

Clinical Alert

May 12, 2016 Measles confirmed in Boston, Massachusetts. Multiple exposures in public settings identified.

The Massachusetts Department of Public Health (MDPH) and the Boston Public Health Commission (BPHC) has confirmed the first case of measles in the Commonwealth this year, in an individual with an unknown vaccine history who recently visited from Europe. MDPH and BPHC have been working with healthcare providers and other local boards of health to notify individuals who may have been exposed and make recommendations concerning vaccination and quarantine of susceptible contacts. Healthcare providers should proactively identify and update the immunity status of their patients and be vigilant for the possibility of additional cases of measles.

The confirmed case visited several places in the greater Boston area while infectious (exposures occurred from 5-1-16 through 5-8-16). See below for specifics. Because the average incubation period to rash onset is 14 days, with a range of 7-21 days, providers may see new cases at any time.

Providers should consider measles in patients who:

- are not known to be immune, symptomatic and were exposed during the times listed below
- present with febrile rash illness and clinically compatible measles symptoms (cough, coryza (runny nose) or conjunctivitis)
- recently traveled internationally or were exposed to someone who recently traveled
- have not been vaccinated against measles

If you suspect measles, do the following immediately:

- 1. Isolate patients to minimize disease transmission
- 2. **Report** to your local board of health and to the DPH Division of Epidemiology and Immunization at **617-983-6800**, **24/7**. In Boston, report to BPHC at **617-534-5611**, **24/7**.
- 3. Obtain specimens for testing from patients with suspected measles, including serum, a nasopharyngeal swab or throat swab in viral transport media, and urine. Testing at the Massachusetts State Public Health Laboratory is preferred over testing at commercial laboratories. Contact an MDPH epidemiologist (available 24/7) at 617-983-6800 24/7 for technical guidance on specimen collection, necessary submission forms, and to arrange for transportation to the Massachusetts State Public Health Laboratory.
- 4. See the attached document, "Measles Control in Medical Settings Initial Steps."

Times and Dates of Possible Exposures

Sunday, May 1, 2016

10:00am-2:00pm

- TRANSPORTATION: MBTA #1 Bus Newbury St., Boston to Harvard Square
- Harvard Square: Shopped at J August, 1320 Massachusetts Ave.

12:00pm -4:00pm

- Cambridgeside Galleria
 - Ate at Panda Express in the food court
 - Shopped at Victoria's Secret, Gap, Abercrombie & Fitch, PacSun
 - o Starbucks
- TRANSPORTATION: Back to Boston via MBTA (Green line)

Monday, May 2, 2016

12:00pm-6:00pm

- Wrentham Village Outlet
 - Ate at Unos Chicago Grill (at Wrentham)
 - Shopped at Nike, Gap, Polo Ralph Lauren, and others

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<u>Tuesday, May 3, 2016</u> 11:30am-4:00pm

- Rockport Village, Rockport, MA
 - The Pewter Shop
 - Sea Star Gift Shop
 - Brothers' Brew Coffee Shop

Wednesday, May 4, 2016

Wednesday Afternoon (1:30 – 4:30 PM)

- Star Market at the Prudential (53 Huntington Ave. Boston, Massachusetts 02199)
 - Nespresso Boutique Bar (7 Newbury St, Boston, MA 02116)

Thursday, May 5 - Sunday May 8, 2016 - Massachusetts General Hospital

• Exposed patients will be notified by the hospital or health departments.

For questions, please contact MDPH Division of Epidemiology and Immunization at 617-983-6800, or the Boston Public Health Commission at 617-534-5611.

Resources

Measles – United States, January 4 – April 2, 2015. Morbidity and Mortality Weekly Report, April 17, 2015.

Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps, 2013: Summary Recommendations of the Advisory Committee on Immunization Practices (ACIP). CDC, <u>Morbidity and Mortality Weekly Report</u>, June 14, 2013.

Immunization of Health-Care Personnel, 2011: Recommendations of the Advisory Committee on Immunization Practices (ACIP). CDC, <u>Morbidity and Mortality Weekly Report</u>, November 25, 2011.

CDC Measles Homepage, CDC guidance for providers, travelers and the general public.

Measles Chapter, VPD Surveillance Manual (6th Edition), CDC, 2013.

Measles Chapter, The Pink Book (12th Edition), CDC, May 2012.

Red Book: 2012 Report of the Committee on Infectious Diseases, 29th Edition, American Academy of Pediatrics.

Measles Control in Medical Settings – Initial Steps

Patients with fever, rash and respiratory illness may have measles. Measles usually starts with a prodrome consisting of mild to moderate fever, cough, conjunctivitis and/or coryza. This is followed by fever spikes, often as high as 104-105° F, and a red maculopapular rash that typically starts at the hairline, then face, then spreads rapidly down the body.

Patients who have recently (within three weeks) been in contact with other people with measles, have been in locations with recent cases of measles, have travelled internationally, or who have visited sites popular with international visitors (tourist attractions, airports) may be at increased risk.



- 1. Assess, screen and mask all patients with febrile rash illness immediately on arrival. Only staff with evidence of immunity to measles should attend suspect measles patients and should wear N95 or higher level of protection respirators to filter airborne particles when caring for suspect measles patients if possible.
- 2. Isolate and consolidate care: Escort masked patients with febrile rash illness or suspect measles to a separate waiting area or private room, preferably an airborne infection isolation ("negative pressure") room.
- 3. Ask: Ask patient about risk factors for measles, such as international travel, known exposure to a measles case, vaccine history, and progression of rash.
- 4. **Report:** Immediately report the suspect case to your local board of health and to the DPH Division of Epidemiology and Immunization at 617/983-6800. Cases diagnosed in Boston should be reported to Boston Public Health Commission at 617/534-5611.
- 5. Test: Obtain specimens including serum, and NP swab or throat swab, and urine, for testing at the Hinton State Laboratory in Jamaica Plain (call 617/983-6800).
- 6. Restrict: Do not use the room which has been occupied by a suspect case for two hours following the case's exit.
- 7. Identify: Identify all exposed patients and staff. This includes:
 - a. Patients and families in the waiting and examination rooms up to two hours after suspect case was present;
 - b. All staff both with and without direct patient contact (e.g., maintenance, administrative support); and
 - c. Due to airborne route of transmission, areas of shared air space beyond those occupied by the patient may be considered exposed, potentially encompassing an entire facility.
- 8. Document: Acceptable evidence of immunity for healthcare workers: Two doses of MMR or serologic evidence of measles immunity.

Depending on test results and index of suspicion, next steps may include:

Notify exposed potentially susceptible patients and staff quickly and offer MMR or immune globulin: MMR within 72 hours of exposure may prevent illness. Beyond 72 hours it is usually still recommended, to provide protection against exposure to future cases of measles. For high-risk susceptibles and those ineligible for vaccination, IG \leq 6 days after exposure may modify or prevent illness.

Exclusions: MDPH, BPHC (in Boston), or your local health department will provide assistance with quarantine requirements if exclusions are necessary. In general, susceptible individuals exposed to measles who are not appropriately vaccinated within 72 hours of the exposure may need to be excluded from all public activities from day 5 through day 21 after the exposure. In high-risk healthcare settings exclusion criteria may be more rigorous.