Oklahoma State Department of Health
Acute Disease Service
Public Health Fact Sheet

Meningococcal Disease

What is meningococcal disease?
Meningococcal disease is a disease caused by the bacteria *Neisseria meningitidis*, also called meningococcus. This bacteria can infect the blood, causing septicemia. It can also infect the covering of the brain and spinal cord, causing meningitis.

How is this disease spread?
Meningococcal disease spreads by direct contact with the saliva or with respiratory droplets from the nose and throat of an infected person.

Who is at risk of getting this disease?
Some groups of people have a higher risk of meningococcal disease, such as first year college students living in dormitories or new military recruits living in barracks. Other persons at increased risk include household contacts of a person known to have had this disease, immunocompromised people, people without a spleen, and people traveling to parts of the world where meningococcal disease is more common. Exposure to tobacco smoke and having a concurrent upper respiratory infection also increase the risk of meningococcal disease. Infants are at highest risk, but rates decrease after infancy and then increase in adolescence and young adulthood.

What are the symptoms?
Ten percent or more of people are thought to be carrying *Neisseria meningitidis* in their nose and throat without being ill, which is called "asymptomatic carriage". Of these people, about 1% can develop illness, which may be meningitis or a bloodstream infection called septicemia or meningococcemia. As described above, some people can carry the bacteria in their nose and throat without ever becoming ill. Signs of illness may include fever, severe headache, nausea, vomiting, and a rash. People who develop meningitis can have fever, intense headache, nausea, vomiting, stiff neck, and extreme sensitivity to light. It is important to seek care from a healthcare provider as soon as possible if these symptoms appear. Meningococcal disease has a 15% risk of death if it is not treated promptly.

How soon do the symptoms appear?
The symptoms may appear two to ten days after infection, but usually within three to four days.

What is the treatment for meningococcal disease?
Antibiotics, such as penicillin or a cephalosporin such as ceftriaxone, are used to treat meningococcal disease.

Should people who have been around a person infected with meningococcal disease receive treatment?
When meningococcal disease occurs in one person, only the people who have had recent close contact with that person's respiratory secretions are recommended to receive antibiotics. These include household members, intimate contacts, health care personnel performing mouth-to-mouth resuscitation, day care center playmates, etc. Such people are usually advised to obtain a prescription for a specific antibiotic (rifampin, ciprofloxacin, ceftriaxone, or azithromycin) from their physician. The health department will contact the individuals who are recommended to receive antibiotics, and advise them of options to obtain antibiotics. Casual contacts including classmates, co-workers, or those in a factory setting are not at increased risk of disease when a single person has meningococcal illness. When clusters or outbreaks occur, the health department may expand the recommendations for which groups need to receive antibiotics to prevent possible spread. Antibiotics do not protect people from future exposure to *Neisseria meningitidis*.

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Is there a vaccine to prevent meningococcal disease?
Three types of meningococcal vaccines are available in the United States. They are effective against four of the five most common disease-causing types of meningococcal disease: A, C, Y, and W-135. An additional vaccine is now available that protects against serogroup B, but is currently only licensed for high-risk children over ten years of age. Consult with your healthcare provider or the local health department about receiving the vaccine.