

# Meningococcal Disease

Last Reviewed: July 2011

- [Versión en español](#)
- [Additional Information on Meningococcal Disease and College Students](#) - cdc.gov

## What is meningococcal disease?

Meningococcal disease is a severe bacterial infection of the bloodstream or meninges (a thin lining covering the brain and spinal cord) caused by the meningococcus germ.

## Who gets meningococcal disease?

Anyone can get meningococcal disease, but it is more common in infants and children. For some adolescents, such as first-year college students living in dormitories, there is an increased risk of meningococcal disease. Every year in the United States approximately 2,500 people are infected and 300 die from the disease. Other persons at increased risk include household contacts of a person known to have had this disease, immunocompromised people, and people traveling to parts of the world where meningococcal meningitis is prevalent.

## How is the meningococcus germ spread?

The meningococcus germ is spread by direct close contact with nose or throat discharges of an infected person.

## What are the symptoms?

High fever, headache, vomiting, stiff neck and a rash are symptoms of meningococcal disease. The symptoms may appear two to 10 days after exposure, but usually within five days. Among people who develop meningococcal disease, 10 to 15 percent die, in spite of treatment with antibiotics. Of those who live, permanent brain damage, hearing loss, kidney failure, loss of arms or legs, or chronic nervous system problems can occur.

## What is the treatment for meningococcal disease?

Antibiotics, such as penicillin G or ceftriaxone, can be used to treat people with meningococcal disease.

## Should people who have been in contact with a diagnosed case of meningococcal meningitis be treated?

Only people who have been in close contact (household members, intimate contacts, health care personnel performing mouth-to-mouth resuscitation, daycare center playmates, etc.) need to be considered for preventive treatment. Such people are usually advised to obtain a prescription for a special antibiotic (either rifampin, ciprofloxacin or ceftriaxone) from their physician. Casual contact, as might occur in a regular classroom, office or factory setting, is not usually significant enough to cause concern.

## Is there a vaccine to prevent meningococcal meningitis?

There are three vaccines available for the prevention of meningitis. The preferred vaccine for people ages 2-55 years is Meningococcal conjugate vaccine (MCV4). This vaccine is licensed as Menactra (sanofi pasteur) and Menveo (Novartis). Meningococcal polysaccharide vaccine (MPSV4; Menomune [sanofi pasteur]), should be

used for adults ages 56 and older. The vaccines are 85 to 100 percent effective in preventing the four kinds of meningococcus germ (types A, C, Y, W-135). These four types cause about 70 percent of the disease in the United States. Because the vaccines do not include type B, which accounts for about one-third of cases in adolescents, they do not prevent all cases of meningococcal disease.

### **Is the vaccine safe? Are there adverse side effects to the vaccine?**

The three vaccines available to prevent meningococcal meningitis are safe and effective. However, the vaccines may cause mild and infrequent side effects, such as redness and pain at the injection site lasting up to two days.

### **Who should get the meningococcal vaccine?**

The vaccine is routinely recommended for all adolescents ages 11-12 years, all unvaccinated adolescents 13-18 years, and persons 19-21 years who are enrolling in college. The vaccine is also recommended for people ages 2 years and older who have had their spleen removed or have other chronic illnesses, as well as some laboratory workers and travelers to endemic areas of the world.

### **Who needs a booster dose of meningococcal vaccine?**

CDC recommends that children age 11 or 12 years be routinely vaccinated with Menactra or Menveo and receive a booster dose at age 16 years. Adolescents who receive the first dose at age 13-15 years should receive a one-time booster dose, preferably at ages 16-18 years. Teens who receive their first dose of meningococcal conjugate vaccine at or after age 16 years do not need a booster dose, as long as they have no risk factors.

All people who remain at highest risk for meningococcal infection should receive additional booster doses. If the person is age 56 years or older, they should receive Menomune.

### **How do I get more information about meningococcal disease and vaccination?**

Contact your physician or your student health service. Additional information is also available on the websites of the New York State Department of Health, <http://www.health.state.ny.us/>; the Centers for Disease Control and Prevention, <http://www.cdc.gov/DiseasesConditions/>; and the American College Health Association, <http://www.acha.org.au/info/general/Home/get/0/0/>.

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