Health Advisory

Outbreak of Meningococcal Disease in Florida Involving Men Who Have Sex with Men -- Recommendations for San Francisco

May 18, 2022

Situational Update

In April 2022, CDC reported a large, ongoing outbreak of meningococcal disease in Florida, primarily among gay, bisexual, and men who have sex with men (MSM), including those living with HIV, and made the recommendations that MSM living in Florida should receive vaccination with quadrivalent meningococcal conjugate vaccine (MenACWY) and that MSM traveling to Florida should talk with their doctor about getting MenACWY vaccine.

During 2015-16, outbreaks of serogroup C meningococcal disease occurred primarily among MSM in several large US urban areas, including Los Angeles and Orange Counties in California. At that time, the SF Department of Public Health (SFDPH) launched a vaccination campaign for MSM and transgender persons who have sex with men who had behavioral risk factors for meningococcal disease exposure (see Health Advisory 6/28/2016). San Francisco did not experience an outbreak of meningococcal disease during that period. No cases of meningococcal disease in MSM have been reported recently in San Francisco.

Over the next several months, San Francisco MSM may encounter increased risk of meningococcal disease transmission due to attendance at events that involve MSM from around the country, including but not limited to SF Pride in June 2022.

SFDPH endorses a policy whereby MSM with or without HIV infection should be brought up to date with MenACWY vaccination if they meet risk criteria below. The primary MenACWY series for adults with risk consists of 1 dose for HIV-uninfected individuals and 2 doses given 8-12 weeks apart for people living with HIV. Previously vaccinated individuals with ongoing risk, regardless of HIV status, should receive a booster every 5 years.

Actions Requested of SF Clinicians

1. **Recommend and offer MenACWY vaccine to MSM and transgender persons who have sex with men, who have potentially elevated risk for meningococcal exposure based on one or more of these criteria:**

a. Plan to visit Florida; or

b. Plan to attend gatherings that may include MSM from around the country; or

c. Have close or intimate contact with multiple partners or visit crowded venues such as bars or parties.

Previously vaccinated persons with ongoing risk should receive a **booster dose if ≥5 years has elapsed since their previous MenACWY dose.**

MSM not known to be HIV-infected who have not been tested for HIV within the last year should be tested for HIV along with vaccination, if possible, and should be offered screening for other sexually transmitted infections and referred for HIV pre-exposure prophylaxis based on reported risk.

2. **Routinely vaccinate all persons eligible for the MenACWY vaccine according to the CDC** child/adolescent immunization **and** adult immunization **schedules**. MenACWY vaccine is routinely recommended for:

   a. Pre-adolescents ages 11-12 years (single dose), with a booster at age 16 years.

   b. Children and adults with HIV infection, anatomic or functional asplenia (including sickle cell disease), persistent complement component deficiency, or complement inhibitor medication use (e.g., eculizumab, ravulizumab). In general, MenACWY vaccination for these persons is a 2-dose primary series given 8-12 weeks apart plus a booster dose every 5 years if the person remains at increased risk. If the 2nd dose in the 2-dose primary series is given more than 12 weeks later, the series does not need to be restarted. Please review the MenACWY primary and booster dose tables as the schedules for persons with risk factors varies by age and medical condition.

   c. Persons traveling to countries with hyperendemic or epidemic meningococcal disease, military recruits, and first-year college students living in residential housing (if not vaccinated at age 16 years or older).

3. **Immediately report** any San Francisco resident with suspected or confirmed meningococcal disease 24/7 to the SFDPH Communicable Disease Control Unit at (415)-554-2830. After hours follow instructions to page the on-call MD. Do not wait to report until the diagnosis is culture-confirmed; any delay in reporting may compromise the ability to identify close contacts and ensure they receive timely post-exposure prophylaxis (PEP).

4. **Consider antimicrobial susceptibility testing of *N. meningitidis* isolates** due to concern about the emergence of resistance to penicillin, rifampin, and ciprofloxacin.

Susceptibility testing may be used to inform treatment and PEP decisions and should occur in parallel with these decisions. it should not delay initiation of treatment or PEP.

Additional Information

Approved MenACWY Products. Three brands of MenACWY vaccine are available:

- Menactra is FDA-approved for ages 9 months through 55 years
- Menveo is FDA-approved for ages 2 months through 55 years
- MenQuadFi is FDA-approved for ages 2 years and older with no upper age limit

CDC does not express a brand preference -- all are considered safe and effective. CDC guidance is that in addition to MenQuadFi, Menactra and Menveo can be administered to persons >55 years of age, though such use is considered off-label.

The MenACWY vaccine brands are interchangeable – that is, the same vaccine product is recommended, but not required, for all doses. MenACWY vaccines can be administered concomitantly with other vaccines, except that Menactra (but not Menveo or MenQuadFi) can interfere with the immune response to pneumococcal conjugate vaccine (PCV) and should be deferred until at least 4 weeks after completion of all PCV doses.

Where to Obtain MenACWY Vaccination. MenACWY vaccines are offered at pediatric and adult primary care offices, clinics, and retail pharmacies. Though SFDPH policy is that all MSM with meningococcal risk are eligible for vaccination, MSM seeking MenACWY vaccine may discover that not all insurers cover MenACWY vaccination for HIV-uninfected MSM.

For MSM whose provider does not offer the vaccine, who lack health insurance, or whose insurer does not cover the vaccine, several San Francisco locations offer free or low-cost MenACWY vaccine.

MenB Vaccination. Cases of meningococcal serogroup B disease are rare in the US, but in recent years small outbreaks have occurred among college students. MenB vaccination is not routinely recommended but may be considered for persons ages 16-23 years based on shared decision-making between the healthcare provider and the patient or parent/guardian. Two brands of MenB vaccine are licensed, Trumenba and Bexsero, and are not interchangeable.

Mode of Transmission. Meningococcal disease results from infection with *Neisseria meningitidis* bacteria, which can cause meningitis, bacteremia, and septicemia. Transmission is via contact with the respiratory secretions or aerosols of someone carrying the bacteria in their nasopharynx, typically via close or sexual contact. Transmission occurs more easily in households and other crowded or congregate settings where there is close contact with many

others. This is reflected in the increased risk of meningococcal disease among college dormitory residents and military recruits.

Other known risk factors for meningococcal disease include smoking and exposure to cigarette smoke or cigarette smokers, recent viral infection (especially influenza A infection), and mycoplasma infection. The higher risk of meningococcal disease is because both infection and exposure to smoke can cause microtrauma of the nasopharynx, increasing the risk that bacteria will enter the bloodstream.

While highly effective, vaccination is not 100% effective. Those wishing to further reduce their risk of meningococcal disease should consider avoiding contact with nasopharyngeal secretions and aerosols from the nose or mouth of other persons, as well as avoiding smoking or smoky settings.

Clinical Description. Prompt recognition and antibiotic treatment of meningococcal disease is critical. Symptoms of meningitis may include sudden onset of fever, headache, and stiff neck, accompanied by nausea, vomiting, photophobia, and altered mental status. Symptoms of septicemia may include fatigue, nausea, vomiting, cold hands and feet, chills, severe muscle aches or abdominal pain, rapid breathing, diarrhea, and a petechial or purpuric rash.

The following may be helpful in making the diagnosis:

- A thorough examination of the skin, conjunctiva, and pharynx for petechiae, with particular attention to pressure zones beneath clothes, the palms, and the soles.
- Severe muscle or abdominal pain, particularly when no apparent alternative etiology
- Blood pressure values that are in the normal range but are actually low, considering the heart rate, temperature, and severity of illness (e.g., BP 100/60 with a heart rate of 140).
- Platelet counts between 100,000-150,000 per microliter.

While any single finding does not necessarily indicate meningococcal disease, the constellation of findings warrants closer scrutiny and consideration of antibiotic therapy. A history of vaccination does not rule out meningococcal disease. Antibiotics should not be delayed in order to obtain diagnostic specimens.

Resources

CDC Meningococcal Vaccination Recommendations

SFDPH Meningococcal Disease Among MSM

CDPH Meningococcal Disease Resources

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