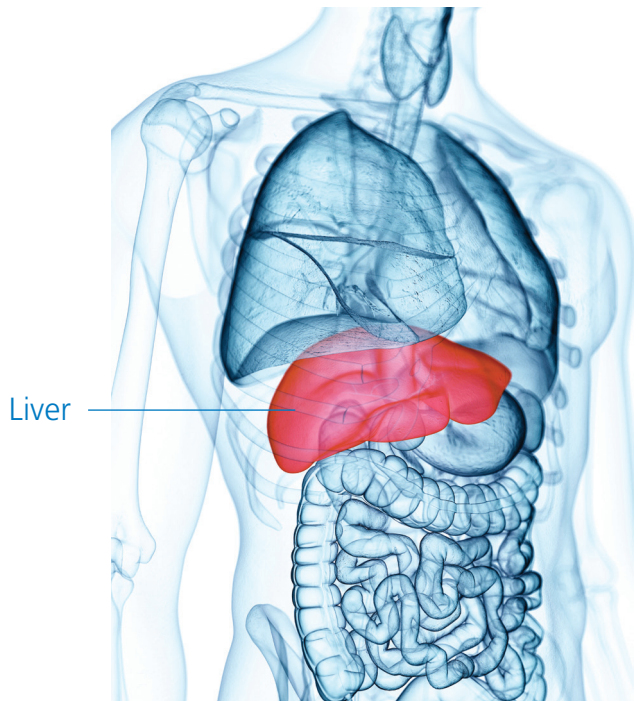


Chronic hepatitis B virus (HBV)



Information for patients

This leaflet explains chronic hepatitis B virus, including how you may have become infected, the main symptoms and how it is treated. If you have any questions or concerns, please do not hesitate to speak to the doctors or nurses caring for you.



What is chronic hepatitis B virus (HBV)?

Hepatitis B virus (HBV) is a virus that infects your liver and is in your blood. If you have this infection for more than six months, we call it chronic hepatitis B or chronic HBV.

About 240 million people in the world have chronic HBV. About a third (30%) of individuals with chronic HBV have HBV-related health problems and about 30 in 100 people with HBV in the UK have health problems caused by HBV.

It is often called a 'silent' disease because you may have no symptoms even if you have been infected for many years. But it can still have caused damage which leads to the scarring of your liver (cirrhosis) which can cause liver failure and liver cancer (hepatocellular carcinoma).

How did I get chronic HBV?

Many people become infected with HBV when they are very young. It is a blood-borne virus (BBV) that is spread from person to person by blood and body fluids containing (contaminated by) the virus. You can become infected:

- during childbirth
- if you had sex with someone who is infected
- if you shared needles for drugs, acupuncture, tattoos or piercings
- if you shared toothbrushes and razors
- if you were given infected blood or blood products before screening for the virus was introduced
- if you grew up in an area of the world where HBV is common.

How can I stop other people from getting HBV?

HBV is a preventable disease. You can still hug and kiss, share knives, forks, spoons and cups. You can stop other people from getting HBV by:



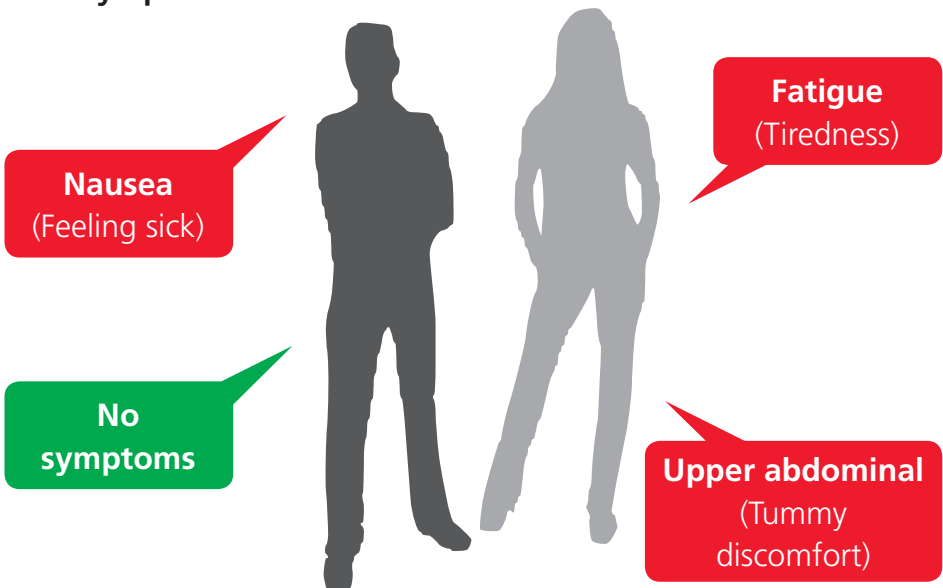
- getting your close family members and sexual partners **tested** and **vaccinated**
- not sharing needles, razors or toothbrushes
- using plasters or bandages to cover cuts
- cleaning drops of your blood from surfaces carefully
- using condoms.

What are the symptoms?

Chronic HBV is a silent disease, which means you may have few symptoms. Most are not specific but this does not mean that the virus is not causing damage. Your immune system's reaction to the virus can cause your liver to become inflamed and your liver cells to be replaced by scar tissue.

Common symptoms include:

- nausea (feeling sick)
- fatigue (tiredness)
- discomfort in your upper abdomen (tummy)
- **no symptoms at all.**



How is it diagnosed?

You will test positive for HBV if we find the hepatitis B surface antigen (HBsAg), a type of viral protein, in your blood. Infection is called chronic when you have this protein in your blood for more than six months. You will have more tests at the hospital to find out which strain (or genotype) of HBV you have and to assess the phase of the HBV infection (see page 6) as well as the general health of your liver.

Will I be tested for any other infections?

We test all patients with HBV for other blood-borne viruses (BBVs). These include Human Immunodeficiency Virus (HIV), Hepatitis C Virus (HCV) and Hepatitis D Virus (HDV/Hepatitis Delta), another type of liver virus. About eight – ten people in every 100 who are infected with HBV are also infected with HDV. Your liver can be damaged more quickly if you are also infected with HDV.

Can I take medication to cure chronic HBV?

There is currently no cure for HBV. You may need to start taking anti-viral medication if your liver shows signs of damage or scarring. This can happen when your immune system fights the virus. The treatment controls HBV infection by suppressing the amount of the virus in your blood. You may need to take this medication long term; it is safe and improves your health.

Tenofovir and entecavir: Tenofovir is usually the first drug you are prescribed for chronic HBV. If you have poor kidney function and poor bone health you will be prescribed entecavir. These are a type of drug called nucleos(t)ide analogues (NUCs) that reduce virus activity (antivirals). You take them as tablets.



Interferon: You have this drug by injection once a week to boost your immune system. You are usually prescribed this only if you are in phase 2 of HBV or you also have HDV.

Lamivudine: If your immune system is weakened (compromised) – for example, if you need chemotherapy to treat cancer or immunosuppression treatment after having an organ transplant – you may need to take a drug called lamivudine {this is a NUC too} to prevent re-activation of HBV.

How can I look after my liver?

Your lifestyle is important for your general health but is also important for the health of your liver. You can help look after your liver by:

- not smoking
- not drinking alcohol to excess as alcohol will speed up scarring of your liver
- eating healthily
- exercising moderately.

Getting close contacts (family, partners etc) tested and vaccinated is also important.

Why is it important for me to come to my liver outpatient appointments?

It is very important that you come to your appointments so we can decide whether you need to start medication and to check you for liver damage, including liver cancer. We also need to check any changes in your blood tests.

Each consultation takes about 15 – 30 minutes and you will have blood tests and a liver stiffness test (Fibroscan). There is a small risk



of you developing liver cancer (2 in 100), so at some appointments we will do an ultrasound scan of your liver.

If you do start antiviral medication, you **must** take it every day to control the virus. **We can only prescribe you this medication from the hospital, so it is very important you come to your appointment.**

Liver biopsy

We cannot accurately assess the level of liver damage using blood tests, Fibroscan and ultrasound in about one in four patients, so we may advise you to have a liver biopsy. For more information, please ask your doctor for a copy of our leaflet about having a liver biopsy. We may ask for your consent to keep left over tissue samples for research.

The different phases of hepatitis B

HBV is a dynamic infection, which means the behaviour of the virus changes over time. In phases 1 and 2, the virus makes a part of itself called e antigen (HBeAg). During these phases you are highly infectious. In phases 3 and 4, the virus no longer makes e antigen and you generally have less virus in your blood, but you are still infectious.

In phases 2 and 4, we may need to monitor you more often because the virus can cause inflammation and damage to your liver as your immune system tries to get rid of it.

In phase 5 you have hidden (occult) infection. You may still need antiviral medication to prevent re-activation of HBV (see page 7).



Phase 1

e antigen positive
Chronic hepatitis B infection
Highly infectious

Phase 2

e antigen positive
Chronic hepatitis B infection
Liver damage possible

Phase 3

e antigen negative
Chronic hepatitis B infection
Low risk of liver damage and complications

Phase 4

e antigen negative
Chronic hepatitis B infection
Liver damage possible

Phase 5

e antigen negative
surface antigen negative
Chronic hepatitis B infection
Hidden (occult) infection

Research into HBV treatment

We do research into chronic HBV, so there now opportunities to take part in the clinical trial **HBV Cure Program** at King's College Hospital. They include testing new drugs, improved treatments and more accurate blood tests (blood markers).

If would like to know more about our clinical trials, please talk to your doctor, nurse or pharmacist, or email our clinical trials team at: kch-tr.livertrials@nhs.net

Who can I contact with queries and concerns?

For more information or if you have any queries, please speak to your doctor, nurse or pharmacist in the specialist liver clinic.

Tel: **020 3299 5802**

Email: kch-tr.hepatitisservice@nhs.net



More information

Hep B Foundation website

Includes information leaflets in a number of languages such as Urdu, Bengali, Hindi, Chinese, Gujarati, Polish and Punjabi.

www.britishlivertrust.org.uk

Public Health Agency (Northern Ireland)

Offers multi-lingual disease awareness in Arabic, Chinese, Hungarian, Irish, Latvian, Lithuanian, Polish, Portuguese, Romanian, Russian and Slovak.

www.hepbandcni.net/content/hepatitis-c-public-information-leaflets

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 located on the ground floor of the Hambleton Wing, near the main entrance on Bessemer Road - staff will be happy to direct you.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS

Tel: **020 3299 3601**

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

You can also contact us by using our online form at
www.kch.nhs.uk/contact/pals

If you would like the information in this leaflet in a different language or format, please contact PALS on 020 3299 1844.