

Protecting newborns from hepatitis B in Vietnam

Expanding coverage of the hepatitis B vaccine birth dose

HEPATITIS B IN VIETNAM

Each year, an estimated 600,000 people die from hepatitis B infection, almost half in Asia. People infected as children are especially vulnerable—approximately 90 percent of infants infected during the first year of life develop chronic infections, and one in every four adults infected during childhood later die from virus-related conditions, including liver cancer.¹

In Vietnam, more than 8 percent of the population is chronically infected with hepatitis B, though most people are unaware of their own status.² As in many other endemic countries, mothers in Vietnam commonly pass the virus to their infants during childbirth. However, it is possible to prevent this mother-to-child transmission by giving a dose of vaccine to newborns within 24 hours of birth.³

To address the epidemic in Vietnam, Vietnam's National Expanded Program on Immunization (NEPI) introduced hepatitis B vaccine in 1997. By 2006, 64 percent of newborns were receiving the hepatitis B birth-dose vaccine within 24 hours. However, after suspicions that the vaccine was responsible for a number of infant deaths in 2006 were widely publicized, confidence in the vaccine plummeted. While an investigation found no link, by 2008 NEPI reported only 20 percent coverage of hepatitis B birth dose nationwide.

REBUILDING CONFIDENCE

To get Vietnam back on track with hepatitis B birth-dose vaccination, PATH joined hands with NEPI in 2009 to restore confidence in the vaccine. PATH worked with national and international partners to develop a national action plan and technical guidelines for hepatitis B vaccine implementation, and educated stakeholders—from the government to health workers to communities—on the dangers of hepatitis B and the benefits of vaccination. These efforts resulted in renewed support from the Ministry of Health for the hepatitis B birth-dose vaccine.

Building on successes at the national level, PATH and the Hai Duong Provincial Health Department piloted the national action plan and technical guidelines in 2011. The project trained nearly 1,000 health workers on vaccine use, including immunization safety, vaccine storage, and how to counsel pregnant women. To raise awareness, the project broadcast messages about the hepatitis B vaccine through local media. In just five months, the vaccination rate jumped to a remarkable 92 percent, up from only 20 percent in 2008. After project end, coverage levels in Hai Duong remain at almost 85 percent, which is high enough to effectively combat hepatitis B-related diseases in the province.



PATH/Katharine Bagshaw

HEPATITIS B IN THE MEKONG

Some 900 people die from hepatitis B-related causes each day in the WHO's Western Pacific Region. Health system weaknesses hinder reaching infants born at home and in hard-to-reach health facilities. In Cambodia, only 48 percent of children born at home or in referral hospitals receive hepatitis B birth-dose within 24 hours due to poor coordination between health facilities. While birth dose vaccination is being introduced in larger hospitals in Myanmar, scale-up to district and community health facilities is pending better infrastructure and staff capacity.

Health system readiness is key to scaling up birth-dose vaccination and reducing inequities in coverage. PATH's experience working at national, provincial, district, and commune levels can help. PATH and our partners are committed to sharing experiences, lessons learned, and research results to make a difference in the hepatitis B situation in the Mekong region.

VACCINATION SCALE UP

PATH then extended lessons learned to Thanh Hoa and Hoa Binh provinces. With training provided through the project, and with continued support from NEPI and the Northern EPI, almost 650 health workers are now more confident about explaining the benefits of the birth-dose vaccination and administering it. This confidence contributed to an increase in birth-dose vaccination rates in Thanh Hoa, from 51 to approximately 90 percent. In addition, with encouragement from PATH, the Thanh Hoa Provincial Preventive Medical Center (PPMC) mobilized resources to procure household refrigerators to store the vaccines for each district hospital.

The provinces also conducted community awareness-raising activities. In Hoa Binh, mothers have now begun to ask for the vaccination. As Dr. Nhat, director of the public district health center no. 21, explained, “More and more often during antenatal care visits, women are asking me if we have the hepatitis B birth-dose vaccination available.” These requests indicate an increased awareness of hepatitis B birth-dose vaccination among the general population.

LEVERAGING LESSONS LEARNED TO REACH EVERY CHILD

Hoa Binh continues to face challenges, however, because nearly 40 percent of all births occur at community health centers (CHCs) rather than hospitals. Given the lack of refrigeration and intermittent power in some centers, the supply of birth-dose vaccine is not reliable. To address this issue, PATH helped to develop three different models for CHCs, which are employed based on each facility’s characteristics, such as urban vs. mountainous, distance to the PPMC (where vaccines are stored), and cold chain system and power conditions. In the first month after CHCs in Hoa Binh began implementing the models, vaccination rates rose in CHCs from 17 percent to 90 percent.

PATH is leveraging lessons learned and insights gathered in Hai Duong, Hoa Binh, and Thanh Hoa to further revise the birth-dose model and expand coverage in lower-level facilities and hard-to-reach areas. To facilitate this expansion, additional national-level policies guiding the process must be put into place. In collaboration with NEPI, PATH is developing a national action plan that will guide nationwide hepatitis B birth-dose activities to reach the WHO-recommended 90 percent vaccination rate at national and district levels by 2017.⁴

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PATH/Pham Trung

CREATING LASTING CHANGE IN HOA BINH PROVINCE

Before she became pregnant, Bui Thi Hong (pictured above) had never heard of hepatitis B. In Vietnam’s Hoa Binh Province, where Hong lives, childhood infection rates are high, while prevention—the only recourse—has been dismally low.

Women in Hoa Binh often give birth in commune health centers instead of hospitals, making it challenging to reach newborns within 24 hours of birth. Getting the message out can be difficult.

But Hong heard the message and not long after she gave birth to her daughter, May, she asked her birth attendant to vaccinate the infant.

Efforts by PATH, in collaboration with government counterparts, instill confidence in health workers to provide vaccination services, including counseling to pregnant mothers. The result is improved access to care and increased rate of on-time hepatitis B birth-dose vaccination.

¹ WHO Western Pacific Region. Hepatitis B [fact sheet]. Manila; WHO; 2012.

² World Health Organization (WHO). Progress towards meeting the 2012 hepatitis B control milestone: WHO Western Pacific Region, 2011. *Weekly Epidemiological Record*. 2011; 19(86):177–188.

³ WHO Western Pacific Region. Hepatitis B [fact sheet]. Manila; WHO; 2012.

⁴ Hepatitis B Technical Advisory Group Meeting. Manila: June 2013.



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