Meningococcal Disease

What is meningococcal disease?

Meningococcal disease is caused by bacteria called Neisseria meningitidis. It can lead to serious blood infections. When the linings of the brain and spinal cord become infected, it is called meningitis. The disease strikes quickly and can have serious complications, including death.

Anyone can get meningococcal disease. Some people are at higher risk. This disease occurs more often in people who are:

- Teenagers or young adults
- Infants younger than one year of age
- Living in crowded settings, such as college dormitories or military barracks
- Traveling to areas outside of the United States, such as the "meningitis belt" in Africa
- Living with a damaged spleen or no spleen or have sickle cell disease
- Being treated with the medication Soliris® or, who have complement component deficiency (an inherited immune disorder)
- Exposed during an outbreak
- Working with meningococcal bacteria in a laboratory

What are the symptoms?

Symptoms appear suddenly – usually 3 to 4 days after a person is infected. It can take up to 10 days to develop symptoms.

Symptoms may include:

- A sudden high fever
- Headache
- Stiff neck (meningitis)
- Nausea and vomiting
- Red-purple skin rash
- Weakness and feeling very ill
- Eyes sensitive to light

How is meningococcal disease spread?

It spreads from person-to-person by coughing or coming into close or lengthy contact with someone who is sick or who carries the bacteria. Contact includes kissing, sharing drinks, or living together. Up to one in 10 people carry meningococcal bacteria in their nose or throat without getting sick.

Is there treatment?

Early diagnosis of meningococcal disease is very important. If it is caught early, meningococcal disease can be treated with antibiotics. But, sometimes the infection has caused too much damage for antibiotics to prevent death or serious long-term problems. Most people need to be cared for in a hospital due to serious, life-threatening infections.

What are the complications?

Ten to fifteen percent of those who get meningococcal disease die. Among survivors, as many as one in five will have permanent disabilities. Complications include:

Hearing loss

- Brain damage
- Kidney damage
- Limb amputations

What should I do if I or someone I love is exposed?

If you are in close contact with a person with meningococcal disease, talk with your healthcare provider about the risk to you and your family. They can prescribe an antibiotic to prevent the disease.

What is the best way to prevent meningococcal disease?

The single best way to prevent this disease is to be vaccinated. Vaccines are available for people 6 weeks of age and older. Various vaccines offer protection against the five major strains of bacteria that cause meningococcal disease:

- All teenagers should receive two doses of vaccine against strains A, C, W and Y, also known as MenACWY or MCV4 vaccine. The first dose is given at 11 to 12 years of age, and the second dose (booster) at 16 years.
 - It is very important that teens receive the booster dose at age 16 years in order to protect them through the years when they are at greatest risk of meningococcal disease.
- Teens and young adults can also be vaccinated against the "B" strain, also known as MenB vaccine. Talk to your healthcare provider about whether they recommend vaccine against the "B" strain.
- Others who should receive meningococcal vaccines include:
 - o Infants, children and adults with certain medical conditions
 - People exposed during an outbreak
 - o Travelers to the "meningitis belt" of sub-Saharan Africa
 - Military recruits
- Please speak with your healthcare provider if you may be at increased risk.

Who should not be vaccinated?

Some people should not get meningococcal vaccine or they should wait.

- Tell your doctor if you have any severe allergies. Anyone who has ever had a severe
 allergic reaction to a previous dose of meningococcal vaccine should not get another
 dose of the vaccine.
- Anyone who has a severe allergy to any component in the vaccine should not get the
- Anyone who is moderately or severely ill at the time the shot is scheduled should probably wait until they are better. People with a mild illness can usually get the vaccine.

What are the meningococcal vaccine requirements for school attendance?

- For grades 7 through 9 in school year 2018-19: one dose of MenACWY vaccine. With each new school year, this requirement will move up a grade until students in grades 7 through 11 will all be required to have one dose of MenACWY vaccine to attend school.
 - o 2019-20: grades 7, 8, 9, and 10
 - o 2020-21 and later years: grades 7, 8, 9, 10, and 11
- For grade 12: two doses of MenACWY vaccine
 - o The second dose needs to be given on or after the 16th birthday.
 - Teens who received their first dose on or after their 16th birthday do not need another dose.

Additional Resources:

- Meningococcal Disease Centers for Disease Control and Prevention (CDC)
- Meningococcal Vaccination CDC
- Meningococcal ACIP Vaccine Recommendations
- Travel and Meningococcal Disease
- Information about Vaccine-Preventable Diseases