

Meningococcal Vaccines

8th Grade

What You Need to Know

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis
 Hojas de Información Sobre Vacunas están disponibles en Español y en muchos otros idiomas.
 Visite <http://www.immunize.org/vis>

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What is meningococcal disease?

Meningococcal disease is a serious bacterial illness. It is a leading cause of bacterial meningitis in children 2 through 18 years old in the United States. Meningitis is an infection of the covering of the brain and the spinal cord.

Meningococcal disease also causes blood infections.

About 1,000 – 1,200 people get meningococcal disease each year in the U.S. Even when they are treated with antibiotics, 10-15% of these people die. Of those who live, another 11%-19% lose their arms or legs, have problems with their nervous systems, become deaf or mentally retarded, or suffer seizures or strokes.

Anyone can get meningococcal disease. But it is most common in infants less than one year of age and people 16-21 years. Children with certain medical conditions, such as lack of a spleen, have an increased risk of getting meningococcal disease. College freshmen living in dorms are also at increased risk.

Meningococcal infections can be treated with drugs such as penicillin. Still, many people who get the disease die from it, and many others are affected for life. This is why preventing the disease through use of meningococcal vaccine is important for people at highest risk.

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Meningococcal vaccine

There are two kinds of meningococcal vaccine in the U.S.:

- Meningococcal conjugate vaccine (MCV4) is the preferred vaccine for people 55 years of age and younger.
- Meningococcal polysaccharide vaccine (MPSV4) has been available since the 1970s. It is the only meningococcal vaccine licensed for people older than 55.

Both vaccines can prevent 4 types of meningococcal disease, including 2 of the 3 types most common in the United States and a type that causes epidemics in Africa. There are other types of meningococcal disease; the vaccines do not protect against these.

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Who should get meningococcal vaccine and when?

Routine Vaccination

Two doses of MCV4 are recommended for adolescents 11 through 18 years of age: the first dose at 11 or 12 years of age, with a booster dose at age 16.

Adolescents in this age group with HIV infection should get three doses: 2 doses 2 months apart at 11 or 12 years, plus a booster at age 16.

If the first dose (or series) is given between 13 and 15 years of age, the booster should be given between 16 and 18. If the first dose (or series) is given after the 16th birthday, a booster is not needed.

Other People at Increased Risk

- College freshmen living in dormitories.
- Laboratory personnel who are routinely exposed to meningococcal bacteria.
- U.S. military recruits.
- Anyone traveling to, or living in, a part of the world where meningococcal disease is common, such as parts of Africa.
- Anyone who has a damaged spleen, or whose spleen has been removed.
- Anyone who has persistent complement component deficiency (an immune system disorder).
- People who might have been exposed to meningitis during an outbreak.

Children between 9 and 23 months of age, and anyone else with certain medical conditions need 2 doses for adequate protection. Ask your doctor about the number and timing of doses, and the need for booster doses.

MCV4 is the preferred vaccine for people in these groups who are 9 months through 55 years of age. MPSV4 can be used for adults older than 55.



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

Important Information for Parents About Meningococcal Disease and Meningococcal Vaccines from the Oklahoma State Department of Education and the Oklahoma State Department of Health

What is meningitis?

Meningitis is an infection of the tissue lining and fluid that surround the spinal cord and the brain. Meningitis is usually caused by a virus or a bacterium. Meningitis caused by a virus is usually less severe and goes away without any special treatment, while meningitis caused by bacteria can be severe and may cause:

- Brain damage,
- Hearing loss,
- Amputation of arms or legs,
- Learning disabilities, or
- Death.

What types of bacteria cause meningitis?

There are several types of bacteria that may cause meningitis, including:

- *Neisseria meningitidis*
- *Streptococcus pneumoniae*,
- Group B streptococcal disease, and
- *Haemophilus influenzae* type B (Hib).

This information sheet will focus on the disease caused by *Neisseria meningitidis* (Nay-sear-e-a men-in-git-it-dis), which is rare but especially risky for people of certain ages. Disease caused by *Neisseria meningitidis* is usually referred to as "meningococcal disease" (men-IN-jo-kok-ul disease). Many persons are exposed to *Neisseria meningitidis* and carry the bacteria in their nose and throat for weeks or months and spread the bacteria to others, but do not become sick themselves. If the meningococcal bacteria invade the body, they may cause a rapidly spreading infection of the blood, lung infection, or meningitis. More information about the other kinds of bacteria that cause meningitis can be found at the web sites listed in the box at the end of this information sheet.

Who is at risk from meningococcal disease?

Babies less than a year old have the highest risk for meningococcal disease, but no vaccine is available for babies. The risk of meningococcal disease increases for teenagers and young adults 15 through age 21 years of age, because of behaviors that spread the disease. On average, two or three people in this age group get meningococcal disease every year in Oklahoma. More than half of these could be prevented by vaccine.

College students, military personnel, and other people living in close quarters or dormitory-style housing have a greater chance of contracting the disease than other persons their age. Other persons at increased risk include smokers or persons frequently exposed to second-hand smoke, those with immune system

problems, those without a spleen, or international travelers going to countries where the disease is more common.

How is the disease spread?

The disease is spread by respiratory droplets produced by a person harboring the bacteria and expelled a short distance by laughing, singing, coughing, or sneezing. The bacteria may also be spread by direct contact with the respiratory fluids of someone who is infected. That includes kissing, or sharing a water bottle, food item, cigarettes, lipstick, lip balm, mouth guard or anything an infected person touches with his or her nose or mouth.

Why is meningococcal disease dangerous?

Meningococcal disease is relatively uncommon with about 2,500 people affected every year in the United States. However, the infection can spread very quickly and 300 of those people die in spite of treatment with antibiotics. Of those who live, about 400 a year lose their arms or legs, become deaf, have problems with their nervous systems, become mentally retarded, or suffer seizures or strokes.

For this reason, it is best to prevent the disease from occurring. Signs and symptoms of meningococcal disease may be confused with other infectious diseases. If your child has symptoms of meningococcal disease, contact your healthcare provider immediately.

Signs and Symptoms of Meningitis

- Headache
- Fever
- Chills
- Stiff neck
- Extreme tiredness
- Vomiting
- Sensitivity to light
- Rash of purplish black-red dots or splotches
- Confusion
- Seizures

How can meningococcal disease be prevented?

Vaccines can prevent approximately two-thirds of the meningococcal disease cases. There are two types of meningococcal vaccine available in the United States (MCV4 and MPSV4) that protect against four of the five most common disease-causing strains of the meningococcal bacteria.