

# Hib vaccine

## *Haemophilus influenzae* type b (Hib)



### *Haemophilus influenzae* type b (Hib)

*Haemophilus influenzae* type b vaccine prevents **meningitis** (an infection of the covering of the brain and spinal cord), **pneumonia** (lung infection), epiglottitis (a severe throat infection), and other serious infections caused by a type of bacteria called *Haemophilus influenzae* type b. It is recommended for all children younger than 5 years old , and it is usually given to infants starting at 2 months old. In certain situations, patients at increased risk for invasive Hib disease who are fully vaccinated need additional doses of Hib vaccine and unimmunized older children, adolescents, and adults with certain specified medical conditions should receive Hib vaccine. The Hib vaccine can be combined with other vaccines. Some brands of vaccine contain Hib along with other vaccines in a single shot. Hib vaccine can safely be combined with other vaccines to make these combination vaccines.

The schedule of vaccination is to be given in 3 doses at the age of 2 , 4 , 6 months in combined with the hexavalent vaccine ( DTPa , Hib , Hep type B , IPV ) .

There's a vaccine that can prevent disease caused by *Haemophilus influenzae* type b (Hib), but not the other types ("strains") of *H. influenzae* bacteria.

**Meningitis** is an infection of the covering of the brain and spinal cord. Symptoms typically include sudden onset of:

- Fever
- Headache
- Stiff neck
- Nausea with or without vomiting
- Increased sensitivity to light (photophobia)
- Altered mental status (confusion)

**Pneumonia** occurs when the lungs become infected, causing inflammation (swelling). *H. influenzae* pneumonia is considered non-invasive if there's not bacteremia or pleural fluid (fluid surrounding the lungs) infection occurring at the same time. When there is pneumonia with either bacteremia or pleural fluid infection occurring at the same time, it is considered invasive. Symptoms of pneumonia usually include:

- Fever and chills
- Cough
- Shortness of breath or difficulty breathing
- Sweating
- Chest pain
- Headache
- Muscle pain or aches
- Excessive tiredness

**Bacteremia** is an infection of the blood. It can cause symptoms such as:

- Fever and chills
- Excessive tiredness
- Pain in the belly
- Nausea with or without vomiting
- Diarrhea
- Anxiety
- Shortness of breath or difficulty breathing
- Altered mental status (confusion)

Bacteremia from *H. influenzae* can occur with or without pneumonia.

Babies may appear to be lethargic (limp, loss of alertness) or irritable, or may not eat well. In young children, doctors may also test the child's reflexes, which can be abnormal with meningitis.

## Vaccine for Hib Only

The first Hib vaccine was licensed in 1985. Scientists later reformulated the vaccine so that it would be effective in young children, and the U.S. Food and Drug Administration (FDA) licensed this improved version in 1987 (for children) and 1990 (for babies). The current Hib vaccine protects children as young as six weeks old. This vaccine is also used to protect older children, teens, and adults who are at increased risk for Hib disease due to certain medical conditions.

Before Hib vaccine was introduced in the United States for children younger than 5 years old, Hib disease:

- Was the leading cause of bacterial meningitis
- Caused about 20,000 cases of invasive disease each year
- Caused about 1,000 deaths each year

Due to the use of Hib vaccine, by 2013 fewer than 40 cases of Hib disease occurred annually in children younger than 5 years old.

Questionnaire :

- 1- What is the main symptoms of meningitis and pneumonia ?
- 2- The Hib vaccine can't be combined with other vaccines. ( F or T )
- 3- At what age the vaccine be administered?
- 4- Bacteremia from *H. influenzae* can occur with or without pneumonia. ( F or T )
- 5- *What H. influenzae* vaccine used for ?