

Hepatitis B - You and your baby



Information for women diagnosed with hepatitis B virus infections in pregnancy at Princess Royal University Hospital

This leaflet answers some of the questions you may have about hepatitis B (HBV) in pregnancy. It explains how and when we test for it, how it may affect you and your baby, the recommended treatments, and the risks and benefits of these treatments. If you have any more questions, please ask a member of our team.



What is hepatitis B?

Hepatitis B virus is a type of virus that infects your liver to cause hepatitis B, the disease. The infection is carried in your blood. You can have the symptoms for a short time (acute) or they can continue for a long time (chronic). It can be spread through blood and body fluids such as semen and vaginal fluids.

Hepatitis B virus is also called simply HBV.

Hepatitis B and your health

How will HBV affect my health?

About 90% to 95% of adults with HBV are able to fight off the infection naturally. They fully recover within a couple of months and have no lasting health problems. This is called acute HBV.

The 5% – 10% of people who do not get rid of the virus naturally will develop chronic or long-term HBV. You may be a carrier but not have any symptoms of the infection yourself. You may not even know that you have been infected. But you can still unknowingly pass the virus to someone who is not immune, including your baby.

Chronic HBV causes your liver to become inflamed. This does not cause problems for most people. But 15% – 40% of those with chronic HBV are more likely than those who do not have the infection to develop liver scarring, a condition called cirrhosis. This cannot be reversed.

Over time, the virus may also cause liver tumours to develop. These are known as hepatocellular carcinoma or HCC. A tiny number of people (0.01% – 1.2%) may develop liver cancer.



How do I find out if I have HBV?

We test all pregnant women for HBV. We usually offer you this test soon after you become pregnant, during your antenatal booking appointment. It finds out whether you have the infection and the test is for part of the virus called hepatitis B surface antigen. If this test is positive, it means you have been infected with HBV. Your body produces antibodies to try and fight the virus.

What are the symptoms of HBV?

Acute HBV

Many people do not have symptoms when they get HBV. But at the start, in the acute stage, you may feel generally unwell with a flu-like illness, and have nausea, vomiting and abdominal (tummy) pain. This can last for a number of weeks.

You can also develop jaundice, where your skin and the whites of your eyes become yellow, your urine becomes dark, your stools (faeces) become pale and you may have itchy skin (pruritis). It may take a few months to feel fit and well again.

Most adults fight off the infection naturally and do not have any lasting health problems.

Chronic HBV

The 5% – 10% who do not get rid of the virus naturally will develop chronic or long-term HBV, which means the infection has continued for longer than six months.

If you have chronic HBV, you may be a carrier but have no symptoms and infect others without realising it. You can also have symptoms similar to those in the acute stage that may come and go.



Your liver will become inflamed, which does not cause problems for most people. But 15% – 40% of those with chronic HBV are more likely than those without the infection to develop cirrhosis. This is not reversible. You may also develop liver tumours (hepatocellular carcinoma/HCC). A tiny number of people (0.01% – 1.2%) may develop liver cancer.

What does my liver do?

Your liver is in the right side of your abdomen, tucked under the bottom of your ribcage. It is your body's 'factory' carrying out many jobs which are vital to keeping you alive.

These include:

- **processing and removing any alcohol, toxins (poisons) and drugs from your blood**
- **storing glycogen, which is converted into glucose when you need quick short-term energy**
- **storing vitamins and minerals, such as vitamin K and iron**
- **making bile, which helps you to digest fat in your diet**
- **fighting infections**
- **making substances that clot your blood and which your body uses to stop you bleeding when you injure yourself**
- **helping to control the amount of cholesterol in your blood**
- **making and controlling hormones.**

How could I have caught HBV?

The virus is passed on when blood or body fluids (saliva, semen and vaginal secretions) from someone with HBV infects someone who has not come into contact with it before. You cannot catch HBV from normal day-to-day social contact, such as shaking or holding hands, cuddling, or sharing plates and cutlery.



Common ways in which you can pick up the infection include:

Mother to baby

If you have hepatitis B virus, your baby may become infected in the womb (uterus) or at birth when they come into contact with your infected blood and other body fluids. See page 10, Hepatitis B and your baby's health, for more information.

Blood-to-blood contact (this can be with very small amounts of blood that cannot be seen)

- by having tattoos or body piercings where the shared equipment has not been sterilised properly and is contaminated with blood from someone else
- by being injured by a blood contaminated needle
- by sharing blood contaminated personal grooming items such as razors, toothbrushes, hair clippers, nail scissors, and manicure and pedicure equipment.

Sexual activity

- by having unprotected oral, vaginal or anal sex with someone who has HBV.

How can I avoid giving HBV to others?

Vaccination

Being vaccinated against hepatitis B virus is an important way of avoiding passing it on.

You have three injections over six months. If you are in certain vulnerable or high-risk groups you can have the injections more quickly, over three months, with a fourth injection at 12 months. It is important that you have a blood test to check that the injections have protected you. This is called a hepatitis B surface antibody test.



If you have been diagnosed with active HBV or as an HBV carrier, your partner/spouse, children living in the same household as you and any house mates may need to be tested for, and vaccinated against, the virus. Your doctor or nurse specialist will advise you about this.

You can have the hepatitis B vaccination at your GP surgery, travel clinics, sexual health clinics and drug centres.

Other precautions

- keep any cuts covered
- dispose of dressings (such as plasters, cotton wool and bandages) in two bags, one inside the other (ordinary plastic carrier bags are fine), to make sure no one can accidentally come into contact with them
- clean all blood spills yourself with neat bleach (bleach that has not been watered down) or carpet disinfectant
- do not share your toothbrush, razors, hair clippers, nail clippers or scissors, sponges or towels – these may have tiny traces of your blood on them that you cannot see
- use a condom during sexual activities.

Why do I need to come to a specialist hepatitis clinic?

HBV is often a 'progressive' disease. This means it may get worse over time. So even if you feel well, if you have been diagnosed with HBV it is important to come to a specialist clinic so we can keep an eye on your condition and make sure you stay well. It is also important to discuss and plan the injections your baby will need.



What happens at a specialist hepatitis clinic?

We ask you to come to two specialist clinic appointments.

1 Your first appointment will be with a specialist midwife.

You will be able to talk to them about your diagnosis.

The midwife will also:

- explain your result to you
- explain how to get your baby vaccinated against HBV
- write in your Maternity Records and on the computer system so the staff looking after you in labour know your baby needs to be vaccinated
- discuss with you whether your partner or children need to be tested for HBV and whether you should ask any future partners to be checked for it
- do your hepatitis B blood test again to confirm your diagnosis
- discuss with you the results of your 24-week HBV DNA blood test sampling (see box on page 9, What do the hepatitis markers mean?).
- discuss with you the Liver Outpatients appointment procedure and refer you.

2 Your second appointment will be with a doctor or a nurse who specialises in HBV.

You usually have a 15 – 30 minute appointment where you can talk with a doctor or a specialist nurse. After this, how often you need to visit the specialist hepatitis clinic depends on the progress of your disease.

Blood tests are an important part of these visits. You need to have them regularly because they tell us lots about the virus and how it is affecting your health.



Coming to the clinic regularly will allow us to explain your results and discuss with you the best way of managing your condition, so you stay well.

We will also offer you a liver ultrasound scan. You usually have one every six months so we can check for any signs of liver damage or cancerous changes.

You will continue to have these appointments after your baby is born.

During your pregnancy, please remember to bring your Maternity Records booklet to your specialist hepatitis clinic appointments.

What blood tests will I have at the clinic and what are they for? You will have tests for hepatitis 'markers' and liver function. These measure the proteins and enzymes in a sample of your blood.

- Markers are a sign that you have HBV in your blood (see box on page 9, What do the hepatitis markers mean?). We may test for them regularly over a period of time because the level of them in your blood tells us whether your infection is active or you are a HBV carrier.
- The liver function tests help to show whether your liver is inflamed or damaged and how well it is working. We also use them to assess the progress of your disease. Your specialist nurse or doctor will discuss your blood results with you and what the individual markers mean.



What do the hepatitis markers mean?

Name	Abbreviation	What does it mean?
HBV surface antigen	HBsAg +ve	You have the virus in your blood.
HBV surface	HBsAb +ve	You have recovered from the virus – you have antibodies in your blood which show that your body is fighting it.
Viral load (HBV DNA level)		It tells us how much of the virus you have in your blood. The level can go up and down, but generally the higher it is the higher the risk of liver injury/ disease and liver cancer. You can control this by having treatment and frequent check-ups.
E antigen positive	HBeAg +ve	You have high levels of the virus in your blood and are more infectious.
E antigen negative	HBeAg -ve	Often used with the result of your viral load to see if the disease is active or inactive.

Why do I need treatment for HBV?

You may not need treatment for HBV. Your doctor will discuss your results with you and whether you need treatment at your appointment.

If you do need treatment, we usually prescribe an antiviral drug called tenofovir during pregnancy.



Please remember that it is important to come to your regular check-ups so we can make sure your treatment is working and help you with any side effects you may have.

Hepatitis B and your baby's health

How could I pass HBV to my baby?

If you have hepatitis B your baby may be infected at birth when they come into contact with your blood and other body fluids.

How can I protect my baby against HBV infection?

If your baby is vaccinated straight after birth, you can prevent them from being infected. They will need several injections to protect them against the virus and you must make sure they have the full course.

They may also need an injection of an antibody called immunoglobulin. We will discuss this with you at your specialist hepatitis clinic appointment (see page 7).

Why does my baby need treatment?

If your baby is not vaccinated against the virus, they may become infected with HBV. As many as 9 out of 10 babies infected at birth develop a long-lasting infection and are at risk of developing serious liver disease as they grow older. They could also pass their infection on to their close family and other contacts in future.



When does my baby need to have their HBV injections?

It is important that your baby has the full course of the vaccine at the right ages for it to work properly.

They need **five** separate doses of the vaccine, as follows:

1. Within **24 hours** of their birth, before they go home from hospital.
2. When they are **one-month old, at your GP surgery** (home doctor).
3. When your baby is **two months old, at your GP surgery**.
4. When your **baby is one, at your GP surgery**. They will also have a blood test to check their antibody levels. This shows whether the injections are working.
5. They have their final injection when they are **three years and four months old** with the preschool booster, at your **GP surgery**.

You should get a letter from your GP to arrange the appointment for your baby's second injection, given when they are one month old. If you have not received this by the time your baby is two weeks' old, please contact your GP.

What are the benefits of the hepatitis B vaccine for my baby?

Having the course of injections:

- prevents your baby from getting the HBV infection from you when they are born
- means they will not become ill with hepatitis B later in life.



What are the risks of the hepatitis B vaccine for my baby?

The vaccine is very safe and has been given to millions of babies worldwide without causing any serious side effects.

In some babies, the place where they had their injection may become red and swollen, but this does not last for long.

Are there any alternatives?

There are no alternatives to having the course of injections. If your baby is not vaccinated, they are at risk of being infected with the virus from birth.

Is it safe to breastfeed my baby?

Yes. But please make sure your baby has a full course of vaccinations to prevent them from becoming infected with HBV.

Will having hepatitis B affect my pregnancy or delivery?

You will need to come to some other appointments with a specialist midwife and at the Liver Outpatients department. This is to make sure you do not need treatment.

You will not need any extra care in labour.



Who can I contact with queries and concerns?

If you need more information or have any queries, please speak to your midwife or GP.

You can also contact the Antenatal and Newborn Screening Co-ordinator at the Princess Royal University Hospital.

Tel: **01689 864856**

Further information and support

King's College Hospital website

www.kch.nhs.uk

British Liver Trust

For leaflets about HBV in a number of languages including Urdu, Bengali, Hindi and Mandarin.

Helpline: 0800 652 7330

www.britishlivertrust.org.uk/publications/translations

Hepatitis B Foundation UK

Helpline: 0800 046 1911

www.hepb.org.uk

Sharing your information

We have teamed up with Guy's and St Thomas' Hospitals in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas'. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between the hospitals.



Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

Patient Advice and Liaison Service (PALS)

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. The PALS office is near the main entrance on the ground floor of the South Wing. Helpdesk staff at the main reception will be happy to direct you.

Tel: **01689 863 252**

Email: **kch-tr.palskent@nhs.net**

If you would like this leaflet in a different format or language, please contact our Patient Advice and Liaison Service (PALS) on 020 3299 1844.

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www.kch.nhs.uk
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For more information, visit www.kingshealthpartners.org 