

Hepatitis B Fact Sheet

A Publication of the Hepatitis C Support Project

a series of fact sheets written by experts in the field of liver disease



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HBV: How Frequently to Monitor Chronic Hepatitis B

The following tests are recommended when patients are diagnosed with chronic hepatitis B:

- A doctor should take a complete medical history, asking about any family history of liver disease or cancer, and conduct a thorough physical examination.
- Every six months, for or more frequently if there is liver damage, patients' ALT levels should be checked for signs of liver damage, and a complete blood count with platelets, liver (hepatic) panel, and prothrombin time tests should also be run. These all require a blood sample.
- The doctor should conduct a viral test for hepatitis B surface antigen (HBsAg) and antibodies, "e" (HBeAg) antigens and antibodies, and the core antibody (HBcAb). This should be done every **three to six months** after the initial diagnosis, and then at least annually. This requires a blood sample.
- HBV DNA, which shows viral load in the bloodstream, should be tested. This also requires a blood sample. The **frequency** of the test depends on viral load and whether ALT levels are normal.
- An alpha fetoprotein (AFP) test will check for liver cancer. This test should be conducted every **six to 12 months**, and also requires a blood sample.
- A baseline ultrasound on the liver to check for liver cancer or other damage is recommended. Additional ultrasounds may be recommended **annually or more frequently** if liver damage is suspected or if a patient has been infected for many years.

- A liver biopsy to evaluate the stage of liver disease is recommended **if there are signs** of liver damage and a patient has been infected for many years.

If these tests show signs of liver damage, a physician may recommend treatment with either antivirals (pills taken daily) or pegylated interferon (administered by a weekly injection under the skin). If interferon is considered, a genotype test on a blood sample should be performed to identify the hepatitis B virus (HBV) strain a patient has. Some genotypes respond better to interferon treatment than others.

Below is the monitoring schedule recommended for patients who are not candidates for treatment, and have normal ALT levels and no sign of liver damage:



How Frequently to Monitor Hepatitis B

HBeAg-positive people whose HBV DNA level is equal to or greater than 20,000 IU/mL should have:

- ALT levels tested every **three to six months**
- A viral test **every year** or more often to assess HBsAg and HBeAg antigen and antibody status.
- HBV DNA tested **at least once a year.**
- An AFP test and ultrasound **at least once a year.**

If ALT levels increase, treatment and a liver biopsy should be considered.

HBeAg-negative people who have HBV DNA levels greater than or equal or 2,000 IU/mL should have:

- ALT levels tested every **three to six months.**
- A viral test **every year.**
- HBV DNA tested every **three to six months.**
- An AFP test and ultrasound **at least once a year.**

If ALT levels increase, treatment and a liver biopsy should be considered.

HBeAg-negative people with undetectable HBV DNA should have:

- ALT tested every **six to 12 months.**
- HBV DNA, AFP, ultrasound,

and viral tests conducted **at least once a year.**

If ALT levels increase, HBV DNA should be checked and other causes of liver damage should be ruled out.

ALANINE AMINOTRANSFERASE (ALT; formerly SGPT): an enzyme (also called alanine transaminase) produced in the liver when the membranes of liver cells break down.

ALPHA-FETOPROTEIN (AFP): a protein, measurable in the blood, that is often elevated in people with liver cancer.

COMPLETE BLOOD COUNT (CBC): an inventory of the cellular components of the blood, including red blood cell count, hematocrit and hemoglobin, white blood cell count, and platelet count.

HEPATIC PANEL or LIVER FUNCTION TESTS: a set of blood tests that measure levels of liver enzymes, proteins, and various other substances. Liver function tests are used to help diagnose liver disease, assess the degree of liver damage and determine if treatment is needed.

PLATLET OR THROMBOCYTE: a type of blood cell responsible for normal blood clotting.

PROTHROMBIN TIME (PT): a measure of blood clotting time. People with advanced liver disease may have a slower than normal PT.

ULTRASOUND: a method of visualizing the internal parts of the body using sound waves.

VIRAL LOAD or HBV DNA: the amount of virus in the blood or other tissues, usually expressed in terms of copies of viral genetic material (DNA). The presence of genetic material indicates that a virus is actively replicating.

HCSP • VERSION 2.0 • January 2011

The information in this fact sheet is designed to help you understand and manage HBV and is not intended as medical advice. All persons with HBV should consult a medical practitioner for diagnosis and treatment of HBV.

For more information about hepatitis B, visit the following websites.
Hepatitis B Foundation: www.hepb.org • HIVandHepatitis.com

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