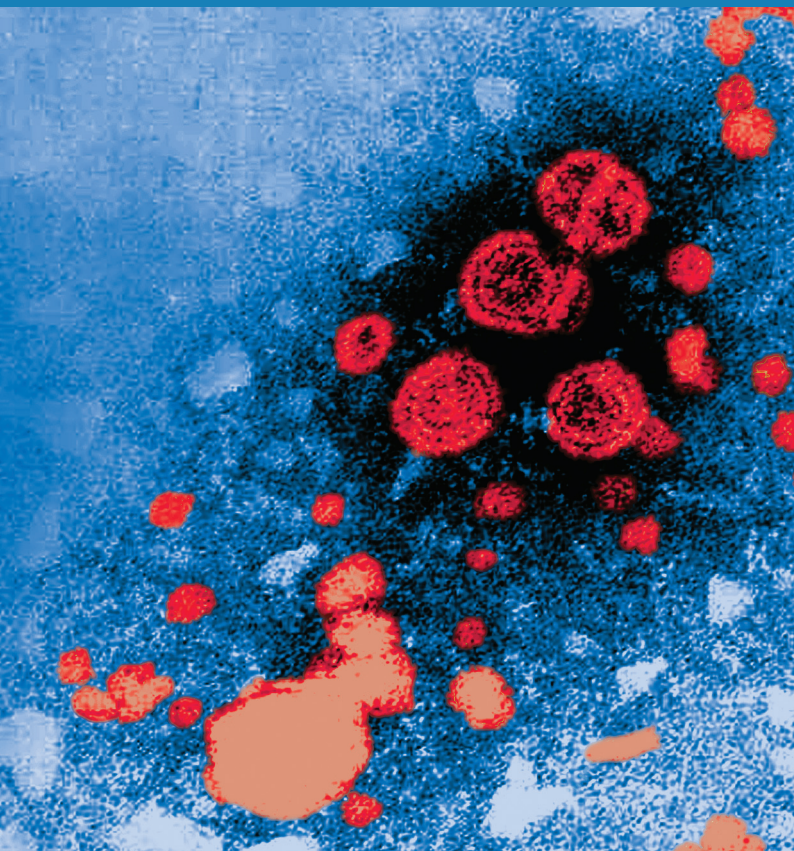


Hepatitis B

Information leaflet



Deutsche Leberhilfe e.V.

What is hepatitis B (HBV)?

Hepatitis B is inflammation of the liver caused by infection with the hepatitis B virus. If a healthy adult contracts the infection, hepatitis B clears by itself within the first six months in approximately 95% of cases. In children and people with a weak immune system, however, the virus is much less likely to clear spontaneously. Once the hepatitis B has resolved, people remain immune for life. These people do not require any medication, unless the immune system is severely weakened, e.g. by chemotherapy. In 5-10% of adults, the disease remains in the body for more than six months. From this point on, the infection is classed as chronic, i.e. long-term. Chronic hepatitis B is often a lifelong condition, but in rare cases it is still possible that it may clear spontaneously years later. Chronic hepatitis B can damage the liver over a number of years and lead to cirrhosis or liver cancer. For this reason, patients with chronic hepatitis B must receive specialist medical advice.

How dangerous is hepatitis B?

This varies from person to person. In some people, the disease can take a mild course for decades, and the patient can live with the disease into old age. In others, the inflammation can severely damage the liver over a period of between 5 and 50 years, until cirrhosis (liver scarring) develops. Cancer of the liver can also develop, which is often difficult to treat. These long-term effects can be fatal.

Regular alcohol consumption, smoking, obesity and other diseases such as AIDS, diabetes, and other hepatitis viruses can accelerate the harmful course of chronic hepatitis B.

How do you become infected?

Hepatitis B is mainly transmitted through infected blood. However, the virus is also present in other bodily fluids such as semen, vaginal fluid, saliva and tears.

The most common means of transmission are birth (if the mother has hepatitis B), unprotected sexual intercourse, and injuries. If equipment is not properly cleaned, hepatitis B can also be transmitted through tattooing and piercing, and by medical instruments.



If someone in the family has hepatitis B, the whole family should be vaccinated. No personal hygiene items (e.g. tooth brushes, razors, nail scissors, etc.) should be shared, as these may carry blood residues. If your partner has hepatitis B and you have not yet been fully vaccinated, you also need to be careful during sexual intercourse. You must use a condom. It is not clear whether hepatitis B can be transmitted through kissing. If your partner has been successfully vaccinated, these protective measures are no longer necessary. When drinking from the same bottle or the same glass, and when using the same cutlery, the risk of infection is low.

The infection is not transmitted in the following ways

Coughing and sneezing, shaking hands or hugging, eating, using the same toilet/the same hand towel do not pose a risk of infection, as long as there are no bleeding injuries or traces of blood. Laundry from hepatitis B patients can be washed normally.

How is vaccination performed?

The vaccine is given three times:

1st vaccination: Day 0

2nd vaccination: One month later

3rd vaccination: Six months after the first vaccination

It is also possible to use an accelerated vaccination schedule: 0, 7 and 21 days.

The vaccine is manufactured artificially; it is tolerated well and does not contain any live virus. Vaccination is successful in more than 90% of people. This is confirmed by the presence of enough protective antibodies (anti-HBs). Vaccination can also be given as a combined hepatitis A and hepatitis B vaccine. This offers a valuable increase in the level of protection to also include hepatitis A, and it also increases the success of vaccination. Vaccination costs EUR 40-60. German health insurance companies cover vaccination costs for new-born babies, children, adolescents, people with liver disease, and relatives of those infected.

How is hepatitis B detected?

It is not possible to detect the virus yourself. There are also no clear symptoms. Hepatitis B is not one of the standard blood tests performed by your doctor. The virus can only be discovered if a special blood test is performed specifically to look for it. The most important value to look for is HBs antigen (HBsAg). If this is detected ("HBsAg positive"), you have hepatitis B.



Various symptoms can be an indication of liver or gallbladder disease; however, these symptoms are not proof of hepatitis B:

- constant fatigue
- difficulty concentrating
- feeling of pressure in the right upper abdomen
- itching
- pale or clay-coloured stools and dark brown urine
- loss of appetite
- aversion to certain foods, especially meat
- weight changes
- nausea and vomiting
- abdominal bloating
- nosebleeds and bruising
- yellowing of the skin or eyes
- frequent muscle and joint pain
- in men: low body hair on the chest or abdominal area

If elevated liver values are detected in the blood, this can also be the first sign that something is not right with the liver.

What to do if you have hepatitis B?

Ask your doctor to explain your situation to you. The most important question is: to monitor or to treat? Some patients need treatment, while other patients would be better to wait.

In the first six months of the infection (“acute hepatitis B”), it is still possible for the immune system to clear the virus spontaneously. In this early phase, drugs do not make any difference, and they do not improve the chances of spontaneous recovery. For this reason, no medication is given to treat “acute” (new) hepatitis B infection, unless the infection takes a very severe course and there is a danger of liver failure (less than 1% of cases).

If hepatitis B remains in the body for longer than six months, it is classed as chronic. In some patients, the disease takes a mild course, but in other patients the liver becomes damaged. Even if chronic hepatitis B takes a mild course, regular monitoring is very important, as the situation can change and development of liver cancer is possible. Medicines available today can change “aggressive” chronic hepatitis B to “mild” hepatitis B, but they are not generally able to clear the infection. Better treatments are being researched.

The infection can resolve in rare cases. In these patients, the virus is no longer detectable in the blood, and only antibodies are left behind as an immune system reaction (anti-HBc positive, but HBs antigen negative; anti-HBs is often also positive). However, DNA from the virus remains in the liver cells for life. As a result, even hepatitis B that has “cleared” can reactivate if the immune system is weakened significantly (e.g. with chemotherapy, immunosuppression or AIDS), and it can then take a very severe course. However, this can be prevented with prophylactic antiviral therapy.

Drugs currently available to treat hepatitis B

Two different types of treatment are currently (2018) available: tablets or interferon injections.

Tablets (nucleoside or nucleotide analogues)

are taken once daily and stop the virus from multiplying. Treatment is usually tolerated very well, but it can last many years or even for life.

Important: do not forget to take the tablets, even if you do not notice any difference! The hepatitis B virus can become resistant, meaning that the medicine no longer works. This risk is particularly high if you do not take the tablets regularly. If the virus becomes resistant, it can start to multiply once again and damage the liver. Therefore, it is important that viral load is measured regularly during treatment. In the event of resistance, treatment must be adapted, either by adding a different medicine or by switching to a new one.



Peginterferon alfa is given once a week in the form of an injection under the skin. The treatment stimulates the immune system, so that it can bring the infection under control. Treatment usually lasts one year. It can cause side effects, such as flu-like symptoms, depression, and blood count changes. With the form of chronic hepatitis B found in Germany, the chances of success are low, and for this reason interferon-based therapy is only rarely used.

What else should I know?

Ask your doctor how often you need to be examined. Even if your hepatitis B is mild, you must be monitored regularly.

In some situations, for example during pregnancy or in the event of immunosuppressive therapies, preventative measures may be required, and you should discuss this with your doctor.

There is no special diet for hepatitis B. A generally healthy diet is recommended, however. It is important that you do not drink any alcohol.

If anyone has to handle your blood, e.g. a doctor, you should inform them about your hepatitis B.



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Published by: ©2018 Deutsche Leberhilfe e.V.

Unaltered reprint: 2023

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