Newly Updated Meningococcal Q&As: Download and Copy for Your Patients

Meningococcal: Questions and Answers

INFORMATION ABOUT THE DISEASE AND VACCINES

What causes meningococcal disease?
Meningococcal disease is caused by the bacterium Neisseria meningitides. This bacterium has at least 13 different subtypes (called serogroups), five of which—serogroups A, B, C, Y, and W—he causes almost all invasive disease. The risk varies by serogroup. Each serogroup has a geographic location and other factors. In the United States almost all meningococcal disease is caused by serogroups B, C, and Y. Each serogroup accounts for about one-third of reported cases.

How does meningococcal disease spread?
The disease is spread person-to-person through the respiratory route, such as coughing, sneezing, or sharing eating utensils. Meningococcal disease cannot spread farther than the reach of the infected outside the body, so the disease is not spread as easily as the common cold or other respiratory illness.

How long does it take to show signs of meningococcal disease after being exposed?
The incubation period of meningococcal disease is 2 to 4 days, with a range of 2 to 10 days. Meningococcal disease can be spread prior to the time symptoms appear. Symptoms include high fever, headache, neck stiffness, and vomiting. Any of these symptoms in anyone—including a child—should be considered a sign of meningococcal disease and the patient should be brought to a hospital immediately.

What are the symptoms of meningococcal disease?
The most common symptoms are high fever, chills, lethargy, or irritability, and a sudden change in behavior. In babies and young children, these symptoms may be misinterpreted as a cold or flu, which can delay diagnosis and treatment. Of those who recover, up to 20% suffer very serious long-term effects. About 10 to 15% of people with meningococcal disease will also include headache and neck stiffness (which can be misinterpreted as a cold or flu). Fever, vomiting, and cough can also be symptoms of meningococcal disease. These are very serious symptoms that require immediate medical attention.

What is meningitis?
Meningitis is the inflammation of the meninges, the tough membranes that cover the brain and spinal cord. It can be caused by bacteria, viruses, fungi, or even chemicals in medications. Meningitis can include meningococcal meningitis, the most common cause of bacterial meningitis in the United States.

How common is meningococcal disease in the United States?
Meningococcal disease is seen in almost all age groups, but the most common age groups are 16-24 year-olds and 6 months to 1 year-olds. Young adults are at greatest risk.

How is meningococcal disease diagnosed?
In about 60% of cases, the diagnosis is obtained by performing a lumbar puncture (spinal tap), where a needle is inserted into the spinal fluid area of the body (sacrificial) or by collecting the fluid of the spinal fluid around the brain (meningitis). Because this disease progresses quickly, it is important to be diagnosed and started treatment as soon as possible.

What are the risk factors for meningococcal disease?
The most common symptoms are high fever, chills, lethargy, and irritability. Of those who recover, up to 20% suffer very serious long-term effects. About 10 to 15% of people with meningococcal disease will also include headache and neck stiffness (which can be misinterpreted as a cold or flu). Fever, vomiting, and cough can also be symptoms of meningococcal disease. These are very serious symptoms that require immediate medical attention.

Who should not receive meningococcal vaccine?
Meningococcal vaccines should not be given to people who:
- Are pregnant
- Have a history of an allergic reaction to the meningococcal vaccine
- Have a history of a serious allergic reaction to other vaccines
- Are immunocompromised
- Have a history of Guillain-Barré syndrome
- Have a history of blood clots

What is the role of meningococcal vaccines?
Meningococcal vaccines are used to prevent meningococcal disease caused by specific serogroups of the meningococcus bacterium, a type of microbe. Meningococcal vaccines contain the polysaccharide or protein of the microbe.

How effective is this vaccine?
The meningococcal vaccine series is 85% to 90% effective at preventing meningococcal disease.

Meningococcal disease can be treated with antibiotics. Antibiotics do not prevent meningococcal disease.

Meningococcal disease can be treated by antibiotics. Although several small meningococcal B disease outbreaks have occurred in college campuses since 2013, college students in general are not at higher risk of meningococcal B disease than their peers of the same age who are not college students. Consequently, ACP does not routinely recommend MenB vaccination for college students. However, college students may choose to receive MenB vaccine to reduce their risk of meningococcal B disease outbreak.

Meningococcal vaccines contain type-specific vaccines or polysaccharide vaccines that contain the capsular polysaccharide of meningococci. Meningococcal polysaccharide and conjugate vaccines prevent infection against meningococcal disease and meningococcal meningitis.

Technical content reviewed by the Centers for Disease Control and Prevention.

For more information, visit www.immunize.org/catg.d/p4210.pdf.

For IAC’s ready-to-print Q&As about all vaccine-preventable diseases, visit www.immunize.org/handouts/vaccine-questions.asp.