WHO-UNICEF JOINT STATEMENT ON VACCINE DONATIONS (WHO/IVB/10.09)

This WHO-UNICEF Joint Statement is now online. The statement is intended to provide guidance to achieve "Good Donations Practice" for both vaccine donors and recipients, and to serve as a basis for preparing national or institutional donations guidelines.

REVISED WHO POSITION PAPER ON PERTUSSIS VACCINES PUBLISHED:
29/10/2010 from Alison Brunier, WHO/HQ:

A revised WHO position paper on pertussis vaccines was published in the Weekly Epidemiological Record on 1 October 2010. The document incorporates the most recent developments in the field of pertussis vaccines and replaces the position paper on pertussis vaccines published in January 2005.

The main aim of pertussis vaccination is to reduce the risk of severe pertussis in infancy. At least 90% coverage of infants with 3 doses of high quality pertussis vaccine remains the programme priority worldwide, particularly where pertussis still poses a serious health problem in infants and young children.

Protection against severe pertussis in infancy and early childhood can be obtained after a primary series with whole-cell (wP) or acellular (aP) vaccines. Although local and systemic reactogenicity is more commonly associated with wP-containing vaccines, both aP and wP-containing vaccines have an excellent safety record with regard to serious adverse events. The aP-containing vaccines continue to be significantly more expensive than wP-containing vaccines, however, and for many countries there is insufficient marginal benefit to consider changing from wP to aP-containing vaccines.

WHO recommends a 3-dose primary series with the first dose administered at 6 weeks of age, and subsequent doses given 4-8 weeks apart, at 10-14 and 14-18 weeks of age. The last dose of the recommended primary series should be completed by the age of 6 months. All infants, including HIV-positive individuals, should be immunized against pertussis. A booster dose, given at least 6 months after the last primary dose, is recommended for children 1-6 years of age, preferably during the second year of life.

Although vaccination can prevent pertussis in adolescents and adults, there is insufficient evidence to support the addition of vaccine boosters in these age groups for achieving the primary goal of reducing severe pertussis in infants.

Countries with demonstrable nosocomial transmission are encouraged to vaccinate health-care workers, particularly maternity and paediatric staff, if economically and logistically feasible. The revised position paper in English and French, together with background material, can be downloaded here. Arabic, Chinese, Russian and Spanish translations will be available in due course.
CCL TASKFORCE GUIDANCE SUBGROUP WORKSHOP:
29/10/2010 from Kate Bai, UNICEF

The Cold Chain and Logistics (CCL) Taskforce Guidance Subgroup held a workshop on 19 to 22 October 2010 to help meet its aim to “collect and review available guidance to identify overlaps, conflicts and areas where new guidance is needed, or where current guidance requires updates based on new developments.” Participants representing most of the agencies (AMP, CDC, CHAI, PATH, UNICEF, WHO) involved in CCL support, as well as consultants who provide this support engaged in plenary and small group discussions to reach consensus on the guidance needed for the range of CCL-system tasks. The aim is to finalize guidance materials, share best practices in the field of cold chain and vaccine management, and make these resources available on the web for consultation and dissemination. The group noted that the current guidance is not sufficiently focused on the needs of the target audience, and also identified the need for active and focused approaches to dissemination using multiple methods. If you wish to contribute to the process of building the guidance process, please contact Kate Bai.

AFRICAN REGION

AFRICA SEIZES CHANCE AGAINST POLIO:
29/10/2010 from Rod Curtis, WHO/HQ:

More than 72 million children to be immunized across 15 countries to tackle remaining risks

FIFTEEN countries across Africa are holding a synchronized mass immunization campaign this week to reach 72 million children under five-years of age, and to capitalize on an unprecedented chance to drive out polio from the continent. Some 290,000 vaccinators have been mobilized to go door-to-door to deliver two drops of oral polio vaccine (OPV) in these areas considered at “highest risk” of polio transmission.

Africa’s leaders demonstrated unprecedented cooperation and commitment to carry out a series of synchronized immunization activities (SIAs) in 2009 and in March and April, 2010, following the spread of the disease from Nigeria into 23 countries across west and central Africa and in the Horn of Africa. As a direct result of these SIAs, the polio outbreaks have slowed to a trickle. Across west Africa, only Liberia and Mali have recorded any cases in the past five months, while Nigeria – the only country in Africa never to have stopped polio transmission – has slashed polio by 98% in 2010.

However, recent weeks have shown the risks of not completing eradication, with a September case in Liberia confirming residual transmission, a new importation of type 3 wild poliovirus into Mali (the first since 2001), and a new case in Uganda, which had been polio-free for more than a year. Rapid assessments are being conducted to formulate an emergency response plan to these cases. Additional mop-up rounds will be held, and all countries in the West Africa sub-region will conduct two full campaigns in February and March.

Angola (25 cases) currently has the only expanding outbreak in Africa, which has spilled over into neighboring provinces in the Democratic Republic of the Congo (28 cases). Together, these two countries have recorded 48 of Africa’s 58 cases in the past six months and represent the greatest threat to polio eradication on the continent. However, the virus in DR Congo remains geographically restricted and in Angola, steps by the Federal Government to close vaccination coverage gaps in the most recent campaign saw the percentage of missed children in Luanda fall from 30% to 13%.

DR Congo and Angola will launch immunization activities from 28 October and 29 October, respectively, while the 10-country synchronized campaigns are being launched from 26 October in Cote d’Ivoire, from 28 October in Benin, Burkina Faso, Gambia, Guinea, Mali, Mauritania, Senegal and Sierra Leone, and from 29 October in Liberia. Chad and Sudan will launch immunization activities on 1 November, while last week (from 23 October), Nigeria immunized more than 29 million children in 20 high-risk northern states.
UPDATE FROM WHO-AFRO INTER-COUNTRY SUPPORT (IST) TEAM FOR CENTRAL AFRICA
29/10/2010 from Auguste Ambendet, WHO AFRO:

From 5 to 9 October 2010, the IST for Central Africa conducted a training of 27 trainers (ToT) in Central African Republic, following the MLM course model. The national EPI programme will conduct training of EPI staff throughout the country in the coming days.

The IST for Central Africa conducted the post evaluation introduction of pentavalent vaccine in Sao Tome & Principe from 4-11 October 2010. The introduction process followed by the national team was satisfactory.

The IST for Central Africa has launched the EPI external review in the Republic of Congo/Brazzavile in early October 2010. The review includes a coverage survey and an assessment of the cold chain storage and vaccine management.

INTERNATIONAL EPI EVALUATION IN NICARAGUA
29/10/2010 from Jennifer Sanwogou, WHO PAHO:

An International Evaluation on the Expanded Program on Immunization (EPI) took place from 4 to 15 October 2010 in Nicaragua. The objectives of the evaluation were to determine the capacity and needs of the EPI in order to respond to the challenges of: maintaining eradication, elimination and control of vaccine preventable diseases; sustaining new vaccines introduction; transitioning infant vaccination to family vaccination; and maintaining vaccinations in the political agenda.

Twenty-nine municipalities in eight of the country’s departments were visited by a team of 31 health professionals, 14 of which were Nicaraguan, and 17 of which were internationals, all experts in immunizations and epidemiological surveillance. A total of 36 municipalities and 102 health care centers were visited and 468 persons were interviewed.

The evaluation team concluded that Nicaragua’s EPI program benefits from strong political support based on the principle that all individuals have the ‘Right to Health’. The budget of the country’s Ministry of Health guarantees financial resources for EPI’s vaccines procurement and supplies. Health users are highly satisfied with the care they receive in health centers and are used to bringing their children’s vaccination cards with them when visiting health care centers. Specific considerations included political priority assurance with regards to financial and human resources to improve the regular vaccination program; and the creation of a legal framework that will increase the notification of epidemiological surveillance activities. The activities to implement the recommendations were incorporated in a five-year comprehensive plan of action. Specific considerations and recommendations were included in the evaluation report.

WORKSHOPS ON MAINTAINING INJECTION AND VACCINE SAFETY
29/10/2010 from Nora Lucía Rodríguez Morales, WHO PAHO:

PAHO recently conducted two workshops on Vaccine and Injection Safety:

1. A workshop was held in Apaneca, El Salvador from 4 to 8 October 2010, where 52 participants were in attendance. In addition Guatemala sent two participants to the workshop. The participants were immunization staff, epidemiologists, and medical and nursing officers.

2. From 11 to 15 October 2010, PAHO conducted an International workshop on Injection and Vaccine Safety, with 65 participants from 7 countries (Brazil, Colombia, Chile, Ecuador, Peru, Uruguay, Venezuela). The participants were immunization staff, medical and nursing officers, and personnel with responsibilities for investigating adverse events following immunization (AEFI).

The workshops topics covered investigation of AEFI, management and clinical aspects of AEFI, causality evaluation, best practices on Injection Safety, best storage practices, and use of new technologies for autodisable syringes.

In both workshops pre and post test were administered. At the end of workshops participants were urged to improve supervisory practices and to share the information from the workshop with their colleagues for improving vaccine and safe injection practices.
The 50th Directing Council of the Pan American Health Organization (PAHO), which meets every year to set the priorities for Pan-American cooperation in health and to guide PAHO’s technical cooperation in Member States, took place in Washington, D.C. from 27 September to 1 October 2010. Several activities related to immunization were carried out over the course of the week.

On 27 September, in accordance with Resolution CSP27.R2 (2007), Brazil became the first country of the Region of the Americas to submit a report to PAHO Director, Dr. Mirta Roses, verifying the elimination of measles and documenting significant advances in the interruption of endemic rubella virus transmission in the country.

On 28 September, health ministers from the Americas celebrated major milestones in fighting vaccine-preventable diseases. The first session focused on the 30th anniversary of smallpox eradication and its legacy in public health programs. Drs. D.A. Henderson and Ciro de Quadros, who were key players in smallpox eradication efforts, participated in the session. A statue of Dr. Edward Jenner, officially on loan from the Edward Jenner Museum in Berkeley, England, was unveiled at the closing of the session to commemorate the 30th anniversary of smallpox eradication.

Also on 28 September a progress report on rubella and congenital rubella syndrome (CRS) elimination was presented to the PAHO Member States, highlighting that the Region of the Americas recently celebrated the first anniversary of the interruption of rubella virus transmission. During the session, several countries commented on the significant advances in the regional initiative at the country level and requested the inclusion of a discussion of rubella and measles global elimination goals during the Sixty-fourth World Health Assembly in 2011. A ceremony was held to recognize several ministries of health and strategic partners whose continued contributions over decades have been vital to achieving the regional goal of rubella and CRS by 2010. These recognitions included the Ministry of Health of Costa Rica, the Spanish Ministry of Health and Social Policy, Canadian International Development Agency, the United States Centers for Disease Control and Prevention, and the Serum Institute of India. These contributions have also been fundamental in maintaining measles elimination efforts in the Region, as well as in the overall strengthening of national immunization programs in our countries. During these immunization sessions, Dr. Mirta Roses took the opportunity to discuss the impact of the immunization programs on the health of the Region’s population. Several participants, including Dr. Esperanza Martinez, minister of health of Paraguay, highlighted the role of the PAHO’s Revolving Fund for Vaccine Procurement in making quality vaccines available to all Member States at accessible prices.

Finally, on 29 September, Resolution CD50.R5 on the strengthening of immunization programs was approved. The Resolution recognizes the significant progress made by countries in the field of immunization. The Resolution urges countries to endorse national immunization programmes as a public good and support the Regional Strategy for Immunization. The Director is requested to continue providing technical support to strengthen national capacity, to make evidence-based decisions through the ProVac initiative, to strengthen the Revolving Fund, and to support advocacy and social mobilization efforts in light of growing anti-vaccination sentiments.
Country Information by Region

EASTERN MEDITERRANEAN REGION

NRA ASSESSMENTS IN IRAN AND EGYPT:
29/10/2010 from Lahouari Belgharbi, WHO/HQ:

WHO has conducted an international assessment of the vaccine regulatory system in the Islamic Republic of Iran (May 2010) and in Egypt (October 2010). Both NRAs were found to be functional against the WHO NRA published indicators.

The Iranian NRA is represented by the Deputy Minister of Food and Drugs who is the official licensing authority that has a supervisory role over all regulatory functions. There is a National Control Laboratory (FDCL) in charge of the testing. The National Ethic Committee which deals with clinical trials and the National Immunization Programme dealing with Adverse Events Following Immunization (AEFI), have both been assessed. The WHO team was composed of experts from China, Egypt, EMRO, Germany, Indonesia, Thailand, and HQ, and was impressed by the achievements and recommended increased support to the NRA and relevant institutions in order to sustain the progress. A re-assessment is planned for May 2012.

The Egyptian regulatory system represented by the Egyptian Drug Authority (EDA) includes three main institutions: Central Pharmaceutical Administration (CAPA), National Organization for the Drug Control and Research (NODCAR) and National Organization for the Research and Control of Biologicals (NORCB). However only two organizations lead the regulation of biologicals including vaccines: CAPA and NORCB. There is also involvement of the National Research Ethic Committee that deals with clinical trials as well as the National Immunization Programme which deals with Adverse Events Following Immunization surveillance (AEFI). The WHO team was composed of experts from China, Indonesia, Thailand, USA, EMRO and HQ. The team congratulated the Government of Egypt for its continuous commitment towards the vaccine regulatory system and issued several recommendations to sustain the current achievements. A re-assessment is planned for October 2012.

SOUTH EAST ASIA REGION

TRAINING WORKSHOP FOR INDONESIA’S NATIONAL IMMUNIZATION TECHNICAL ADVISORY GROUP (NITAG) HELD IN BOGOR, INDONESIA
29/10/2010, from Marine Prado, AMP:

The WHO South East Asia Regional Office (SEARO) and the SIVAC (Strengthening Independent Immunization Vaccine Advisory Committees) Initiative conducted a training workshop with the Indonesian Technical Advisory Group on Immunization (ITAGI) in Bogor, Indonesia from 7 to 8 October, 2010. The workshop aimed to address possible ways to strengthen the ITAGI. Presentations were made and discussions were held on existing national NITAG models (Canada, France, USA), the roles and responsibilities of NITAGs, tools for vaccine prioritization, the current status of ITAGI, the role of immunization stakeholders (e.g., national regulatory authorities, AEFI committees, ethical review committees, WHO, UNICEF, vaccine industry), and support available from WHO and SIVAC. In breakout groups, participants came up with an outline for how the ITAGI will conduct its work over the next two years.

For more information, please contact: Batmunkh Nyambat (SIVAC, International Vaccine Institute, IVI) or Nihal Abeyesinghe (WHO/SEARO).
Country Information by Region

**SOUTH EAST ASIA REGION**

**CAPACITY BUILDING ON AEFI MONITORING AND CAUSALITY ASSESSMENT IN SOUTH EAST ASIA**

29/10/2010 from Madhava Ram. B, WHO SEARO:

Adverse Events Following Immunization (AEFI) are rare, however a surveillance system for monitoring their occurrence is an essential element of an immunization programme. As these events are always temporally associated with vaccinations, investigating into confirming or rejecting the existence of a causal link is an important aspect of strengthening AEFI surveillance systems. The damage caused by AEFI to individuals as well as to the credibility of national immunization programmes could be minimized by having a good surveillance system and timely implementation of appropriate actions in managing them. In the SEA Region, a birth cohort of almost 40 million children receives vaccines (both conventional and new) through routine EPI programmes and mass immunization campaigns. Therefore, it is essential to have a robust, sensitive and responsive AEFI monitoring and surveillance system in all member countries.

The National Regulatory Authority (NRA) interacts with the immunization programme and monitors vaccine safety & quality through its regulatory functions. The VPD Surveillance systems in member countries provide information on AEFI to the national EPI programme. SEARO/IVD provides technical support to member countries to review AEFI monitoring and surveillance systems.

Since 2008, WHO has assisted Member States in the region in training of the members of the National AEFI committees, NRAs, other implementing agencies of Ministries of Health, physicians, persons responsible for public education, social mobilization and support for vaccination and representatives of other agencies who support regional and national activities in vaccine safety. The training focuses on assessing the AEFI monitoring system, determining the strengths and weaknesses and foraging consensus on mechanisms to resolve issues of national concern. The trainings have a participatory, self learning and problem solving approach around the AEFIs that have occurred locally in the recent past. The topics discussed include concepts and definition, AEFI system of the respective member country, methods for monitoring AEFI, the framework of investigating AEFI clusters, analysis of vaccine safety data, key elements of causality assessment, procedures for optimal causality assessment, global initiatives to support causality assessment, outcomes of AEFI monitoring and risk communication in relation to vaccination programmes.

Upon completion of the training, participants contribute to the development or strengthening of a national framework to collect, collate, analyze, interpret AEFI data and conduct causality assessment. Two such advanced causality assessment trainings were conducted in Bhutan (27 September to 1 October 2010) and in Bangladesh (10 to 14 October 2010). Each had 20 participants per programme, and two other similar trainings have been scheduled for early 2011 in Thailand and in Myanmar.

**WESTERN PACIFIC REGION**

**WPRO AND SIVAC TO HOLD WORKSHOPS IN SEOUL, SOUTH KOREA**

29/10/2010 from Marine Prado, AMP:

The WHO Western Pacific Regional Office (WPRO) and the SIVAC Initiative will hold an inter-country workshop on NITAGs at the International Vaccine Institute (IVI) in Seoul, South Korea from 29 to 30 November 2010. The purpose of the two-day event is to review progress in establishing surveillance networks and to provide an update on the status of NITAGs in the Western Pacific Region. The workshop is a continuation of the dialogue between WPRO/WHO and the SIVAC Initiative to strengthen decision making related to immunization through the establishment or strengthening of NITAGs. The session will be followed by a WPRO workshop, 1 to 2 December, 2010, focused on the introduction of new vaccines.

Participating countries will include Cambodia, China, Fiji, Laos, Mongolia, Papua New Guinea, Philippines, and Vietnam. These WPRO member states are facing an unprecedented array of new vaccines and technologies along with an increasing number of disease-specific experts at global, regional, and national level amid scarce human and financial resources for health.

For more information, please contact: Batmunkh Nyambat (SIVAC, IVI) or Yoshihiro Takashima (WHO/WPRO). For more information on the SIVAC Initiative, please visit the SIVAC website: [http://www.sivacinitiative.org](http://www.sivacinitiative.org).
Country Information by Region

WESTERN PACIFIC REGION

MEASLES CAMPAIGN IN CHINA
29/10/2010 from Lisa Cairns, WHO WPRO China:

From 11 to 20 September 2010, China conducted a nationwide measles supplementary immunization activity, with a target population of approximately 100 million children. Six provinces targeted children aged eight months through 14 years old, five provinces covered children aged eight months through six years of age and the remaining 20 provinces covered children aged eight months through four years. One dose of measles vaccine was offered to all children in the targeted age groups, regardless of whether they were local residents or migrants and regardless of their previous immunization and disease history. During the campaign, three teams of international experts from WHO headquarters, WPRO, PAHO and the China office as well as from US CDC and UNICEF participated with national supervision teams in field reviews in Shanghai, Henan and Sha'anxi provinces. The campaign has gone very smoothly due to strong leadership and technical support from all levels of government, as well as close cooperation between different departments. Prior to the campaign, the WHO country office worked closely with national counterparts on training, risk communication and social mobilization.
### Regional Meetings & Key Events Related to Immunization

<table>
<thead>
<tr>
<th>Title of Meeting</th>
<th>Start</th>
<th>Finish</th>
<th>Location</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2010 Meetings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Parliamentarian Symposium on Sustainable Immunization Financing</td>
<td>29-Oct</td>
<td>29-Oct</td>
<td>Abuja, Nigeria</td>
<td>AFRO</td>
</tr>
<tr>
<td>First Regional Training Workshop on the New Vaccine Management Assessment Tool (EVM)</td>
<td>30-Oct</td>
<td>04-Nov</td>
<td>Cairo, Egypt</td>
<td>EMRO</td>
</tr>
<tr>
<td>Immunization Data Quality Assessment</td>
<td>01-Nov</td>
<td>12-Nov</td>
<td>Jamaica</td>
<td>PAHO</td>
</tr>
<tr>
<td>Immunization Practices Advisory Committee (IPAC)</td>
<td>04-Nov</td>
<td>05-Nov</td>
<td>Geneva, Switzerland</td>
<td>Global</td>
</tr>
<tr>
<td>Strategic Advisory Group of Experts (SAGE) Meeting</td>
<td>09-Nov</td>
<td>11-Nov</td>
<td>Geneva, Switzerland</td>
<td>Global</td>
</tr>
<tr>
<td>First Meeting of the Presidents of the National Commissions to Document and Verify Measles, Rubella, and CRS Elimination</td>
<td>Nov</td>
<td>Nov</td>
<td>Washington, D.C., USA</td>
<td>PAHO</td>
</tr>
<tr>
<td>Caribbean EPI Managers’ Meeting</td>
<td>15-Nov</td>
<td>19-Nov</td>
<td>TBC</td>
<td>PAHO</td>
</tr>
<tr>
<td>Malaria Vaccine Advisory Committee meeting 2010</td>
<td>22-Nov</td>
<td>24-Nov</td>
<td>TBC</td>
<td>Global</td>
</tr>
<tr>
<td>Intercountry Meeting on Measles/Rubella Control/Elimination</td>
<td>28-Nov</td>
<td>01-Dec</td>
<td>Sharm El Sheikh</td>
<td>EMRO</td>
</tr>
<tr>
<td>Planned Joint SIVAC/WPRO Intercountry Workshop on NITAGs and new vaccines</td>
<td>29-Nov</td>
<td>30-Nov</td>
<td>Seoul, Republic of Korea</td>
<td>WPRO</td>
</tr>
<tr>
<td>Technet Meeting</td>
<td>30-Nov</td>
<td>02-Dec</td>
<td>Kuala Lumpur, Malaysia</td>
<td>Global</td>
</tr>
<tr>
<td>Preparatory meeting for regional vaccination week 2011</td>
<td>03-Dec</td>
<td>03-Dec</td>
<td>Sharm El Sheikh</td>
<td>EMRO</td>
</tr>
<tr>
<td>Intercountry Training Workshop on Surveillance of Vaccine Preventable Diseases and Monitoring &amp; Evaluation of National Immunization Programmes</td>
<td>04-Dec</td>
<td>06-Dec</td>
<td>Sharm El Sheikh</td>
<td>EMRO</td>
</tr>
<tr>
<td>Annual Regional Conference on Immunization (ARCI) and the Annual African Regional Inter-Agency Coordination Committee</td>
<td>06-Dec</td>
<td>09-Dec</td>
<td>Ouagadougou, Burkina Faso</td>
<td>AFRO</td>
</tr>
<tr>
<td>Subregional Working Group for West and Central Africa</td>
<td>10-Dec</td>
<td>10-Dec</td>
<td>Ouagadougou, Burkina Faso</td>
<td>AFRO</td>
</tr>
<tr>
<td>Global Advisory Committee on Vaccine Safety (GACVS)</td>
<td>08-Dec</td>
<td>09-Dec</td>
<td>Geneva, Switzerland</td>
<td>Global</td>
</tr>
<tr>
<td><strong>2011 Meetings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subregional Working Group for West and Central Africa</td>
<td>Feb</td>
<td>Feb</td>
<td>Sao Tome and Principe</td>
<td>AFRO</td>
</tr>
<tr>
<td>WHO Global Meeting on Implementing New and Under-utilized Vaccines</td>
<td>22-Jun</td>
<td>24-Jun</td>
<td>TBC</td>
<td>Global</td>
</tr>
</tbody>
</table>
Links Relevant to Immunization

Global Websites

Department of Immunization, Vaccines & Biologicals, World Health Organization
WHO New Vaccines
Immunization Financing
Immunization Monitoring
Agence de Médecine Préventive
EPIVAC
GAVI Alliance Website
IMMUNIZATION basics (JSI)
International Vaccine Institute
PATH Vaccine Resource Library
Pediatric Dengue Vaccine Initiative
SABIN Sustainable Immunization Financing
SIVAC Program Website
UNICEF Supply Division Website
Hib Initiative Website
Japanese Encephalitis Resources
Malaria Vaccine Initiative
Measles Initiative
Meningitis Vaccine Project
Multinational Influenza Seasonal Mortality Study (MISMS)
RotaADIP
RHO Cervical Cancer (HPV Vaccine)
WHO/ICO Information Center on HPV and Cervical Cancer
SIGN Updates
Technet
Vaccine Information Management System
PneumoAction
International Vaccine Access Center

Regional Websites

New Vaccines in AFRO
PAHO’s website for Immunization
Vaccine Preventable Diseases in EURO
New Vaccines in SEARO
Immunization in WPRO

Newsletters

PAHO/Comprehensive Family Immunization Program-FCH: Immunization Newsletter

Produced by WHO, in collaboration with UNICEF and the GAVI Alliance: