
Hepatitis B

Frequently Asked Questions

1. What is Hepatitis B (HBV)?

HBV is a contagious viral disease that affects the liver. The disease ranges in severity from a mild illness lasting a few weeks to a serious, lifelong illness. HBV can be either “acute” or “chronic.” Acute HBV is a short illness (2-4 weeks) that occurs within the first 6 months after someone is exposed HBV. Acute infection may lead to chronic infection in a small percentage of cases. Chronic HBV infection is a long-term illness that occurs after acute infection if the virus continues to replicate (grow) in a person’s body.

2. Who can get HBV?

Persons who are not vaccinated against HBV are vulnerable to infection. HBV is exceedingly infectious approximately 50 to 100 times more infectious than HIV. HBV is spread by contact with blood or body fluids of an infected person. Children born to mothers with chronic HBV infection are particularly vulnerable. Persons who have unprotected sex or who share needles with persons who have chronic hepatitis are at high risk of becoming infected with HBV. Health care workers who are chronically infected with HBV may transmit HBV to their patients if they do not adhere to universal precautions. Persons who have been vaccinated, or who have had acute HBV infection are protected from HBV.

3. How common is HBV in the South African context?

Infection with HBV is an important public health issue in South Africa. Prior to the introduction of the HBV vaccine into the South African Expanded Programme of Immunisation (EPI) in 1995, prevalence rates of HBV were 0.3 - 15%. South Africa has had one of the highest rates of liver cancer in the world – this is directly related to the high rate of HBV in adults.

How is HBV transmitted?

Hepatitis B virus is spread when the blood, semen, or other body fluid infected with the Hepatitis B virus enters the body of a person who is not infected. Neonates may become infected with the virus during the birth process (spread from an infected mother to her baby during birth). Adults may become infected following unprotected sex with an infected partner, through the sharing of needles, syringes, or other drug-injection equipment, through sharing items such as razors or toothbrushes with an infected person. , Direct contact with the blood or open sores of an infected person and exposure to blood from needles or other sharp instruments may lead to infection. HBV is present in body fluids such as saliva, and so it may also be spread through contact of infectious fluids with mucous membranes, through splashes or kissing. HBV is NOT spread by sharing eating utensils, hugging, holding hands, or through sharing toilet or bathroom facilities, or by recreational use of public pools.

4. What are the signs and symptoms of HBV infection?

Approximately 70% of adults and children over the age of 5 years develop symptomatic illness with acute HBV, but younger children tend to have asymptomatic infection. Symptoms of acute HBV include fever, tiredness, appetite loss, nausea, vomiting, abdominal pain, darkened urine, clay-coloured bowel movements, joint pain and jaundice. The majority of persons with acute HBV recover fully. Rarely, acute HBV infection leads to liver failure and death. Most individuals with chronic HBV remain symptom free for as long as 20 or 30 years. About 15%–25% of people with chronic HBV develop serious liver conditions, such as cirrhosis (scarring of the liver) or liver cancer.

5. How is HBV diagnosed?

There are many different blood tests available to diagnose HBV. They can be ordered as an individual test or as a series of tests. Hepatitis B serologic testing involves measurement of several hepatitis B virus (HBV)-specific antigens and antibodies. Different serologic “markers” or combinations of markers are used to identify different phases of HBV infection and to determine whether a patient has acute or chronic HBV infection, is immune to HBV as a result of prior infection or vaccination, or is susceptible to infection.

6. How is HBV treated?

It is not necessary to treat acute HBV with antiviral medication. Following rest, adequate nutrition, and fluid intake, most persons recover spontaneously. Occasionally some persons may need to be hospitalized. Chronic hepatitis B is treatable - persons with chronic infection should consult a doctor with experience treating HBV. Persons with chronic HBV should be evaluated for treatment eligibility and monitored regularly for signs of liver injury. Several medications have been approved for HBV treatment, and new drugs are in development. However, not every person with chronic HBV needs to be on medication, and the drugs may cause side effects.

7. How can HBV be prevented?

The most effective method of preventing HBV is through vaccination with the HBV vaccine. The vaccine is usually given as a single injections with a booster at month 1 and month 6. The HBV vaccine has an outstanding record of safety and effectiveness, and since 1982, over 1 billion doses have been used worldwide. The vaccine is 95% effective in preventing chronic infections from developing. Protection lasts for 20 years at least and no booster is recommended by WHO. Infection prevention and control measures including the use of universal precautions may prevent transmission of hepatitis B in hospital and institutional settings.

8. Where can I find out more information

Guidelines and other useful resources are available on the NICD website: www.nicd.ac.za. Health care workers may contact the NICD hotline (+27 82 883 9920) after hours and in emergency situations. South African guidelines for management are still in development.