



FREQUENTLY ASKED QUESTIONS: HEPATITIS B



1. What is hepatitis B?

Hepatitis B is a serious liver disease caused by the hepatitis B virus (abbreviated HBV). It is a disease that affects people from all walks of life regardless of age, race, and gender. Some people naturally recover from HBV infection and become protected (immune) for the rest of their lives. But others become chronically (long term) infected with the virus. Chronic hepatitis B carriers carry the virus in their bodies for years or for life, and they are at an increased risk of experiencing liver problems, or suffering liver failure, especially from cirrhosis (permanent liver damage) and/or hepatocellular carcinoma (liver cancer).

2. What are the symptoms of hepatitis B disease?

HBV causes both acute and chronic hepatitis B. However, symptoms of hepatitis B are often age dependent. The younger the person is when infected, the less likely it is that symptoms will occur. However, a large proportion of persons infected in childhood become chronic carriers.

Acute (short-term) hepatitis B - signs and symptoms:

- jaundice (yellow skin and/or yellow colour in the white part of eyes)
- dark urine and pale stools
- nausea, diarrhoea, vomiting, loss of appetite and fatigue
- pain in muscles, joints or abdomen

Chronic (long-term) hepatitis B - signs, symptoms and complications:

- asymptomatic infection (usually in early childhood)
- chronic liver disease
- cirrhosis
- hepatocellular carcinoma
- liver failure
- and death

3. Why is hepatitis B disease a health problem in South Africa and the world?

HBV infection is a major cause of acute and chronic liver disease. About one-third of the world's population (i.e. about two billion persons) have been infected with HBV. Most of the serious consequences occur among persons who develop chronic hepatitis B infection. About a million persons with chronic hepatitis B die each year from cirrhosis and hepatocellular carcinoma. HBV is second only to tobacco as the leading cause of cancer in humans.

In sub-Saharan African countries, infants and young children are most at risk of HBV infection. In South Africa, hundreds of thousands of people seek medical care, or become hospitalised, or die from hepatitis B, each year. Everyone is at risk, although the disease affects the black population more than other groups. It is estimated that over 50% of South Africans have been infected by the virus and at least 3 million people are chronic hepatitis B carriers.

4. How is hepatitis B transmitted?

HBV is transmitted when blood or body fluids from an infected person enter the body of an unprotected person in one of the following ways:

- direct contact with infected blood and saliva
- infected mother to child during birth
- child to child most probably through weeping sores, cuts, bites, scrapes and scratches
- having unprotected sex with an infected person
- unsafe injection practices
- sharing needles when using intravenous drugs
- sharing toothbrushes, razors and other sharp instruments
- using non-sterile instruments for tattooing, ear and body piercing, and circumcisions.

5. Who is at risk?

Persons at risk for HBV infection may also be at risk of other blood borne infections, especially HIV and hepatitis C (HCV). These include, but are not limited to, the following:

- neonates born to hepatitis B carrier mothers
- household contacts of hepatitis B chronic carriers
- health care and public safety workers
- people with more than one sexual partner
- people with history of a sexually transmitted disease
- injection drug users
- haemodialysis patients
- recipients of blood products such as haemophiliacs
- inmates of long-term correctional facilities
- clients and staff of institutions for developmentally disabled individuals
- travellers to HBV endemic countries.

6. How do I know if I have or have had hepatitis B disease?

As the causes of hepatitis are many, the only way to confirm hepatitis B is to do a blood test. You can visit your doctor or hospital for further information.

7. What is the treatment following HBV infection?

Therapy is indicated only for chronic hepatitis B carriers. Interferon alpha, lamivudine, and adefovir can be used. Treatment is successful in very few patients; the majority of hepatitis B carriers fail to be cured. These drugs can only be used under the supervision of a doctor.

8. How is hepatitis B prevented?

General measures

These include screening of blood, blood products, donated tissues and organs for HBV, to eliminate the risk of HBV infection to recipients, and this is an enforced policy in almost every country in the world. In addition, strict adherence to standard microbiological practices and techniques, and routine use of appropriate barrier precautions to prevent skin and mucous membrane exposure when handling blood and other body fluids of all patients in health care settings, should always be adhered to.

Pre- and post-exposure prophylaxis

Pre-exposure or post-exposure prophylaxis is possible by one of two methods (or both): passive immunisation with hepatitis B immunoglobulin (HBIG) and vaccination. Of these two methods, the most cost-effective method to prevent and control hepatitis B is through vaccination.

9. Who should get the hepatitis B vaccine?

Immunisation of babies within EPI-SA schedule

In South Africa, all babies born in or after April 1995 receive hepatitis B vaccine, as part of routine childhood immunisation at 6, 10, and 14 weeks of life

Immunisation of other groups

- Children born before April 1995 who require vaccination can consult their local clinic or doctor
- Hepatitis B vaccine is highly recommended for:
 - i) Health care and public safety workers
 - ii) People handling blood and body fluids such as laboratory workers
 - iii) Teenagers
 - iv) Other at-risk individuals (see section 5)

Post-exposure prophylaxis

Pregnant women who are hepatitis B chronic carriers should advise their doctors about their hepatitis B status so that post exposure prophylaxis can be administered. The first dose of the vaccine and one dose of HBIG must be given within 12 hours of life to prevent infection.

10. How and when is the hepatitis B vaccine given?

- Hepatitis B vaccine is given by injection in the thigh (for infants) or arm (for older children and adults).
- Three doses of the vaccine are administered at least 4 weeks apart, depending on the hepatitis B vaccine to be used.
- In South Africa, hepatitis B vaccine is given at 6, 10, and 14 weeks of age through EPI-SA together with other childhood vaccines.

11. Should HIV positive individuals be vaccinated against hepatitis B?

Since the transmission routes of HIV and HBV are similar, individuals with HIV infection are at an increased risk of HBV infection. These individuals should be given hepatitis B vaccination, even though most are nonresponders to the vaccine.

12. What are the side effects of the hepatitis B vaccine?

Hepatitis B vaccine is very safe. The most common side-effects are redness, swelling and pain at the site of injection. Less commonly, fever may occur for a short time after the vaccine has been administered.

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