



# 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***

**Date:** June 3, 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 3 confirmed cases of invasive meningococcal disease (IMD) in men who have sex with men (MSM), one of which was fatal. All 3 *N. meningitidis* isolates are serogroup C. Characteristics of cases include HIV diagnosis or use of on-line “hook-up” apps to seek sexual partners (e.g., Grindr, Jack’d, Adam4Adam).

Among HIV positive MSM in Chicago, the annual incidence rate of IMD in 2015 has reached approximately 23/100,000, surpassing the Advisory Committee on Immunization Practices (ACIP) recommended threshold of 10/100,000 for initiating a meningococcal vaccination campaign.<sup>1</sup>

**Due to this cluster, CDPH is recommending meningococcal vaccination for:**

- 1) HIV-positive MSM and,**
- 2) MSM regardless of HIV status, who have close or intimate contact with anonymous partners or seek sexual partners through use of on-line “hook-up” apps.**

In 2003, an outbreak of IMD occurred among MSM in Chicago.<sup>2</sup> From 2010-2013 an outbreak of IMD in MSM was identified in New York City; cases included HIV-positive MSM and MSM who used digital applications to meet sexual partners.<sup>3</sup>

**Obtaining meningococcal vaccine:** Men in the risk categories defined above may obtain vaccine through one of 3 methods:

- Primary healthcare provider
- Pharmacies
- CDPH Fast-track clinics located at Englewood Neighborhood Health Center: 641 W. 63<sup>rd</sup> 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., 2<sup>nd</sup> level, phone 312-742-3227 (hours: Mon, Wed, Fri. 8:30a-3:30p and Tues/Thurs 9a-4:30p).

Providers may call or have their patient directly call 311 to obtain locations where patients may go to receive vaccine for both insured and uninsured individuals. In addition, a provider hotline at 312-746-4835 will be available beginning Thursday, June 4, 2015 from 8:30a-4:30p.

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.

**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.
- Severe abdominal pain.
- Severe 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.
- 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 also 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:

Business hours: 312-746-5377 or 312-746-5925

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 *Neisseria meningitidis* from an outbreak of meningococcal disease among men who have sex with men, Chicago, Illinois, 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.