

Bacterial Meningitis

What is Bacterial Meningitis?

Meningitis is an infection of the protective membranes that surround the brain and spinal cord. It is usually caused by an infection with a bacterium. Knowing whether meningitis is caused by a virus or a bacterium is important because of differences in the seriousness of the illness and the treatment needed. **This fact sheet is specific to bacterial meningitis.**

Where is it Found?

Bacterial meningitis is found worldwide. The bacteria often live harmlessly in a person's mouth and throat. In rare instances they can break through the body's immune defenses and travel to the fluid surrounding the brain and spinal cord and begin to multiply quickly. The thin membrane that covers the brain and spinal cord (meninges) becomes swollen and inflamed, leading to the classic symptoms of meningitis.

BACTERIAL MENINGITIS is much more serious. It can cause severe disease that result in brain damage and even death.

VIRAL MENINGITIS is usually relatively mild. It clears up within a week or two without specific treatment. Viral meningitis is also called aseptic meningitis.

Spread of Disease

The bacteria are spread by direct close contact with the discharges from the nose or throat of an infected person. They are not spread by casual contact or by simply breathing the air where a person with meningitis has been.

Signs and Symptoms



In persons over age two, common symptoms are high fever, headache, and stiff neck. These symptoms can develop over several hours, or they may take one to ten days after exposure. Other symptoms can include nausea, vomiting, sensitivity to light, confusion, and sleepiness. In advanced disease, bruises develop under the skin and spread quickly. In newborns and infants, the typical symptoms of fever, headache, and neck stiffness may be hard to detect. Other signs in babies might be inactivity, bulging soft spot on baby's head, irritability, vomiting, and poor feeding. As the disease progresses, patients of any age can have seizures or coma.

People at Risk

Anyone can get bacterial meningitis, but it is most common in infants and children. People who have had close or prolonged contact with a patient with meningitis caused by *Neisseria meningitidis* can also be at increased risk. This includes people in the same household or day-care center, or anyone with direct contact with discharges from the meningitis patient's mouth or nose. Healthy children and young adults are susceptible, and death can occur within a few hours of onset.

Diagnosis

The diagnosis is usually made by growing bacteria from a sample of spinal fluid. The spinal fluid is obtained by a spinal tap. A doctor inserts a needle into the lower back and removes some fluid from the spinal cord. Identification of the type of bacteria responsible for the meningitis is important for the selection of correct antibiotic treatment.

Treatment

Early diagnosis and treatment are very important. If symptoms occur, the patient should see a doctor right away! Bacterial meningitis can be treated with a number of effective antibiotics. It is important, however, that treatment be started early.

Prevention

- **Vaccines** - - *There are vaccines against Haemophilus Influenza Type B(Hib), some strains of Neisseria meningitidis, and many types of Streptococcus pneumoniae.*
- **Disease Reporting** - - *Cases of Bacterial Meningitis must be reported to the Health Department so they can follow and treat close contacts of patients and monitor the community for outbreaks.*
- **Treatment of Close Contacts** - - *People who are identified as close contacts of a person with meningitis caused by Neisseria meningitidis can be given antibiotics to prevent them from getting the disease. Antibiotics for contacts of a person with Hib disease are no longer recommended if all contacts four year of age or younger are fully vaccinated.*
- **Travel Precautions** - - *Although large epidemics of bacterial meningitis do not occur in the United States, some countries experience large, periodic epidemics of meningococcal disease. Overseas travelers should check to see if meningococcal vaccine is recommended for their destination. Travelers should receive the vaccine at least two weeks before departure.*



For more sources of information on this topic visit:

ST. CLAIR COUNTY HEALTH DEPARTMENT www.scchealth.co

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES www.michigan.gov/mdhhs

THE CENTERS FOR DISEASE CONTROL AND PREVENTION www.cdc.gov

THE MAYO CLINIC www.mayoclinic.org