Hepatitis B Fact Sheet

**DESCRIPTION**
Hepatitis B is a serious disease caused by a virus that attacks the liver. The virus, which is called hepatitis B virus (HBV), can cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure, and death.

Hepatitis B vaccine is available for all age groups to prevent hepatitis B virus infection.

**SIGNS & SYMPTOMS**
About 30% of persons have no signs or symptoms. Signs and symptoms are less common in children than adults.

- jaundice
- fatigue
- abdominal pain
- loss of appetite
- nausea, vomiting
- joint pain

**CAUSE**
- Hepatitis B virus (HBV)

**TRANSMISSION**
- Occurs when blood from an infected person enters the body of a person who is not infected.
- HBV is spread through having sex with an infected person without using a condom (the efficacy of latex condoms in preventing infection with HBV is unknown, but their proper use might reduce transmission), by sharing drugs, needles, or "works" when injecting drugs, through needlesticks or sharps exposures on the job, or from an infected mother to her baby during birth.

Persons at risk for HBV infection might also be at risk for infection with hepatitis C virus (HCV) or HIV.

**RISK GROUPS**
- Persons with multiple sex partners or diagnosis of a sexually transmitted disease
- Men who have sex with men
- Sex contacts of infected persons
- Injection-drug users
- Household contacts of chronically infected persons
- Infants born to infected mothers
- Infants/children of immigrants from areas with high rates of HBV infection ([country listing](#))
- Health-care and public safety workers with exposure to blood ([View current post-exposure prophylaxis recommendations](#))
- Hemodialysis patients

**PREVENTION**
- Hepatitis B vaccine is the best protection.
- If you are having sex, but not with one steady partner, use latex condoms correctly and every time you have sex. The [efficacy of latex condoms](#) in preventing infection with HBV is unknown, but their proper use might reduce transmission.
- If you are pregnant, you should get a blood test for hepatitis B. Infants born to HBV-infected mothers should be given HBIG (hepatitis B immune globulin) and vaccine within 12 hours after birth.
- Do not shoot drugs; if you shoot drugs, stop and get into a treatment program; if you can't stop, never share drugs, needles, syringes, water, or "works", and get vaccinated against hepatitis A and B.
- Do not share personal care items that might have blood on them (razors, toothbrushes).
- Consider the risks if you are thinking about getting a tattoo or body piercing. You might get infected if the tools have someone else's blood on them or if the artist or piercer does not follow good health practices.
| **VACCINE RECOMMENDATIONS** | • Hepatitis B vaccine has been available since 1982.  
• Routine vaccination of 0-18 year olds  
• Vaccination of risk groups of all ages |
| --- | --- |
| **LONG-TERM EFFECTS WITHOUT VACCINATION** | Chronic infection occurs in:  
• 90% of infants infected at birth  
• 30% of children infected at age 1–5 years  
• 6% of persons infected after age 5 years  
Death from chronic liver disease occurs in:  
• 15%–25% of chronically infected persons |
| **CONTRAINDICATIONS TO VACCINE** | A serious allergic reaction to a prior dose of hepatitis B vaccine or a vaccine component is a contraindication to further doses of hepatitis B vaccine. The recombinant vaccines that are licensed for use in the United States are synthesized by *Saccharomyces cerevisiae* (common bakers' yeast), into which a plasmid containing the gene for HBsAg has been inserted. Purified HBsAg is obtained by lysing the yeast cells and separating HBsAg from the yeast components by biochemical and biophysical techniques. Persons allergic to yeast should not be vaccinated with vaccines containing yeast. |
| **TREATMENT & MEDICAL MANAGEMENT** | • HBV infected persons should be evaluated by their doctor for liver disease.  
• Adefovir dipivoxil, interferon alfa-2b, pegylated interferon alfa-2a, lamivudine, entecavir, and telbivudine are six drugs used for the treatment of persons with chronic hepatitis B.  
• These drugs should not be used by pregnant women.  
• Drinking alcohol can make your liver disease worse. |
| **TRENDS & STATISTICS** | • Number of new infections per year has declined from an average of 260,000 in the 1980s to about 60,000 in 2004.  
• Highest rate of disease occurs in 20-49-year-olds.  
• Greatest decline has happened among children and adolescents due to routine hepatitis B vaccination.  
• Estimated 1.25 million chronically infected Americans, of whom 20-30% acquired their infection in childhood. |