

Meningococcal: Questions and Answers

Information about the disease and vaccines

What causes meningococcal disease?

Meningococcal disease is caused by the bacterium *Neisseria meningitidis*. This bacterium has at least 13 different subtypes (serogroups). Five of these serogroups, A, B, C, Y, and W-135, cause almost all invasive disease. The relative importance of these five serogroups depends on geographic location and other factors.

How does meningococcal disease spread?

The disease is spread person-to-person through the exchange of respiratory and throat secretions (e.g., by coughing, kissing, or sharing eating utensils). Meningococcal bacteria can't live for more than a few minutes outside the body, so the disease is not spread as easily as the common cold or influenza.

What are the symptoms of meningococcal disease?

The most common symptoms are high fever, chills, lethargy, and a rash. If meningitis is present, the symptoms will also include headache and neck stiffness (which may not be present in infants); seizures may also occur. In overwhelming meningococcal infections, shock, coma, and death can follow within several hours, even with appropriate medical treatment.

Is there a treatment for meningococcal disease?

Meningococcal disease can be treated with antibiotics. It is critical to start treatment early.

What people are at special risk for meningococcal disease?

Studies have shown that college freshmen who live in a dormitory are at an increased risk of meningococcal disease compared with others their age. In addition to certain age groups, people at increased risk include travelers to places where meningococcal disease is common (e.g., certain countries in Africa, and in Saudi Arabia), people with damaged or missing spleens, and people with persistent complement component deficiency (an immune system disorder). Other factors make it more likely an individual will develop meningococcal disease, including having a previous viral infection, living in a crowded household, having an underlying chronic illness, and being exposed to cigarette smoke (either directly or second-hand).

How safe is this vaccine?

All types of meningococcal vaccines are very safe. Polysaccharide (sugar) meningococcal vaccine has been used extensively since 1981, and millions of doses of meningococcal conjugate vaccine have been given since they were first licensed in 2005.

Should college students be vaccinated against meningococcal disease?

College freshmen living in residence halls, are at an increased risk of meningococcal disease relative to other people their age. The meningitis vaccine is recommended for previously unvaccinated first-year college students, age younger than 22 years, who are or will be living in a residence hall. Some colleges and universities require incoming freshmen and others to be vaccinated; some may also require that a meningococcal vaccination have been given since the age of 16 years. Although the risk for meningococcal disease among other college students (such as those 22 years or older, or not living in a residence hall) is similar to that of the general population of the same age, students who wish to decrease their risk of meningococcal disease can be vaccinated.

What kind of vaccines are they?

There are several vaccines on the market. Your medical provider will advise you on the one that is recommended for you.

How many doses of meningococcal vaccine are needed?

The number of doses recommended depends on the age when the vaccine is given and the presence of certain medical conditions or risk factors. All adolescents should be vaccinated at ages 11 through 12 years and need a booster dose at age 16 years. All teens who were vaccinated at ages 13 through 15 years need a booster dose at age 16 through 18 years (at least 8 weeks after the first dose). **First-year college students younger than 22 years who are living in a residential hall should get a booster dose if their previous dose was given before age 16 years.** In addition, vaccinated people who remain at risk, such as people without a spleen, microbiologists who work with meningococcus, or those who travel repeatedly to parts of Africa, should receive a booster dose of meningitis every 5 years.

How do I get more information about meningococcal disease and vaccination?

Contact your physician or your student health services. Additional information is available on the websites of New York State Department of Health, www.health.ny.gov; Center for Disease Control and Prevention www.cdc.gov/vaccines; and American College Health Association, www.acha.org.