

Information about Meningococcal Disease and Hepatitis B

Adapted from CDC and the Children's Hospital of Philadelphia Vaccine Education Center publications.

Meningococcal disease is the leading cause of bacterial meningitis in children 2-18 years of age in the United States. Meningococcal bacteria can cause meningitis (inflammation of the lining of the brain and spinal cord) or sepsis (an infection of the bloodstream).

Symptoms of meningitis include stiff neck, headache, fever, nausea, vomiting, confusion and drowsiness.

Symptoms of sepsis include fever, shock and coma.

Death from sepsis can occur within 12 hours of the beginning of the illness—meningococcal disease can be a rapid and overwhelming infectious disease.

For these reasons, meningococcal infections that occur in childcare centers, elementary schools, high schools and colleges often cause panic in the community.

Every year about 2,600 people in the United States are infected with meningococcus. Ten to 15 percent of these people die, in spite of treatment with antibiotics. Of those who live, another 10 percent lose their arms or legs, become deaf, have problems with their nervous systems, become mentally retarded or suffer seizures or strokes.

How do you catch a meningococcal infection?

Usually meningococcal infection is acquired after intimate contact with an infected person. Intimate contact includes kissing, sharing toothbrushes or eating utensils, or frequently eating or sleeping in the same dwelling as an infected person.

Who is at risk?

Anyone can get meningococcal disease, but it is most common in infants less than 1 year of age and in people with certain medical conditions. College freshmen, particularly those who live in dormitories, have a slightly increased risk of getting meningococcal disease. The risk for meningococcal disease among non-freshmen college students is similar to that for the general population; however, the vaccine is safe and effective and therefore can be provided to non-freshmen undergraduates who want to reduce their risk for meningococcal disease.

What can be done to decrease risk?

The meningococcal vaccine can prevent four types of meningococcal disease, including two of the three most common types in the United States. Meningococcal vaccine cannot prevent all types of the disease, but it does help to protect people who might become sick if they don't get the vaccine. The vaccine is available through a variety of settings, including physician offices.

What about the vaccine?

A vaccine, like any other medicine, is capable of causing serious problems, such as allergic reactions. 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 risk of the meningococcal vaccine causing serious harm is extremely small. Getting meningococcal vaccine is safer than getting the disease. People who are mildly ill at the time the shot is scheduled, and women who are pregnant, can still get the vaccine. Those with moderate or severe illnesses should usually wait until they recover.

College students and their parents should discuss the timing, risks and benefits of vaccination with their health care providers.

For more information about the meningococcal vaccine, access the Vaccine Information Sheet at the Centers for Disease Control and Prevention (CDC) Web site <http://www.cdc.gov/nip/publications/VIS>.

If college students decide to be vaccinated against meningococcal meningitis, they (or their parents if they are less than 18 years of age) should contact their health care provider to inquire about receiving the vaccine. Although the need for revaccination has not been determined, antibody levels rapidly decline in two to three years, and if indications still exist for vaccination, revaccination may be considered three to five years after receipt of the first dose.

Hepatitis B is one of several hepatitis diseases (e.g., hepatitis A and hepatitis C) that affects the liver. The hepatitis B virus (HBV) can cause a short-term (acute) illness that leads to loss of appetite, stomach pain, tiredness, diarrhea, vomiting, jaundice (yellow skin or eyes) and pain in the muscles and joints. These symptoms can last for several weeks.

HBV can also cause a long-term (chronic) illness from which people never recover. A person might not look or feel sick, but he or she carries the hepatitis B virus in his or her blood for the rest of their lives and can infect other people with the hepatitis B virus.

Chronic hepatitis B may cause liver damage (cirrhosis), liver cancer and even death. About 1.25 million people in the United States have chronic HBV infection. Each year 80,000 more people, mostly young adults, get infected with HBV and 4,000 to 5,000 people die from chronic hepatitis B.

How do you catch Hepatitis B?

Hepatitis B virus is spread through contact with blood or other body fluids of an infected person. You can catch the virus by having unprotected sex, by sharing drug needles or by sharing personal items like razors and toothbrushes with someone who is infected. Babies of chronic HBV mothers can become infected during birth. Children can be infected through exposure to blood and other body fluids from infected children or adults.

Anyone who participates in any of the behaviors listed above is at risk of acquiring hepatitis B.

What can be done?

There are hepatitis B vaccines available that can prevent infection with HBV. Many physicians offer the vaccine to patients seen in their offices. These are the first anti-cancer vaccines, because they can prevent a form of liver cancer that can develop in a person who gets a chronic hepatitis B infection.

What about the vaccine?

A vaccine, like any medicine, is capable of causing serious problems, such as allergic reactions. Most people who get hepatitis B vaccine do not have any problems with it. People who have ever had a life-threatening allergic reaction to baker's yeast (the kind used to make bread) or to a previous dose of hepatitis B vaccine should not get the vaccine. People who are moderately to severely ill at the time the shot is scheduled should usually wait until they recover before getting the vaccine.

Hepatitis B vaccine is very safe and the risk of it causing serious harm is extremely small. Hepatitis is a serious disease and getting the vaccine is safer than getting the disease. College students and their parents should discuss the risks and benefits of vaccination with their health care providers.

For more information about the hepatitis vaccine, access the Vaccine Information Sheet at the Centers for Disease Control and Prevention (CDC) Web site <http://www.cdc.gov/nip/publications/Vis>.

If college students decide to be vaccinated against hepatitis B, they (or their parents if they are less than 18 years of age) should contact their health care provider to inquire about receiving the vaccine.