

Appendix 1

Hepatitis B Fact sheet – for people living with chronic infection

What is hepatitis B?

Hepatitis means inflammation of the liver. It may be caused by infection with a virus, such as the hepatitis B virus. When hepatitis B virus enters the body it travels to the liver, where it lives and multiplies in liver cells. The presence of the virus in the liver stimulates the immune system to kill it. Unfortunately, it is the body's immune response, not the virus, that causes most of the inflammation and damage to the liver.

The impact of hepatitis B infection depends on a person's age when they become infected. Infants with hepatitis B infection almost always develop a long-term (chronic) infection, whereas people who get the infection as adults have a 95% chance of clearing the virus from their body.

Many people with hepatitis B do not get sick and do not know they have hepatitis B virus infection. Some people experience tiredness, nausea (feeling sick) and jaundice (yellowing of the eyes and skin). Infants rarely develop symptoms of infection. About 50% of adolescents and adults develop jaundice when they first get the infection, which is called acute hepatitis B.

Chronic hepatitis B

A person is diagnosed with chronic hepatitis B when they have the virus infection for longer than 6 months (confirmed through blood tests). Chronic hepatitis B develops in approximately 5% of adults, some children and most infants with the infection. People with chronic hepatitis B are likely to have a lifelong infection, and although they generally remain in good health, they have an increased risk of developing serious complications, such as cirrhosis (scarring of the liver) and liver cancer. Importantly, people with chronic hepatitis B have the potential to spread the infection if they do not follow some simple precautions.

How is hepatitis B spread?

Hepatitis B is spread when blood and other infected bodily fluids (including saliva, semen and vaginal fluids) enter the bloodstream either through a break in the skin or through mucous membranes. Hepatitis B virus can be spread as follows:

- A pregnant woman with hepatitis B infection can transmit the infection to her baby at the time of birth—this is the most common way the virus is spread in developing countries around the world
- Vaginal, anal or oral sex without a condom
- Reusing injecting equipment
- Tattooing or body piercing
- Close contact, including the sharing of toothbrushes, razors, nail files or other personal items that may lead to the exchange of body fluids
- Blood transfusion (donated blood is now screened in most developed countries and so there is only a very small risk of infection. Receiving a blood transfusion in some areas of the world can still be extremely risky)
- Accidental needlestick injury or splashing of infected blood or body fluids, especially for health care workers
- Contact sports

Managing and testing for hepatitis B

There are several blood tests available to diagnose and monitor hepatitis B (some are outlined in the table below). The interpretation of these tests is not always straightforward and may require the expertise of your GP or liver specialist.

Blood test	Abbreviation	What it means
Hepatitis B surface antigen	HBsAg	Hepatitis B infection
Anti-hepatitis B surface antibody	Anti-HBs	Immunity to hepatitis B infection
Hepatitis B e antigen	HBeAg	Viral replication and infectivity
Hepatitis B virus DNA	HBV DNA	Viral replication
Alanine aminotransferase	ALT	Estimates liver inflammation or damage

There are other tests that can detect changes in the liver, such as liver ultrasound or scan, and liver biopsy (the removal of a tiny piece of the liver under local anaesthetic). These tests are used to diagnose cirrhosis and liver cancer.

Treatment for hepatitis B

There are several types of antiviral medicines available to treat hepatitis B in Australia.

Oral medicine: Lamivudine, adefovir or entecavir are taken as an oral tablet and have very few side effects. However, these treatments often need to be taken for a long time, which means the virus may develop resistance to the medicine.

Injections: Pegylated interferon is given as a weekly injection for up to 12 months. It often causes significant side effects.

Each treatment has different benefits and side effects. You need to discuss your treatment options with your liver specialist.

Before starting treatment, people with hepatitis B should have a liver biopsy to check if there is any damage to the liver. If there is no damage, treatment may not be recommended. However, if you have high HBV DNA, and elevated ALT levels, and your liver biopsy shows liver inflammation or damage, your doctor will discuss treatment with you.

Reducing the risk of liver damage; lifestyle issues

People with hepatitis B should eat a balanced diet that includes a variety of foods to meet the body's need for energy, growth and repair. Unless a person with hepatitis B has significant liver damage, there are no particular foods that should be favoured or avoided. If you are in doubt, you can see a dietician for advice.

Alcohol intake should be minimised to one standard drink per day and should be completely avoided if severe scarring or cirrhosis are present. Similarly, smoking cigarettes should be reduced and preferably stopped.

Support is available to help you reduce your alcohol intake and quit smoking.

Some prescribed medicine, over-the-counter medicine and herbal remedies, including Chinese Medicines, can be harmful to the liver, especially if taken in high doses or for a long period of time. It is important to discuss all your medication with your liver specialist and GP.

It is also important to avoid contracting other blood-borne viruses, such as hepatitis C or HIV, as this can dramatically affect your health and cause further liver damage. Therefore, avoid unsafe sex and reusing injecting equipment. Following these precautions also helps stop the spread of hepatitis B.

Preventing the spread of hepatitis B

Precautions

- Practise safe sex – use condoms during vaginal, anal and oral sex
- Do not allow anyone to have contact with your blood – cover cuts and clean up spilt blood yourself
- Do not share toothbrushes, razors or other personal items
- Do not share needles, syringes or other injecting equipment
- Do not donate blood, sperm, organs or any other tissues
- Make sure people in close contact with you are vaccinated (see below)
- Be careful about blood contact when playing contact sport
- Get advice from your doctor if your job involves the potential for blood exposure to other people

Vaccination

The hepatitis B vaccine is very safe and provides immunity more than 95% of the time. The vaccine is usually given by three injections over six months. In Australia, all infants and adolescents aged 10 to 13 years are provided with hepatitis B vaccination at no cost. It is strongly recommended that the following groups of people are also vaccinated against hepatitis B:

- Long-term or regular sexual partners of people with hepatitis B
- Household contacts of people with acute and chronic hepatitis B
- Health care workers
- Emergency services workers, such as ambulance officers
- Men who have sex with men
- Sex industry workers
- Indigenous Australians
- Injecting drug users
- Prisoners and prison staff
- Cultural and linguistically diverse (CALD) communities
- People adopting children from overseas countries with high rates of hepatitis B
- Frequent or long-term travellers to areas with high rates of hepatitis B
- People with other forms of liver disease

People at high risk of contracting hepatitis B, such as health care workers, should be tested one month after the final dose of vaccine to assess whether they are immune to hepatitis B.

Do I need to tell others?

Your hepatitis B test result is personal. You do not have to tell anyone straight away, however, you are required to take precautions to prevent transmission of hepatitis B to others (Please refer to Precautions). You are advised to inform sexual partners and your close household contacts so that they can be tested and vaccinated.

There is no legal requirement to tell any of your treating doctors, nurses, dentists or other healthcare providers that you have hepatitis B. However, it is advisable that you do this so that you get the best treatment for your needs. If you decide to tell any of these professionals, they are required to keep that information confidential unless you give your consent or unless this is required by law, court order or in exceptional circumstances. Unfortunately you cannot donate any blood or body fluids and if you are a health care worker with hepatitis B you must not perform “exposure prone” procedures.

Where can I find out more information?

If you need more information, please talk to your GP or liver specialist.

State and Territory Hepatitis C Councils can also provide information about hepatitis B and refer you to liver clinics and support services in your local area.

Please contact Hepatitis Australia for details of your local Hepatitis C Council.

INFOLINE: 1300 HEP ABC

Website: www.hepatitisaustralia.com