June 2017 Haemophilus Influenzae Information for the Public



What is Haemophilus influenzae?

Haemophilus influenzae (H. influenzae) is a type of bacteria that causes illness in babies and young children. These bacteria can cause infections in people of all ages ranging from mild, such as an ear infection, to severe, such as a bloodstream infection. In spite of the name, *H. influenzae* do not cause influenza (the "flu"). There are six identifiable types of *H. influenzae* bacteria (a through f) and other non-identifiable types (called non-typeable). The serotype people are most familiar with is *H. influenzae* type b, or Hib. This type can be prevented with a vaccine. However, the vaccine does not protect against other types of the bacteria.

Is Hib disease dangerous?

Hib disease is very serious. Most children with Hib disease need care in the hospital. Even with treatment, as many as 1 out of 20 children with Hib meningitis die. As many as 1 out of 5 children who survive Hib meningitis will have brain damage or become deaf.

How is *H. influenzae* spread?

H. influenzae, including Hib, are spread person-to-person through respiratory droplets that occur when someone who has the bacteria in their nose or throat coughs or sneezes. Most of the time, *H. influenzae* are spread by people who have the bacteria in their noses and throats but who are not ill or who do not show any symptoms.

However, the bacteria can sometimes move to other parts of the body and cause infection. Some of these infections are considered "invasive" and can be very serious and sometimes even deadly.

The incubation period (time between exposure and first symptoms) of *H. influenzae* disease is not certain, but could be as short as a few days

Who is at risk for *H. influenzae*?

H. influenzae, including Hib, disease occurs mostly in babies and children younger than five years old. Adults 65 years or older, American Indians, and Alaska Natives are also at increased risk for getting sick with invasive *H. influenzae* disease.

People with certain medical conditions are also at increased risk for developing *H. influenzae* disease. Those medical conditions include:

- Sickle cell disease
- Asplenia (no spleen)
- HIV (human immunodeficiency virus) infection
- Antibody and complement deficiency syndromes

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- People who have received chemotherapy or radiation therapy for neoplasms
- People who have received hematopoietic stem cells

How can you prevent *H. influenzae*?

Vaccine

There's a vaccine that can prevent Hib disease, the most common type ("strain") of *Haemophilus influenzae* bacteria. However, this vaccine does not prevent disease caused by the other types of *H. influenzae*.

Hib vaccine is recommended for all children younger than 5 years old in the United States and is usually given to babies starting at 2 months old. In certain situations, people at increased risk for getting invasive Hib disease (when bacteria invade parts of the body that are normally free from germs) who are fully vaccinated may need additional doses of Hib vaccine. Unimmunized older children, teens, and adults with certain medical conditions should also receive Hib vaccine.

The annual influenza vaccination does not protect against Hib.

Re-Infection

A child with *H. influenzae*, including Hib, disease may not develop protective levels of antibodies (proteins produced by the body to fight off diseases). This means that someone could get *H. influenzae* disease again. Children younger than 2 years old who have recovered from invasive Hib disease are not considered protected from *H. influenzae* type B and should receive Hib vaccine as soon as possible.

Antibiotic Prophylaxis

Sometimes Hib is spread to people who have had close or lengthy contact with someone who has or had Hib disease. In certain cases, people in close contact with someone who is sick with Hib should receive antibiotics to prevent them from getting the disease. This is known as prophylaxis. A doctor or local health department will make recommendations for who should receive prophylaxis

How is *H. influenzae* treated

H. influenzae, including Hib, disease is treated with antibiotics (medicines that kill bacteria in the body), usually for 10 days. Most cases of invasive disease (when bacteria invade parts of the body that are normally free from germs) require care in a hospital.

When *H. influenzae* cause a non-invasive infection, like bronchitis or an ear infection, antibiotics may be given to prevent complications.