TO: Primary Care Staff, Infectious Disease, Emergency Medicine, Internal Medicine, Pediatrics, Family Medicine, Laboratory Medicine, and Infection Control Personnel

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SUBJECT: Measles Advisory

Summary:

- Two measles cases have been confirmed in New Haven County, Connecticut. The cases are both children who reside in the same household.
- The source of these cases is international travel to a country with endemic measles transmission.
- The first case had rash onset on 4/13; the second has not developed a rash yet and had onset of symptoms 4/17. The first case was infectious starting on 4/9 and both cases have been isolated as of 4/17. The cases did not leave New Haven County during the infectious period.
- The average incubation period of measles (from contact with a case until onset of rash) is 14 days, with a range of 7–21 days.
- Cases are considered infectious from 4 days before rash onset through 4 days after.
- The Connecticut Department of Public Health (DPH) is working with local health departments and healthcare providers to identify and inform identified contacts of the cases.
- We may see secondary cases of measles among contacts, especially among those who have never been vaccinated for measles.
- All suspected measles cases must be reported to the DPH Immunization Program at (860) 509-7929. All requests for testing from the DPH Laboratory must be reported and approved by the Immunization Program.

Children or adults born since 1957 who do not have documented evidence of receiving a measles-containing vaccine or documented evidence of laboratory confirmed measles are considered to be highly susceptible to measles. All people in this age group are recommended to receive two doses of a measles-containing vaccine.
Recommendations

1. **Consider measles** in patients who present with a febrile rash illness. Have a high index of suspicion in patients who present with a morbilliform rash **with fever still present at the time of rash onset** AND cough, coryza, or conjunctivitis.

   The characteristic measles rash is classically described as a generalized, maculopapular, erythematous rash that begins several days after the fever starts. It starts on the head and neck before spreading to cover most of the body, often causing itching. The measles rash appears two to four days after the initial symptoms and lasts for up to eight days. The rash is said to "stain", changing color from red to dark brown, before disappearing. Koplik's spots seen inside the mouth are pathognomonic (diagnostic) for measles, but are not often seen because they are transient and may disappear within a day of arising.

2. **Immediately notify** the DPH Immunization Program of any patient that you suspect could have measles by telephone at (860) 509-7929 or during evenings, weekends, or holidays call (860) 509-8000.

3. **Collect patient samples to confirm measles diagnosis.**
   a. An **oropharyngeal or nasopharyngeal swab** can be collected for detection of measles RNA by RT–PCR or virus isolation. **This is the gold standard test for measles diagnosis and will have the quickest turnaround time of available test methodologies.** PCR specimens can be tested at the DPH State Laboratory, but must be coordinated with the Immunization Program. For more information on sample collection visit [www.cdc.gov/measles](http://www.cdc.gov/measles) and click on the “Lab Tools” tab.
   b. **Take blood** for serological confirmation (IgM testing). Samples are sent to the Centers for Disease Control and Prevention for testing, and must be coordinated with the Immunization Program.

4. **Minimize transmission:**
   a. Be alert for new measles cases - make sure all staff, particularly triage nurses, have a high index of suspicion for patients presenting with a febrile rash illness.
   b. If other patients are in the waiting room when they arrive, give the suspected case a mask and take him/her directly to a consulting room (that room should not be used for another patient for at least two hours after the consultation).

5. **In general practice:**
   a. See suspected measles patients at home if possible.
   b. If not possible, make their appointment the last of the day to minimize contact with other patients in the waiting room.
   c. If a patient needs to be sent to hospital, give them a mask to wear and telephone ahead and let the Emergency Department or Ambulance staff (if applicable) know that you are referring a case of suspected measles.
6. **Seek advice from the DPH regarding the management of susceptible contacts.**
   a. If you suspect a patient has measles, DPH will discuss recommendations regarding public health measures after evaluating available clinical and risk-factor information.
   b. If you have questions about managing an asymptomatic patient who reports a measles exposure, please contact the Immunization Program.

7. **Check vaccination records for:**
   a. Your staff - All staff born during or since 1957 should have documentation of two doses of measles containing vaccine.
   b. Your patients - Ideally all patients born during or since 1966 should have received two doses of a measles-containing vaccine.
   c. Currently MMR vaccine is routinely recommended at 12–15 months and 4–6 years of age.

For more information, visit the Centers for Disease Control and Prevention measles home page at [http://www.cdc.gov/measles/about/index.html](http://www.cdc.gov/measles/about/index.html).