



North Carolina Department of Health and Human Services
Division of Public Health

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May 13, 2013 (**2 pages – previous version dated April 17, 2013**)

To: All North Carolina Health Care Providers
From: Megan Davies, MD, State Epidemiologist
Re: **Measles Outbreak in North Carolina – Provider Update**

Summary:

This memo is to update North Carolina providers regarding the first measles outbreak to occur in North Carolina in more than 20 years. As of May 13, 2013, 23 cases have been identified among residents of Stokes (13) and Orange (9) Counties and one out of state resident exposed in North Carolina. The index case developed symptoms on April 4, shortly after returning from a trip to India. Measles was suspected when household contacts developed symptoms, and diagnosis was confirmed by the State Laboratory of Public Health on April 16. The most recent case developed a rash on May 7. All cases have been epidemiologically linked.

As a reminder, measles, a highly infectious viral disease, is spread through coughing, sneezing, and contact with secretions from the nose, mouth, and throat of an infected person. The incubation period for measles is usually about 10 days from exposure to fever (range, 7–18 days) and 14 days from exposure to rash (range, 7–21 days). Typically, illness begins with fever $\geq 101^{\circ}\text{F}$, cough, coryza, and conjunctivitis. Koplik spots may be visible on the buccal mucosa. After 3–7 days of illness, this stage progresses to a maculopapular rash that begins on the face and generalizes to the rest of the body. Persons with measles are contagious from 4 days prior to rash onset through 4 days after rash onset.

The majority of cases in this outbreak have occurred among persons who were not vaccinated against measles. However, four cases have occurred among persons who had received at least one dose of measles, mumps, and rubella (MMR) vaccine. While measles can infrequently occur in vaccinated people who have close or prolonged exposure to another case, evidence from this outbreak and previous outbreaks shows that people who are not vaccinated remain at much higher risk of being infected.

Although every effort is being made to identify all contacts, it is possible that additional cases could occur among unrecognized contacts.

Recommendations:

The following recommendations are provided for North Carolina clinicians in order to rapidly identify any additional cases and control the spread of infection:

- Clinicians are urged to consider the diagnosis of measles in anyone presenting with a febrile rash illness and clinically compatible symptoms (cough, coryza, and/or conjunctivitis; Koplik spots).
- Clinicians who suspect measles should immediately contact their local health department or the state Communicable Disease Branch (919-733-3419; available 24/7) to discuss laboratory testing and control measures.

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- Any patient with suspected or confirmed measles should be immediately isolated, using airborne isolation precautions if possible. Rooms occupied by a suspect or confirmed measles patient should not be used for 2 hours after the patient leaves.
- Notify EMS and/or the receiving facility prior to transporting or referring patients with suspected or confirmed measles to avoid additional exposures.
- Only healthcare workers with documented immunity to measles should attend to patients with suspected or confirmed measles.
- Healthcare personnel without evidence of immunity who are exposed to measles should be relieved from patient contact and excluded from the facility from the 5th day after the first exposure until the 21st day after the last exposure, regardless of whether they received vaccine or immune globulin (IG) after the exposure.

As a reminder, vaccination with MMR vaccine is the best way to protect against measles. Clinicians are encouraged to provide MMR to all unvaccinated patients who are eligible for this vaccine. Healthcare workers should be immunized with two doses of MMR, and this outbreak is an opportunity to verify compliance.

Additional clinical information for providers about measles is available at: <http://www.cdc.gov/measles/index.html>. Please contact your local health department or the North Carolina Communicable Disease Branch (919-733-3419) with any questions.