

China is taking action to eliminate hepatitis B

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Viral hepatitis poses a significant global threat to human health and stands as the eighth leading cause of death worldwide. Disturbingly, China leads in both the number of cases and deaths from liver cancer attributed to viral hepatitis, as reported by the Chinese Foundation for Hepatitis Prevention and Control. Hepatitis B frequently progress into chronic hepatitis, and in severe cases, escalate into liver cirrhosis and cancer, imposing a substantial burden on healthcare systems.

Additionally, in the context of hepatitis B prevention and treatment, failure to initiate antiviral therapy promptly escalates the risks of developing liver cirrhosis and liver cancer, particularly as individual's age. In a concerted effort to combat this menace, the World Health Organization (WHO) formulated the Global Health Sector Strategy on Viral Hepatitis 2016–2021, aiming to eliminate viral hepatitis as a major public health concern by 2030.

Traditionally, China has a high incidence of hepatitis B. In response to this crisis, China has taken a series of positive and effective measures. According to the data collected from 1992 to 2001, China has a high prevalence of hepatitis B, with an HBsAg positivity rate of 10.0% [1]. However, due to persistent efforts in hepatitis B prevention and control, the positive rate of HBsAg dropped to 5% in 2020 [2]. This marked achievement led to China shedding its infamous status as “a major country for hepatitis”. In 1992, China became one of the first developing countries to implement a universal hepatitis B vaccination program for newborns and infants.

Figure 1 illustrates a consistent increase in the hepatitis B vaccination rates for newborns. By 2020, the first-dose

vaccination rate for hepatitis B reached an impressive 95%, while the full vaccination rate for infants soared to 99%. Consequently, the prevalence rate of hepatitis B among children under 5 years old in China plummeted to a mere 0.3%. Recognizing that mother-to-child transmission is an important mode of hepatitis B virus transmission, China formulated the Clinical Guidelines on Prevention of Mother-to-Child Transmission of Hepatitis B Virus in 2020 [3]. Since 1992, these efforts have prevented nearly 19 million children under the age of 5 from contracting chronic hepatitis B virus. These outcomes can be credited to the successful implementation of the hepatitis B immunization program strategy (Fig. 2). In addition, the inclusion of anti-hepatitis B virus drugs in the reimbursable drug list for health insurance and the National Centralized Drug Purchasing (NCDP) has significantly reduced costs and the burden of disease for hepatitis B patients.

In 2019, Guangdong province, a region with a high prevalence of hepatitis B in China, witnessed a striking scenario where hepatitis B cases constituted more than half of all viral hepatitis instances. This alarming statistic not only burdens the province with a heavy disease load but also imposes significant economic challenges due to the repercussions of long-term chronic hepatitis B. According to the Global Burden of Disease (GBD) 2016 report, Guangdong ranked first among the 33 provinces and regions in China concerning new hepatitis cases. In response to this critical situation, a team from Jinan University proposed an accelerated action plan to eliminate the threat of hepatitis in Guangdong Province. Their proposal includes implementing a pilot adult hepatitis B screening program in the province.

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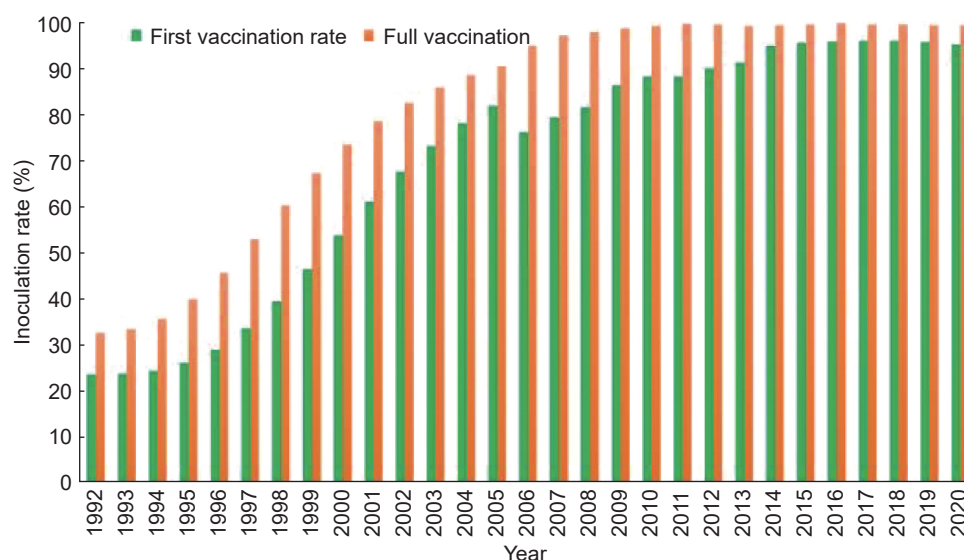


Figure 1 The hepatitis B vaccine coverage for newborns in China from 1992 to 2020.

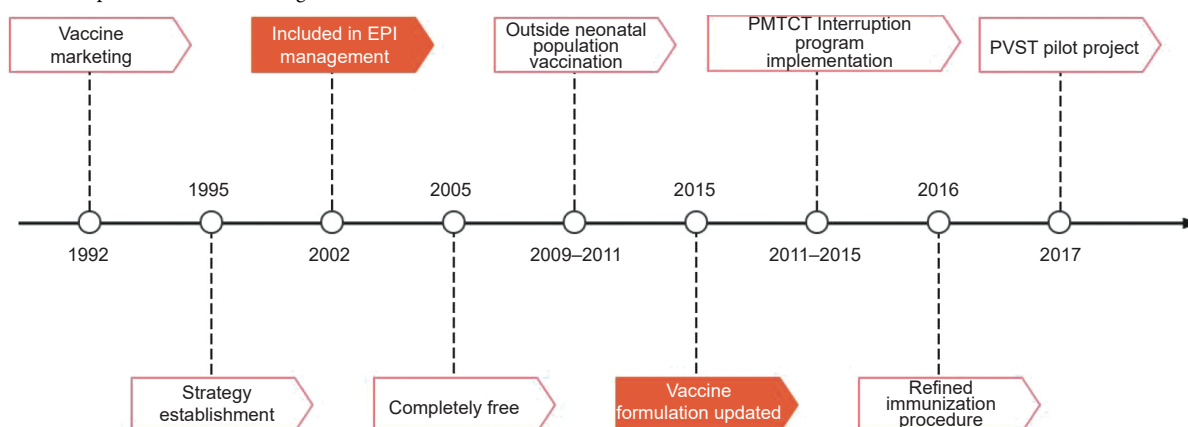


Figure 2 The evolution of China's hepatitis B vaccine immunization prevention strategy.

Following the screening, vaccination should be administered to individuals testing negative for hepatitis B antibodies. Additionally, early treatment strategies should be employed for HBsAg-positive patients. These measures are aimed at reducing the burden of disease and easing the financial pressure on hepatitis B patients in the province.

Nevertheless, there are significant challenges on the path to hepatitis elimination. In 2020, the hepatitis B screening rate in China stood at 19%, falling considerably short of the WHO's target of 30%. Several factors contribute to this disparity, including limited public awareness about hepatitis B, the social discrimination faced by people with hepatitis B, and the absence of a comprehensive national hepatitis B screening program. Taken together, these issues contribute to the low screening rates for hepatitis B in China. Moreover, as new HBV infections decline, the proportion of elderly individuals among hepatitis B patients in our country is rising. It is anticipated that the percentage of elderly individuals with chronic hepatitis B is gradually increasing. In addition, the dedicated fundings allocated for the elimination of viral hepatitis in China remain insufficient. This scarcity hampers the implementation of national initiatives. Consequently, it is apparent that eliminating hepatitis B remains a formidable and long-term challenge in the country. Addressing these issues will be critical to making significant progress in the fight against hepatitis B.

While China's efforts to eliminate hepatitis have yielded

some successes, our commitment to progress remains unwavering. In our relentless pursuit of eliminating hepatitis B, we will persist in taking proactive measures. With steadfast dedication, we firmly believe that China will ultimately achieve the goal of eradicating viral hepatitis as a significant threat to public health.

Conflict of interests

The authors declare no competing interests.

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