

Hepatitis B

Key Facts

Hepatitis B occurs in countries worldwide, but has high prevalence in areas in sub-Saharan Africa, East and South-East Asia, the Eastern Mediterranean region, south and western Pacific islands, the Amazon basin and the Caribbean.

An estimated 360 million people are chronically infected with the hepatitis B virus. People with chronic hepatitis B infection have a 15%-25% risk¹ of dying prematurely from hepatitis B-related cirrhosis or liver cancer – often during the most productive adult years. In 2003, there were an estimated 600 000 deaths from chronic hepatitis B-related diseases.

The Hepatitis B virus is highly contagious. Most infections are through mother-to-child (perinatal) or child-to-child transmission (mainly through cuts, bites, scrapes and scratches). The disease is also spread by unsafe injection practices, unsafe blood transfusions, and sexual contact.

- The development of chronic hepatitis B infection occurs mainly in children infected before the age of five years. Of the people infected at a later age, only 6% are likely to develop the chronic form of the disease. Most adults who get hepatitis B recover and are then protected for life against the disease.
- As many as 90% of children infected perinatally and 30% of children infected before their fifth birthday go on to develop chronic hepatitis B infection.

Although a long-term treatment exists for chronic hepatitis B infection, it is very expensive and has only a 40%-50% success rate.

Hepatitis B immunization

A safe and effective vaccine against hepatitis B has been available since 1982. The vaccine is available as a monovalent (single) vaccine or in combination with other

vaccines including DTP, Hib, hepatitis A and injectable polio vaccine (IPV). See: <http://www.who.int/vaccines-documents/DocsPDF01/www598.pdf>

In 1992, WHO recommended that countries with a high hepatitis B disease burden introduce the vaccine in routine immunization programmes by 1995 and all countries by 1997. An additional target was added in 1993 – an 80% reduction in the incidence of hepatitis B carriers by 2001. Even when the initial high price of the vaccine (US\$150 for three doses) came down substantially, most low-income countries were unable to secure the funds needed to introduce the vaccine.

Before the launch of GAVI in 2000, only 12 of The Vaccine Fund-eligible countries, some of the world's poorest, had fully introduced hepatitis B vaccine in their routine immunization programmes. The GAVI partners set a new milestone to reach its hepatitis B immunization goals. This milestone is for hepatitis B vaccine (HepB) to be introduced in all countries with adequate delivery systems by 2007.

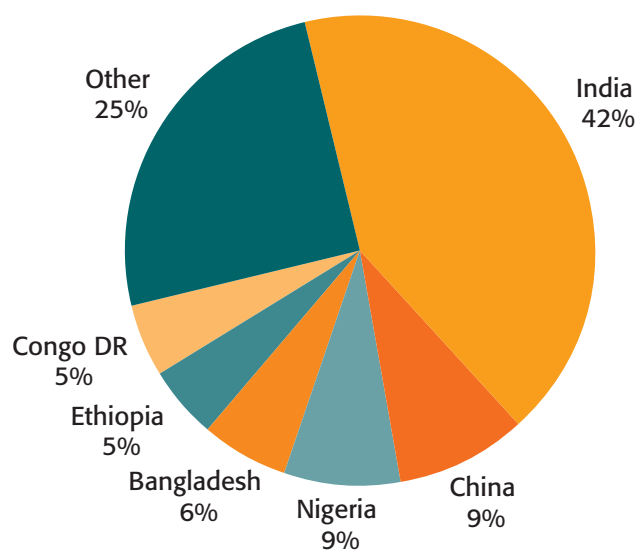
The role of GAVI

Since 2000, the GAVI Alliance has worked to ensure that hepatitis B vaccine is available and affordable in the 70 low-income countries which it supports. This includes:

- In countries with DTP3 coverage of 50%-80%, support for the purchase of hepatitis B vaccine (and safe injection equipment), for five years, together with a one-off payment of US\$100,000 to facilitate the introduction of the new vaccine.
- Working with vaccine manufacturers to ensure that adequate and affordable supplies of hepatitis B vaccine are available in low-income countries.
- Support to countries in developing a financial analysis as part of multi-year plans to ensure continued financing for hepatitis B vaccine once support ends.

¹ WHO, 2002

Children not vaccinated with HepB3 in GAVI Eligible Countries (based on WHO/UNICEF coverage estimates)*



The Challenge

In 2004, 153 countries were using hepatitis B vaccine in their routine infant immunization programme and the global hepatitis B vaccine coverage rate was 48%. Out of the nearly 65 million children not immunized with hepatitis B vaccine in 2004, nearly 55 million (84.5%) are in GAVI eligible countries. Among countries eligible for support from the GAVI Alliance, six countries have the greatest number of children not immunized: India, Nigeria, China, Bangladesh, Ethiopia and the Democratic Republic of Congo.

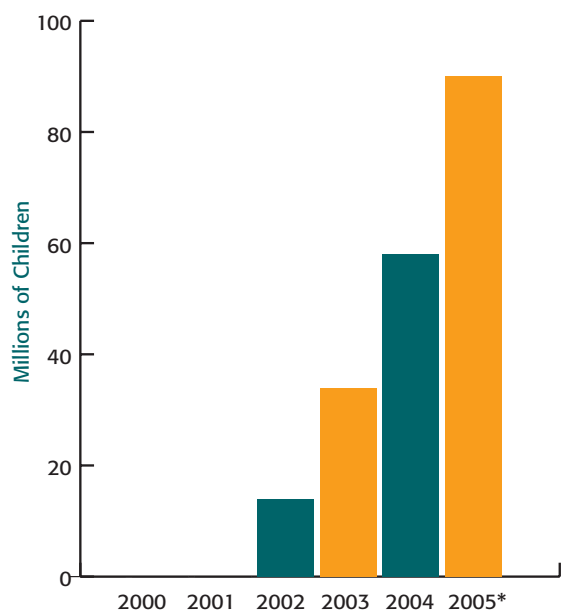
While all regions are increasing their average hepatitis B vaccine coverage rate, with a marked increase noted in the African and East Mediterranean regions, a substantial increase will only be possible in the South East Asian Region if India completes the introduction of the vaccine.

Progress to date

Of the 75 countries eligible for support from the GAVI Alliance, 52 had introduced hepatitis B vaccine by the end of 2004, compared to only 12 countries in 1999. In these countries, the hepatitis B vaccine coverage rate in 2004 was 37.9% compared to 4.9% in 1999. It is expected that by the end of 2008, 71 eligible countries will have introduced the vaccine.

According to current projections, GAVI Alliance support will have ensured that approximately 90 million additional children will have been immunized against hepatitis B by the end of 2005. This will result in an estimated 1.4 million future deaths averted.

Hepatitis B Coverage In 75 GAVI-eligible countries, 2000-2005*



Source: WHO/UNICEF data * Projected Results

* WHO, Department of Immunization, Vaccines and Biologicals, 2005.