

Meningococcal Disease

Definition:

Meningococcal disease is caused by bacteria called *Neisseria meningitidis*.

Signs and symptoms:

Meningococcal disease presents most commonly as meningitis and/or a bloodstream infection. Symptoms of meningitis are acute onset of fever, intense headache, nausea, vomiting, stiff neck, rash and altered mental status. Symptoms of meningococemia are high fever, hypotension, shock, and a petechial or purpuric rash.

Transmission:

Neisseria meningitidis is found in the nose and throat. Approximately 10 percent of the population is an asymptomatic carrier of the bacteria. Invasive disease is quite rare. A person can become sick when the bacteria enter the blood stream. The bacteria spread from person to person through small droplets of saliva or nasal secretions. Close personal contact, including kissing and sharing drinks or smoking materials, is usually required to transmit the bacteria. Transmission does not result from casual contact, contact with inanimate surfaces, or from food.

Diagnosis:

Meningococcal disease is usually diagnosed by growing the bacteria from a sample of blood or spinal fluid.

Role of the School Nurse:

Prevention

- Vaccination is recommended for all adolescents 11 or 12 years of age; all previously unvaccinated adolescents age 13 through 18 years; and all people age 2 months and older with anatomic or functional asplenia, or persistent complement component deficiency
- Teach students and staff to cover their noses and mouths when sneezing or coughing.
- Remind students that they should not share water bottles, beverage cans or drinking cups, or cosmetics, especially lip balm.
- Promote proper hand washing particularly after using facial tissues or having contact with respiratory secretions to prevent the spread of disease.
- School nurse would assist Maine CDC to identify close contacts of a confirmed case.

Treatment Recommendations

- If invasive disease is suspected, the student should be referred immediately to their primary care provider or local emergency department for further evaluation.
- Persons with invasive disease are typically treated with an antibiotic that is effective in reducing nasopharyngeal carriage of *Neisseria meningitidis*.

Exclusions

- Students should be excluded from school and social activities as soon as meningococcal disease is suspected. A person is considered infectious from 7 days prior to symptom onset to 24 hours after initiation of appropriate antibiotic therapy.
- Education accommodations may be necessary

Reporting Requirements

Invasive meningococcal disease is a reportable condition and should be reported immediately upon recognition or strong suspicion to Maine CDC at 1-800-821-5821.

Resources:

- Maine CDC Meningococcal Disease website (including fact sheet)
<http://www.maine.gov/dhhs/boh/ddc/epi/airborne/meningococcal.shtml>
- Federal CDC Meningococcal Disease website
<http://www.cdc.gov/meningococcal/about/index.html>
- Immunization Action Coalition website (including vaccine information)
http://www.immunize.org/askexperts/experts_men.asp