

IDRS Infectious Disease Reporting System

Disease Reporting 24 Hours a Day

Columbus Public Health and Franklin County Public Health

MENINGOCOCCAL DISEASE

Meningococcal Disease is caused by bacteria called *Neisseria meningitidis*. It often causes meningitis (infection of the lining that surrounds the brain and spinal cord) but it can also cause bloodstream infections, pneumonia, and other illness. Meningitis can also be caused by other types of viruses or bacteria.

Symptoms

Symptoms develop suddenly about 1-10 days after being exposed to the bacteria, including:

- Fever and chills
- Headache with a stiff neck
- Sometimes rash or vomiting
- Changes in thinking: confusion, irritability, extreme sleepiness, or seizures (fits or spells)
- Classic symptoms like headache, stiff neck and confusion only occur about half the time. The disease can come on suddenly with great severity, and end in shock, coma and death, even with treatment.

Transmission

- The bacteria are spread through fluids from the nose or throat of an infected person that go into the air when a person coughs, sneezes, or speaks. People with close contact with a person that has the infection are at increased risk, such as those in the same household or child care center with the person.
- *Neisseria meningitidis* only infects humans. The bacteria can be carried in the throat and sometimes, for reasons not fully understood, can overwhelm the body's defenses allowing infection to spread through the bloodstream to the brain.
- People at greater risk include infants and young children (for endemic disease), refugees, household contacts of people with the infection, military recruits, college freshmen who live in dormitories, microbiologists who work with *N. meningitidis*, people without spleens or with weakened immune systems, and people exposed to tobacco smoke.

Treatment

- Early diagnosis and treatment are very important. If symptoms occur, the patient should see a doctor immediately. The diagnosis is usually made by growing bacteria from a sample of spinal fluid. The spinal fluid is obtained by performing a spinal tap, in which a needle is inserted into the lower back.
- Hospitalization is usually required to give the kinds of antibiotics needed to treat Meningococcal disease.

Prevention

- There is a vaccine against certain strains of *Neisseria meningitidis* called the Meningococcal vaccine. It is recommended for certain groups, such as travelers to certain areas of the world and college students.
- People who are close contacts of a person with Meningococcal disease should receive antibiotics to prevent them from getting the disease. When a case of Meningococcal disease occurs, public health personnel and health care providers usually contact and treat people at risk.

Additional Information

- A person with meningococcal disease must be isolated until twenty-four hours after beginning effective antibiotics. Anyone who is around the ill person during this period should wear a mask.

All information is general in nature and is not intended to be used as a substitute for appropriate professional advice.



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