

To: Vermont Health Care Providers
From: Harry Chen, MD, Commissioner of Health

Measles Advisory

The United States is currently experiencing a large measles outbreak. From January 1 to February 13, 2015, 141 people from 17 states and Washington DC were reported to have measles. The majority of people who got measles were unvaccinated. Most cases [113 cases (80%)] are part of an ongoing multi-state outbreak linked to an amusement park in California. To date, no cases have been reported in Vermont; however, two cases have been reported in New York.

Measles was declared eliminated in the United States in 2000, but remains endemic in many parts of the world, including popular tourist destinations. Travelers continue to bring measles into the U.S. where it can easily spread within communities with low vaccination rates. The current multi-state outbreak underscores the ongoing risk of measles transmission and the need for high measles vaccine coverage.

Actions Requested:

1. Assess measles immunity and vaccinate with MMR when indicated.

Children

- The first dose of MMR should be administered between 12 to 15 months of age and the second dose at 4 to 6 years, but before the start of kindergarten. The minimum time period between the first and second dose is 28 days.
- Children traveling internationally can be given measles vaccine as early as 6 months of age. These children should then receive a measles vaccine at 12 to 15 months of age. This second dose should be given at least 28 days after the initial dose. Children traveling internationally who are older than 12 months of age and have already received one dose of vaccine should receive a second dose prior to travel. The interval between doses should be 28 days or more.

Adults

- Adults born in 1957 or later who do not have a medical contraindication should receive at least one dose of MMR vaccine unless they have documentation of vaccination with at least one dose of MMR containing vaccine or other acceptable evidence of immunity to these three diseases. Serologic screening need not be done before vaccinating for measles and rubella.
- In general, people may be presumed to be immune to measles if they were born before 1957, or have:
 - documentation of two doses of measles vaccine, or
 - laboratory evidence of immunity to measles, or
 - documentation of physician-diagnosed measles.

2. Ensure that your staff are immune to measles.

Staff should all have documentation of two doses of measles vaccine, laboratory evidence of immunity to measles, or laboratory confirmation of measles disease. Birth prior to 1957 is not acceptable evidence of immunity for health care providers.

Susceptible personnel who have been exposed to measles should not have contact with patients or be in a health care facility from the 5th through the 21st day after exposure, regardless of whether they received vaccine or immune globulin after the exposure.

3. Diagnose Measles:

- Measles is a highly infectious viral disease with an incubation period of approximately 10 days (range seven to 21 days) from exposure to rash onset. Patients with measles are considered infectious from four days before through four days after rash onset. Transmission is primarily person-to-person via large respiratory droplets. Airborne transmission via aerosolized droplets has occurred within shared air space for up to two hours after an infectious person with measles has occupied the space.
- Clinical Presentation: Measles is characterized by fever of 101°F (38.3°C) or more, cough, coryza, and conjunctivitis. After three to seven days of illness, this stage progresses to a maculopapular rash that begins on the face and generalizes to the rest of the body.
- Laboratory criteria for measles include any ONE of the following: 1) positive IgM serologic test for measles, 2) IgG seroconversion or significant rise in measles IgG antibody, 3) isolation of measles virus from a clinical specimen or 4) detection of measles-virus specific nucleic acid by polymerase chain reaction.
- Collect serum to test for measles IgG and IgM antibodies and a throat swab and urine for viral isolation. Coordinate with the Health Department for testing.
- Contact the Vermont Department of Health immediately at 802-863-7240 to report the suspected case and for additional guidance on testing and control measures.

4. Prevent transmission of measles. In patients who present with a febrile rash that you suspect is measles, the following actions are recommended:

- Immediately triage the patient. Do not allow such patients to remain in your waiting area.
- Place a surgical mask on the patient as soon as possible.

- If you are aware that a suspect measles patient will be arriving at your facility, ensure that the patient is masked prior to entering the building. Notify other facilities before referring suspect measles patients so that appropriate infection control measures can be implemented.
- Place these patients in a private, negative pressure room if available, or a room with a closed door. The exam room should not be used for two hours after a suspect patient leaves.
- Do not refer patients with suspected measles to other sites unless infection control measures are implemented at these sites.
- Use standard and airborne precautions, if possible.
- Only permit health care workers with documented immunity to measles to work with the patient.

Additional information about measles and measles vaccination is available at the Vermont Department of Health website

(<http://healthvermont.gov/prevent/measles/Measles.aspx>)

and the Centers for Disease Control and Prevention website

(<http://www.cdc.gov/measles/>).

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.