

Patient information from BMJ

Last published: Sep 29, 2022

Hib vaccine (*Haemophilus influenzae* type B)

The Hib vaccine is designed to protect against a type of bacteria called *Haemophilus influenzae* type B (Hib). Hib can cause fatal diseases including meningitis.

What is Hib (*Haemophilus influenzae* type B)?

Hib is a bacterial infection that can cause various life-threatening conditions, including **meningitis**, **sepsis**, and **pneumonia**.

The most well-known of these conditions among parents is probably meningitis. **Meningitis** is inflammation (swelling) of the tissues that protect the brain and spinal cord. These tissues are called the meninges.

This type of infection is not always caused by bacteria. Meningitis can also be caused by infection with a virus or, rarely, a fungus. But these types of infection are usually less serious.

Meningitis can sometimes be fatal. And people who recover are often affected for the rest of their lives. Long-term problems caused by meningitis can include:

- severe brain damage
- hearing or vision problems
- epilepsy
- problems with memory and concentration
- problems with movement and balance, and
- needing to have limbs amputated.

Vaccination programmes have made Hib extremely rare in developed countries. But it is more common where vaccination rates are lower.

Who needs the Hib vaccine?

Vaccination schedules might vary slightly depending on where you live, and depending on which version of the vaccine your child has.

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In the US, there are two different Hib vaccines available. One is given in **three doses** while the other is given in **four doses**.

Your baby should have had all the doses he or she needs by the age of **15 months**. But if your child missed out for any reason, they might be able to have a **catch-up vaccination**, up to the age of about five years old.

Is there anyone who shouldn't have the vaccine?

Your baby should not have the vaccine if he or she:

- has had a severe allergic reaction to a previous dose of the vaccine, or
- is allergic to any of the vaccine's ingredients. Tell the medical staff giving the vaccine about any **allergies** your baby has before he or she has the vaccine.

Severe allergic reactions can very rarely happen with this vaccine. But the medical staff will be trained in how to treat this.

Is it safe?

The Hib vaccine is very safe. It's also safe for your baby to have it at the same time as other vaccines.

Like all vaccines, the Hib vaccine can cause side effects in some babies. Common side effects that can affect your baby for a short time after having this vaccine include:

- pain, redness, or swelling where the injection is given (called the injection site)
- a fever
- being irritable
- loss of appetite, and
- being more sleepy than usual.

Some babies also vomit or have diarrhea after this vaccination. But this is less common.

If your baby has a rash after having the vaccine, call your doctor right away. This could be a sign of an allergic reaction.

How is the vaccination given?

Vaccines in babies are usually given as an injection in the thigh. But if your baby is having several vaccinations at once, they will have them in different places.

This might mean that your baby has injections in the upper arms as well as in the thighs.

How well does the vaccine work?

The evidence suggests that the vaccine works very well. For example, in most developed countries, meningitis is now extremely rare because of the vaccination program.

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