

# Meningococcal Disease

## **What is meningococcal disease?**

Meningococcal disease is caused by infection with a type of bacteria called *Neisseria meningitidis* (also known as “meningococci”). A small proportion of people exposed to this organism develop a serious illness from it, such as meningitis (swelling of the tissues around the brain) or a blood infection.

## **What are the signs and symptoms of meningococcal disease?**

People can get the organism and can carry it in their nose and throat without developing symptoms; only a small proportion go on to develop disease. Symptoms of infection may include fever, chills, headache, muscle aches, stiff neck, nausea, vomiting, sleepiness or confusion, and/or a skin rash. However, in small infants the classic findings may be absent – symptoms may include irritability, poor feeding, and/or vomiting.

## **How is this disease spread?**

Meningococcal infection is not highly contagious. Transmission occurs through direct contact with nose and throat secretions. An infected person can spread the bacteria by coughing or sneezing directly into the face of others, kissing a person on the mouth, or sharing cups, water bottles, eating utensils, cigarettes, lipstick, toothbrushes, etc.

These bacteria do not survive for more than a few minutes on environmental surfaces such as tables, chairs, clothing, etc. Casual contact, such as occurs in a classroom or office, does not usually spread disease.

## **How long is a person contagious and how soon do the symptoms appear?**

A person may transmit the organism from the time that the person is first infected until the bacteria are no longer present in the nose and throat. Symptoms of infection may appear 2-10 days after exposure (usually within 5 days).

## **Can meningococcal disease be treated?**

A meningococcal infection requires immediate medical treatment. The diagnosis is usually made by growing bacteria from a sample of blood or spinal fluid. Antibiotics are generally effective in treating the infection. However, even with appropriate therapy about 10% of the people who have a meningococcal infection die and 20% of survivors have permanent complications such as hearing loss, brain injury, or loss of a limb.

## **How can meningococcal disease be prevented?**

Risk of transmission of meningococcal infection can be reduced by good hygiene. Persons should cover their noses and mouths when sneezing or coughing and discard used tissues promptly. Wash hands thoroughly, or use alcohol-based hand sanitizers, before and after eating and after coughing or sneezing. Do not share cigarettes, straws, cups, glasses, or eating utensils. Eating and drinking utensils can be used by others only after they have been washed.

People who have been in close contact with the ill person may need to receive antibiotics. These are generally household members, intimate contacts, and close friends. In these persons, the organism can be eliminated from the nose and throat by taking an antibiotic. Contacts should watch for illness for 10 days after last contact with the ill person, even if they take antibiotics.

In the United States, a vaccine is available that protects against certain strains of the bacteria. Vaccination is currently recommended for children at their routine preadolescent visit (11-12 years of age) as well as any unvaccinated adolescents at high school entry (15 years of age). Vaccination is also recommended for military recruits, college freshmen, and persons with certain health conditions (e.g., damaged spleen). The vaccine may be used in outbreak situations and for persons who are traveling to areas of the world where high rates of the disease are known to occur. Others who want to decrease their risk of meningococcal infection may also get the vaccine.

## **Where can I get more information?**

You may contact your doctor or local health department if you would like more information. Additional information is also available from the Centers for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)).