



## **Welcome to the Turkish Chapter of the Hepatitis B Foundation Website**

Hepatitis B is known as a silent disease, and many people don't even know they are infected. Please share the following important information with your friends, family and others in your community.

- There is a safe vaccine.
- There is a simple blood test.
- There are treatment options.
- Hepatitis B is not inherited - it is caused by a virus.

*The Hepatitis B Foundation is a national nonprofit organization dedicated to finding a cure and helping to improve the quality of life for all those affected by hepatitis B worldwide through research, education and patient advocacy.*

**Disclaimer:** The information that is provided on this website is for educational purposes only. The Hepatitis B Foundation is not a medical organization. Please talk to your doctor or a qualified health care provider for personal medical care and advice.

### **Contents:**

General Information

Prevention and Vaccination

Hepatitis B Blood Tests

Living with Hepatitis B

Pregnancy and Hepatitis B

Children and Hepatitis B

Other Resources

## ***General Information***

What is hepatitis B?

How many people are affected by hepatitis B?

Why is hepatitis B so dangerous?

What is "acute" hepatitis B?

What is "chronic" hepatitis B?

Is there a cure for hepatitis B?

### **What is hepatitis B?**

Hepatitis B is the world's most common liver infection. It is caused by the hepatitis B virus (HBV), which attacks and injures the liver. It is transmitted through blood, unprotected sex, shared or re-used needles, and from an infected mother to her newborn baby during pregnancy or delivery. Most infected adults are able to get rid of the hepatitis B virus without any problems. However, some adults and most infected babies and children are unable to get rid of the virus and will develop chronic infections.

The good news is that there is a safe vaccine to prevent a hepatitis B infection and new treatments for those already infected with hepatitis B.

### **How many people are affected by hepatitis B?**

Worldwide, 2 billion people (1 out of 3 people) have been infected with hepatitis B. 400 million people have become chronically infected (which means they are unable to get rid of the virus). An estimated 1 million people die each year from hepatitis B and its complications.

### **Why is hepatitis B so dangerous?**

Hepatitis B is dangerous because it is a "silent infection" that can infect people without them knowing it. Most people who are infected with hepatitis B are unaware of their infection and can unknowingly pass the virus to others through their blood and infected bodily fluids.

For those who become chronically infected, there is an increased risk of developing serious cirrhosis and/or liver cancer later in life. The virus can quietly and continuously attack the liver over many years without being

detected.

### **What is acute hepatitis B?**

An "acute" hepatitis B infection refers to the first time a person has been exposed to the hepatitis B virus. Some people might feel like they have the flu, but most people don't have any symptoms after they are first infected.

For most healthy adults, it can take up to 6 months to successfully get rid of the virus. In other words, the immune system will fight off the virus within the first 6 months after the initial infection. During an acute infection, a person is contagious and able to pass the virus on to others.

90% of healthy adults are able to "recover" by getting rid of the virus, which is confirmed by a blood test. Once a person has recovered, they are no longer contagious and are immune to future hepatitis B infections.

### **What is chronic hepatitis B?**

A person is diagnosed with chronic hepatitis B if they test positive for the hepatitis B virus for longer than 6 months. A chronic hepatitis B infection may stay with the person for a lifetime. About 10% of adults who contract hepatitis B will not be able to get rid of the virus and they develop a "chronic hepatitis B" infection.

### **Is there a cure for hepatitis B?**

For an "acute" infection, there is generally no treatment other than rest and supportive measures to manage any symptoms. For "chronic" hepatitis B, there are 5 approved drugs in the US: Intron A, Pegasys, Epivir-HBV, Hepsera, and Baraclude. These drugs slow down the virus and reduce potential liver damage. In rare cases, they may even get rid of the virus completely. For a complete list of other promising drugs in development for hepatitis B, visit our [Drug Watch](#).

## ***Prevention and Vaccination***

[How can I get hepatitis B?](#)

[Is hepatitis B transmitted casually?](#)

[Who is most likely to become infected with hepatitis B?](#)

[What should I do if I am in one of the "high risk groups"?](#)



Is the hepatitis B vaccine safe?

Can I catch hepatitis B from the vaccine?

If I started the vaccine series but didn't complete my 2nd or 3rd dose on schedule, do I have to start the series over?

What else can I do to protect myself from hepatitis B?

### **How can I get hepatitis B?**

Hepatitis B is an infectious disease caused by a virus that is spread through blood. Listed below are the most common ways hepatitis B is passed to others:

- Direct contact with infected blood or infected bodily fluids
- Unprotected sex with an infected partner
- Shared or re-used needles (for example, sharing needles for illegal drugs or re-using needles that are not properly sterilized for medicine, acupuncture, tattoos, or ear/body piercing)
- From an infected mother to her newborn baby during pregnancy or delivery

### **Is hepatitis B transmitted casually?**

No, hepatitis B is not spread through casual contact. You cannot get hepatitis B from the air, hugging, touching, sneezing, coughing, toilet seats or doorknobs. You cannot get hepatitis B from eating or drinking with someone who is infected or from eating food prepared by someone who has hepatitis B.

### **Who is most likely to become infected with hepatitis B?**

- Sexually active adults and teenagers
- Men who have sex with men
- Infants born to infected mothers
- Healthcare workers and providers
- Emergency Personnel
- Recipients of blood transfusions before 1992
- Injection drug users, past and present
- People who get tattoos or body piercing
- Family or household members living in close contact with an infected person



## **What should I do if I am in one of the “high risk groups” for contracting hepatitis B?**

Anyone who is in a “high risk” group should receive the hepatitis B vaccine. It only takes 3 shots to protect you and your loved ones against hepatitis B for a lifetime! Adults can obtain the vaccine by asking their doctor or a local health clinic.

## **Is the hepatitis B vaccine safe?**

Yes, the hepatitis B vaccine is very safe and effective. In fact, it is the first “anti-cancer vaccine” because it can protect you from hepatitis B, which is the cause of 80% of all liver cancer in the world.

With more than one billion doses given throughout the world, medical and scientific studies have shown the hepatitis B vaccine to be one of the safest vaccines ever made.

## **Can I get hepatitis B from the vaccine?**

No, you cannot get hepatitis B from the vaccine. The vaccine is made from a synthetic yeast product in a laboratory. The most common side effects are redness and soreness in the arm where the shot is given.

## **What else can I do to protect myself from hepatitis B?**

Since hepatitis B is spread through infected blood and infected body fluids, there are several simple things that you can do to protect yourself from possible infection:

- Avoid touching blood or any bodily fluids directly
- Use condoms with sexual partners
- Avoid illegal drugs and prescription drug misuse, including injection of such drugs
- Avoid sharing sharp objects such as razors, toothbrushes, earrings, and nail clippers
- Make sure that sterile needles are used for medicine, acupuncture, tattoos, ear and body piercing
- Wear gloves and use a fresh solution of bleach and water to clean up blood spills
- Wash your hands thoroughly with soap and water after touching or cleaning up blood
- Most importantly, make sure you receive the hepatitis B vaccine!

## ***Hepatitis B Blood Tests***

Is there a blood test for hepatitis B?

What three tests make up the "hepatitis B blood panel"?

What is the hepatitis B surface antigen (HBsAg)?

What is the hepatitis B surface antibody (HBsAb)?

What is the hepatitis B core antibody (HBcAb)?

I donated blood and received a letter from the blood bank, what does it mean?

### **Is there a blood test for hepatitis B?**

There is a simple hepatitis B blood test that your doctor or health clinic can order called the "hepatitis B blood panel". This blood sample can be taken in the doctor's office.

There are 3 common tests that make up this blood panel. Sometimes the doctor may ask to check your blood again six months after your first visit to confirm your hepatitis B status. If you think you have been recently infected with hepatitis B, it will take 4 -6 weeks before the virus will be detected in your blood.

Understanding your hepatitis B blood test results can be confusing, so you want to be clear about your diagnosis – are you infected with hepatitis B, have you recovered from a hepatitis B infection, or do you have a chronic hepatitis B infection?

In addition, it is helpful if you request a written copy of your blood tests so that you fully understand which tests are positive or negative.

### **What three tests make up the "hepatitis B blood panel"?**

The hepatitis B blood panel requires only one blood sample but includes three tests that are needed to make a final diagnosis:

- **HBsAg** (hepatitis B surface antigen)
- **HBsAb or Anti-HBs** (hepatitis B surface antibody)
- **HBcAb or anti-HBc** (hepatitis B core antibody)

### **What is the hepatitis B surface antigen (HBsAg)?**

A "positive" HBsAg test result means that the person is infected with the hepatitis B virus, which can be an "acute" or a "chronic" infection. Infected people can pass the virus on to others through their blood.

### **What is the hepatitis B surface antibody (HBsAb or anti-HBs)?**

A "positive" HBsAb (or anti-HBs) test result indicates that a person has successfully responded to the hepatitis B vaccine or has recovered from an acute hepatitis B infection. This result means that you are immune to future hepatitis B infection and you are not contagious.

### **What is the hepatitis B core antibody (HBcAb)?**

The HBcAb is an antibody that is part of the virus- it does not provide protection. A "positive" or "reactive" HBcAb (or anti-HBc) test result indicates a past or present infection. The interpretation of this test result depends on the results of the other two tests. Its appearance with the protective surface antibody (positive HBsAb or anti-HBs) indicates prior infection and recovery. For chronically infected persons, it will usually appear with the virus (positive HBsAg).

## ***Living with Hepatitis B***

Will I recover from a hepatitis B infection?

What is the difference between acute and chronic hepatitis B?

Will I become sick if I have acute hepatitis B?

How will I know when I have recovered from an acute hepatitis B infection?

What should I do if I have been diagnosed with chronic hepatitis B?

What tests will be used to monitor my chronic hepatitis B?

Is there a cure for chronic hepatitis B?

Are there any approved drugs to treat chronic hepatitis B?



If I have a chronic hepatitis B infection, should I be on medication?

What advice do you have for those living with chronic hepatitis B?

Can I donate blood if I have hepatitis B?

### **Will I recover from a hepatitis B infection?**

Most healthy adults who are infected will recover without any problems. But babies and young children may not be able to successfully get rid of the virus.

- **Adults** – 90% will get rid of the virus and recover without any problems; 10% will develop chronic hepatitis B.
- **Young Children** – 40% will get rid of the virus and recover without problems; 60% will develop a chronic hepatitis B infection.
- **Infants** – 90% will become chronically infected; only 10% will be able to get rid of the virus.

### **What is the difference between an "acute" and a "chronic" hepatitis B infection?**

A hepatitis B infection is considered to be "acute" during the first 6 months after being exposed to the virus. This is the average amount of time it takes to recover from a hepatitis B infection.

If you still test positive for the hepatitis B virus (HBsAg+) after 6 months, you are considered to have a "chronic" hepatitis B infection, which can last a lifetime.

### **Will I become sick if I have acute hepatitis B?**

Hepatitis B is considered a "silent infection" because it often does not cause any symptoms. Most people feel healthy and do not know they have been infected, which means they can unknowingly pass the virus on to others. Other people may have mild symptoms such as fever, fatigue, joint or muscle pain, or loss of appetite that are mistaken for the flu.

Less common but more serious symptoms include severe nausea and vomiting, yellow eyes and skin (called "jaundice"), and a swollen stomach - these symptoms require immediate medical attention and a person may need to be hospitalized.



### **How will I know when I have recovered from an "acute" hepatitis B infection?**

Once your doctor has confirmed through a blood test that you have gotten rid of the virus from your body and developed the protective antibodies (HBsAb+), you will be protected from any future hepatitis B infection and are no longer contagious to others.

### **What should I do if I am diagnosed with chronic hepatitis B?**

If you test positive for the hepatitis B virus for longer than 6 months, this indicates that you have a chronic hepatitis B infection. You should make an appointment with a hepatologist (liver specialist) or gastroenterologist familiar with hepatitis B. This specialist will order blood tests and possibly a liver ultrasound to evaluate your hepatitis B status and the health of your liver. Your doctor will probably want to see you at least once or twice a year to monitor your hepatitis B and determine if you would benefit from treatment.

Most people chronically infected with hepatitis B can expect to live long, healthy lives. Once you are diagnosed with chronic hepatitis B, the virus may stay in your blood and liver for a lifetime. It is important to know that you can pass the virus along to others, even if you don't feel sick. This is why it's so important that you make sure that all close household contacts and sex partners are vaccinated against hepatitis B.

### **What tests will be used to monitor my hepatitis B?**

Common tests used by doctors to monitor your hepatitis B include the hepatitis B blood panel, liver function tests (ALT), hepatitis B e-Antigen (HBeAg), hepatitis B e-Antibody (HBeAb), ultrasound and imaging, and possibly liver biopsy before starting treatment.

### **Is there a cure for chronic hepatitis B?**

Right now, there is no cure for chronic hepatitis B, but the good news is there are new treatments that can help slow the progression of liver disease in chronically infected persons by slowing down the virus. If there is less hepatitis B virus being produced, then there is less damage being done to the liver. Sometimes these drugs can even get rid of the virus, although this is not common.

With all of the new exciting research, there is great hope that a complete cure will be found for chronic hepatitis B in the near future. Visit our [Drug Watch](#) for a list of other promising drugs in development.

## **Are there any approved drugs to treat chronic hepatitis B?**

Yes, there are currently five approved treatments for hepatitis B in the United States:

- [Interferon-alpha](#) (Intron A) is given by injection several times a week for six months to a year, or sometimes longer. The drug can cause side effects such as flu-like symptoms, depression, and headaches. Approved in 1991 and available for both children and adults.
- [Pegylated Interferon](#) (Pegasys) is given by injection once a week usually for six months to a year. The drug can cause side effects such as flu-like symptoms, depression and other mental health problems. Approved May 2005 and available only for adults.
- [Lamivudine](#) (Epivir-HBV) is a pill that is taken once a day, with almost no side effects, for at least one year or longer. A primary concern is the possible development of drug resistance during and after treatment. Approved in 1998 and available for both children and adults.
- [Adefovir dipivoxil](#) (Hepsera) is a pill taken once a day, with few side effects, for at least one year or longer. A primary concern is that kidney problems can occur while taking the drug. Approved September 2002 and available only for adults. Pediatric clinical trials are being planned.
- [Entecavir](#) (Baraclude) is a pill taken once a day, with almost no side effects for up to one year. It is considered to be the most potent oral antiviral drug for chronic hepatitis B to date. Approved April 2005 and available only for adults.

## **Do these drug provide a “cure” for chronic hepatitis B?**

Although they do not provide a complete cure, except in rare cases (a “cure” means that a person loses the hepatitis B virus and develops protective surface antibodies), they do slow down the virus and decrease the risk of more serious liver disease later in life.

## **If I have a chronic hepatitis B infection, should I be on medication?**

It is important to understand that not every person with chronic hepatitis B needs to be on medication. You should talk to your doctor about whether you are a good candidate for drug therapy. Whether you decide to start treatment or not, you should be seen regularly by a liver specialist or a doctor knowledgeable about hepatitis B.



### **What advice do you have for those living with chronic hepatitis B?**

We strongly recommend avoiding alcohol, as it can be extremely harmful to a liver already infected with the hepatitis B virus. Additionally, you should avoid smoking for the same reason. You should be sure to talk to your doctor before taking any prescription, over the counter medication, or herbal remedies.

Although there is no special diet for people who have chronic hepatitis B, a healthy, well-balanced diet that is low fat and includes plenty of vegetables is recommended. You may want to avoid eating raw shellfish, since they can contain bacteria that are harmful to your liver.

### **Can I donate blood if I have hepatitis B?**

No. The blood bank will not accept any blood that has been exposed to hepatitis B, even if you have recovered from an acute infection.

## ***Pregnancy & Hepatitis B***

Should I be tested for hepatitis B if I am pregnant?

Why are hepatitis B tests so important for pregnant women?

Will a hepatitis B infection affect my pregnancy?

If I am pregnant and have hepatitis B, how can I protect my baby?

Can I breastfeed my baby if I have hepatitis B?

### **Should I be tested for hepatitis B if I am pregnant?**

Yes, ALL pregnant women should be tested for hepatitis B! If you are pregnant, be sure your doctor tests you for hepatitis B before your baby is born.

### **Why are these tests so important for pregnant women?**

If you test positive for hepatitis B and are pregnant, the virus can be passed on to your newborn baby during your pregnancy or during delivery. If your doctor is aware that you have hepatitis B, he or she can make arrangements to have the proper medications in the delivery room to prevent your baby from being infected. ***If the proper procedures are not followed, your baby has a 95% chance of developing chronic hepatitis B!***



### **Will a hepatitis B infection affect my pregnancy?**

A hepatitis B infection should not cause any problems for you or your unborn baby during your pregnancy. It is important for your doctor to be aware of your hepatitis B infection so that he or she can monitor your health and so your baby can be protected from an infection after it is born.

### **If I am pregnant and have hepatitis B, how can I protect my baby?**

If you test positive for hepatitis B, then your newborn must be given two shots immediately in the delivery room:

- First dose of the **hepatitis B vaccine**
- One dose of the **Hepatitis B Immune Globulin (HBIG)**.

If these two medications are given correctly within the first 12 hours of life, a newborn has more than a 90% chance of being protected against a lifelong hepatitis B infection.

You must make sure your baby receives the second and third dose of the hepatitis B vaccine at one and six months of age to ensure complete protection.

***There is no second chance to protect your newborn baby!***

### **Can I breastfeed my baby if I have hepatitis B?**

The benefits of breastfeeding outweigh the potential risk of infection, which is minimal. In addition, since it is recommended that all infants be vaccinated against hepatitis B at birth, any potential risk is further reduced.

## ***Children & Hepatitis B***

How will being diagnosed with chronic hepatitis B affect my child?

I am planning to adopt a child, should I request that he or she be tested?

What if the child I'm planning to adopt tests positive for hepatitis B?

How can I protect other family members if my child tests positive for hepatitis B?

Is there treatment available for a child with chronic hepatitis B?



### **How will being diagnosed with chronic hepatitis B affect my child?**

Hepatitis B does not usually affect a child's normal growth and development. Most children with chronic hepatitis B infections will enjoy long and healthy lives. Unlike other chronic medical conditions, hepatitis B does not usually cause any physical problems.

### **What if my child tests positive for hepatitis B?**

Finding out that your child has hepatitis B can be upsetting, but you should know that most children will enjoy a long and healthy life. Hepatitis B does not usually affect a child's normal growth and development. It does not restrict their physical activity or their mental abilities.

### **How can I protect other family members if my child tests positive for hepatitis B?**

All parents, siblings, and other household members should be vaccinated. Extended family members, childcare providers, family, friends, and others should consider vaccination if they have frequent and close contact with your child.

### **Is there treatment available for a child with hepatitis B?**

There are currently two approved treatment options available in the United States for children with chronic hepatitis B: (1) Intron A (interferon alpha) and (2) Epivir-HBV (lamivudine).

However, not every child (or adult) with hepatitis B needs to be treated. You should see a pediatric liver specialist to determine if your child would benefit from one of these approved treatments. Whether you decide to start treatment or not, your child should see a liver specialist or doctor skilled in hepatitis B on a regular basis.