

Infection Prevention and You



Meningococcal disease: What it is and how to prevent it

What is meningococcal disease?

Meningococcal disease is any infection caused by the bacterium *Neisseria meningitidis*. It can cause bloodstream infections or meningitis—an inflammation in the lining that covers the brain and spinal cord. The type of meningitis that is caused by meningococcal disease is referred to as **meningococcal meningitis**. It will strike otherwise healthy individuals and can cause devastating illness—even death.

Death can occur in as little as a few hours. In non-fatal cases, permanent disabilities can include hearing loss, brain damage, and loss of fingers or toes. The Centers for Disease Control and Prevention (CDC) recommends that all preteens and teens get the meningococcal vaccine.

How does meningococcal disease spread?

Meningococcal disease is spread from person to person. The bacteria are spread by exchanging saliva (respiratory or throat secretions) with someone who has meningococcal disease or who is a carrier. It's possible to get it by kissing, sharing drinking glasses or toothbrushes, or being in very close contact while coughing. It is not spread by casual contact or by simply breathing the air where a person with meningococcal disease has been.

What are symptoms of meningococcal meningitis?

Symptoms of meningococcal meningitis include sudden onset of fever, headache, and stiff neck. These often come with by nausea, vomiting, an increased sensitivity to light (called photophobia), or a change in mental status. Symptoms can come on quickly or over several days. Typically they develop within three to seven days after exposure.

What are symptoms of a bloodstream infection?

Meningococcal disease can also cause bloodstream infections. A bloodstream infection causes damage to the walls of the blood vessels. Symptoms of this include fatigue, vomiting, cold hands and feet, chills, severe aches in the muscles, joints or abdomen, rapid breathing, diarrhea, and the development of a dark purple skin rash.

Who is at risk for meningococcal disease?

The following people are at high-risk for meningococcal disease and should get vaccinated:

- College students living in a dormitory
- Military recruits
- Anyone with a damaged spleen or no spleen
- Anyone with an immune system disorder
- Microbiologists who are routinely exposed to *Neisseria meningitidis* (the bacteria that causes meningococcal disease)
- Anyone traveling or residing in countries in which the disease is common
- Anyone with a weakened immune system
- Anyone who has skipped routine recommended vaccinations

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How can you prevent meningococcal disease?

Fortunately, there are vaccines available to prevent the most common types (also known as serogroups) of meningococcal infections. **All 11- to 12-year-old preteens** should be vaccinated with a single dose of a quadrivalent vaccine. This protects against most meningococcal strands of the disease, but the protection declines in about 5 years. A booster dose is recommended at age 16 so teens continue to have protection during the years when they are at highest risk of being exposed to someone with meningococcal disease. Most colleges require students living in dormitories to be vaccinated with the quadrivalent vaccine. The vaccine is very safe.

The CDC recommends the serotype B meningococcal vaccine for people 10 years of age or older if they are at a higher risk for getting meningococcal diseases because of a medical condition, or if they were exposed to someone who had meningococcal type B disease. This vaccine is given in two or three injections, depending on the brand given.

Additional resources

APIC consumer alert—Meningococcal disease: What you need to know <http://www.apic.org/For-Consumers/Monthly-alerts-for-consumers/Article?id=meningococcal-disease-what-you-need-to-know>

APIC Infection Prevention and You—Meningitis <http://professionals.site.apic.org/bugs-and-outbreaks/meningitis/>

CDC—Meningococcal Disease <http://www.cdc.gov/meningococcal/index.html>

CDC Morbidity and Mortality Weekly Report—Use of Serogroup B Meningococcal Vaccines in Adolescents and Young Adults: Recommendations of the Advisory Committee on Immunization Practices

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6441a3.htm>

Confederation of Meningitis Organisations—World Meningitis Day <http://www.comeningitis.org/news-and-events/world-meningitis-day/>

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