Confirmed Measles in New Hampshire Resident

Key Points and Recommendations:

1. Healthcare providers should be aware that infectious measles has been confirmed in a child who has been in three locations in Keene, NH:
   - The nursery (9am – 1pm) and coffee hour (11am – 2pm) at the United Church of Christ at 23 Central Square in Keene on Sunday May 12th
   - The infant/toddler room at the Keene Montessori School on 125 Railroad Street from 9am – 3pm on Thursday May 16th
   - The Walk-in Clinic at Cheshire Medical Center at 149 Emerald Street from 1pm – 5pm on Thursday May 16th

2. Healthcare providers should be prepared to offer measles post-exposure prophylaxis (PEP) to any person reporting potential exposure and who cannot readily show that they have presumptive evidence of immunity against measles (see sections below).

3. Healthcare providers should consider and test for measles in persons presenting with a consistent clinical syndrome of fever, cough, conjunctivitis, and coryza (the three “C”s), followed by development of a maculopapular rash.

4. To test for measles, the following specimens should be obtained and submitted to NH Public Health Laboratories:
   - Oropharyngeal, nasopharyngeal, or nasal swab for polymerase chain reaction (PCR)
   - Serum for measles virus IgM antibody

5. Patients who may have measles should be managed under airborne infection isolation and immediately reported to NH DPHS at (603) 271-4496. If you are calling after hours or on the weekend, please call the New Hampshire Hospital switchboard at (603) 271-5300 and request the Public Health Nurse on-call.

Situation
The NH Division of Public Health Services (DPHS) has been notified of a New Hampshire resident (a child) in the Keene, NH area with confirmed measles who visited several public locations during their infectious period. Any susceptible person (i.e. any person who does not have presumptive evidence of immunity, as noted below) who visited these locations during the specified date and times are considered potentially exposed to measles.

The incubation period after exposure to measles is typically 10-14 days, but can range from 7-21 days.

Measles was declared eliminated in the United States, but due to low vaccination rates in some communities, measles has been making a resurgence. For 2019, at least 839 cases of measles
in the United States have already been reported from 23 different states (https://www.cdc.gov/measles/cases-outbreaks.html).

Presumptive Evidence of Measles Immunity:
Persons can be presumed to have immunity to measles if any of the following criteria apply:
- Written documentation of adequate vaccination:
  - one or more doses of a measles-containing vaccine administered on or after the first birthday for preschool-age children and adults not at high risk
  - two doses of measles-containing vaccine for school-age children and adults at high risk, including college students, healthcare personnel, and international travelers
- Laboratory evidence of immunity
- Laboratory confirmation of measles
- Birth before 1957 (note: this criteria does not apply to healthcare workers)

Post-Exposure Prophylaxis (PEP)
To provide protection or modify the clinical course of measles among susceptible persons, either administer MMR vaccine within 72 hours of the measles exposure, or immunoglobulin (IG) within six days of exposure. Do not administer MMR vaccine and IG simultaneously, as this practice invalidates the vaccine. If MMR vaccine is not administered within 72 hours of exposure as PEP, MMR vaccine should still be offered at any interval following exposure to the disease in order to offer protection from future exposures. People who receive MMR vaccine or immunoglobulin as PEP should be monitored for signs and symptoms consistent with measles for at least one incubation period (e.g., 21 days).

Contraindications to the MMR vaccine include a history of a severe allergic reaction to any component of the vaccine, pregnancy, or immunosuppression. In these individuals, immunoglobulin should be used for PEP as noted below.

People who are at risk for severe illness and complications from measles, such as infants younger than 12 months of age, pregnant women without evidence of measles immunity, and people with severely compromised immune systems, should receive IG. Intramuscular IG (IGIM) should be given to all infants younger than 12 months of age who have been exposed to measles. For infants aged 6 through 11 months, MMR vaccine can be given in place of IG, if administered within 72 hours of exposure. Because pregnant women might be at higher risk for severe measles and complications, intravenous IG (IGIV) should be administered to pregnant women without evidence of measles immunity who have been exposed to measles. People with severely compromised immune systems who are exposed to measles should receive IGIV regardless of immunologic or vaccination status because they might not be fully protected by MMR vaccine.

For additional information on measles and the MMR vaccine please refer to:
See the most recent ACIP MMR vaccine recommendations for further details:

CDC website: https://www.cdc.gov/measles/hcp/index.html
• For any questions regarding this notification, please call the NH DHHS, DPHS, Bureau of Infectious Disease Control at (603) 271-4496 during business hours (8:00 a.m. – 4:30 p.m.).

• If you are calling after hours or on the weekend, please call the New Hampshire Hospital switchboard at (603) 271-5300 and request the Public Health Professional on-call.

• To change your contact information in the NH Health Alert Network, contact Adnela Alic at (603) 271-7499 or email Adnela.Alic@dhhs.nh.gov.