

# Meningococcal Disease

## What is meningococcal disease? What causes it?

Meningococcal disease is a serious, potentially fatal illness caused by bacteria. There are three types of invasive meningococcal disease:

- ❖ **Meningitis** - an infection of the fluid surrounding the brain and spinal cord
- ❖ **Bacteremia** - an infection of the blood stream
- ❖ **Pneumonia** - an infection of the lungs

## How is the disease spread?

Meningococcal disease is contagious. The disease is spread through air droplets and direct contact with infected persons. It can be spread through coughing, sneezing, kissing, or shared items like a drinking glass, utensils or cigarettes.

## What are the symptoms?

Symptoms can progress rapidly and may resemble the flu. They can include fever, headache, stiff neck, nausea, vomiting, confusion, sleepiness and sensitivity to light. Some people also develop a rash mainly on their arms and legs.

## How many people contract or die from meningococcal disease?

About 3,000 people get meningococcal disease each year in the United States. Approximately 10% to 15% of people who get the disease die from it, and many others are affected for life. About 20% of those who survive suffer long-term effects that can include brain damage, seizures or limb amputations.

## Who is at risk?

Anyone can get meningococcal disease. 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 freshmen who live in dormitories have an increased risk of getting meningococcal disease.

## Can meningococcal disease be prevented?

**Yes.** Although meningococcal disease is serious and potentially life threatening, up to 83 percent of the cases in adolescents and young adults are potentially vaccine preventable. The meningococcal vaccine has been demonstrated to be safe, and offers protection against four of the five most common types of meningococcal infection.

## What do health officials recommend?

Health officials recommend routine vaccination of children and adolescents 11 through 18 years of age. This vaccine is normally given in one dose during the routine preadolescent immunization visit (at 11-12 years). But those who did not get the vaccine during this visit should get it at the earliest opportunity.

## Does the meningococcal vaccine prevent all forms of meningococcal disease?

There are currently two meningococcal vaccines available in the U.S.:

- ❖ **Meningococcal polysaccharide vaccine (MPSV4)** - available since 1970s
- ❖ **Meningococcal conjugate vaccine (MCV4)** - licensed in 2005

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Both vaccines protect against four of the five most common types of meningococcal infection, including two of the three types most common in the United States. Neither vaccine prevents meningitis caused by other bacteria such as “strep” or Hib bacteria.

### Is the vaccine effective?

**Yes.** Both vaccines work well, and protect about 90% of those who receive it. MCV4 is expected to give better, longer-lasting protection. MCV4 is also expected to be better at preventing the disease from spreading from person to person.

### What about side effects?

Up to half of the people who get meningococcal vaccines have mild side effects, such as redness or pain where the shot was given. A small percentage of those who receive the vaccine develop a fever. Serious allergic reactions to the vaccine are rare, but do occur. Signs of a serious allergic reaction can include difficulty breathing, weakness, hoarseness or wheezing, a fast heart beat, hives, dizziness, paleness, or swelling of the throat.

### What can I do if I have a reaction to the vaccine?

If you think you are having a serious reaction to the vaccine, seek immediate medical attention. For mild to moderate vaccine reactions, an aspirin-free pain reliever can be used to reduce fever and soreness at the shot site.

It is important to remember that your child's chances of being harmed by meningococcal disease are far

greater than any chance of being harmed by the vaccine. Immunizations are one of the most important ways parents can protect their children against serious infectious diseases.

### How widespread is meningococcal disease? Would I need the vaccine if I travel?

Although large epidemics of meningococcal disease do not occur in the United States, some countries experience large, periodic epidemics. Overseas travelers should check to see if meningococcal vaccine is recommended for their destination. Travelers should receive the vaccine at least one week before departure, if possible. Information on areas for which meningococcal vaccine is recommended can be obtained by calling the CDC at (877) 394-8747.

### Where can I get more information on the disease and vaccine?

Talk to your physician or someone at your local health department for more information. They can give you the vaccine package insert or suggest other sources of information. In addition, you can find information about the disease and vaccine through the following sources.

- ❖ North Carolina Immunization Branch:
  - Visit the web site at [www.immunizenc.org](http://www.immunizenc.org).
  - Call (919) 707-5550
- ❖ Call your local health department's immunization program.
- ❖ Contact the Centers for Disease Control and Prevention (CDC):
  - Call 1-800-232-4636 (1-800-CDC INFO)
  - Visit the National Center for Infectious Disease's meningococcal disease website at [www.cdc.gov/meningitis/index.htm](http://www.cdc.gov/meningitis/index.htm).
  - Visit CDC's Travelers Health website at [www.cdc.gov/travel](http://www.cdc.gov/travel).
- ❖ Vaccines & Immunizations website at [www.cdc.gov/vaccines](http://www.cdc.gov/vaccines).
- ❖ National Network for Immunization Information at [www.immunizationinfo.org](http://www.immunizationinfo.org).
- ❖ American College Health Association at [www.acha.org](http://www.acha.org).

