

MENINGOCOCCAL DISEASE AND COLLEGE STUDENTS

Meningococcal disease is a serious vaccine-preventable infection. The meningococcal conjugate vaccine is recommended for all 11-18 year olds. Adolescents should get this vaccine at their 11-12 year old check-up with other preventive services. Adolescents 13-18 years old who haven't received the vaccine can get it at any time. A booster dose should then be given at age 16 years. For adolescents who receive the first dose at age 13 through 15 years, a one-time booster dose should be administered, preferably at age 16 through 18 years. Adolescents who receive their first dose of MCV4 at or after age 16 years do not need a booster dose.

What is meningococcal disease?

Meningococcal disease is a serious disease caused by the bacteria (*Neisseria meningitidis*). The bacteria can cause meningitis (an inflammation of the lining of the brain and spinal cord) or sepsis (an infection of the bloodstream). Approximately 1,000 cases of meningococcal disease occur in the United States each year.

What are the symptoms of meningococcal disease?

Symptoms of meningitis include stiff neck, headache, fever, nausea, vomiting, confusion and drowsiness. Symptoms of sepsis include fever, rash, hypotension (low blood pressure), shock and multi-organ failure. Meningococcal disease can be very serious – even life-threatening – in 48 hours or less. Death from sepsis can occur within a few hours of the beginning of the illness. Even with antibiotic treatment, people die in about 10-15% of cases. About 11-19% of survivors will have long-term disabilities, such as loss of limb(s), deafness, nervous system problems, or brain damage.

How is meningococcal infection spread?

Meningococcal disease can be spread from person to person. The bacteria are spread by exchanging respiratory and throat secretions during close or lengthy contact (for example, coughing or kissing), especially if living in the same dorm or household. Many people carry the bacteria in their throats without getting meningococcal disease. Since so many people carry the bacteria, most cases of meningococcal disease appear to be random and aren't linked to other cases.

Who is at risk?

Anyone can get meningococcal disease, but it is most common in infants less than 1 year of age, adolescents and young adults and in people with certain medical conditions. College freshmen, particularly those who live in dormitories, have a slightly increased risk of contracting meningococcal disease. The meningococcal vaccine is a safe and effective way to reduce the risk for contracting meningococcal disease.

What about the vaccine?

The good news is that there are vaccines to help prevent meningococcal disease and it can prevent two of the three most common disease-causing strains. The meningococcal conjugate vaccines are routinely recommended for all 11-18 year olds. In addition to

being available at physician offices, the vaccines may also be available at university/college student health centers.

A vaccine, like any other medicine, could possibly cause serious problems, such as severe allergic reactions. The risk of the meningococcal vaccine causing serious harm is extremely small. People should not get meningococcal vaccine if they have ever had a serious allergic reaction to a previous dose of the vaccine. Some people who get the vaccine may develop redness or pain where the shot was given, and a small percentage of people develop a fever. These symptoms usually last for one or two days.

The risks associated with meningococcal vaccine are smaller than the risks associated with contracting the disease. People who are mildly ill at the time the shot is scheduled can still get the vaccine; however, those with moderate or severe illnesses should usually wait until they recover. Meningococcal vaccines may be given to pregnant women. However, the meningococcal conjugate vaccine is a new vaccine and has not been studied in pregnant women as much as the meningococcal polysaccharide vaccine has. Thus, it should be used only if clearly needed.

If college students decide to be vaccinated against meningococcal disease, they (or their parents if they are less than 18 years of age) should contact their healthcare provider or the university/college student health center where they will be attending to inquire about receiving the vaccine. Their parents should discuss the timing, risks and benefits of vaccination with their healthcare providers.

For more information about the meningococcal vaccine access the Vaccine Information Statement at the Centers for Disease Control and Prevention (CDC) Web site:

<http://www.cdc.gov/vaccines/pubs/vis/default.htm>

<http://www.cdc.gov/vaccines/hcp/vis/vis-statements/mening.html>.

Who does CDC recommend get a booster dose of the vaccine?

Adolescents are now recommended to get a booster dose as discussed. Other individuals with high risk medical conditions, occupational risks, or exposure (such as travel to certain parts of Africa) may be advised to receive booster vaccinations as well.

Adapted from material on the CDC website: www.cdc.gov;
<http://www.cdc.gov/meningococcal/vaccine-info.html>