Our Achievements

The Region as a whole and at least 30 of its countries and areas have reduced chronic infection rates in children to less than 2% — a milestone set for 2012. If immunization coverage rates are maintained, this translates to preventing almost 1 million chronic infections and 230 000 HB-related deaths among children born after 2012.

REGIONAL PROGRESS: CHRONIC HEPATITIS B VIRUS (HBV) PREVALENCE IN CHILDREN

Next Steps

Having reached the 2012 milestone of reducing infection rates to less than 2%, the Region is now striving to reduce infection rates to less than 1%. Reaching this goal will prevent an additional 240 000 chronic infections and 60 000 hepatitis B-related deaths.

The challenges and focus for this next phase of the initiative include:

1) To ensure that at least 95% of newborns delivered in health facilities receive HB vaccination at birth within 24 hours. This is feasible because there are technically no contraindications to vaccination, and professionals are available to administer vaccine in health facilities.

2) To collaborate with maternal and newborn health programmes to ensure that newborns delivered at home receive a post-natal care visit and birth dose vaccination soon after birth, preferably within 24 hours.

3) To strengthen routine immunization services. Three doses of HB vaccine are required to prevent mother-to-child transmission and birth dose vaccination could be the mother’s first encounter with childhood immunization programmes. This provides a key opportunity to communicate the critical nature of immunization to protect against HB and all other infections that can be prevented through vaccination.

Hepatitis B Control

In the WHO Western Pacific Region, an estimated 890 deaths occur every day due to chronic hepatitis B infection. Countries in WHO’s Western Pacific Region have the highest rates of chronic hepatitis B infection in the world. Hepatitis B (HB) virus is an important carcinogen; 25% of persons with chronic HB infection will die prematurely from liver cancer or cirrhosis due to the virus. The fight against this disease is a public health priority, leading all countries in the Region to adopt a resolution to reduce chronic hepatitis B infection rates in children through newborn and infant vaccination. This document describes the strategies, achievements, and next steps in controlling hepatitis B infection in the Region.

The Expanded Programme on Immunization (EPI) was established in 1974 through a World Health Assembly resolution (resolution WHA27.57) to build on the success of the global smallpox eradication programme and to ensure that all children in all countries benefit from life-saving vaccines.
Our Goal
To reduce chronic HB infection prevalence in five-year-old children to less than 1%. The year 2017 is being considered as the target year for this goal.

Our Strategic Areas
Reach high coverage immunization
Measure impact with HB serologic surveys
Verify achievements
Communication and advocacy

Prevention
In the Western Pacific Region, most chronic HB infections are acquired during birth or early childhood. These can be prevented with vaccination at birth followed by at least two more doses.

Coverage
Timely birth dose vaccination within 24 hours of birth and three-dose coverage are monitored and reported globally. Both birth-dose vaccination and three-dose coverage have increased steadily over the years in the Region (see figure below). It is estimated that timely birth-dose coverage should reach 90% and three-dose coverage should reach 95% for a country to reduce chronic HB infection rates in children to less than 1%.

Measuring Impact
Because liver disease or cirrhosis can take years to develop, it is not practical to measure the impact in preventing disease through disease surveillance systems. Instead, it is recommended for countries to conduct serologic surveys to measure the prevalence of chronic HB infection in children.

Approach
Conducting serologic surveys is a relatively cost-effective approach for evaluating impact compared to establishing a routine surveillance system. Nationally representative surveys can often be conducted by spending two to three weeks in the field, depending on the number of survey teams. Approximately 20 of the 37 countries and areas of the Region have conducted HB serologic surveys in the last 10 years.

Verification
In 2007, the Region established a standard process for determining whether the control targets have been met. This process is centered around a 10-person HB Expert Resource Panel (ERP) representing independent experts on HB epidemiology, laboratory science and survey methodology.

Requirements
When a country has met the requirements of at least five years of high vaccination coverage and has conducted a national serologic survey showing evidence of meeting HB targets, the WHO verification process can be started. As of 2013, 10 countries have been officially verified as having reached the HB control goal.

Communication and Advocacy
Partners in Hepatitis B Control
Partners are an integral part of hepatitis B control in the Region. The governments of Australia and New Zealand provided financial support, while WHO and UNICEF provided technical support for the introduction of hepatitis B vaccine in 13 Pacific Island countries in the mid-1990s. This project provides a model of sustainable donor support that can make an impact.

Starting in 2002 the GAVI Alliance began supporting hepatitis B vaccine introduction or expansion in seven countries in the region. Other key partners include the Burnet Institute of Australia, the governments of Japan and Luxembourg, PATH, Stanford University’s Asian Liver Center, UNICEF, the United States Centers for Disease Control and Prevention, and the Zeshan Foundation in China, Hong Kong. In addition, the Victorian Infectious Diseases Reference Laboratory in Melbourne, Australia, was established as the Western Pacific Region’s regional reference laboratory for hepatitis B in 2010.

World Hepatitis Day
In 2010, the World Health Assembly established 28 July as World Hepatitis Day, one of eight mandated public health days. The Region and countries have since capitalized on this day by raising awareness of the Western Pacific Region’s HB control initiatives.