



KAREN SMITH, MD, MPH  
Director & State Health Officer

State of California—Health and Human Services Agency  
California Department of Public Health

Clinician Health Advisory



EDMUND G. BROWN JR.  
Governor

**Outbreak of Meningococcal Disease among adult Males  
in Southern California  
June 24, 2016**

Outbreaks of serogroup C invasive meningococcal disease among men who have sex with men (MSM) have been reported in [New York City](#), [Los Angeles County](#), and [Chicago](#) since 2014. Serogroup C meningococcal disease outbreaks among MSM have also been reported in Canada and Europe.

Since May 2016, nine confirmed cases of meningococcal disease, including one death, have been reported in men living in Southern California, most of whom were MSM. Six of the cases are known to be caused by serogroup C and one additional case is awaiting serogroup identification. This represents a substantial increase above the typical number of reported cases. Most cases have occurred in the past four weeks.

Persons with HIV infection are known to be at increased risk of meningococcal disease. In addition, MSM without HIV infection may also be at increased risk, including those who:

- Regularly have close or intimate contact with multiple partners, or who seek partners through the use of online websites or phone digital applications
- Regularly visit crowded venues such as bars, parties, etc.
- Smoke cigarettes, marijuana, hookahs or illegal drugs or spend time in smoky settings

Many cities will have Pride events this summer, and there will be many crowded venues. To reduce the risk of meningococcal disease, CDPH recommends that healthcare providers discuss the potential benefits of meningococcal vaccination with MSM, particularly those who may be at increased risk of infection with *Neisseria meningitidis*.

[Quadrivalent meningococcal conjugate vaccines](#) (MenACWY) protect against serogroup C disease, the serogroup causing clusters and outbreaks among MSM, as well as against A, W, and Y disease. Although serogroup B ([MenB](#)) vaccines are now available, serogroup B has not been associated with clusters or outbreaks among MSM.

Because of their increased risk for meningococcal disease, the U.S. Advisory Committee on Immunization Practices (ACIP) [voted on June 22, 2016](#) to recommend that all persons with HIV infection who are two months of age and older be routinely vaccinated with MenACWY vaccine. MenACWY is included on the [AIDS Drug Assistance Program](#) (ADAP) formulary.

**Invasive meningococcal disease background**

Meningococcal disease results from infection with *Neisseria meningitidis* bacteria, which can cause meningitis, bacteremia and septicemia. Even if diagnosed early and treated with antibiotics, meningococcal disease can still result in death, loss of limbs, or permanent brain damage. Symptoms of infection usually occur within 3-7 days after exposure. Most persons who

are exposed to the bacteria do not develop invasive disease, although they may become colonized in the nasopharynx for a period of time and transmit the bacteria to others.

The bacteria that cause meningococcal disease are transmitted by contact with the respiratory secretions or aerosols of someone carrying the bacteria in their nasopharynx; usually by close or intimate 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; preceding viral infection, especially influenza A infection; and mycoplasma infection. The increased risk of meningococcal disease is because both infection and exposure to smoke can cause microtrauma of the nasopharynx, which increases the risk that bacteria will enter the bloodstream.

### **Meningococcal vaccine recommendations**

- MSM who are not HIV-infected, but who are at increased risk of meningococcal disease (see above) should be offered 1 dose of MenACWY vaccine (Menveo® or Menactra®). Because meningococcal vaccine-induced immunity wanes, a booster dose can be considered for those whose last dose of MenACWY vaccine was  $\geq 5$  years ago.
  - MSM who are not known to be HIV-infected and have not been tested for HIV within the last year should be offered an HIV test along with vaccination.
- HIV-infected persons should routinely receive 2 doses of MenACWY vaccine (Menveo or Menactra), 8-12 weeks apart, as their primary series. Previously vaccinated HIV-infected persons who received only 1 dose of vaccine should receive a second dose at the earliest opportunity, regardless of the time interval since the previous dose. A booster dose should be given every 5 years if the previous dose was administered at  $\geq 7$  years of age.
- All adolescents should continue to be routinely vaccinated with MenACWY vaccine as per [current ACIP recommendations](#).
- Infants, children and adults with increased risk of meningococcal disease (due to underlying complement deficiency or asplenia, or due to exposure through travel, occupation, or outbreak) should continue to be routinely vaccinated with meningococcal vaccines as per [current ACIP recommendations](#).

Vaccine	Primary Schedule	Storage/Handling
<b>Menactra® (MenACWY-D)</b> (Sanofi Pasteur)	Single dose: 0.5mL (IM) No reconstitution required	<ul style="list-style-type: none"><li>• Store MenACWY-D and MenACWY-CRM (lyophilized and liquid components) in the refrigerator between 35°F and 46°F (aim for 40°F).</li><li>• Do not freeze any component – do not use if this happens.</li></ul>
<b>Menveo® (MenACWY-CRM)</b> (Novartis)	Single dose: 0.5 mL (IM)	

\*Although Menactra® and Menveo® are licensed for persons through 55 years of age, they may be administered to persons 56 years of age and older.

### **Where meningococcal vaccine can be obtained:**

Adults may locate meningococcal vaccine in their area by using CDC's "Adult Vaccine Finder" at: [http://www.vaccines.gov/more\\_info/features/healthmapvaccinefinder.html](http://www.vaccines.gov/more_info/features/healthmapvaccinefinder.html)

If Alameda County Providers have questions regarding how to access quadrivalent meningococcal conjugate vaccine, please call the Alameda County Immunization Program at 510-267-3230.