

## Parents' Guide to Childhood Immunization

### Hib Disease (Haemophilus influenzae type b)

Not long ago Hib disease (Haemophilus influenzae type b) was the leading cause of bacterial meningitis in children less than 5 years old. As recently as the mid-1980s it struck one child out of every 200 in that age group. About 1 in 4 of these children suffered permanent brain damage, and about 1 in 20 died. Hib disease is spread through the air by coughing, sneezing, and even breathing. If the bacteria stay in a child's nose and throat, the child will probably not get sick. But if they spread to the lungs or bloodstream, the child can get meningitis (inflammation of the covering of the brain), pneumonia, epiglottitis (inflammation in the throat), arthritis, or other problems. A child who is infected can spread the disease to others for as long as the bacteria remain in the body. Antibiotics can stop spread in 2 to 4 days.

### Hib Vaccine

There are several brands of Haemophilus influenzae type b (Hib) vaccine used in the United States. They are all inactivated (killed) vaccines, made from only a small part of the Hib bacterium. All brands work equally well, protecting 95%–100% of children from Hib disease. The first Hib vaccine was licensed in 1985, and several improved versions have become available since then. Children should get either 3 or 4 doses of Hib vaccine, depending on which brand your doctor uses. The vaccine is recommended at 2, 4, 6, and 12–15 months of age. The 6-month dose is not given with one brand of vaccine.



### Hib Vaccine Side Effects

Hib is a very safe vaccine. It cannot cause Hib disease or meningitis, and is not known to cause any other serious reactions. About 2 children in every 100 who get Hib vaccine have redness, swelling or warmth where the shot was given, or a fever over 101°F. These reactions usually begin within 24 hours after the shot and last 2 or 3 days.

### **Hib Vaccine Precautions**

In addition to the normal precautions for all vaccines, shown on page 30, Hib vaccine should not be given to children younger than 6 weeks of age. This is not because it is unsafe but because it might not protect as well if given too early.

### **Combination Vaccines**

Several vaccines are sometimes combined into a single shot. These are called combination vaccines. Some combination vaccines are used routinely - DTaP is a combination; so is MMR. There are currently four other combination vaccines available for children. One combines DTaP and Hib vaccines; the second Hib and hepatitis B; the third combines DTaP, hepatitis B, and polio, and the fourth combines measles, mumps, rubella and varicella. The advantage of combination vaccines is, of course, that your children get the protection of all the component vaccines while getting fewer injections. Each of these vaccines has certain restrictions, and not all providers carry them. But ask your provider about them if you are interested in reducing the number of shots your child needs.