Meningococcal Disease

What You Need to Know

What is meningococcal disease?

Meningococcal disease is an infection caused by the bacterium *Neisseria meningitidis* that can affect the blood stream, brain and spinal cord. There are thirteen different serogroups of *Neisseria meningitidis* that can cause disease, five of which cause the most disease in the United States. Meningococcal disease is the leading cause of bacterial meningitis in the United States.

About 1,000 people get meningococcal disease each year in the United States. Although meningococcal disease is somewhat rare, 10 to 14 percent of infected people die from the disease. In instances where it is not fatal, it can lead to permanent brain damage, loss of hearing, loss of arms and legs and potentially lifelong disability.

Although anyone can contract meningococcal disease, it is most common in infants less than one year of age, in adolescents 16 to 21 years of age and in people with certain medical conditions, such as the lack of a spleen. Adolescents and young adults have an increased incidence of disease, accounting for nearly 15 percent of all United States cases. College students are susceptible to meningococcal disease because they live in close quarters and often share food, drink and cosmetics.

What are the symptoms of meningococcal disease?

The symptoms of meningococcal disease may include high fever, chills, nausea, exhaustion and a rash. Early symptoms of meningococcal disease can be mistaken for influenza. An infected person may become seriously ill very quickly. If any of these symptoms are unusually sudden or severe, seek medical attention immediately.

How is meningococcal disease diagnosed?

Meningococcal disease is diagnosed by taking blood and spinal fluid samples from a person who is possibly infected. The medical laboratory will grow and identify the bacteria in culture to give a confirming diagnosis.

Antibiotics can be used to treat meningococcal infections and reduce the risk of death, but sometimes the infection has caused too much damage to the body for antibiotics to prevent death or serious long-term disabilities.

How does meningococcal disease spread?

Meningococcal disease is spread person-to-person through exchange of respiratory and throat secretions. Kissing, sharing drinking glasses, food or eating utensils, sharing a cigarette or lipstick, coughing and having close social contact (living in the same household) are examples of how this disease spreads.

How can you reduce the risk for getting meningococcal disease?

The best way to reduce the risk of getting meningococcal disease is through immunization. Other ways to reduce the risk of meningococcal disease are to avoid sharing items that have touched someone's mouth such as cups, bottles, food, cosmetics and smoking materials.

What is the meningococcal vaccine?

There are three kinds of meningococcal vaccine available in the United States:

- Meningococcal conjugate vaccine (MCV4) protects against A, C, Y and W-135 serogroups and is the preferred vaccine for people 9 months through 55 years of age.
- Meningococcal Serogroup B vaccine (MenB) protects against serogroup B and is for people without high risk conditions 16 through 23 years of age.
- Meningococcal polysaccharide vaccine (MPSV4) protects against serogroup A, C, Y and W and is the only meningococcal vaccine licensed for people older than 55 years of age.

Who should get the meningococcal vaccine?

The Centers for Disease Control and Prevention (CDC) recommends two doses of MCV4 for adolescents.

- The first dose at 11 or 12 years old, with a booster dose at 16.
- For those who receive the first dose at 13 through 15 years of age, a booster dose is recommended at 16 through 18.
- For those who receive the first dose after 16, no booster dose is needed.

CDC recommends MCV4 or MPSV4 for:

- Individuals who have a damaged spleen, whose spleen has been removed or who have sickle cell disease.
- Individuals who are traveling to countries in which meningococcal disease is epidemic.
- Individuals who are at an increased risk of a meningococcal A, C, Y and W-135 disease due to an outbreak.

CDC recommends MenB vaccine for:

- Individuals who are at an increased risk because of a meningococcal serogroup B disease outbreak.
- Individuals who have a damaged spleen, whose spleen has been removed or who have sickle cell disease.
- Individuals who are 16 through 23 years without high risk conditions.

How effective is the recommended meningococcal vaccine?

MCV4 vaccines are 85 percent effective in protecting against four of the five major strains of the bacteria responsible for meningococcal disease.

Have Questions?

Individuals who have questions or concerns about meningococcal disease should contact their health care provider.

Children may be eligible to receive free vaccines through the Vaccines for Children program before their 19th birthday. Contact the Missouri Department of Health and Senior Services or your local public health agency to find out if your child is eligible.

Missouri Department of Health and Senior Services
Bureau of Immunizations
800.219.3224

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