Chicago Department of Public Health

Health Alert

City of Chicago
Rahm Emanuel, Mayor

Communicable Disease Program

Chicago Department of Public Health
Julie Morita, MD, Commissioner

Invasive Meningococcal Disease in Men Who Have Sex with Men HAN#3

Date: **June 19, 2015**

To: **Infection Preventionists, Emergency Department, Infectious Disease, Primary Care, Internal Medicine, Family Medicine, Pediatrics, Critical Care physicians and Laboratory personnel**

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Since mid-May 2015, the Chicago Department of Public Health (CDPH) has been actively investigating reports of 5 confirmed cases of invasive meningococcal disease (IMD) in men who have sex with men (MSM), one of which was fatal. An additional IMD case was reported in DuPage County. All 6 *N. meningitidis* isolates are serogroup C and 3 isolates tested to date are identical on pulsed-field gel electrophoresis (PFGE). Characteristics of cases include but are not limited to HIV diagnosis, anonymous sex, or use of on-line "hook-up" apps to seek sexual partners (e.g., Grindr, Jack'd, Adam4Adam). African American men have been disproportionately affected. Given the rapid increase of cases, CDPH in conjunction with Centers for Disease Control and Prevention partners, are recommending to **expand vaccination recommendations to include all MSM.**

Among 51,000 MSM in Chicago, the annual incidence rate of IMD in 2015 to date is 10/100,000, reaching the Advisory Committee on Immunization Practices (ACIP) recommended threshold for initiating a meningococcal vaccination campaign.[1]

Due to the continued identification of IMD in MSM, CDPH is recommending meningococcal vaccination for all MSM.

In 2003, an outbreak of IMD occurred among MSM in Chicago.[2] From 2010-2013 an outbreak of IMD in MSM was identified in New York City.[3]

Vaccine information: Vaccine is available through primary healthcare providers, pharmacies and CDPH Fast-track clinics located at Englewood Neighborhood Health Center: 641 W. 63rd St, Lower Level, phone (312)745-1000 (hours: Thurs 9a-4:30p and Fri 8a-3:30p) or Uptown Neighborhood Health Center: 845 W. Wilson Ave., 2nd level, phone 312-742-3227 (hours: Mon, Wed, Fri. 8:30a-3:30p and Tues/Thurs 9a-4:30p). A list of providers currently offering meningococcal vaccine is posted on the CDPH website (http://www.cityofchicago.org/city/en/depts/cdph/supp_info/infectious/meningococcal-vaccine-locations.html).Providers may also call or have their patient directly call 311 to obtain locations where patients may go to receive vaccine for both insured and uninsured individuals.

Two meningococcal conjugate vaccines (i.e., Menactra, Menveo) that contain serogroups A, C, W135, and Y are licensed for use in adults through age 55 years. Non-immunocompromised adults only need one dose for adequate protection; HIV-infected and other immunocompromised individuals should receive 2 doses, 8 weeks apart (i.e., at 0 and 2 months). Meningococcal polysaccharide vaccine (i.e., Menomune) should be used for adults aged 56 and older. If meningococcal polysaccharide vaccine is not available, meningococcal conjugate vaccine may be used in patients 56 years or older.

Brand Name	**Menactra**	**Menveo**	**Menomune**
Characteristics	Conjugate Vaccine (MCV4)	Conjugate Vaccine (MCV4)	Polysaccharide Vaccine (MPSV4)
CPT Code	90734	90734	90733

Serogroups	A, C, W135, Y	A, C, W135, Y	A, C, W135, Y
Manufacturer & Licensure	*Sanofi Pasteur*, Licensed in 2005	*Novartis*, Licensed in 2010	*Sanofi Pasteur*, Licensed in 1981
Age Guidelines	9 months – 55 years	2 – 55 years	56 years and older
Administration	Intramuscular	Intramuscular	Subcutaneous
Vaccine properties	Single-dose vial, no preservative or adjuvant	Single-dose vials, no preservative or adjuvant, requires reconstitution	Single-dose or 10-dose vials, diluent is sterile water with thimerisol preservative, requires reconstitution

There is limited data regarding the risk of meningococcal disease in relation to severity of HIV infection (i.e., low CD4 count). There is also limited data on vaccine effectiveness in patients with severe HIV. Clinicians should ensure patients understand the risk factors for disease, as well as signs/symptoms of illness, and should continue to provide post-exposure chemoprophylaxis to close contacts (intimate and/or sexual relations) of confirmed cases regardless of vaccination history.

Revaccination: For persons at increased risk of meningococcal disease, revaccinate every 5 years as long as the person remains at increased risk. Therefore, those individuals who received meningococcal vaccination in Chicago during the 2003 campaign should be revaccinated now if they were not revaccinated since 2010.

Clinical manifestations: Patients with meningococcal disease characteristically present with fever, headache, stiff neck, petechial rash, sepsis, and/or altered mental status. Early in the course, an abnormality in pulse, blood pressure or respiratory rate out of proportion to the physical examination may be the only indication of a serious infection. Rapid recognition of IMD with administration of appropriate antibiotics increases the probability of survival. Treatment with antibiotics should not be delayed pending the results of diagnostic testing. Early clues to meningococcal disease may include presence of petechial or purpuric rash. It is especially important to examine the skin thoroughly for the presence of petechiae. In the early stages of meningococcal disease the rash may be maculopapular and blanch. Patients may have severe abdominal or muscle pain, usually in the extremities or back.

Timely antibiotic prophylaxis reduces the risk of transmission to close contacts, but must be administered as soon as possible and within 10 days of the last exposure. CDPH routinely investigates all IMD cases to identify close contacts and assist providers with administering antibiotic prophylaxis. Persons that should receive prophylaxis include household members, child-care center contacts, and anyone directly exposed to the patient's respiratory or oral secretions (e.g., through kissing, intimate contact, mouth-to-mouth resuscitation, endotracheal intubation, or endotracheal tube management).

Additional information from the Centers for Disease Control and Prevention about *N. meningitidis* infection and meningococcal vaccines can be found at: http://www.cdc.gov/meningococcal/index.html and http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6003a3.htm

Please remember to report cases of IMD to CDPH immediately. Please ensure that bacterial isolates are submitted to the Illinois Public Health Laboratory for serogrouping and molecular typing in a timely fashion. To report a suspect or confirmed case of meningococcal disease, please call during business hours: 312-746-5377 or 312-746-5925 and during non-business hours, call 311 and ask for the communicable disease physician on-call.

References:

1. Bilukha OO, Rosenstein N; National Center for Infectious Diseases, Centers for Disease Control and Prevention. Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep 2005;54:1-21.
2. Schmink, S, Watson J, Coulson GB et al. Molecular Epidemiology of N*eisseria meningitidis* from an outbreak of meningococcal disease among men who have sex with men, Chicago, Illiinois, 2003, Journal of Clinical Microbiology 2007; 45(11):3768-3770.
3. Kratz MM, Weiss D, Ridpath A et al. Community-based outbreak of *Neisseria meningitidis* Serogroup C in men who have sex with men, New York, New York, USA, 2010-2013, *Emerging Infectious Diseases*; 2015; 21(8), publication pending.