

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 hepatitis B vaccine has proven to be safe and highly effective for newborns, infants, children and adults (including people who are pregnant). The vaccine is a series, typically given as three shots over a six-month period that will provide a lifetime of protection. There is also a 2-dose vaccine option in the U.S. 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?

U.S.: The U.S. Centers for Disease Control and Prevention (CDC) recommends the hepatitis B vaccine for all newborns, children, adults 19-59 years of age, and adults 60 and older who are at high-risk for infection.

International: The World Health Organization (WHO) recommends the hepatitis B vaccine for all newborns, 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.)

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.

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.



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.

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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.

When do I get the hepatitis B vaccine?

U.S. Children and Adult Hepatitis B Vaccine Schedules			
Vaccine	Dose 1	Dose 2	Dose 3
3 dose vaccine series Brand names: PreHevbrio (<i>Adults ≥ 18 Years</i>), Engerix-B, Recombivax HB, Twinrix (hepatitis A and B)	Now ✓	1 month after dose 1 ✓	6 months after dose 1 ✓
2 dose vaccine series Adults ≥ 18 Years Brand name: Heplisav-B	Now ✓	1 month after dose 1 ✓	
Key	✓ = Monovalent hepatitis B vaccine (protection against hepatitis B only)		

International Hepatitis B Vaccine Schedules For All Ages				
Vaccine	Dose 1	Dose 2	Dose 3	Dose 4
3-dose vaccine series for infants < 1 year	Within 24 hours of birth ✓	1 month after dose 1 At least 4 weeks of age ✓	6 months after dose 1 At least 24 weeks of age ✓	
3-dose vaccine series for children ≥ 1 year and adults	Now ✓	1 month after dose 1 ✓	6 months after dose 1 ✓	
4-dose combination vaccine series for infants < 1 year (pentavalent or hexavalent)	Within 24 hours of birth ✓	6 weeks of age ✓	10 weeks of age ✓	14 weeks of age ✓
Key	✓ = Monovalent hepatitis B vaccine (protection against hepatitis B only) ✓ = Combination vaccine (protection against hepatitis B + other diseases)			

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

- Hepatitis B Foundation – www.hepb.org
- CDC Immunization Hotline – 1 (800) 232-4636 or www.cdc.gov/hepatitis
- Immunization Action Coalition – http://www.immunize.org/vis/hepatitis_b.pdf
- GAVI Vaccine Alliance: Pentavalent Vaccine Support – www.gavi.org/support/nvs/pentavalent



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