

New York State Department of Health

Haemophilus Influenzae Type B (Hib, Haemophilus b)

Updated: September 2008

What is Haemophilus influenzae type b (Hib) disease?

Hib is a bacterial illness that can lead to a potentially deadly brain infection in young children. Hib may cause diseases such as meningitis (inflammation of the coverings of the brain and spinal column), bloodstream infections, pneumonia, arthritis and infections of other parts of the body.

Who gets Hib disease?

Hib disease can occur at any age. Before the development of a vaccine, Hib was the leading cause of bacterial meningitis among children less than five years of age. Since the introduction in 1988 and the widespread use of the Hib vaccine, the number of new cases of Hib disease in infants and young children decreased by 99 percent to fewer than one case per 100,000 children younger than five years of age. Now, Hib is seen more commonly in the elderly, unvaccinated or incompletely vaccinated children, and people with a weakened immune system.

How is Hib disease spread?

Hib disease may be transmitted through contact with mucus or droplets from the nose and throat of an infected person.

What are the symptoms of Hib disease?

Symptoms may include fever, lethargy, vomiting and a stiff neck. Other symptoms depend upon the part of the body affected.

How soon do symptoms appear?

The incubation period for Hib disease is unknown, but is probably less than one week.

What are the possible complications associated with Hib disease?

If Hib meningitis occurs, death occurs in one out of 20 children and permanent brain damage in ten to 30 percent of the survivors.

What is the treatment for Hib disease?

Antibiotics, such as cefotaxime, ceftriaxone, or ampicillin with chloramphenicol, are generally used to treat serious infections. Rifampin is used in some circumstances as preventive treatment for persons who have been exposed to Hib disease.

When and for how long is a person able to spread Hib disease?

The period of time a person is able to spread the disease varies. Unless treated, it may be transmitted for as long as the organism is present in the nose and throat, even after symptoms have disappeared.

Does past infection with Hib disease make a person immune?

Children who had Hib disease when younger than 24 months of age may be at risk of getting Hib disease again. Children and adults who had Hib disease at 24 months of age or older are likely to be immune.

Is there a vaccine for Hib disease?

There are currently several Hib vaccines licensed by the U. S. Food and Drug Administration for routine use in children. Immunization authorities recommend that all children be immunized with an approved Hib vaccine beginning at two months of age. Recommendations for scheduling of subsequent doses vary depending on the manufacturer. Therefore, it is important to consult with your physician.

Some older children and adults with special conditions are at an increased risk for infection with Hib and should be vaccinated if they were not vaccinated in childhood. These conditions include sickle cell disease, removal of the spleen, bone marrow transplant, cancer treatment with drugs that weaken the immune system, and human immunodeficiency virus (HIV).

In New York State, Hib vaccine is required for all children enrolled in pre-kindergarten programs.

What can be done to prevent the spread of Hib disease?

The single most important preventive measure is to maintain a high level of immunization in the community. Rifampin, an antibiotic, is used in some circumstances as preventive treatment for persons who have been exposed to Hib disease.

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