

a series of articles written by medical professionals about the management and treatment of hepatitis C

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Hepatitis B in Children

Based upon CDC statistics, an estimated 80,000 persons in the USA were infected with the hepatitis B virus (HBV) in 1999. People of all ages, including children, can get hepatitis B and about 5,000 die per year from sickness caused by HBV. You can get hepatitis B by direct contact with the blood or body fluids of an infected person. This can occur by having sex or sharing needles with an infected person. A baby can get hepatitis B from an infected mother at childbirth. It is estimated that one out of 20 people in the United States will get infected with HBV some time during their lives. The risk is higher if your parents were born in Southeast Asia, Africa, the Amazon basin in South America, the Pacific Islands, and the Middle East. Hepatitis B is NOT spread through food or water or by casual contact. Persons at risk for HBV may also be at risk for HCV or HIV.

Pregnant women can transmit hepatitis B to their baby. Babies who get HBV at birth may have the virus for the rest of their lives, can spread the disease, and can develop cirrhosis of the liver and even liver

cancer. All pregnant women should be tested for HBV early in their pregnancy. Many states have laws mandating this testing. If the blood test is positive, the baby should receive the hepatitis B vaccine along with another medication, hepatitis B immune globulin (HBIG), at birth or very soon thereafter. The second dose of the vaccine should be given at 1-2 months of age and a third dose at 6 months of age. This important regimen may prevent transmission of HBV to the newborn.

The term "hepatitis B carrier" refers to people who are infected with HBV and never recover fully from the infection. These people carry the virus and can infect other individuals for the rest of their lives. In the United States about 1 million people carry HBV. Many people may carry HBV and not know it. Many people carry the HBV infection and have no symptoms at all. This is particularly true in children. Symptoms of HBV infection may include your eyes or skin turning yellow,

Alpha interferon, lamivudine and adefovir dipivoxil are drugs licensed by the FDA for the treatment of children with chronic hepatitis B.

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a loss of appetite, nausea, vomiting, fever, stomach or joint pain, and fatigue. Only a blood test can determine for sure if a person is infected with HBV.

The best protection against HBV infection is the hepatitis B vaccine. Scientific data shows the hepatitis B vaccine is safe and effective for infants, children and adults. Current data show that vaccine induced hepatitis B antibody levels decline with time. However, there is no need to obtain a booster dose of vaccine since immune memory (anamnestic anti-HBs response) will protect immunized individuals if exposed to HBV.

All children from 0-18 years of age should routinely receive the hepatitis B vaccine in the United States. Many states have laws mandating hepatitis B vaccination for school entry. The number of new infections per year of hepatitis B has declined from an average of 260,000 in the 1980s to about 78,000 in 2001. The greatest decline has happened among children and adolescents due to routine hepatitis B vaccination. The latest estimates suggest that there are 1.25 million chronically infected Americans with HBV, of whom 20-30% acquired their infection during childhood.

The treatment and medical management of HBV infection in children should be coordinated by individuals with expertise in the field. HBV infected children should be evaluated by their doctor for liver disease. Alpha interferon, lamivudine and adefovir dipivoxil are drugs licensed by the FDA for the treatment of children with chronic hepatitis B. Preliminary data suggests that children who have been infected for shorter periods of time, may respond better to these drugs than adults. Another drug, entecavir, has been approved for use in adults. Entecavir is not approved for use currently in children, but studies in children with chronic HBV infection are currently in progress.

In summary, HBV infection occurs in newborns, infants and children and is frequently unrecognized. Compared to the disease in adults, hepatitis B in children is frequently less severe but more likely to be prolonged. Children might have a better response to therapy, but this is based on preliminary data. Education is important to prevent transmission of hepatitis B infection to children. Vaccination holds the key to eradication of hepatitis B.



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The Mission of the Hepatitis C Support Project is to offer support to those who are affected by the hepatitis C Virus (HCV), hepatitis B Virus (HBV) and HCV coinfections. Support is provided broadly, through information and education, as well as access to support groups. The Project seeks to serve the HCV community as well as the general public.

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