



Hepatitis B - Quick reference guide for primary care

What is hepatitis B?

- Hepatitis B is a disease affecting the liver caused by the hepatitis B virus (HBV), which is a blood-borne and sexually transmitted infection.
- It can be an acute or chronic infection.

Acute HBV:

- is acquired most commonly in the UK through vaginal or anal intercourse;
- may also be acquired as a result of blood-to-blood contact (eg sharing needles and other equipment by injecting drug users, 'needlestick' injuries, sharing razors/toothbrushes);
- may be asymptomatic or cause a mild to (rarely) fulminant hepatitis.

Chronic HBV:

- occurs when HBV infection persists more than six months after acute infection;
- is most commonly acquired through perinatal or sexual or household/social contact in countries with high or intermediate prevalence of chronic infection;
- will develop in 5–10% of those infected as adults; 90% of neonates infected; and 30–50% of children infected.

HBV is notifiable to the Public Health Agency (PHA) duty room.

Prevalence

High-prevalence regions:

- sub-Saharan Africa, most of Asia and the Pacific islands.

Intermediate-prevalence regions:

- southern parts of Eastern and Central Europe, the Amazon, the Middle East and the Indian sub-continent;

Low-prevalence regions:

- most of Western Europe and North America.

Why should I be proactive in diagnosing HBV?

- Chronic HBV is often asymptomatic;
- Diagnosis allows follow-up and treatment if indicated;
- Diagnosis decreases further transmission through infection control measures and vaccination of those at risk.

Who is at risk and should be tested?

HBV testing should be offered to anyone who:

- has been born in, or been at risk in, high or intermediate prevalence countries;

- changes sexual partners frequently, especially men who have sex with men and male and female sex workers;
- has ever injected drugs or shared equipment;
- has household contact with a person with chronic HBV;
- has received a blood transfusion in the UK before 1991 or blood products before 1986;
- has been accidentally exposed to blood through a sharps injury;
- has had a tattoo, piercings, acupuncture or electrolysis where infection control is poor;
- has received medical or dental treatment in countries where infection control is poor;
- has unexplained abnormal liver function tests or unexplained jaundice.

Pregnant women are also tested through the antenatal screening programme.

How do I test for HBV?

A blood sample is tested for HBV infection using a range of markers which can identify acute and chronic infection. Clinical information is important in helping to differentiate between acute and chronic infection. If surface antigen (HBsAg) is present then there is virus present in the blood and the patient is infected and infectious. Immunity, either from vaccination or previous infection, is indicated by the presence of antibodies to surface antigen (anti-HBs).

A virology general request form is available at: www.rvl-belfast.net

Consider testing for hepatitis C (HCV) and HIV as many of the risks are the same.

Pre-test discussion should include:

- hepatitis B, its natural history and the benefits offered by treatment;
- assessment of exposure risks;
- implications of a positive result.

Post-test discussion should include:

- if negative: the need for further testing if within incubation period;
- vaccination;
- avoidance of future risk;
- if positive: see below.

How is hepatitis B managed?

Acute infection

- Refer to hepatologist or gastroenterologist for treatment of acute infection if required, urgently if severe hepatitis;
- Give infection control advice;
- Refer to GUM and/or drugs and addiction services as appropriate;
- Advise avoiding alcohol;
- Consider other risks, particularly HIV and HCV;
- Notify the PHA duty room;
- Test for HBsAg at six months to check if cleared or has chronic infection.

Chronic infection

- Refer to hepatologist or gastroenterologist with interest in hepatitis;
- Refer to GUM/other services as appropriate;
- Give infection control advice;
- Advise avoiding alcohol;
- Consider other risks, particularly HIV and HCV;
- Notify the PHA.

A factsheet for patients is available from the PHA duty room or at www.publichealth.hscni.net

Hepatitis B vaccine

- Current and full details of vaccines available, at-risk groups, schedules and testing for immunity should be sourced from the latest version of *The green book* online.
<http://immunisation.dh.gov.uk/category/the-green-book/>
- Many countries include the hepatitis B vaccine in their universal childhood immunisation programme, and it is good practice to complete this if started.

Hepatitis B immunoglobulin (HBIG)

HBIG should be given to any sexual partner of newly diagnosed case of acute hepatitis B seen within one week of last contact. It should also be considered for contacts of new chronic cases.

Pre-exposure immunisation

The following groups are among the more important

in primary care who should be offered pre-exposure immunisation:

- individuals who change sexual partners frequently;
- injecting drug users;
- close family contacts of an individual with chronic hepatitis B infection;
- families adopting children from countries with a high or immediate prevalence of hepatitis B;
- foster carers;
- patients with chronic kidney disease;
- patients with chronic liver failure;
- individuals in residential accommodation for those with learning difficulties;
- people travelling to or going to reside in areas of high or intermediate prevalence.

Post-exposure immunisation

Post-exposure prophylaxis is recommended for the following groups:

- babies born to mothers who are chronically infected with HBV or to mothers who have had acute hepatitis B during pregnancy;
- household and sexual contacts of individuals suffering from either acute or chronic hepatitis B;
- persons who are accidentally inoculated or contaminated with blood from a known HBsAg-positive person.

Persons who are accidentally inoculated or contaminated

Wash the affected area well with soap and warm water or flush mucous membranes, and seek medical advice. Consult occupational health services urgently for HSC worker injury and a virologist, the PHA, or Accident and Emergency for non-HSC injury.

Further information:

<http://immunisation.dh.gov.uk/category/the-green-book/>

PHA duty room – 028 9055 3994

www.publichealth.hscni.net

British Liver Trust www.britishlivertrust.org.uk

NICE guidance <http://publications.nice.org.uk/hepatitis-b-and-c-ways-to-promote-and-offer-testing-to-people-at-increased-risk-of-infection-ph43>