



## **The 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) that attacks liver cells and can lead to liver failure, cirrhosis (scarring) or cancer of the liver later in life. The virus is transmitted through contact with infected blood and bodily fluids.



**Is there a safe vaccine for hepatitis B?** YES! The good news is that there is a safe and effective vaccine for hepatitis B. More than 1 billion doses have been given around the world. The vaccine is a series of three shots given 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.

**Who should be vaccinated against hepatitis B?** The American Academy of Pediatrics is now recommending 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 at birth, or before leaving the hospital. In most states, children need the hepatitis B vaccine for school entry. We also recommend this vaccine for anyone who lives in close contact with, or is a sexual partner of an infected individual. In addition, the vaccine is recommended to anyone who is at risk of infection through their job, lifestyle choices, or other life circumstances.



Those at risk for contracting hepatitis B are:

- Health care workers and emergency personnel
- Infants born to mothers who are infected at the time of delivery
- Partners or individuals living in close household contact with someone who is infected
- Individuals who have had multiple sex partners, or who have been diagnosed with an STD
- Individuals who use illegal drugs
- Men who have sex with men
- Individuals who received a blood transfusion prior to 1992
- Individuals who get tattoos or body piercings
- Individuals who adopt children from or travel to countries where hepatitis B is common (Asia, Africa, South America, the Pacific Islands, Eastern Europe, and the Middle East)
- Individuals emigrating from countries where hepatitis B is common, or are born to parents who emigrated from these countries

**Where can I get the hepatitis B vaccine?** Talk to your doctor and check your local health department or health clinics to see if they have free or reduced-cost vaccine programs. Ask about the Vaccines for Children Program, which provides free hepatitis B vaccine for all children up to age 19. For more information on this program, contact the National Immunization Hotline at 1-800-232-2522 or [www.cdc.gov/nip/vfc/Default.htm](http://www.cdc.gov/nip/vfc/Default.htm).



**How can I tell if I am protected against hepatitis B?** If someone has received the hepatitis B vaccine, then a simple blood test can tell whether they are protected. If they have responded to the vaccine series, the blood test will show a positive result for the hepatitis B surface antibody (HBsAb+). It is recommended that all health care workers and household members or sexual partners of an infected individual have their antibody levels tested one month after completing the vaccine series.

**How soon will I be protected once I start the vaccine series?** After the 1st dose of HBV vaccine, there can be up to 50% protection. After the 2nd dose of HBV vaccine, there can be up to 80% protection. It is very important to receive the third shot to ensure 100%, long-term protection. If possible, ask your doctor to check your antibody level one month after completing the vaccine series.

**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, and the antibody level blood test shows positive protection (HBsAb+). For example, it is important to not share toothbrushes, razors, or nail equipment. In addition, following safe sex practices is important since HBV can be transmitted sexually.

**Does the vaccine work for everyone?** Approximately 5% of people do not develop antibodies after the completion of the hepatitis B vaccine series. If a blood test is given four weeks following the completion of the series and the test shows no response to the vaccine, the general recommendation is to complete the series again. 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.



**What if I am exposed to hepatitis B?** If you have been vaccinated and a blood test shows positive antibodies (HBsAb+), you are protected against a hepatitis B infection. In the case of non-responders or unvaccinated individuals who are exposed to HBV, it is recommended that they receive the hepatitis B immunoglobulin (HBIG) as soon as possible. Unvaccinated individuals should also start the vaccine series at this time. Talk to your doctor if you think you might have been exposed to HBV.

**If I began the vaccine series and never completed it, do I have to start the entire series over again?** According to guidelines created by the Centers for Disease Control and Prevention (CDC) you do not have to restart the vaccine series if you received only one or two 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 shot(s).

#### **DID YOU KNOW??**

The hepatitis B vaccine is the most widely used vaccine in the world, with over 1 billion doses given.

Since HBV accounts for 80% of all liver cancer worldwide, the hepatitis B vaccine is the first anti-cancer vaccine to be developed.

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

Hepatitis B Foundation at [www.hepb.org](http://www.hepb.org)

Vaccines for Children's Program at 1-800-232-2522, [www.cdc.gov/nip/vfc/Default.htm](http://www.cdc.gov/nip/vfc/Default.htm)

CDC Immunization Hotline at 1-800-232-2522 or [www.cdc.gov/hepatitis](http://www.cdc.gov/hepatitis)

Immunization Action Coalition at: [www.immunize.org](http://www.immunize.org)

Children's Hospital of Philadelphia at <http://vaccine.chop.edu/>

2/07

