World Hepatitis Day
Hepatitis vaccination in Latin America and the Caribbean

Background and current situation
The World Health Organization (WHO) and the Pan American Health Organization (PAHO), through the PAHO’s Technical Advisory Group (TAG), recommend universal hepatitis B vaccination as a main strategy for control of hepatitis and its severe consequences. Additionally, PAHO recommends hepatitis B routine vaccination among health workers.

In Latin America and the Caribbean, the introduction of hepatitis B vaccine was progressive, although most of the countries (26) introduced the vaccine between 1997 and 2000. In 2009, all countries and territories of the Region, with exception of Haiti, had introduced hepatitis B vaccine in their routine programs. This year, the vaccine was officially introduced in Haiti childhood immunization program. Also 13 countries and territories have included birth dose in their immunization programs. Countries have introduced this vaccine using different ways, being the pentavalent vaccine (DTP+Hib+Hep B) the most used combination (35 countries and territories). When it comes to hepatitis B/pentavalent third dose vaccination coverage levels, in 2009, they were higher than 90% at regional level. Information on vaccination coverage levels among health workers is insufficient in the Region.

To date, only three countries in Latin America and the Caribbean (Argentina, Panama and Uruguay) have introduced hepatitis A vaccination in their childhood immunization programs. However, result have been very positive and other countries in the Region are currently considering their use.

During PAHO’S TAG on Immunizations meeting, celebrated in Buenos Aires city on 6th-8th July 2011, hepatitis A and B were reviewed and technical recommendations were given to the countries. Next section presents a summary of them.

Observations and recommendations of PAHO’s TAG on Immunizations (Buenos Aires, 6th-8th July 2011)

Hepatitis A
The Gates Foundation-funded Global Burden of Disease (GBD) Study includes death and disability-adjusted life year (DALY) estimates due to hepatitis A virus (HAV) infection. As part of this project, data on the seroprevalence of HAV infection was reviewed systematically according to the GBD Study guidelines. The report was composed by a document published by WHO and a text published by “Vaccine” journal. 2,932 documents were examined and 637 were selected and classified in the 21 regions of the GBD. It was observed that many countries are
experiencing epidemiological transitions that may leave many persons at risk for infection and increase the benefits of use of hepatitis A vaccine. This data has been used in disease modeling to derive death and DALY estimates.

The age-specific hepatitis A vaccine prevalence was used to model age-specific forces of infection. Overall, the results suggest an increase from 117 million infections in 1990 to 121 million infections in 2005 (the rate decreased slightly but the absolute numbers increased because of the increase of the world population size). Deaths increased from 30,283 in 1990 to 35,245 in 2005. Beyond pure burden of disease estimations, economic analyses might be particularly relevant to intermediate countries and emerging economies that may face hepatitis A control issues in the coming years.

The WHO has noted an increase in the number of countries universally using hepatitis A vaccines among young children. These countries include: Argentina, Bahrain, China, Greece, Iraq, Israel, Kazakhstan, Panama, Saudi Arabia, the United States, and Uruguay with many more countries using the hepatitis A vaccine in some parts of the country. It is important to take note of the decision-making processes and experiences of some countries, especially the single-dose use of hepatitis A vaccine in Argentina. Countries that have introduced universal hepatitis A have noted a dramatic decrease in acute hepatitis A incidence.

**Hepatitis B**

Tremendous progress has been made in the prevention of hepatitis B related morbidity and mortality globally. The WHO last revised its position with respect to hepatitis B vaccines in 2009. In this document, the use of the birth dose (hepatitis B vaccine within 24 hours of birth) was recommended for all countries. Countries were also encouraged to develop goals for hepatitis B control. PAHO will document the impact of hepatitis B vaccination and will review the feasibility to establish a goal for elimination of transmission of hepatitis B in the Americas.

The WHO has developed guidance on conducting serosurveys of hepatitis B surface antigen (HBsAg) among children as one method of documenting impact. Other methods include acute and chronic HBV infection surveillance and disease registry data (for cirrhosis, liver cancer).

Both the WHO’s Western Pacific and Eastern Mediterranean Regions have adopted time-limited goals for hepatitis B control based on HBsAg prevalence in children. Other regions are in various stages of setting similar goals. The Western Pacific Region has a validation process for assessing the progress of HBV control using country submitted seroprevalence data and coverage data and review by an Expert Review Panel. The Eastern Mediterranean Region has a comprehensive approach that includes immunization as well as screening, care and treatment.

The 2010 World Health Assembly adopted Resolution 63.18 as sponsored by Brazil, calling for the WHO to adopt a comprehensive approach to hepatitis prevention and control, and to commemorate World Hepatitis Day on 28 July. The WHO’s Central Office established a hepatitis unit in May 2011 and developed a strategy for an integrated approach to the disease. PAHO has also taken actions and get involved in several interventions through an internal working group collaborating with the Member States and some external partners.

**Recommendations**

- All countries are encouraged to maintain high hepatitis B vaccine coverage and adhere to the 2009 WHO recommendation of using a birth dose (within 24 hours of birth) of the vaccine.
- Countries are encouraged to conduct epidemiological and cost-effectiveness studies for the introduction of hepatitis A vaccine to support evidence-based decisions in light of existing public health priorities in the countries.
- Countries in the Americas are urged to join the celebration of the Global Hepatitis Day on 28 July as a day to commemorate the accomplishments in the control of hepatitis and to advocate for further efforts.