

Vaccination against Haemophilus influenzae b (Hib)

Information by your physician and the Forum Impfen

The following information about the prophylactic vaccination against haemophilus influenzae b (Hib) is intended to provide fundamental updated* facts to help you decide whether to participate in these vaccinations.

Infection with Hib and its therapy

Hib is a bacterium present in the nasopharynx of man. It is transmitted by droplet infection, especially during close contact. Starting from the upper part of the respiratory tract, the bacteria is mainly transported by the blood to the meninges. Most children are carriers of the pathogen for a limited period of time without showing any symptoms at all, building up an effective protection during this time. In young children up to 5 years of age, Hib was the most common cause for meningitis and epiglottitis before the introduction of vaccination. Despite early diagnosis and treatment with antibiotics, 5 to 10% of the children with meningitis die. In 15 to 30% of the surviving, sequellae of the nervous system such as hearing disorders or brain edema persist. The most important symptoms associated with epiglottitis are difficulties to swallow, increasing difficulties to breath, unrest, fear. Up to 25% of the infected children die from suffocation. Hib is also the pathogen in pneumonia and suppurating cutaneous and joint infections. The infection is treated with antibiotics. Unfortunately, the disease often progresses so quickly that treatment, even if started on time, may not be able to help. Additionally, antibiotic therapy may not always prevent damage to the nervous system.

Vaccination against Hib

The Hib vaccine is manufactured from capsular proteins of the bacteria. It is a dead vaccine. The capsular substance undergoes a special treatment during manufacturing so that even infants and small children below 2 years of age may form protective antibodies. Hib is usually administered in combination vaccines containing tetanus, diphtheria, polio, pertussis and hepatitis B which are injected into the muscle at 3, 4, 5 as well as 12 to 15 months of age. For details about vaccinations or reasons which may be considered as contra-indication to vaccination, please contact your physician . As a normal reaction of the body to the vaccine redness, pain and swelling may develop at the injection site, rarely associated with important edema of the limbs that normally resolve rapidly, within 1 to 3 days after vaccination; these symptoms persist for more than three days in rare cases only. Also within 1 to 3 days, sometimes for a longer period of time, general symptoms such as a mild to moderate increase of temperature (up to 10%) shivering, sweating, mild muscular and joint pain or gastrointestinal disorders (lack of appetite, nausea, vomiting, diarrhea) may develop, but are uncommon. Long-lasting high-pitched crying is rarely observed in small children. In infants and small children febrile reactions might rarely be associated with febrile convulsions (usually without sequellae). In individual cases allergic reactions may occur.

Benefit for the individual and the population

Infection with Hib was the most common cause for meningitis and epiglottitis in infants and small children before the introduction of vaccination. A completed course of primary immunization provides long term protection for pediatric age groups at increased risk of infection. In Germany, incidence of Hib infection decreased by 95% due to vaccination. This is not only achieved by individual protection, but also by a decisive decrease of bacteria-carriers.

Who should be vaccinated

Hib vaccination is generally recommended. Hence, all infants should be vaccinated. In addition, the German Expert Commission for Vaccinations (STIKO) recommends Hib vaccinations for persons without spleen or spleen dysfunction.