

## CDC: HEPATITIS B

The Centers for Disease Control and Prevention (CDC) released a report in December 2006 updating its comprehensive strategy to eliminate the transmission of hepatitis B infection in the United States. With the decline of hepatitis B among children, the new strategy aims to increase the number of adults who are vaccinated against hepatitis B.

The hepatitis B virus (HBV) can cause lifelong infection, cirrhosis of the liver, liver cancer, liver failure, and death. Of the 5 hepatitis viruses, only hepatitis A is more prevalent in the United States.

Transmission of HBV is transmitted from human to human by blood or body fluids. The virus is spread through sexual contact, by sharing drug needles, or from an infected mother to her baby during childbirth. Symptoms of the disease include jaundice, fatigue, abdominal pain, nausea, joint pain, and loss of appetite. However, 30% of humans infected with HBV lack signs or symptoms.

Children are more likely than adults to develop long-term hepatitis B effects. Chronic hepatitis B infection occurs in 90% of infants infected at birth, 30% of children aged 1 to 5 years, and 6% of humans older than 5. The CDC reported 1.25 million chronically infected Americans in 2006. Death results from hepatitis B in 15% to 25% of those with chronic infection.

The number of reported hepatitis B cases has steadily declined since the introduction of the hepatitis B vaccine in 1982. The 5,494 reported cases of acute hepatitis B infection in 2005 were the lowest ever recorded; the highest was 26,664 cases in 1985. Because cases may not be recorded the CDC estimated that the total number of infections was 51,000 in 2005, a number markedly lower than the 260,000 cases per year in the 1980s.

The greatest decline in hepatitis B infection has been



in children. Beginning in 1982, the CDC implemented a successful strategy to immunize infants and children in the United States. The strategy included universal vaccination beginning at birth, screening of all pregnant women for HBV, and vaccinating children and adolescents not yet vaccinated. As a result, HBV infection in children under 15 decreased 98% between 1990 and 2005.

Even so, incidence rates of hepatitis B remain high in adults. In 2005, adults accounted for 95% of all new HBV cases. According to the CDC, this incidence reflects the lack of hepatitis B vaccination services for vulnerable adults.

The 2006 CDC report recommends vaccinating all high-risk adults against hepatitis B. These adults can be found in facilities which test and treat HIV/AIDS and STDs, drug-abuse treatment and prevention programs, and correctional institutions. The report also recommends providing education about HBV to adults in these settings.

With a new strategy in place, the CDC hopes to lower incidence rates among adults and eliminate the transmission of HBV in all age groups.

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*Bibles, Books and Shovels medical clinic in Kenya. Photo courtesy of ND Pitts PharmD.*



*Poster in Lagos. Photo courtesy of Pastor OL Edoro-Ighalo.*