



GLOBAL IMMUNIZATION NEWS

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26 October 2007

TECHNICAL INFORMATION

IMMUNIZATION DEVICES & EQUIPMENT

26/10/07 from Umit Kartoglu, WHO/HQ:

The WHO Performance, Quality and Safety (PQS) Secretariat announces the official release of the PQS E01 and E03 product specifications and verification protocols which were approved on 14 September 2007, as well as the PQS E10 "safety box for the disposal of used sharps" product specifications and verification protocol approved on 28 September 2007 by the PQS Steering group.

With the approval of PQS E01 and E03 performance specifications and verification protocols, the cold room suppliers (E01) and refrigerators and freezers for storing vaccines and freezing icepacks listed in the PIS 2000 edition are now subjected to re-evaluation that has to follow new PQS procedures. The deadlines for submission of product dossier for prequalification for these PIS listed item are set as follows:

E01 - 31 March 2008 and E03 - 31 March 2009

On the above mentioned dates, PIS E01 and E06 sections will be shut down while PQS E01 and E03 pages will become fully functional. From these days on, WHO will only recommend PQS prequalified suppliers (E01) and refrigerators and freezers (E03).

With the approval of the PQS E10 safety box performance specifications and verification protocol on 28 September 2007, all safety boxes listed in the PIS 2000 edition are now subjected to re-evaluation that has to follow new PQS procedures. The deadline for submission of the product dossier for prequalification for safety boxes listed in PIS is set at **30 April 2008**. The safety box manufacturers having products listed in PIS should obtain PQS prequalification status to enter the PQS data base for safety boxes. Items that are not prequalified by this date will be delisted and will not be further recommended for purchase by UN procurement agencies.

The PQS secretariat is still working on the finalization of specifications and verification protocols for needle removers. Once these are finalized and announced, PIS E10 section will be shut down following the deadline that will be announced later on.

All related documents can be downloaded from the following links:

E01 performance specifications and verification procedures:

http://www.who.int/immunization_standards/vaccine_quality/pqs_e01_coldrooms/en/index.html

E03 performance specifications and verification protocols:

http://www.who.int/immunization_standards/vaccine_quality/pqs_e03_fridges_freezers/en/index.html

E10 safety boxes:

http://www.who.int/immunization_standards/vaccine_quality/pqs_e10_wastemanagement/en/index.html

Manufacturer's guidelines:

E01 (cold rooms and freezer rooms)

http://www.who.int/immunization_standards/vaccine_quality/WHO_PQS_E01_GUIDE%201.pdf

E03 (vaccine refrigerators, vaccine freezers and icepack freezers)

http://www.who.int/immunization_standards/vaccine_quality/pqs_e03_guide1_1.pdf

E03 (solar power systems)

http://www.who.int/immunization_standards/vaccine_quality/pqs_e03_guide2_1.pdfhttp://www.who.int/immunization_standards/vaccine_quality/pqs_e03_guide2_1.pdf

E10 (safety boxes)

http://www.who.int/immunization_standards/vaccine_quality/who_pqs_e10_guide1_1.pdf

MALARIA

26/10/07 from Zarifah Reed, WHO/HQ:

Possibility of protecting infants from malaria infection demonstrated in a recent malaria vaccine trial - Results published in *The Lancet* of a clinical trial undertaken to determine a candidate malaria vaccine's safety, immunogenicity and efficacy, show promise. The randomized, double-blind control trial, in which 214 Mozambican infants were enrolled, measured a reduced risk of 65% in contracting new malaria infections in infants who received all three doses of RTS,S/AS02D, the candidate malaria vaccine during a three-month active follow-up period. A strong association between vaccine-induced antibodies and reduction of the risk of malaria infection was also observed. In addition, the vaccine was found to be safe and well-tolerated in the infants. Although study authors stressed that caution should be used in interpretation of the efficacy results in view of the brief follow-up period as well as the intensity of surveillance, this is the first time the possibility of preventing malaria infection in young infants through vaccination has ever been demonstrated.

The preliminary results represent an important step in the direction of the goal envisioned by the Malaria Vaccine Technology Roadmap: the development of a vaccine by 2025 that would have a protective efficacy of more than 80% against clinical disease lasting for more than four years.

The results pave the way for large, multi-center trials enrolling 16,000 sub-Saharan African infants in the third quarter of 2008. These pivotal trials will confirm if these results translate into true and long-lasting protection against malaria infection and disease for the African infants who need it most. Malaria is the leading cause of under-five mortality in Africa.

More details can be found under: http://www.who.int/immunization/newsroom/news_archive_2006/en/

MEASLES

26/10/07 from Hayatee Hasan, WHO/HQ:

The Measles Initiative Partnership reviews progress on implementation of measles control and elimination strategies - This meeting, held on 24-25 September 2007 in Geneva, brought together the members of the Measles Initiative partnership and the WHO measles global and regional focal points to review progress on the implementation of measles control and elimination strategies. The participants reviewed programme plans for 2007-2008 and discussed the progress and challenges in achieving the measles elimination and mortality reduction goals. Tremendous progress has been achieved with global coverage with the first dose of measles vaccine reaching its highest level ever at 80% in 2006 and unprecedented numbers of children were vaccinated through supplementary immunization activities.

However, the 2010 global goal of reducing measles mortality by 90% by 2010 poses both financial and programmatic challenges. The group discussed ways to best tackle the challenges and achieve the goal. They also reviewed the progress in strengthening case-based surveillance as a key tool both for guiding evidence-based decisions at country-level and for monitoring the global progress towards achieving the 2010 goal.

POLIO

26/10/07 from Oliver Rosenbauer, WHO/HQ:

Polio Eradication in Afghanistan - vaccinators enter conflict zones to reach unvaccinated children: Intense local negotiation and dialogue have enabled polio vaccinators to reach an additional 80,000 children during the polio immunization campaign in Afghanistan in September 2007, according to monitoring data. In total, more than one million children were immunized in the country that month.

The extra children all live in areas of insecurity, mostly in the country's Southern Region. Due to ongoing conflict in parts of Afghanistan, efforts to immunize such children have often been hampered in the past, resulting in continued transmission of polio in such areas.

The increased access in September was made possible by the engagement of all levels of civil society in polio eradication, which included direct and indirect negotiations with all groups involved in the conflict to assure safe access for vaccinators.

Afghanistan is one of only four countries worldwide ever to interrupt endemic wild poliovirus transmission - along with Nigeria, India and Pakistan. Most of Afghanistan is today polio-free, with the virus restricted to key remaining endemic transmission zones in border areas with neighbouring Pakistan and areas of insecurity. The geographic reach of the poliovirus in Afghanistan mirrors the security situation fairly closely. Both insecurity and difficult terrain along the border with Pakistan have historically proven a challenge to polio campaigns. However, both Afghanistan and Pakistan could become polio-free in the near future, if all children are consistently reached during immunization activities.

For further information on global efforts to eradicate polio, including latest global case country figures and updates on the financing situation, please visit: www.polioeradication.org

ROTAVIRUS

26/10/07 from Chris Nelson, Merck: Vietnamese investigators participating in the Phase 3 clinical trial to study safety and efficacy of RotaTeq® enrolled their first participant in September 2007. With this milestone, both Asian countries participating in the trial (Bangladesh and Vietnam), and all three African sites participating in the trial (Ghana, Kenya and Mali) have sites up and running. To date, 3,418 African infants and 968 Asian infants have been enrolled. Data from this study, which is being conducted through a collaboration between PATH's Rotavirus Vaccine Program and Merck, will inform WHO's position on global rotavirus vaccine introduction and will set the stage for future GAVI support.

SAFE INJECTION GLOBAL NETWORK (SIGN)

26/10/07 from Selma Khamassi, WHO/HQ: The annual SIGN meeting will take place from 23-25 October 2007 at the WHO Headquarters in Geneva. All documents and information related to this meeting is posted on the website: http://www.who.int/medicines_technologies/en/

PUBLICATIONS

WHO PUBLISHED DOCUMENTS

26/10/07 from Alison Brunier, WHO/HQ: A new publication on *Immunization Quality, Safety and Standards* is now available - this short booklet (WHO/IVB/07.03) provides a general overview of the work carried out by the Quality, Safety and Standards Team of the WHO Department of Immunization, Vaccines and Biologicals. It briefly outlines the changing regulatory environment required to keep pace with demand for the introduction of new vaccines. It includes sections on: setting norms and standards; assuring the quality of vaccines and immunization equipment; and monitoring, assessing and responding to vaccine safety issues of global concern. Information about the funding of this work is provided, as are links to sources of further information. The document can be accessed at the following link: http://www.who.int/immunization/documents/WHO_IVB_07.03/en/index.html
For hard copies, please contact Mario Conde at condema@who.int

26/10/07 from Mario Conde, WHO/HQ: A new publication on *Procedure for expedited review of imported prequalified vaccines for use in national immunization programs* (WHO/IVB/07.08) is available. These guidelines are directed at countries that are sourcing their vaccines either through UN agencies or directly from manufacturers, using the WHO prequalified list of products, and that wish to ensure that these products are under appropriate regulatory oversight, but that may lack the resources to carry out a regulatory approval procedure. Because in executing the prequalification process, WHO assures that the necessary regulatory functions are in place, countries that source their vaccines using the WHO prequalified list could expedite the regulatory process for these products by using a fast-track procedure. Such a procedure would recognize the contribution of the WHO prequalification process, while facilitating development of national regulatory capacity. The aim of the fast-track procedure is two-fold:

- To comply with national regulations and international standards of regulatory approval of product; and
- To continue to provide timely access to vaccines used in national immunization programs that meet standards of assured quality.

This publication is available online: http://whqlibdoc.who.int/hq/2007/WHO_IVB_07.08_eng.pdf

GAVI-RELATED INFORMATION

CIVIL SOCIETY ORGANIZATIONS

26/10/07 from Ariane Manset, GAVI Alliance:

Proposals - The GAVI Secretariat has received its first proposal for the civil society organizations during the current HSS review.

Country Visits - Country visits to strengthen CSO inclusion in GAVI Alliance related activities are ongoing. The Democratic Republic of Congo, Ethiopia and Pakistan have been visited, while the visit to Indonesia is underway. A visit to Mozambique is also planned during the end of November 2007. The five remaining pilot countries will be visited in early 2008 to ensure that information on the CSO window is available.

CSO Meeting - A meeting is planned in Geneva for 12-13 November 2007, and representatives from all 10 CSO pilot countries have been invited, as well as all the CSO Task Team members. The main objective of this meeting is to review progress with GAVI CSO funding and review ways of strengthening CSO representation and nomination processes.

HEALTH SYSTEMS STRENGTHENING

26/10/07 from Ariane Manset, GAVI Alliance:

HSS Task Team Meeting - The GAVI Health Systems Strengthening Task team met in Nairobi, Kenya with WHO and UNICEF regional focal points. This meeting provided an opportunity to assess regional HSS activities and plan accordingly for 2008.

HSS Proposals - The GAVI Secretariat has received 22 HSS proposals for review between 26 October and 7 November 2007, bringing the number to 41 countries out of 72 GAVI-eligible (57%) that have applied for HSS funding since November 2006.

HSS Monitoring - A review of HSS monitoring with the monitoring IRC was undertaken from 25-26 September 2007, which included members from the GFATM, HSS Task Team, HSS IRC, and the Health Metrics Network. This helped provide recommendations for strengthening the design of monitoring the GAVI HSS window.

HSS Broad Meeting - A broad HSS meeting will take place in Geneva from 7-11 January 2008, when several countries will be invited to provide feedback on their experiences with the HSS window. This will also give the opportunity for other partnerships to provide feedback into the GAVI HSS processes as well as to receive an update of the ongoing process.

PROPOSAL REVIEW

26/10/07 from Ariane Manset, GAVI Alliance: The GAVI Independent Review Committee will review the applications received from 29 countries for ISS and New Vaccines support from 18 to 27 October 2007. This is the first review of proposals for support for pneumococcus and rotavirus vaccines.

The following is the list of applications that were received for this review:

Country	Type of Support Requested						Comments
	ISS	YF	HepB	Hib	Pneumo	Rota	
Afghanistan				X			From DTP-HepB to Penta Liquid
Bangladesh				X			From HepB mono to phased-in Penta Liquid
Bolivia						X	
Cameroun				X			From DTP-HepB to Penta lyophilized
Central African Rep			X	X			Penta lyophilized
Chad			X	X			Penta liquid
Comoros	X			X			From DTP-HepB to Penta Liquid
Congo				X			From DTP-HepB to Penta lyophilized
DR Congo				X			From DTP-HepB to Penta Liquid
Cote d'Ivoire				X			From DTP-HepB to Penta Liquid
Ethiopia	X						
Guinea				X			From HepB mono to phased-in Penta liquid
Guyana					X	X	
Honduras					X	X	
Kenya	X				X		
Kiribati			X	X			Penta liquid
Lesotho	X			X			From HepB mono to Penta liquid
Liberia	X						
Madagascar				X			From DTP-HepB to Penta lyophilized
Moldova				X			DTP-Hib liquid
Mozambique				X			From DTP-HepB to Penta Liquid
Nepal	X			X			From DTP-HepB to Penta Liquid
Nicaragua	X				X		
Niger		X	X	X			Penta liquid
Pakistan				X			From DTP-HepB to Penta Liquid
Solomon Islands			X	X			Penta liquid
Tajikistan				X			From HepB mono to phased-in Penta Liquid
Togo			X	X			Penta liquid
Yemen					X	X	

REVIEW PROCESS

Next Review Dates:

THIRD REVIEW 2007: ISS, INS, New Vaccines & Measles 2nd Dose: The deadline for receiving applications was **28 September 2007**. The applications were reviewed from **18-27 October 2007**.

THIRD REVIEW 2007: HSS Applications: The **deadline** to receive applications for HSS was **5 October 2007**. The applications will be reviewed from **26 October – 7 November 2007**.

COUNTRY INFORMATION¹ BY REGION

AMERICAS

REGIONAL INFORMATION

26/10/07 from PAHO:

Meeting on New Vaccines for Central America, Mexico and Spanish Speaking Caribbean - A sub-regional meeting on rotavirus and pneumococcal vaccines was held in Costa Rica on 20-21 August 2007. Participants included central-level sentinel hospital MoH officers of the represented countries. The Minister of Health of Costa Rica took part in the meeting with a presentation on antimicrobial resistance. After presentations on diseases and vaccines, work groups developed plans for implementation and/or strengthening of surveillance for pneumococcus and rotavirus.

New Vaccines Meeting in Brazil - A National Symposium on Pneumococcal and Influenza Vaccines was held on September 20-21, with the participation of 80 professionals of epidemiology and immunization of all the departments of Brazil. This meeting was organized by PAHO, the Ministry of Health of Brazil and the Sabin Vaccine Institute with support from CDC and PneumoADIP. The meeting included disease and vaccine related presentations; its main objective was to discuss integrated surveillance of both VPDs.

Meeting on Pneumococcus for Southern Cone Countries - A meeting on pneumococcus is programmed to take place in Argentina on December 13-14, organized by PAHO and the Sabin Vaccine Institute with support from CDC and PneumoADIP. Participating countries include Argentina, Uruguay, Chile, and Paraguay.

Rotavirus Vaccine: Case Control Effectiveness Studies - Case-control studies to evaluate the effectiveness of rotavirus vaccine are being conducted in Nicaragua and El Salvador, using equal methodology, as a collaborative effort of Ministries of Health, PAHO, CDC, and PATH.

HONDURAS

26/10/07 from PAHO: An international evaluation of the Expanded Program on Immunization (EPI) of Honduras was conducted from 20-31 August 2007. The objective of the evaluation was to determine the capability of the EPI to respond to the challenges of disease control, elimination, and eradication; to transition from child to family vaccination program; to introduce new vaccines in a sustainable manner; and to adapt to the decentralization process the country has initiated. The international multidisciplinary EPI evaluation consists of a qualitative and quantitative assessment, through interviews of key people at political, managerial and operational levels, in order to review the progress of the components of the immunization program.

Supplementing the EPI evaluation, and in response to a specific request from the country, the information system component (including the system's quality, data accuracy, and reporting integrity and opportunity) was examined using the Data Quality Self-Assessment (DQS) methodology.

Following PAHO's methodology for international EPI evaluations, a report highlighting main achievements, weaknesses and recommendations was presented to national authorities, and a comprehensive five-year strategic plan of action was developed.

¹ HSS= Health Systems Strengthening;
ICP = Inter Country Programme;
ISS = Immunization Services Support;
INS = Injection Safety Support;
NVS = New Vaccine Support;
DQA = Data Quality Audit;
DQS = Data Quality Self Assessment;
FSP = Financial Sustainability Plan;
RED = Reach Every District;
cMYP = Fully costed multi-year plan;

EAST & SOUTH AFRICA

COMOROS

26/10/07 from AFRO E&S: The **RED approach** has been implemented in four out of 17 districts.

ERITREA

26/10/07 from AFRO E&S:

- WHO/AFRO has provided funding to scale up the **DQS**.
- The country is preparing to introduce **liquid-lyophilized pentavalent vaccine** in January 2008.

ETHIOPIA

26/10/07 from AFRO E&S:

- A **post-introduction evaluation of Hib vaccine** will be conducted during 19-30 November 2007.
- The **RED approach** is being implemented in 93% of districts with plans to scale up to 100% in 2008.
- The implementation of the **DQS** is ongoing.

KENYA

26/10/07 from AFRO E&S:

- WHO/AFRO has provided funding for the implementation of the **DQS** in 16 districts. Additional funding is required to cover the remaining districts.
- Thirty-nine districts have undergone **Mid-Level-Managers'** training with financial support from Merck Vaccines.

MADAGASCAR

26/10/07 from AFRO E&S:

- The implementation of the **RED approach** is ongoing in the country.
- The **measles campaign** is also currently ongoing in the country.

MOZAMBIQUE

26/10/07 from AFRO E&S: All provinces and districts have been trained on **RED**.

UGANDA

26/10/07 from Issa Makumbi, EPI Manager for Uganda:

- Data analysis is ongoing for the EPI equipment through an inventory survey of 25000 health facilities. This activity was carried out with support from WHO and PATH.
- The analysis of cold chain management issues has been completed from data collected in the above survey.
- The country hosted a mission on fact-finding on EPI financing from debt relief initiatives.
- The GAVI HSS application was completed with technical assistance from a WHO consultant. This application was submitted to GAVI for the October 2007 review.

ZAMBIA

26/10/07 from AFRO E&S: Training of health workers on **RED** in the remaining 26 out of 72 districts has started, and supportive supervision has been intensified in the 46 districts already implementing the approach.

ZIMBABWE

26/10/07 from AFRO E&S: A **training of trainers on Hib introduction** took place during 14-20 October 2007, to prepare for the introduction of fully liquid pentavalent vaccine in 2008.

EUROPEAN REGION

REGIONAL INFORMATION

26/10/07 from EURO: The WHO Regional Office for Europe has been actively involved in supplementary immunization activities (SIAs) for measles and rubella this autumn. One SIA in Armenia was recently completed, and another two SIAs for Turkmenistan and Uzbekistan are planned for mid-November 2007. The SIAs are carried out by the health ministries in the respective countries, with the support of partners. Armenia conducted a measles and rubella SIA from 1-13 October 2007. With 800,000 people vaccinated, the campaign was very close to reaching its target of one million. The coverage rate was 96% of the civilian

population, but the results of all groups will be ready by the end of the year. SIA coverage will be validated by 102 data collectors who will administer a post-SIA coverage survey by going door-to-door to check whether all targets for the campaign were reached. The survey is expected to show immediate results. This information will be used to plan follow-up immunization activities as required to reach children and adults aged 6-27 years who were not vaccinated during the SIA.

Final preparations are in progress for the two upcoming SIAs in Turkmenistan and Uzbekistan scheduled for 2-24 November 2007. Additionally, preparatory activities in Georgia and Ukraine are ongoing for SIAs planned for the spring of 2008. WHO says that close to 15 million people have been covered by SIAs so far, and another 20 million are expected to be reached with the planned SIAs.

SOUTH EAST ASIA

REGIONAL INFORMATION

26/10/07 from Tom O'Connell, WHO/SEARO: Three countries that attended the WHO/SEARO Regional Workshop on "Preparation of Project Proposals for GAVI-HSS Funding" have submitted their proposals to GAVI for HSS support: Bhutan, Nepal and Sri Lanka. A follow-up inter-country workshop on HSS proposal development has been tentatively planned for 23-26 January 2008 in Indonesia for the remaining GAVI-eligible countries in the region who wish to apply for the next HSS funding round in 2008.

LIST OF MEETINGS & KEY EVENTS RELATED TO IMMUNIZATION

Regional Meetings & Key Events Related to Immunization: November 2007 to 2009					
Title of Meeting	Start	Finish	Location	Responsible Partner	Region
Nov-07					
EMRO RTAG Meeting	02-Nov	02-Nov	Tripoli, Libya	EMRO	EMR
Strategic Advisory Group of Experts (SAGE) meeting	06-Nov	08-Nov	Geneva	WHO/HQ	Global
MR Laboratory Workshop for New and Independent States (NIS) in the European Region	09-Nov	16-Nov	Moscow	WHO/EURO	EUR
Biosafety Workshop for virologists of the polio laboratory network in the Russian Federation	12-Nov	20-Nov	Novosibirsk, Russian Federation	WHO/EURO	EUR
Caribbean EPI Managers Meeting	12-Nov	16-Nov	Tobago	PAHO	PAHO
SEARO Global Training Network Workshop on Vaccine Lot Release	19-Nov	23-Nov	Kasauli, India	WHO/SEARO	SEAR
European GAVI Regional Working Group Meeting	22-Nov	22-Nov	Copenhagen	EURO	EUR
HPV Planning Policy Meeting for Latin America and the Caribbean	26-Nov	29-Nov	Rio de Janeiro, Brazil	PAHO	PAHO
Joint GAVI Alliance & Fund Board Meetings	27-Nov	30-Nov	Cape Town	GAVI Secretariat	Specific
EURO TAG Meeting	tbd	tbd	tbd	EURO	EUR
Dec-07					
AFRO Task Force on Immunization	11-Dec	14-Dec	Antananarivo, Madagascar	AFRO	AFRO
Global Advisory Committee of Vaccine Safety (GACVS) Meeting	12-Dec	13-Dec	CICG	WHO/HQ	Global
2008 Meetings					
Sub-Regional Laboratory Network Meeting for Countries of Central and Eastern Europe	08-Jan	11-Jan	tbd	EURO	EUR
GAVI Regional Working Group meeting for West & Central Africa	21-Jan	22-Jan	Libreville	AFRO (W&C)	AFR
GAVI Regional Working Group for the Western Pacific Region	Feb	Feb	tbd	WPRO	WPR
Global Immunization Meeting	19-Feb	21-Feb	Geneva	WHO/HQ	Global
Strategic Advisory Group of Experts (SAGE) meeting	08-Apr	10-Apr	Geneva	WHO/HQ	Global
European Immunization Week	21-Apr	27-Apr	Region-Wide	WHO/EURO	EUR
Strategic Advisory Group of Experts (SAGE) meeting	03-Nov	05-Nov	Geneva	WHO/HQ	Global
2009 Meetings					
Strategic Advisory Group of Experts (SAGE) meeting	07-Apr	09-Apr	Geneva	WHO/HQ	Global
Strategic Advisory Group of Experts (SAGE) meeting	27-Oct	29-Oct	Geneva	WHO/HQ	Global

LINKS RELEVANT TO IMMUNIZATION

GLOBAL WEBSITES

Department of Immunization, Vaccines & Biologicals, World Health Organization

<http://www.who.int/immunization/en/>

WHO New Vaccines Hib website

<http://www.who.int/nuvi/hib/>

GAVI Alliance Website

<http://www.gavialliance.org/>

PATH Vaccine Resource Library

<http://www.path.org/vaccineresources>

UNICEF Supply Division Website

http://www.unicef.org/supply/index_immunization.html

UNICEF Supply Division Product Menu for GAVI Vaccines

http://www.unicef.org/supply/files/Product_Menu_2007.PDF

Hib Initiative Website

<http://www.hibaction.org/>

Japanese Encephalitis Resources

http://www.path.org/vaccineresources/japanese_encephalitis-resources.php

Malaria Vaccine Initiative

<http://www.malariavaccine.org>

Meningitis Vaccine Project

<http://www.meningvax.org/index.htm>

PneumoADIP

www.preventpneumo.org/

RotaADIP

<http://www.rotavirusvaccine.org/>

RHO Cervical Cancer (HPV Vaccine)

<http://www.rho.org>

WHO/ICO Information Center on HPV and Cervical Cancer

<http://www.who.int/hpvcentre/en/>

SIGN Updates

www.who.int/entity/injection_safety/sign/en/

Technet

<http://www.technet21.org/>

REGIONAL WEBSITES

New Vaccines in AFRO

<http://www.afro.who.int/newvaccines/>

PAHO's website for Immunization

<http://www.paho.org/english/ad/fch/im/Vaccines.htm>

Vaccine Preventable Diseases in EURO

<http://www.euro.who.int/vaccine/>

New Vaccines in SEARO

<http://www.searo.who.int/en/section1226.asp>

Immunization in WPRO

http://www.wpro.who.int/health_topics/immunization/

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

