



NEW YORK CITY DEPARTMENT OF  
HEALTH AND MENTAL HYGIENE  
Oxiris Barbot, MD  
Commissioner

April 24, 2019

## **ALERT # 9: Citywide Recommendations during the Ongoing Measles Outbreak in New York City**

**A total of 390 individuals with measles have been confirmed since October in New York City as part of this outbreak. Nearly all of these cases have occurred among persons living in Williamsburg and Borough Park. A small number of cases have occurred outside of these neighborhoods but have, to date, not resulted in sustained transmission of measles.**

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

- 1) All healthcare providers must make sure all patients are up-to-date with their measles-mumps-rubella vaccine (MMR), the most effective way to prevent measles and its complications.**
- 2) All healthcare staff should have documented measles immunity.**
- 3) Administer an early, extra dose of MMR to infants ages 6 to 11 months who reside in or regularly spend time in Williamsburg, Borough Park, and Crown Heights, Brooklyn or areas outside of New York City (NYC) experiencing measles activity.**
- 4) Consider an early, extra dose of MMR for infants ages 6 to 11 months who are members of the Orthodox Jewish community in NYC and live outside of Williamsburg, Borough Park, and Crown Heights.**
- 5) All persons 6 months of age and older who live, work or reside in these four ZIP codes in Williamsburg – 11205, 11206, 11211, 11249 – must receive at least one dose of MMR or have proof of measles immunity, by [Order of the Commissioner](#).**
- 6) Ask about planned travel. Vaccinate infants aged 6 to 11 months and all unvaccinated children and adults ages 12 months and older with MMR prior to international travel if vaccination history or immune status is unknown.**

Dear Colleagues,

As of April 23, 2019, a total of 390 individuals with measles have been reported to the New York City (NYC) Department of Health and Mental Hygiene (DOHMH) since October 2018. All but twelve of these individuals with measles are members of the Orthodox Jewish communities of Williamsburg (323, 83%) and Borough Park (55, 14%). A small number of cases have occurred outside of the Williamsburg and Borough Park neighborhoods at the core of the current outbreak. These cases have been diagnosed in residents of Midwood/Marine Park (4),

Brighton Beach (2), Flushing (2), Crown Heights (1), Bensonhurst (1), Far Rockaway (1) and the Hunts Point, Longwood and Melrose section of the Bronx (1). Seven individuals who do not identify as members of the Orthodox Jewish community have been diagnosed with measles since the outbreak began in October 2018. All but one of these individuals were exposed to the measles outbreak occurring in Williamsburg or Borough Park. The vast majority of individuals diagnosed with measles have been children (330, 85%), of whom 304 (92%) were unvaccinated. A total of 60 cases have occurred among adults, of whom 43 (72%) were either unvaccinated or had unknown vaccination status. Eight individuals, including the initial case, acquired measles while travelling abroad to Israel (5), the United Kingdom (2) and Ukraine (1), areas with active outbreaks, highlighting the need for MMR vaccination for individuals traveling overseas. Twenty-nine individuals have been hospitalized, including six in the intensive care unit. Serious complications include 17 individuals with pneumonia. Over 13,000 people have been identified as exposed to measles in NYC. In addition to an outbreak of measles in Brooklyn, outbreaks of measles have occurred in Rockland, Orange and Westchester counties in New York State and in other parts of the United States.

**This is a good time for healthcare providers to make sure that all of their patients are up-to-date with all age-appropriate vaccinations, including MMR vaccine. Visit the CDC's webpage for the [annual Advisory Committee on Immunization Practices schedules](#).**

**Citywide MMR Guidance for Adults, 18 years of age and older:**

- ***Standard MMR guidance for adults:***
  - There is no change in guidance for most adults in NYC.
  - Presumptive evidence of immunity to measles includes: documented receipt of two measles containing vaccines, laboratory evidence of immunity or prior infection, or birth prior to 1957. **It is not recommended to check measles IgG titers in people with documentation of two doses of a measles-containing vaccine.** Self-reported vaccination does not constitute evidence of immunity.
  - All employees in healthcare settings are required to have documented evidence of immunity to measles.
  - Adults with no evidence of immunity should get 1 dose of MMR unless the adult is in a group at higher risk for acquisition or transmission of measles. Such individuals should get a second dose of MMR at least 28 days after the first.
    - Groups at higher risk include:
      - all healthcare personnel
      - international travelers
      - students at post-high school educational institutions
      - people exposed to measles in an outbreak setting
      - those previously vaccinated with killed measles vaccine or with an unknown type of measles vaccine during 1963 through 1967.
- ***Outbreak related guidance for adults:***
  - Review the vaccination and immunity status of adults who reside or regularly spend time in neighborhoods or other areas experiencing measles activity (see above).
    - Persons with 2 documented doses of a measles-containing vaccine are considered immune.
    - For persons with 1 documented dose of a measles-containing vaccine: administer a second dose of MMR.

- For persons without documented vaccination: administer two doses of MMR vaccine or draw blood to check for laboratory evidence of immunity.
- Healthcare workers born before 1957 who are working in neighborhoods or other areas experiencing measles activity areas should make sure they are immune to measles by obtaining serology or MMR vaccination, 2 doses of MMR, 4 weeks apart.

### **Citywide MMR Guidance for Children <18 years of age:**

**It is imperative that all children in NYC are up to date with their MMR vaccine. Providers must, without delay, actively identify unvaccinated and under-vaccinated children in their practice to get them up-to-date with current Health Department recommendations:**

- ***Standard MMR guidance for children:***
  - There is no change in guidance for most children in NYC.
  - MMR is routinely recommended for children at 12 months of age with a second dose at 4 to 6 years of age (two doses are required to attend kindergarten through grade 12, and one dose is required for daycare, nursery school, Head Start and pre-K). There is no change in guidance for most children in NYC. Make sure all children have received the recommended number of MMR doses.
- ***Outbreak-related Guidance for 6-11 month old children:***
  - Because of transmission of measles in Williamsburg, Borough Park, and Crown Heights Brooklyn, healthcare providers should administer an early, extra dose of MMR to infants ages 6 to 11 months who reside in or regularly spend time in these neighborhoods or other areas experiencing measles activity.
  - Providers should consider an early, extra dose of MMR for infants ages 6 to 11 months who are members of the Orthodox Jewish community in New York City who live in neighborhoods other than Williamsburg, Borough Park or Crown Heights.
  - This extra, early dose will not be accepted for daycare and school attendance and will need to be repeated after 12 months of age and at least 4 weeks after the first dose.
- ***Outbreak-related guidance for 1-4 year-old children who reside or regularly spend time in areas with measles activity:*** The second dose of MMR can be given earlier than age 4 years, provided it has been at least 28 days since a previous dose of MMR, varicella or live intranasal influenza vaccine. **Administer an early second dose of MMR to children who reside in or regularly spend time in areas experiencing measles activity.** This second dose will meet the school immunization requirement and does not need to be repeated. Further, this second dose is not part of the vaccine order for Williamsburg and is at the discretion of the parent and healthcare provider.

### **Guidance for travelers:**

Healthcare providers should ask patients about planned travel. Infants aged 6 to 11 months who will be travelling internationally should receive a dose of MMR before travel, although this dose does not count towards completion of the routine schedule. All children and adults ages 12 months and older should have documentation of immunity prior to international travel. For persons who are not immune, administer MMR ideally at least 2 weeks prior to travel.

### **Medical contraindications to MMR:**

MMR is contraindicated in immunocompromised individuals and all pregnant persons as well as those who have a history of previous severe allergic reaction to a previous dose of MMR or vaccine

components. Allergy to eggs is not considered a contraindication to MMR vaccine. Persons who are breastfeeding may receive MMR vaccine.

**Additional assistance from the Department of Health:**

If you need assistance with generating a list of unvaccinated patients using the Citywide Immunization Registry, please contact the Bureau of Immunization at 347-396-2400 or e-mail the address provided below. For providers enrolled in the Vaccines for Children (VFC) program, 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).

**Clinical features of measles:**

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. The rash lasts several days. A person who had some degree of immunity to measles prior to infection (e.g. infants <1 year who passively acquired some maternal antibody and previously vaccinated persons who had waning immunity) may have more mild symptoms and certain classic symptoms may be absent. Complications may include diarrhea, otitis media, pneumonia, hepatitis, encephalitis, miscarriage and premature birth in pregnancy, and death. Long-term complications include subacute sclerosing panencephalitis, a very rare, but fatal disease of the central nervous system that results from measles virus infection earlier in life

**Infection Control Guidance:**

It is important that healthcare facilities implement measures to prevent measles transmission. Visit the [Health Department's measles information page](#) for further information on infection control strategies to prevent measles exposures in health care settings.

**Mandatory reporting of suspected measles:**

Persons suspected to have measles should be reported immediately to the Health Department at 866-692-3641. 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. Visit [nyc.gov/health](http://nyc.gov/health) and search for "measles and provider" for more guidance and updates. As always, your cooperation is appreciated.

Sincerely,

*Jennifer Rosen*

Jennifer Rosen, MD  
Director, Epidemiology and Surveillance  
Bureau of Immunization

*Jane Zucker*

Jane R. Zucker, MD, MSc  
Assistant Commissioner  
Bureau of Immunization