



February 28, 2019

## **ALERT # 2: Update on Measles Outbreak in New York City in the Orthodox Jewish Community**

*A total of 121 individuals with measles have been confirmed since October in the Orthodox Jewish communities of Williamsburg and Borough Park in Brooklyn. The vast majority of individuals with measles have been unvaccinated children.*

*Distribute to All Primary Care, Infectious Disease, Emergency Medicine, Internal Medicine, Pediatrics, Family Medicine, Laboratory Medicine, and Infection Control Staff*

- 1) **Screen for rash with fever at the point of entry to healthcare facilities and immediately institute airborne precautions to prevent healthcare-associated exposures.**
- 2) **Make sure all patients are up to date with their MMR vaccine, the most effective way to prevent measles and its complications.**
- 3) **Providers serving the affected Orthodox Jewish communities in Brooklyn should closely follow NYC Department of Health immunization and other guidance to accelerate the end of this local outbreak.**
- 4) **Ask about planned travel. Vaccinate infants aged 6 to 11 months and all unvaccinated individuals (or ‘children and adults’) 12 months of age and older with MMR prior to international travel.**
- 5) **Report all patients with suspected measles immediately to the Health Department. *Do not wait for laboratory confirmation to report a case or institute infection control measures.***

Dear Colleagues,

A total of 121 individuals with measles have been reported to the New York City (NYC) Department of Health and Mental Hygiene (DOHMH) since October in the Orthodox Jewish communities of Brooklyn. Transmission has occurred in Williamsburg (76) and Borough Park (42). Single cases have occurred in each of Bensonhurst, Midwood and Flushing, with the latter in an individual who acquired measles while traveling to Israel. All individuals are associated with the Orthodox Jewish community. The majority of individuals diagnosed with measles have been children (108, 89%), of whom 101 (94%) were unvaccinated. Six individuals, 5 of whom were from New York City, acquired measles while travelling abroad to Israel (4), the United Kingdom (1) and Ukraine (1), areas with active outbreaks. Eight individuals have been hospitalized, including one in the intensive care unit. Serious complications include 7 individuals with pneumonia. All have recovered.

Measles is one of the most contagious infectious diseases. Even one person with measles puts non-immune individuals at risk for becoming infected, particularly young children, the

immunocompromised, and non-immune pregnant women, all of whom are at highest risk for severe complications.

### **Transmission and Infection Control**

To date, over 5,700 exposures have occurred in the city related to this outbreak, primarily in healthcare facilities including in emergency departments, inpatient facilities, urgent cares, and numerous outpatient clinic settings. Measles is transmitted by airborne particles, droplets, and direct contact with the respiratory secretions of an infected person. Infected individuals are contagious from four days before rash onset through the fourth day after rash appearance.

**It is imperative that all patients are screened for rash with fever at the point of entry of a healthcare facility and immediately be placed in negative pressure rooms for airborne precautions to prevent exposures. DO NOT WAIT FOR LABORATORY CONFIRMATION OF MEASLES TO INSTITUTE INFECTION CONTROL PRECAUTIONS.**

Providers serving the affected communities should pre-screen patients when they call for appointments and prior to entering your facility; this is critical to avoiding exposures. Unvaccinated persons with a known measles exposure should be treated as potentially contagious if they present to healthcare for a sick visit. Posters should be placed at your entrance to prevent people with rash from entering. Additional guidance and resources for providers, including posters, can be found at: [www1.nyc.gov/site/doh/providers/health-topics/measles.page](http://www1.nyc.gov/site/doh/providers/health-topics/measles.page). If a negative pressure room is not available, place the patient with suspected measles in an exam room with a mask and do not use that room for 2 hours after the patient has left; note however that in the absence of a negative pressure room, patients in your facility are still considered exposed. Any unvaccinated patient aged 6 months and older in your facility from the time a patient with suspected measles arrives through two hours after they leave should be vaccinated **BEFORE** they leave your facility; this will avoid the need for you to recall non-immune patients urgently for prophylaxis. Parents of children with measles infection should be instructed to keep them home while contagious, through and including four days after rash onset.

### **Clinical Presentation**

Always consider measles when evaluating patients with fever and rash. Measles typically presents in adults and children as an acute viral illness characterized by fever and generalized maculopapular rash. The prodrome may include cough, coryza, and conjunctivitis. The classic rash usually starts on the face, proceeds down the body, and may include the palms and soles, and appears discrete but may become confluent.

### **Reporting**

Persons suspected to have measles should be reported **IMMEDIATELY** to the Department of Health and Mental Hygiene (DOHMH) at 347-396-2402 during business hours or 866-692-3641 during afterhours and weekends. ***Reports should be made at time of initial clinical suspicion. Do not wait for laboratory confirmation to report.*** If you are considering the diagnosis of measles and are ordering diagnostic testing, then you should report the individual at that time.

### **Laboratory Testing**

If you suspect measles, collect venipuncture blood for measles IgM and IgG, and a nasopharyngeal or throat swab for measles PCR. When you call DOHMH to report the patient suspected to have measles, we will arrange pick-up and transport of the specimens to the DOHMH laboratory. ***Collect blood in serum separator tubes (red, red-speckled, or gold-top***

*tops), and if possible, centrifuge and separate. Swabs should be synthetic (non-cotton) in liquid, viral transport media. Refrigerate specimens after collection and transport on ice.*

During this outbreak, if parents of unvaccinated children in the affected community request titers to confirm immunity in order to be allowed to return to school where exclusions are in effect, providers should assume they likely had measles and should report the suspected case to the DOHMH and collect blood for IgM testing along with IgG testing.

### **Post-exposure Prophylaxis**

Non-immune individuals aged 6 months and older should receive MMR vaccine within 72 hours of the initial exposure to prevent disease unless they have a contraindication to vaccination. Persons who received 1 dose of measles-containing vaccine before exposure should receive a second dose, provided it has been at least 28 days since a previous dose of MMR, varicella or live intranasal influenza vaccine.

Immune globulin (IG), not MMR vaccine, should be given as post-exposure prophylaxis to nonimmune individuals who are exposed to measles and at high-risk for complications, including: infants aged <6 months, infants aged 6 to 12 months who did not receive MMR within 72 hours of exposure, pregnant women who are not immune to measles, and severely immunocompromised persons, regardless of immunologic or vaccination status because they might not be protected by MMR vaccine. IG should be given as soon as possible and no later than 6 days after exposure to prevent or modify measles.

*Exposed people who are not immune to measles and who do not receive post-exposure prophylaxis must stay home through 21 days after last exposure, during the time that they are at risk for getting sick and being contagious. Because IG prolongs the incubation period, people who receive IG must stay home through 28 days after their last exposure to a person with measles.*

### **Travel recommendations**

There are large outbreaks of measles occurring globally, including in Israel, Europe, Asia, South America, and Africa. Providers should ensure that adults and children aged greater than 12 months who are traveling outside the U.S. have documented immunity to measles. Adults who believe they received their childhood vaccinations but who do not have documented immunity to measles should be vaccinated against measles prior to travel. Children between 6 and 11 months of age who will be travelling internationally are also recommended to receive a dose of MMR vaccine before travel, although this dose does not count towards completion of the routine schedule. The dose will need to be repeated at 12 months of age, as long as 28 days have passed since the prior dose.

For providers enrolled in the Vaccines for Children (VFC) program serving the Orthodox Jewish community, please make sure you have an adequate supply of MMR vaccine on hand. If you need more vaccine, place your order through the On-line Registry as you normally do. If you need an expedited shipment or need assistance with ordering MMR vaccine, please call 347-396-2405 or e-mail [nycimmunize@health.nyc.gov](mailto:nycimmunize@health.nyc.gov).

For more information, visit [www.nyc.gov/health](http://www.nyc.gov/health) and search for “measles.” As always, your cooperation is appreciated.

Sincerely,

*Jennifer Rosen*

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