



# Hepatitis B Vaccine

Protect Yourself and Those You Love

## What is Hepatitis B?

Hepatitis B is the most common serious liver infection in the world. It is caused by the hepatitis B virus (HBV), which attacks liver cells and can lead to liver failure, cirrhosis (scarring), or liver cancer later in life. The virus is transmitted through direct contact with infected blood and bodily fluids, and from an infected woman to her newborn at birth.

## Is there a safe vaccine for hepatitis B?

**YES!** The good news is that there is a safe and effective vaccine for hepatitis B. The vaccine is a series, typically given as three shots over a six-month period that will provide a lifetime of protection. You cannot get hepatitis B from the vaccine – there is no human blood or live virus in the vaccine.

- The hepatitis B vaccine is the most widely used vaccine in the world, with over 1 billion doses given.
- The hepatitis B vaccine is the first "anti-cancer" vaccine because it can help prevent liver cancer!

## Who should be vaccinated against hepatitis B?

The World Health Organization (WHO) and the U.S. Centers for Disease Control and Prevention (CDC) recommend the hepatitis B vaccine for all newborns and children up to 18 years of age, and all high-risk adults. All infants should receive the first dose of the vaccine in the delivery room or in the first 24 hours of life, preferably within 12 hours. (CDC recommends the first dose within 12 hours vs. the WHO recommendation of 24 hours.) *The HBV vaccine is recommended to anyone who is at high risk of infection.*

### People recommended to get vaccinated include the following:

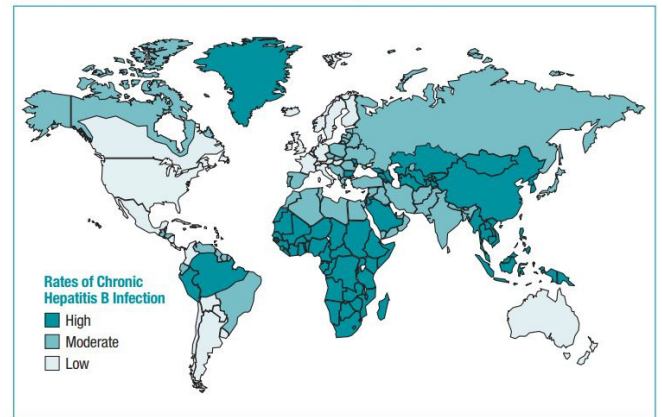
- All infants and children aged <18 years who have not been vaccinated
- Individuals living in or coming from a country where hepatitis B is common\*
- Sexual partners and household contacts of someone who is infected\*
- Men who have sex with men\*
- Persons who have had more than 1 sexual partner within the past 6 months
- Persons diagnosed or undergoing treatment for a sexually transmitted infection (STI)
- Persons who use illegal drugs\*
- Persons with HIV infection, hepatitis C (HCV) infection or other chronic liver disease\*
- Persons who get tattoos or body piercings
- Persons who have been diagnosed with diabetes, type 1 or type 2
- Persons with kidney disease and those undergoing kidney dialysis\*
- Health care workers, emergency responders, and public safety workers
- Residents and staff of long-term care facilities
- Travelers to and families adopting from countries where hepatitis B is common

*\*These individuals should be screened before vaccination, to rule out hepatitis B infection*

**International Hepatitis B Vaccine Considerations:** WHO recommends all infants receive the first dose of the hepatitis B vaccine within 24 hours of birth (often called the "birth dose") and to then complete the vaccine series at 2 and 6 months. In order to meet this requirement, the first dose of the hepatitis B vaccine must be the "monovalent vaccine," which means it is only the hepatitis B vaccine.

Many countries, however, are offering a "pentavalent vaccine," which protects against 5 diseases, including hepatitis B. Unfortunately, the first dose of the "pentavalent vaccine" is given at 6 weeks, which means babies are not being protected at birth against hepatitis B.

### Worldwide Rates of Chronic Hepatitis B



Centers for Disease Control and Prevention, 2010

It is very important that babies receive the "monovalent" hepatitis B vaccine at birth (not the "pentavalent vaccine") in order to protect against a lifelong chronic hepatitis B infection, though the vaccine series may be completed as part of the pentavalent vaccine series. Infants born to moms who are infected with hepatitis B are at extremely high risk of becoming chronically infected after the delivery unless they receive the first dose of the hepatitis B vaccine within the first 24 hours of life, preferably within 12 hours. There is no second chance to protect a newborn or baby from hepatitis B!

## How will I know if I'm protected against hepatitis B?

If you have received the HBV vaccine, then a simple blood test can confirm that you are protected. If you are protected, the blood test will show a positive result for the "hepatitis B surface antibody" (anti-HBs+ or HBsAb+). All health care workers and household members or sexual partners of an infected individual should have their surface antibody levels tested 1-2 months after completing the vaccine series to make sure they are protected against the hepatitis B virus.

## How can I protect myself until the vaccine series is complete?

For those people who are in close household contact with or are sexual partners of infected individuals, it is important to use precautions until the vaccination series is complete. For example, following safe sex practices is important (use condoms) and do not share toothbrushes, razors, nail clippers, or other items such as earrings or body jewelry. Hepatitis B is not transmitted casually. It will not be transmitted by shaking hands, sneezing, hugging and eating a meal with someone, or prepared by an infected person.

## Does the vaccine work for everyone?

Most people are successfully protected by the HBV vaccine when they complete all three shots of the series. There are, however, a small percentage of people that do not develop antibodies after the completion of the hepatitis B vaccine series. A person is considered to be a "non-responder" if they have completed two full vaccination series without producing protective antibodies. A non-responder should ask their doctor for a blood test to rule out the possibility that they are already infected with hepatitis B. The HBV vaccine does not help individuals who are already infected or those who naturally recovered from a past hepatitis B infection.

## What if I am exposed to hepatitis B before being vaccinated?

If you have been vaccinated and a blood test shows positive surface antibodies (anti-HBs+ or HBsAb+), then you are protected against a future hepatitis B infection. For those who have not been vaccinated and are exposed to HBV, it is recommended that one dose of the hepatitis B immunoglobulin (HBIG) be given as soon as possible. This can usually be given in the hospital emergency room. Unvaccinated individuals should also start the HBV vaccine series at this time. Talk to your doctor if you think you might have been exposed to HBV.

## If I started the vaccine series but never completed it, do I have to start the entire series over?

According to the CDC, you do not have to restart the vaccine series if you already received 1 or 2 doses. Even if it has been a few years since your last dose of the vaccine, you only need to complete the series by getting the remaining 2nd or 3rd shot.

## For more information about the hepatitis B vaccine, please visit:

- Hepatitis B Foundation – [www.hepb.org](http://www.hepb.org)
- CDC Immunization Hotline – 1 (800) 232-4636 or [www.cdc.gov/hepatitis](http://www.cdc.gov/hepatitis)
- WHO – [www.who.int/mediacentre/factsheets/fs204/en](http://www.who.int/mediacentre/factsheets/fs204/en)
- Immunization Action Coalition – [http://www.immunize.org/vis/hepatitis\\_b.pdf](http://www.immunize.org/vis/hepatitis_b.pdf)
- GAVI Vaccine Alliance: Pentavalent Vaccine Support – [www.gavi.org/support/nvs/pentavalent](http://www.gavi.org/support/nvs/pentavalent)
- Pentavalent Vaccine FAQ – [www.searo.who.int/india/topics/routine\\_immunization/Pentavalent\\_vaccine\\_Guid\\_for\\_HWs\\_with\\_answers\\_to\\_FAQS.pdf](http://www.searo.who.int/india/topics/routine_immunization/Pentavalent_vaccine_Guid_for_HWs_with_answers_to_FAQS.pdf)



The Hepatitis B Foundation is a national nonprofit organization dedicated to finding a cure and improving the quality of life for those affected by hepatitis B worldwide.

**WWW.HEPB.ORG | 215-489-4900**