

**TO:** Vermont Health Care Providers and Health Care Facilities  
**DATE:** April 4, 2024  
**FROM:** Laura Ann Nicolai, Deputy State Epidemiologist

### **Increase in Measles Cases – Information for Vermont Clinicians**

The CDC has issued a [Health Alert](#) to raise awareness in the medical community of an increase in U.S. and international measles cases. From January 1 to March 28, 2024, the CDC has been notified of 97 confirmed U.S. cases of measles across 18 jurisdictions. This includes seven outbreaks (defined as three or more related cases); 72% of cases are outbreak-associated. For comparison, 58 cases were reported for all of 2023 including four outbreaks; 48% of cases were outbreak-associated. In addition, the Canadian province of Quebec has reported 30 cases so far in 2024, primarily in Montreal and surrounding suburbs. Most domestic cases reported in 2024 have been among unvaccinated children ages 12 months and older who were exposed to measles virus while traveling internationally.

#### **REQUESTED ACTIONS**

##### **Strongly Consider Measles, Especially in Unvaccinated Patients with Compatible Illnesses**

Measles typically presents in adults and children as an acute, viral illness characterized by fever and generalized, maculopapular rash. The prodrome may include cough, conjunctivitis and coryza. Koplik spots, blue-white spots on the buccal mucosa, are occasionally seen. The rash usually starts on the face, proceeds down the body, and may include the palms and soles. The rash, which lasts for several days, initially appears discrete but may become confluent before fading in order of appearance. Complications include diarrhea, otitis media, pneumonia, hepatitis, and encephalitis.

**Report all suspected cases of measles immediately** to the Health Department's Infectious Disease Epidemiology program (802-863-7240, option 2; available 24/7) at the time of initial clinical suspicion. **Do not wait for laboratory confirmation to report.**

##### **Test for Measles**

Contact the Health Department for assistance with submitting specimens to the Health Department Laboratory for testing. Testing will be performed at no charge.

Obtain specimens for both measles PCR and serology at first contact with a patient suspected to have measles.

- Collect a throat or nasopharyngeal swab or a urine sample for measles PCR (respiratory samples are preferred). Swabs should be synthetic (non-cotton) in viral transport media. Urine samples may be collected in a sterile, sealable urine specimen container. Collect samples for PCR as soon as possible after rash onset.

- Collect 0.7mL of blood in a red-top or serum separator (tiger top) tube for measles IgM and IgG. Allow the blood to clot thoroughly and then centrifuge the tube to remove serum from the clot. Gel separation tubes should be centrifuged within two hours of collection. Measles IgM results from blood specimens collected within the first 72 hours after rash onset may be falsely negative and may need to be repeated before rule-out.
- Refrigerate all specimens after collection and transport on ice packs within 24 hours of collection.

### **Transmission and Infection Control**

Measles is transmitted by airborne particles, droplets, and direct contact with the respiratory secretions of an infected person. Infected individuals are contagious from four days before rash onset through the fourth day after rash appearance.

Screen for fever with rash at the point of entry into a health care facility and place symptomatic individuals in airborne isolation immediately. Do not allow patients with suspect measles to remain in waiting rooms. If a negative pressure room is not available, place the patient in an exam room with a closed door, and do not use that room for at least two hours after the patient has left.

If alerted before arrival, meet suspect cases at a side or back door with a mask. Infants and toddlers unable to wear a mask should be “tented” with a blanket or towel when entering the facility. Provide masks to all accompanying family members. If possible, offer testing outside of facilities to avoid transmission in health care settings. Call ahead to ensure immediate isolation for patients referred to hospitals for a higher level of care.

Health care personnel (HCP) should adhere to standard and airborne precautions when evaluating suspect cases, regardless of their vaccination status. Vaccination records should be readily accessible for all HCP. Exposed personnel without [evidence of immunity](#) should be excluded from work from day 5 after the first exposure through day 21 following their last exposure. Health care facilities are also encouraged to have a system in place to identify any exposed patients and to conduct follow-up verification of immunity.

All HCP should have documented evidence of immunity to measles. Although birth before 1957 generally is considered acceptable evidence of measles immunity, two doses of MMR vaccine should be considered for unvaccinated HCP born before 1957 who do not have laboratory evidence of disease or immunity to measles.

### **Ensure all Patients are Up to Date on MMR Vaccine**

Presumptive evidence of immunity to measles includes documented receipt of two doses of measles-containing vaccine, a positive measles IgG titer, or birth before 1957. **Self-reported vaccination does not constitute evidence of immunity.**

For patients planning to travel internationally:

- Infants 6 through 11 months of age should receive one dose of MMR vaccine before departure. (Infants who get one dose of MMR before 12 months of age should get two more doses – one at 12-15 months of age and another at least 28 days later.)
- Children aged 12 months or older should have documentation of two doses of MMR vaccine separated by at least 28 days.
- Teenagers and adults who do not have evidence of immunity to measles should get two doses of MMR vaccine separated by at least 28 days.

### **Post-exposure Prophylaxis**

Administer [measles post-exposure prophylaxis](#) (PEP) as soon as possible after exposure to close contacts without evidence of immunity, either with MMR (within 72 hours) or immunoglobulin (IG) (within six days). The choice of PEP is based on elapsed time from exposure or medical contraindications to vaccination. Do not administer MMR vaccine and IG simultaneously, as this practice renders the vaccine ineffective. Contact the Health Department to request IG.

### **Prepare for Measles Cases**

- Ensure that all health care personnel and staff have documented evidence of immunity to measles.
- Ensure that patients are up to date on MMR vaccine.
- Review infection control plans for assessing patients who might have measles or who might have been exposed.

### **ADDITIONAL RESOURCES**

- [Health Alert: Increase in Global and Domestic Measles Cases and Outbreaks](#) (CDC)
- [Measles Information for Health Care Providers](#) (CDC)
- [Infection Prevention/ Control Recommendations for Measles in Health Care Settings](#) (CDC)
- [Measles Information for Providers](#) (VDH)
- [Instructions for Collecting and Shipping Specimens for Measles PCR to the Vermont Department of Health Laboratory](#) (VDH)
- [Instructions for Collection and Packaging of Serological Specimens to the Vermont Department of Health Laboratory](#) (VDH)
- [Think Measles Fact Sheet](#) (American Academy of Pediatrics)
- [Measles in Child](#) (VisualDX)
- [MMR ACIP Vaccine Recommendations](#) (CDC)
- [Routine Immunizations on Schedule for Everyone](#) (CDC)
- [Healthcare Personnel Vaccination Recommendations](#) (Immunize.org)

If you have any questions, please contact Laura Ann Nicolai at: [LauraAnn.Nicolai@Vermont.gov](mailto:LauraAnn.Nicolai@Vermont.gov).

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**HAN Message Type Definitions**

Health Alert: Conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: Provides important information for a specific incident or situation; may not require immediate action.

Health Update: Provides updated information regarding an incident or situation; unlikely to require immediate action.

Info Service Message: Provides general correspondence from VDH, which is not necessarily considered to be of an emergent nature.