Hepatitis B Prevention

The best way to prevent hepatitis B virus (HBV infection) is to be vaccinated. A new HBV vaccine (Heplisav-B) was approved for adults over age 18 years. Heplisav-B is given in two doses, one month apart. Two older HBV vaccines are available: Recombivax HB and Engerix-B. Both vaccines require three injections administered over a six-month period. The side effects of the hepatitis B vaccine are usually mild and may include soreness at the injection site and mild flulike symptoms.

A combined hepatitis A (HAV) and HBV vaccine is available (Twinrix), which also requires three injections administered over a six-month period but offers the added advantage of protecting against both viral infections. Pediarix is a combination vaccine that protects against HBV, diphtheria, tetanus, whooping cough (pertussis) and poliovirus.

In clinical trials, Heplisav-B was effective 95 percent in adults. Older HBV vaccines are generally effective for more than 90 percent of adults and children who receive all three doses. People with compromised immune systems may be less likely to develop immunity to HBV through vaccination.

Who Should Be Vaccinated Against Hepatitis B

If you do not think you were ever infected with hepatitis B, talk to your health care provider. The vaccine is recommended for:

- Infants within 24 hours of birth
- All children 18 years old or younger who have not been vaccinated previously
- Sex partners or household contacts of individuals who are HBsAg positive
- Sexually active people who are not in long-term, mutually monogamous relationships (for example, more than one sex partner during the previous six months)
- Anyone seeking evaluation or treatment for a sexually transmitted infection
- Men who have sex with men
- Injection drug users
- People with hepatitis C virus and other chronic liver diseases
- People with jobs in which there is a risk of infection (such as emergency medical technicians,
doctors and nurses)

- Residents and staff of facilities for developmentally disabled individuals
- Travelers to regions with moderate or high rates of HBV infection
- Hemodialysis and peritoneal dialysis patients
- People living with HIV
- Anyone receiving care in a correctional setting
- All other persons seeking protection against HBV

Hepatitis B Booster Shots

Booster doses of hepatitis B vaccine are recommended for hemodialysis patients and immunocompromised persons. For hemodialysis patients, the need for booster doses should be assessed by yearly testing for hepatitis B surface antibody (anti-HBs). A booster dose should be administered when anti-HBs levels decline to < 10 mIU/mL. For immunocompromised persons, the need for booster doses has not been well researched. It is recommended that annual anti-HBs testing be considered for those with risk for exposure; when anti-HBs levels are < 10 mIU/mL, HBV booster doses may be administered.

Hepatitis B booster doses are not recommended for people with normal immune status who have been vaccinated.

Other Ways to Prevent Hepatitis B

If you have not been vaccinated against hepatitis B, you can still take steps to prevent HBV infection. These include using a condom or another type of latex barrier while having sex. If you are an injection drug user and share equipment, cleaning your syringes with bleach will not help you avoid hepatitis B. It’s always best to use new needles, syringes and other drug-related articles to prevent the risk of HBV infection. Also, don’t share items that may have been contaminated with someone else’s blood, such as toothbrushes, razors or needles used for body piercing, tattooing or acupuncture. Note that hepatitis B may survive outside the body for up to seven days.

If you have not been vaccinated against hepatitis B and fear that you were recently exposed to HBV—for example, after being poked with a used hypodermic needle or having sexual contact with a person with hepatitis B—it is possible to receive a single injection of hepatitis B immune globulin (HBIG) to help contain the infection. HBIG is recommended following exposure to hepatitis B virus because it provides immediate, short-term protection against the virus. A dose of the hepatitis B vaccine is given at the same time. Two additional doses of hepatitis B vaccine are given to complete the series and ensure long-term protection.

Pregnant women with hepatitis B can pass the virus to their infants during birth. This can be prevented through a series of vaccinations and HBIG for their babies at birth.