Meningococcal Vaccines

What You Need to Know

1. 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.

2. 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.

3. 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.
Some people should not get meningococcal vaccine or should wait.

- Anyone who has ever had a severe (life-threatening) allergic reaction to a previous dose of MCV4 or MPSV4 vaccine should not get another dose of either vaccine.
- Anyone who has a severe (life threatening) allergy to any vaccine component should not get the vaccine. Tell your doctor if you have any severe allergies.
- Anyone who is moderately or severely ill at the time the shot is scheduled should probably wait until they recover. Ask your doctor. People with a mild illness can usually get the vaccine.
- Meningococcal vaccines may be given to pregnant women. MCV4 is a fairly new vaccine and has not been studied in pregnant women as much as MPSV4 has. It should be used only if clearly needed. The manufacturers of MCV4 maintain pregnancy registries for women who are vaccinated while pregnant.

Except for children with sickle cell disease or without a working spleen, meningococcal vaccines may be given at the same time as other vaccines.

What are the risks from meningococcal vaccines?

A vaccine, like any medicine, could possibly cause serious problems, such as severe allergic reactions. The risk of meningococcal vaccine causing serious harm, or death, is extremely small.

Brief fainting spells and related symptoms (such as jerking or seizure-like movements) can follow a vaccination. They happen most often with adolescents, and they can result in falls and injuries.

Sitting or lying down for about 15 minutes after getting the shot – especially if you feel faint – can help prevent these injuries.

Mild problems

As many as half the people who get meningococcal vaccines have mild side effects, such as redness or pain where the shot was given.

If these problems occur, they usually last for 1 or 2 days. They are more common after MCV4 than after MPSV4.

A small percentage of people who receive the vaccine develop a mild fever.

Severe problems

Serious allergic reactions, within a few minutes to a few hours of the shot, are very rare.