

Patient information from BMJ

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Hepatitis B: should I have the vaccine?

Hepatitis B is an infection with a virus that attacks your liver. It is not always serious. But sometimes it can lead to a long-term illness, which can be serious or even fatal. You can avoid getting hepatitis B by getting vaccinated against it.

What is hepatitis B?

Hepatitis B is an infection caused by the hepatitis B virus. The virus attacks the liver. The infection can vary greatly in severity: it can be so mild that you don't even know you have it, and it clears up without treatment; or it can cause serious problems and even death.

Many people with hepatitis B don't get any symptoms. If you do get symptoms, these are some of the most common:

- Feeling tired
- Losing your appetite
- Getting aches and pains
- Feeling sick
- Vomiting
- A rash
- Tenderness in your liver
- Having urine that is darker than usual
- Getting a yellowish tint to your skin and whites of your eyes. This is called jaundice.

The hepatitis B virus is carried in the body fluids of people who are infected. You can catch the virus if blood or another body fluid from a person who is infected gets into your body.

Many people with hepatitis B get the infection by having sex with someone with the virus, or by sharing needles to inject illegal drugs. A pregnant woman who is infected can pass the hepatitis B virus on to her baby.

Even if you don't feel ill you can still pass the virus on to other people if you are infected. Some people become long-term carriers of the illness (called 'chronic carriers') but don't become ill themselves.

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Is it serious?

Most people recover from hepatitis B without treatment. But in a few people it becomes a serious illness that lasts a long time.

If this happens, hepatitis B can make your liver swell and stop working properly. Later, you could get liver cancer or a liver disease called cirrhosis.

Babies and children are more likely to have the serious form of the illness.

Should I have the vaccine?

If you are at risk of catching hepatitis B you may want to consider having a vaccine to prevent it. You are at higher risk if you are:

- travelling to or living in parts of the world where hepatitis B is common (including parts of Southeast Asia, most of the Pacific, sub-Saharan Africa, the Amazon, parts of the Middle East, Central Asia, and some countries in Eastern Europe)
- an injecting drug user, especially if you share needles with other people
- a sexual partner or child of an injecting drug user, or of someone with hepatitis B
- someone who changes sexual partners frequently, especially if they have unprotected sex
- a man who has unprotected sex with men. Having anal sex puts you at greater risk of getting hepatitis B
- sharing a house with someone who has hepatitis B
- working in a job that increases your chance of coming into contact with the virus: for example, if you work as a healthcare professional.

If you fall into any of these categories you should consider getting the vaccine.

Doctors sometimes recommend that people get the vaccine if they are pregnant or have certain health problems, such as diabetes or HIV. Doctors also recommend the vaccine for people who are having dialysis for kidney failure.

What is it and how is it given?

Many countries now recommend hepatitis B vaccination for all new babies. For example, in the UK, all babies born after 1 August 2017 have the hepatitis B vaccine as part of their course of vaccinations.

Vaccines for hepatitis B are made with a tiny, harmless part of the virus that cannot make you ill. After you have the vaccine your body makes antibodies against the hepatitis B virus.

These antibodies protect you from being infected with the virus. So if you come into contact with the virus in the future your body fights it off.

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Adults and older children have the injection in the upper arm. Babies have it in the thigh. You need more than one injection for the vaccine to work properly. Most people have three injections - the first two injections one month apart and the third six months later.

If you are pregnant and have hepatitis B or are a chronic carrier (you carry the virus in your blood but do not feel ill) your baby will be given the vaccine when he or she is born. They will be given one injection soon after birth and further injections when they are 1 month, 2 months, and 12 months old.

Does it work?

There's good evidence that the vaccine protects people against getting hepatitis B. It seems to work for people at any age, including newborn babies, older children, and adults.

Can it be harmful?

The hepatitis B vaccine has been linked to some mild side effects. It might make your arm sore. A very few people feel dizzy or faint or get a skin rash after the injection. But serious reactions to the hepatitis B vaccine are very rare.

What are the alternatives?

There are ways to reduce your chances of getting hepatitis B. You could:

- avoid having unprotected sex with people who are infected, and use a condom if you are unsure
- if you are a drug user avoid sharing needles with other drug users
- avoid sharing household items, such as razor blades and toothbrushes, with infected people
- make sure the needles are sterile if you are having acupuncture, a tattoo, or body piercing.

If you think you may have been infected you may be offered a different type of injection called immunoglobulin. This treatment stops the virus spreading to uninfected cells in the body.

It works best if you have the injection within 24 hours of coming into contact with the virus. Immunoglobulin does not give you long-term protection against hepatitis B.

You should consider seeing a doctor to have this injection if you:

- have had a needlestick injury
- have shared a needle with someone who has or could have hepatitis B
- have had unprotected sex with someone who has or could have hepatitis B.

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