

Central Michigan District Health Department "Promoting Healthy Families, Healthy Communities"

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BACTERIAL MENINGITIS

What is Bacterial Meningitis?

Meningitis is an infection of the fluid that surrounds a person's spinal cord and brain. Bacterial meningitis can be quite severe and may result in brain damage, hearing loss, or learning disabilities. It is important to know which type of bacteria is causing the meningitis because antibiotics can prevent some types from spreading and infecting other people. Before the 1990's, *Haemophilus influenza* type b (Hib) was the leading cause of bacterial meningitis, but new vaccines being given to all children as part of their routine immunizations have reduced the occurrence of invasive disease due to *H. influenza*. Today, *Streptococcus pneumoniae* and *Neisseria meningitidis* are the leading causes of bacterial meningitis.

How is it spread?

The bacteria are spread by direct, close contact with saliva, mucus, or droplets from the nose and throat of an infected person. None of the bacteria that cause meningitis are as contagious as things like the common cold or the flu, and they are not spread by casual contact or by simply breathing the air where a person with meningitis has been. However, sometimes the bacteria that cause meningitis have spread to other people who have close or prolonged contact with a patient with meningitis caused by *N. meningitidis* (also called meningococcal meningitis) or Hib.

What are the signs and symptoms?

High fever, severe headache, stiff neck, shoulders, and back are common symptoms of meningitis in anyone over the age of 2 years. These symptoms can develop over several hours, or they may take 1 to 2 days. Other symptoms may include nausea, vomiting, discomfort looking into bright lights, confusion, sleepiness, and a skin rash of small, bright, red spots or a larger, reddish-purple "bruise". In newborns and small infants, the classic symptoms of fever, headache, and neck stiffness may be absent or difficult to detect, and the infant may only appear slow or inactive, or be irritable, have vomiting, or feed poorly. As the disease progresses, patients of any age may have seizures.

What is the treatment for Bacterial Meningitis?

Bacterial meningitis can be treated with a number of effective antibiotics. It is important that treatment be started early in the course of the disease. Appropriate antibiotic treatment reduces the risk of brain damage or death from meningitis to below 15%, although the risk is higher among the elderly. People in close contact with a case may need antibiotics also.

Who is considered to be close contacts to a case?

- Persons who live in the same house
- Persons who have contact with mouth or nose secretions, such as through kissing, sharing eating utensils or sharing cigarettes
- Persons who have done medical treatments such as mouth-to-mouth resuscitation or intubation
- Children sharing toys, such as in child care centers, family child care homes, or nursery schools

How can I guard against the spread of this disease?

Vaccines are available to prevent the most common types of meningococcal disease. These vaccines are recommended for:

- All children at their routine preadolescent visit (11-12 years of age)
- High school students
- College freshman
- Persons routinely exposed to meningococcal bacteria (microbiologists)
- U.S. military recruits
- Anyone traveling to, or living in, a part of the world where meningococcal disease is common
- Anyone who has a damaged spleen, or whose spleen has been removed
- Anyone with an immune system disorder
- People who might have been exposed to meningitis during an outbreak