ALERT # 10: Update on Measles Outbreak in New York City and Citywide Recommendations

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

- Since October 2018, 535 New York City residents with confirmed measles have been reported to the Health Department as of May 23, 2019.
- Most of these individuals are members of the Orthodox Jewish communities and reside in Williamsburg and Borough Park, Brooklyn.
- Recent community transmission of measles has been identified in Sunset Park, Brooklyn, among a small number of mostly non-Orthodox persons.
- Implement outbreak–related measles-mumps-rubella (MMR) guidance detailed below for your patients who reside in or regularly spend time in Williamsburg, Borough Park, Crown Heights, and Sunset Park, Brooklyn or areas outside of New York City experiencing measles activity. This includes administering an early, extra dose of MMR to infants aged 6 to 11 months.
- An increasing proportion of individuals with measles in Borough Park and Sunset Park are adults.
- Remain vigilant for measles among persons of all ages, including those who do not live in Williamsburg or Borough Park.

Dear Colleagues,

As of May 23, 2019, a total of 535 individuals with measles have been reported to the New York City Health Department since October 2018. Most individuals have resided in Williamsburg (418, 78%) and Borough Park (84, 16%), Brooklyn. However, community transmission of measles has also been identified in Crown Heights and now Sunset Park, Brooklyn. In Sunset Park, four new cases bring the total to 12 individuals who reside in the neighborhood. Many of these individuals are connected epidemiologically and have other geographic exposures in areas with known measles activity. In addition, a recent increasing proportion of reported measles diagnoses have been among adults ages 18 years and older; among 106 cases reported in adults, 84 (79%) were unvaccinated or had unknown vaccination status. Updated information about the outbreak, including the neighborhoods with measles cases is available at nyc.gov/health/measles.

Given recent measles activity in Sunset Park, Brooklyn, the Health Department has added this neighborhood to the list of NYC neighborhoods experiencing measles activity. Residents of the Williamsburg, Borough Park, Crown Heights, and now Sunset Park neighborhoods are under outbreak-related vaccination guidance. Under Order of the Commissioner of Health, Williamsburg residents six months of age or older must demonstrate proof of measles vaccination or immunity or be subject to fines.

Healthcare providers should also be vigilant for possible measles, including in individuals who live, work or spend time in Sunset Park, Brooklyn. See testing recommendations below.
It is imperative that all healthcare facilities implement measures to prevent measles transmission. Many measles exposures may be prevented by implementing effective infection control strategies in all clinical settings. Visit this page for further information on infection control strategies to prevent measles exposures in health care.

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

Under Order of the Commissioner of Health, all Williamsburg residents 6 months or older must demonstrate proof of measles vaccination or immunity or be subject to fines.

- **Outbreak-related MMR guidance for adults:**
  - Review the vaccination and immunity status of adults who reside or regularly spend time in Williamsburg, Borough Park, Crown Heights, and now Sunset Park, Brooklyn or other areas experiencing measles activity (see above).
    - Persons with two documented doses of a measles-containing vaccine are considered immune.
    - For persons with one documented dose of a measles-containing vaccine: administer a second dose of MMR.
    - For persons without documented vaccination who live, work, or spend time in areas with measles activity: administer two doses of MMR vaccine, 28 days apart. **When feasible, vaccination is preferred over drawing blood to check for laboratory evidence of immunity in order to ensure immunity more quickly.**
    - Healthcare workers born before 1957 who are working in neighborhoods or other areas experiencing measles activity should make sure they are immune to measles by obtaining serology or MMR vaccination, two doses of MMR, 28 days apart.

- **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 one 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
  - For adults without proof of vaccination, and who are not exposed to areas with measles activity, administer one dose of MMR. Serologic testing is an option but giving vaccine will provide protection and avoid waiting for results and a possible second visit. An additional dose of MMR poses no risk to the patient. If testing is unavailable, err on the side of administering the MMR vaccine.
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:

- **Outbreak-related guidance for 6-11 month old children:**
  - Because of transmission of measles in Williamsburg, Borough Park, Crown Heights, and now Sunset Park 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, and 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 four weeks after the first dose.

- **Outbreak-related guidance for 1 to 4 year-old children who reside or regularly spend time in areas with measles activity:** The second dose of MMR should 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.

- **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.

**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 women 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. Women who are breastfeeding may receive MMR vaccine.

**Additional assistance from the Health Department:**

If you need assistance with generating a list of unvaccinated patients using the Citywide Immunization Registry, contact the Health Department’s 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, call (347) 396-2405 or e-mail 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. babies <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.

**Mandatory reporting of suspected measles:**

Persons suspected to have measles should be reported immediately to the New York City 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 and search for “measles and provider” for more guidance and updates. As always, your cooperation is appreciated.

Sincerely,

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Deputy Commissioner
Division of Disease Control