

Meningitis

Facts About Meningococcal Disease

What is meningococcal disease?

Meningococcal disease is a serious, potentially fatal infection caused by bacteria called meningococci. Meningococci most often cause meningitis, a swelling of the tissues surrounding the brain and the spinal cord, and blood infections (meningococemia). Sometimes these bacteria lead to other, less severe illnesses, like arthritis and pneumonia.

Meningococcal disease is very serious. Up to 2,800 Americans get it each year. Even with fast and appropriate treatment, approximately one out of every 10 people who get it will die, and about two in 10 survivors will have permanent problems including brain damage, kidney damage, hearing loss and limb amputations.

How is meningococcal disease spread?

Meningococcal disease is spread through coughing and sneezing or by direct contact with secretions from the nose and throat of an infected person (for example, through kissing). Children should also avoid sharing eating utensils and drinking out of the same container, since infections may spread through this type of close contact. The disease is not spread through casual contact, such as breathing air where an infected person has been.

Prevention

Vaccination is the best way to protect against meningococcal disease. It is estimated that about 80 percent of cases could be prevented by vaccination. A conjugate meningococcal vaccine protects against four of the five most common types (called types A, C, Y and W-135) of meningococcal bacteria. Currently, no vaccine is available in the U.S. to protect against type B.

Adolescents and young adults should also avoid sharing eating utensils and drinking out of the same container. Additionally, they can maximize their body's own immune response by eating a balanced diet, getting enough sleep and exercise as well as avoiding cigarettes and alcohol use.

Symptoms

The early symptoms of meningococcal disease may include fever, headache, body aches and a stiff neck. Because these early symptoms may be mild and similar to those of less serious viral illnesses, like a cold or the flu, it would not be unusual for a person to delay seeking treatment.

Meningococcal infection can develop and spread quickly throughout the body. So quickly, in fact, that even with rapid and appropriate treatment, the disease can kill an otherwise healthy young person in 48 hours or less. Other symptoms that may occur are nausea, vomiting, confusion, sleepiness, sensitivity to light and a rash, which usually appears as dark purple spots on the arms, legs or torso.

Who Should Get Meningococcal Vaccine?

The U.S. Centers for Disease Control and Prevention (CDC) recommends vaccination against meningococcal disease for:

- All children 11-12 years of age at their preadolescent visit.
- For those not previously immunized, vaccination is recommended at the time of high school entry (15 years of age).
- College freshmen living in dormitories before they depart for campus.
U.S. military recruits.
- Anyone who has a damaged spleen or whose spleen has been removed.
- All other adolescents and college students wishing to reduce their risk of contracting the disease may elect to be immunized.

Vaccine Safety

The conjugate meningococcal disease vaccine is safe and effective. In addition to the CDC, the vaccine is recommended by the American Academy of Family Physicians, American Academy of Pediatrics, American College Health Association, American Medical Association, Society for Adolescent Medicine and other health care organizations.

As with all vaccines, there can be minor reactions, including pain and redness at the injection site, headache, fatigue or a vague feeling of discomfort. The vaccine can be given at the same time as the tetanus, diphtheria and pertussis booster (Tdap) that is recommended for children during the preadolescent visit at 11 to 12 years of age.

Here are some important facts about meningococcal disease:

- Meningococcal disease is the most common cause of bacterial meningitis among U.S. children, adolescents and young adults.
- Approximately 10 percent of persons infected with meningococcal disease will die; 20 percent of survivors will suffer permanent disability, such as hearing loss, brain damage or amputation of arms, legs, fingers or toes.
- The conjugate vaccine is safe and effective in protecting against four of the five main types of bacteria that cause meningococcal disease. Approximately 80 percent of cases are vaccine-preventable.
- The conjugate vaccine is expected to provide a longer duration of protection than older meningococcal vaccines.
- The meningococcal vaccine is synthetic; you cannot get meningococcal disease from the vaccine.

For more information

See the following websites:

- Centers for Disease Control and Prevention (CDC), www.cdc.gov
- Meningitis Foundation of America, www.musa.org