



Edwin M Lee
Mayor

San Francisco Department of Public Health

Barbara A Garcia, MPA
Director of Health

Tomás J. Aragón, MD, DrPH
Health Officer

Communicable Disease Control & Prevention

sfdph.org/cdcp

Tel (415) 554-2830 Fax (415) 554-2848

HEALTH ADVISORY

NOVEMBER 27, 2013

Notice to Healthcare Providers: Recognizing and Reporting Serogroup B Meningococcal Disease Associated with Outbreaks at Princeton University and the University of California at Santa Barbara

The CDC issued an advisory today concerning recent outbreaks of Serogroup B Meningococcal Disease at two universities. We are notifying you because students from these universities may be returning to San Francisco for the Thanksgiving holiday, and may present to local medical providers for care.

ACTIONS REQUESTED OF ALL CLINICIANS:

1. Be alert for cases compatible with meningococcal disease.
2. Immediately (within 1 hour) report all suspect cases of meningococcal disease to the 24/7 Communicable Disease Control Unit (CDCU) at (415) 554-2830. Do not wait for laboratory confirmation to report a clinically suspected case. Any delay in reporting compromises the ability to identify close contacts and ensure they receive antibiotic prophylaxis. After hours press “1” and “1” again to page the on-call physician.
3. Please let CDCU know if the cases may be connected with the outbreaks at Princeton University and UC Santa Barbara
4. Implement appropriate infection control precautions if meningitis is suspected.
5. Obtain blood and CSF cultures prior to administration of antibiotics if possible to enhance detection of *N. meningitidis*. SFDPH can assist with coordinating Polymerase Chain Reaction (PCR) testing if needed.
6. Assist CDCU as requested to identify close contacts of cases of meningococcal disease—if patient is severely ill or to be intubated attempt to identify contacts prior to intubation if possible.

EXCERPTS FROM CDC ADVISORY

Eight cases of serogroup B meningococcal disease have been reported in Princeton University students or persons with links to Princeton University during the last eight months, including three cases reported since September. One case occurred in a high school student who stayed in a Princeton dormitory and developed illness within one day of returning home; the other seven cases occurred in Princeton University undergraduate students. Three cases of serogroup B meningococcal disease have been reported among UCSB undergraduate students during the month of November. No epidemiologic links have been identified between the Princeton University and the UCSB cases. Although both outbreaks are caused by serogroup B, additional molecular typing shows that the outbreaks are being caused by two different strains, indicating that the outbreaks are not related.

Increased awareness of meningococcal disease and prompt early case recognition among healthcare providers is critical. If a Princeton University or UCSB student or a person who has had close contact with someone from those university communities develops a fever and headache or rash, meningococcal disease should be suspected; empiric treatment should be considered; blood or cerebrospinal fluid (CSF) cultures should be collected; and suspected cases should be reported to the local health department.

GENERAL INFORMATION CONCERNING MENINGOCOCCAL DISEASE

CLINICAL DESCRIPTION – PROMPT RECOGNITION OF CASES IS KEY

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 (sensitivity to light), and altered mental status. Symptoms of bacteremia or septicemia may include fatigue, nausea, vomiting, cold hands and feet, chills, severe muscle aches or abdominal pain, rapid breathing, diarrhea, and appearance of a petechial or purpuric rash (dark purple spots that do not blanch with pressure).

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 there is 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/mm³.

While any individual finding does not necessarily indicate IMD, the constellation of findings warrants closer scrutiny and consideration of antibiotic therapy. **Antibiotic treatment should not be delayed to obtain diagnostic specimens.**

CASE REPORTING

Report should be made to the Communicable Disease Control Unit 24/7 (415) 554-2830 **and** to your facility's Infection Control Professional (ICP) if meningococcal disease is a suspected etiology of your patient's presentation, OR your patient's blood culture (or culture of CSF or other sterile site) grows Gram negative diplococci, OR your patient's blood culture (or culture of CSF or other sterile site) is positive for *N. meningitidis*.

INFECTION CONTROL PRECAUTIONS

N. meningitidis is spread by direct and indirect contact with oral secretions/saliva. Patients are infectious from 7 days before symptom onset until 24 hrs after effective antibiotics have been administered.

- If meningococcal disease is suspected, use droplet precautions until patient has received 24 hours of effective treatment:
 - Put patient in a private room; if not possible, mask patient and keep at least 3 feet away from other patients.
 - Limit movement and transport of the patient; if transport is essential, mask the patient.
 - Health care personnel should wear a mask when within 3 feet of the patient.
- Work with your ICP to implement precautions. Consult with Public Health for guidance.

POST-EXPOSURE PROPHYLAXIS

For post-exposure antimicrobial prophylaxis of known contacts, rifampin, ceftriaxone, ciprofloxacin, or azithromycin are appropriate drugs for adults, and the drug of choice for most children is rifampin. Chemoprophylaxis should be initiated as soon as possible after exposure, but may be effective up to 14 days after the last exposure. Because secondary cases can sometimes occur several weeks or more after exposure to an IMD case, meningococcal vaccination is often recommended in addition to chemoprophylaxis.

ADDITIONAL RESOURCES:

San Francisco Department of Public Health:

Meningococcal Disease page: sfcdcp.org/meningococcal.html

Centers for Disease Control and Prevention:

- Meningococcal Disease Information page: cdc.gov/meningococcal/index
- Prevention and Control of Meningococcal Disease (ACIP): MMWR March 22, 2013 / 62(RR02); 1-22. cdc.gov/mmwr/preview/mmwrhtml/rr6202a1
- Meningococcal Vaccine Information Statement: cdc.gov/vaccines/pubs/vis/downloads/vis-mening.pdf