3) Healthcare personnel (HCP) (all paid and unpaid persons working in health-care settings): Should have presumptive evidence of immunity to measles. Presumptive evidence of immunity is defined as:
 - a) written documentation of vaccination with 2 doses of live measles or MMR vaccine administered at least 28 days apart,
 - b) laboratory evidence of immunity (positive serum IgG),
 - c) laboratory confirmation of disease, or

- d) birth before 1957. (*According to CDC, although birth before 1957 is considered as presumptive evidence of immunity, for unvaccinated HCP born before 1957 that lack laboratory evidence of measles immunity or laboratory confirmation of disease, health care facilities should consider vaccinating personnel with two doses of MMR vaccine at the appropriate interval.*)
- e) [Exposed](#) healthcare personnel who are non-immune should be excluded from work from day 5 after the first exposure through day 21 from the last (not first) day of exposure.

Additional Resources & References:

- [CDC: Measles](#)
- [CDC: Measles Vaccination Information](#)
- [CDC: Measles Outbreak Toolkits](#)
- [CDC: MMR ACIP Vaccine Recommendations \(Measles, Mumps and Rubella\)](#)
- [CDC: Immunization of Health-Care Personnel: Recommendations of the Advisory Committee on Immunization Practices \(ACIP\)](#)
- [IDPH: Measles Testing Instructions](#)
- [CDC: Plan for Travel](#)
- [Infection Control Guidelines](#)
- [CDC Measles Factsheet](#)
- [Global Measles Outbreaks](#)

Target Audience: Healthcare Providers, Hospital Infection Preventionists, Emergency Departments, Local Health Departments

Date Issued

March 26, 2024