



BOSTON PUBLIC HEALTH COMMISSION
Communicable Disease Control Division
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HEALTH ALERT: Measles

Summary: Between July 7th and July 13th, 2010 the Boston Public Health Commission (BPHC) confirmed two measles cases. No epidemiologic link between these cases has been identified to date. This alert summarizes the potential exposures related to each case and provides guidelines for health care providers. Control measures are ongoing and include confirming the immune status of exposed close contacts and excluding those without documented immunity from public activities. Health care providers in Boston are asked to consider a diagnosis of measles in persons with appropriate symptoms and to report all suspect or confirmed cases diagnosed in Boston to the Boston Public Health Commission at (617) 534-5611.

BACKGROUND

Since July 7th, two confirmed cases of measles have been identified in Boston.

- Case 1 arrived on an international flight from Switzerland on July 7th. The case was ill on the plane and was taken to a local emergency department (ED) and subsequently admitted to the hospital. Exposed contacts included persons in the ED and on the plane. Contacts without documented proof of immunity (written documentation of at least one measles containing vaccine given at age 12 months or older OR serological proof of immunity) were excluded from public activities for 5 to 21 days after exposure.
- Case 2 was a 10 month old unvaccinated Boston resident. The case had visits to multiple sites in the South End during the period of communicability (July 3 to July 11). Public notices have been posted in these areas alerting potential contacts of the possibility of exposure

SYMPTOMS AND DIAGNOSIS

Measles is a highly contagious viral disease characterized by prodromal fever, conjunctivitis, coryza, cough, and small spots with white or bluish centers on an erythematous base on the buccal mucosa (Koplik spots). A skin rash usually occurs about 2-4 days after the initial symptoms. The rash begins on the face and soon spreads to other parts of the body. The rash usually lasts 4-7 days and then disappears in the same order it appeared (head to foot). Koplik spots may become visible inside the cheeks of the mouth 1-2 days prior to rash onset. Measles is transmitted from person to person by airborne spread. Persons are infectious from four days before until four days after rash onset. The incubation period from exposure to development of a rash is generally 14 days, but can range from 7 to 18 days. **Laboratory testing for measles is available at the Massachusetts State Laboratory Institute.**

PREVENTION

Immunization with MMR (measles, mumps, and rubella) vaccine provides the best protection from measles. The vaccine is normally given to young children, but adolescents and adults who are not immune should also be vaccinated. Adults born in the United States on or after January 1, 1957 and children >12 months of age (as age appropriate) should have documentation of 2 doses of MMR or serologic proof of immunity to measles. Persons born in the United States prior to January 1, 1957 likely have immunity to measles, but to increase the probability of protection, they should be offered an MMR vaccine unless they have serologic proof of immunity. No year cutoff is used to assess immunity in persons who are not born in the US. Documentation of adequate immunity in healthcare workers (including contractors) is particularly important because they may expose high risk populations. Health care facilities should take appropriate precautions when evaluating a patient with a febrile rash illness. **If measles is suspected, airborne infection isolation precautions should be implemented immediately.**

REPORTING

Healthcare providers in Boston are required by state and city regulations to report all suspect or confirmed measles cases promptly to the Boston Public Health Commission (BPHC) Communicable Disease Control Division at 617-534-5611. Reporting forms for health care providers and for laboratories are available on the web at: www.bphc.org.