
TITLE: **Meningococcal Disease and Health Care Personnel Exposures**

Purpose:

San Francisco Department of Public Health aims to control and prevent communicable diseases including meningococcal disease. Public health and infection control interventions are implemented to minimize potential exposure and transmission of communicable diseases in patients and health care workers.

Statement of Policy:

Each San Francisco hospital has a program in place to coordinate the investigation, reporting and prophylactic treatment of patients and hospital personnel exposed to invasive meningococcal disease, through collaboration of Infection Control and Occupational Health.

SFDPH Communicable Disease Control Unit has protocols in place to investigate, report, and recommend prophylaxis of close contacts and exposures that occur outside the health care setting.

Definitions and Procedures:

1. Mode of transmission

Neisseria meningitidis is transmitted through mucous membrane contact with large droplets in respiratory secretions of patients (e.g. from the nose, throat, and mouth) with meningococemia, meningococcal meningitis, or lower respiratory tract infections caused by *N. meningitidis*. *N. meningitidis* may also be carried in the nasopharynx of otherwise healthy individuals. Invasive meningococcal disease occurs primarily in individuals who are newly colonized with the organism.

Nosocomial transmission is rare.

2. Meningococcal disease

Invasive disease caused by *Neisseria meningitidis* is most commonly meningococemia and/or meningitis. Less commonly *N. meningitidis* may cause primary pneumonia.

Infectious period: Persons with *N. meningitidis* are rendered noninfectious by 24 hours of effective therapy.

Incubation period: The incubation period for meningococcal disease is usually 3 – 4 days, with a range of 1 – 10 days.

Definition of a **case of invasive meningococcal disease:** microbiologically confirmed or strongly suspected invasive meningococcal disease. A strongly suspected case would include situations such as Gram negative diplococci found in fluid from a normally sterile site (e.g., blood, CSF) in the appropriate clinical setting with no other likely explanation; or purpura fulminans in the absence of laboratory confirmation of *N. meningitidis*.

Infection control precautions: For the care of the patient with known or strongly suspected meningococcal disease, health care personnel will continue to practice Standard Precautions, but per additional measure of Droplet Precautions, they will **wear a mask when providing all direct care or when within 3 feet of the patient** until the patient has been on appropriate antibiotic therapy for 24 hours.

3. Notifications

- ❑ Notify Infection Control and Occupational Health of suspected and confirmed cases and potential exposure(s).
- ❑ Notify SFDPH Communicable Disease Control Unit at 415-554-2830 of suspected case and any other potential pre-hospital emergency responder occupational exposures (not covered by your facility's occupational health) immediately by telephone. After hours, follow prompts to page the on-call physician. SFDPH will notify other agencies of potential occupational exposures as soon as possible, but at most within 72 hours of first notice.

4. Definition & Determinations of Meningococcal Exposure

Health care workers are rarely at risk when caring for infected patients.

An exposure is defined as direct contact with the case patient's respiratory, oral or nasal secretions or contamination from a laboratory specimen sent for diagnosis of a suspected case. Personnel would be considered exposed if mouth-to-mouth resuscitation, intubation, endotracheal tube management, or suctioning is done *without protective barriers* (fluid shield mask, eye protection, resuscitation-mask). Other examples of an exposure include close inspection of the patient's oropharynx, provision of oral care, or mucosal contamination from a case specimen.

Antibiotic prophylaxis should be offered to workers with exposure as defined above, and is not recommended routinely for health care workers except those who have had direct exposure to the case's secretions as defined above. Exposure determinations will be made per written facility policy, or in consultation with Infection Control.

Exposure determinations should be provided in writing according to CA OSHA ATD Standard. This includes an opinion regarding whether precautionary removal from the employee's regular

assignment is necessary and a copy of the written opinion from the medical provider within 15 working days. The written opinion shall include the employee's ATD vaccine and/or test status (if relevant), infectivity status, a statement that the employee has been offered any applicable prophylaxis (including vaccine, if relevant), and a statement that the employee has been told about any medical condition resulting from exposure and treatment options.

If prophylaxis is indicated, it should be initiated within 24 hours of the exposure in order to be most effective but may be given within 14 days after exposure. Consult individual facility policies for how to obtain post-exposure prophylaxis, including after hours.

5. Work restrictions for personnel exposed to Meningococcal disease

All health care workers who may have had exposure to the infected person before antibiotic therapy was begun would be considered at low risk for infection. They should be counseled regarding early signs of disease. Exposed individuals who develop a febrile illness should remove themselves from work and receive prompt medical attention.

6. Work restrictions for personnel with Meningococcal disease

Personnel with meningococcal disease will be excluded from work for at least 24 hours after start of effective therapy or longer until they feel well enough to return to work.

References:

<http://www.cdph.ca.gov/programs/immunize/Documents/Meningquicksheet.pdf> (April 2010)

CA OSHA ATD Standard
<http://www.dir.ca.gov/title8/5199.html>

CDC. [Prevention and Control of Meningococcal Disease: Recommendations of the ACIP](#).
MMWR 2005;54 (No. RR-7):1-21
(<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5407a1.htm>)