

## **MENINGOCOCCAL VACCINES**

### **WHAT YOU NEED TO KNOW**

#### **1. What is meningococcal disease?**

**Meningococcal disease is a serious illness caused by a bacteria. It is a leading cause of bacterial meningitis in children 2-18 years old in the United States.**

Meningitis is an infection of fluid surrounding the brain and spinal cord. Meningococcal disease also causes blood infections.

About 2,600 people get meningococcal disease each year in U.S. 10-15 % of these people die, in spite of treatment with antibiotics. Of those who live, another 11-19% lose their arms or legs, become deaf, have problems with their nervous systems, become 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 with certain medical conditions, such as lack of a spleen. **College freshman who live in dormitories have an increased risk of getting meningococcal disease.**

Meningococcal infections can be treated with drugs such as penicillin. Still about 1 out of every ten who get the disease dies 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**

**Two meningococcal vaccines are available in the US:**

- **Meningococcal polysaccharide vaccine (MPSV4)** has been available since the 1970s.
- **Meningococcal conjugate vaccine (MCV4)** was licensed in 2005.

Meningococcal vaccines cannot prevent all types of the disease but both vaccines can prevent **4 of the 5 types** of meningococcal disease, including 2 of the most common types in the United States, and a type that causes epidemics in Africa. **Both vaccines work well, and protect about 90% of those who get it. MCV4 is expected to give better, longer-lasting protection.** MCV4 should also be better at preventing the disease from spreading from person to person.

#### **3. Who should get meningococcal vaccine and when?**

MCV4 is recommended for all children at their routine preadolescent visit (11-12 years of age). For those who have never gotten MCV4 previously, a dose is recommended at high school entry.

Other adolescents who want to decrease their risk of meningococcal disease can also get the vaccine. Meningococcal vaccine is also recommended for other people at increased risk for meningococcal disease:

- College freshman living in dormitories
- Microbiologists 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 terminal complement component deficiency (an immune system disorder).
- People who might have been exposed to meningitis during an outbreak.

MCV4 is the preferred vaccine for people 11-55 years of age in these risk groups, but MPSV4 can be used if MCV4 is not available. MPSV4 should be used for children 2-10 years old and adults over 55 who are at risk

## **How many doses?**

As of 2011 two doses are now recommended if the initial dose was given before 16 years of age; one dose is required if initial dose was given at or after 16 years of age in order to convey lifetime protection.

MPSV4 may be recommended for children 3 months to 2 years of age under special circumstances. These children should get 2 doses, 3 months apart.

## **4. 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 either meningococcal vaccine should not get another dose.
- 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 or nurse. People with a mild illness can usually get the vaccine.
- Anyone who has ever had Guillian-Barre Syndrome should talk with their doctor before getting MCV4.
- Meningococcal vaccines can be given to pregnant women. However, MCV4 has not been studied in pregnant women as much as MPSV4 has. It should only be used if clearly needed.
- Meningococcal vaccines may be given at the same time as other vaccines.

## **5. 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.

### **Mild Problems**

Up to about half of people who get meningococcal vaccines have mild side effects, such as redness or pain at the injection site. If these problems occur, they usually last for 1 to 2 days. They are more common after MCV4 than after MPSV4. A small percentage of people who receive the vaccine will develop a fever.

### **Severe Problems**

- Serious allergic reactions, within a few minutes to a few hours of the shot, are very rare.
- A few cases of Guillian-Barre Syndrome, a serious nervous system disorder, have been reported among people who got MCV4. There is not evidence yet to tell whether they were caused by the vaccine. This is being investigated by health officials.

## **6. What if there is a moderate or severe reaction?**

### **What should I look for?**

- Any unusual condition, such as high fever or behavior changes. Signs of a serious allergic reaction can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heart beat or dizziness.

### **What should I do?**

- Call a doctor, or get the person to a doctor right away.
- Tell your doctor what happened, the date and time it happened, and when the vaccine was given.
- Ask your doctor, nurse, or health department to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form. Or you can file this report through the VAERS website at [www.vaers.org](http://www.vaers.org), or by calling 1-800-822-7967. *VAERS does not provide medial advice.*

## **7. How can I learn more?**

Ask your healthcare provider or call your local or state health department or contact the Centers for Disease Control and Prevention (CDC): Call 1-800-232-4636 (1-800-CDC-INFO). Visit CDC's National Immunization Program website at [www.cdc.gov/nip](http://www.cdc.gov/nip) Visit CDC's Traveler's Health website at [www.cdc.gov/travel](http://www.cdc.gov/travel) . Visit CDC's meningococcal disease website at [www.cdc.gov/ncidod/dbmd/diseaseinfo/meningococcal\\_g.htm](http://www.cdc.gov/ncidod/dbmd/diseaseinfo/meningococcal_g.htm)