



GLOBAL IMMUNIZATION NEWS

*The information contained in this Newsletter depends upon your contributions
Please send inputs for inclusion to: nicolash@who.int*

28 March 2008

TECHNICAL INFORMATION

CAPACITY BUILDING & TRAINING

28/03/08 from Robert Steinglass, JSI: USAID's Global Health eLearning (GHeL) Center has released new eLearning courses at www.globalhealthlearning.org, including: "Immunization Essentials: Do you know the basic concepts of immunity and vaccination? Are you "up to speed" on vaccine-preventable diseases and safe injection policies? This course provides essential technical and managerial information that immunization program personnel need to know to plan, implement, monitor, and evaluate immunization programs effectively on a large scale".

A synopsis of each of these courses and of 20 more GHeL courses is available at <http://www.infoforhealth.org/elearning/>

MATERNAL & NEONATAL TETANUS

28/03/08 from Jos Vandelaer, UNICEF/WHO: UNICEF and WHO have over the past months organized three workshops on MNT:

- One for francophone countries in Africa (Dakar: 8-11 October 2007)
- One for Anglophone countries in Africa (Addis Abeba: 29 October - 1 November 2007)
- One for countries in the WHO/EMRO Region (Sana'a: 11-13 March 2008).

These workshops brought together HQ, regional and country level staff of Ministries of Health, WHO, UNICEF and partner agencies from countries that have not yet eliminated MNT. The workshops allowed for technical updates and sharing of experiences on MNT and on broader child-survival issues. In discussions with individual countries, plans for 2008 were drafted, and the required support was mapped. It is expected that in 2008 a sharp increase will be seen in MNT-related activities, both in campaigns and in routine immunization. Countries are encouraged to use the Reaching Every District (RED) approach to deliver TT vaccine to women, and use TT coverage as a co-indicator to monitor RED performance. The ever more widespread implementation of Child Health Days (CHDs), (particularly on the African continent) will significantly contribute to improving child survival, especially if during these CHDs a package of life-saving interventions can be delivered - including TT.

POLIO

28/03/08 from Oliver Rosenbauer, WHO/HQ:

Ten-thousand health workers stop polio - Somalia passes polio-free landmark

Somalia is again polio-free, the Global Polio Eradication Initiative (GPEI) announced, calling it a 'historic achievement' in public health. Somalia has not reported a case since 25 March 2007, a major landmark in the intensified eradication effort launched last year to wipe out the disease in the remaining few strongholds.

Against a backdrop of widespread conflict, large population movements and a dearth of functioning government infrastructure, transmission of poliovirus in the country has been successfully stopped. This landmark victory is a result of the efforts of more than 10,000 Somali volunteers and health workers who repeatedly vaccinated more than 1.8 million children under the age of five by visiting every household in every settlement multiple times, across a country which has many hard to reach areas.

The use of innovative approaches tailored to conflict areas was pivotal in stopping polio in the country. These included increased community involvement and the effective use of monovalent vaccines to immunize children in insecure areas with several doses, within a short period of time.

"This truly historic achievement shows that polio can be eradicated everywhere, even in the most challenging and difficult settings," said Dr Hussein A Gezairy, Regional Director for the World Health Organization's Office for the Eastern Mediterranean.

Polio, which can cause lifelong paralysis, has been stopped nearly everywhere in the world following a 20-year concerted international effort. Only four polio-endemic countries remain – Afghanistan, India, Nigeria and Pakistan – and the eradication of polio globally now depends primarily on stopping the disease in these countries.

Poliovirus travels easily and, in the world of modern travel, can cover long distances. Until transmission of the virus has been interrupted in the four remaining endemic countries, the risk to the rest of the world remains high. Somalia, which had already eradicated the disease in 2002, became re-infected in 2005 by poliovirus originating in Nigeria. This repeated success in Somalia indicates the disease can be stopped even in areas with no functioning central government.

"Somalia beat polio in the midst of more widespread conflict and poverty than that affecting Afghanistan and Pakistan," according to Dr Maritel Costales, Senior Health Adviser, UNICEF New York, citing insecurity and large population movements in those countries as challenges to reaching all children with vaccine. "But Somalia shows that when communities are engaged, children everywhere can be reached." Afghanistan and Pakistan could be the first of the remaining endemic countries to stop polio; between them they account for 5% of all cases of polio in 2007.

Consistent financial commitment continues to be crucial to completing polio eradication. The global effort currently faces a shortage of US\$525 million for 2008-2009, funding urgently needed to fight the disease in the remaining endemic areas and protect children in high-risk polio-free areas. Rotary International, the top private sector contributor and volunteer arm of the GPEI, has contributed US\$9.2 million for polio eradication in Somalia, and US\$700 million worldwide since 1985. "Somalia clearly shows that the tailored tools and tactics of the intensified eradication effort are working," commented Mohamed Benmejdoub, Chair of Rotary's Eastern Mediterranean PolioPlus Committee. "A polio-free world is a feasible public health goal and a global public good. I urge governments across the world – and in particular the G8 countries – to rapidly make available the necessary resources. Together, we can ensure that no child need ever again suffer the terrible pain of lifelong polio-paralysis."

PUBLICATIONS

WHO PUBLISHED DOCUMENTS

28/03/08 from Mario Conde, WHO/HQ:

Proceedings of the Seventh Global Vaccine Research Forum and Parallel Satellite Symposia (WHO/IVB/07.10)

The meeting serves as a forum for WHO and other partners to discuss research and development issues, to exchange views on research agendas and to monitor progress of the R&D Task Force. Moreover, the meeting serves as a forum to discuss broader issues of vaccine policy and implementation. The report will provide a summary of the meeting presentations and discussions with focus on Pandemic Influenza vaccines, Japanese Encephalitis, dengue, innovation, intellectual property rights and new vaccine production in the South East Asian Region, rabies in Asia, vaccines against cervical cancer, development of vaccines against HIV, Malaria and Tuberculosis, new vaccine presentations, and an update on vaccines against GAVI priority diseases.

http://www.who.int/immunization/documents/WHO_IVB_07.10/en/index.html

GAVI-RELATED INFORMATION

HIB INITIATIVE

28/03/08 from Judy Heck, The Hib Initiative:

A vaccine impact study from Uganda shows the virtual elimination of *Haemophilus influenzae* type b (Hib) in young children in Uganda just five years after the country introduced the vaccine nationwide, according to an independent study. Where monitored, the incidence rate dropped by 85% within four years of vaccine introduction and fell to zero in the fifth year. The study will soon be published in the April issue of *The Bulletin of the World Health Organization*.

REVIEW PROCESS

Next Review Dates:

PROPOSAL REVIEWS - ISS, INS, New Vaccines & Measles 2nd Dose:

Second Review: The deadline for receiving applications is **2 May 2008**. The applications will be reviewed from **6-15 June 2008**.

Third Review: The deadline for receiving applications is **25 September 2008**. The applications will be reviewed from **23-31 October 2008**.

HSS REVIEWS

First Review: The deadline for receiving applications is **7 March 2008**. The applications will be reviewed from **14-26 April 2008**.

Second Review: The deadline for receiving applications is **12 September 2008**. The applications will be reviewed from **3-15 October 2008**.

MONITORING REVIEW

The deadline for receiving annual progress reports is **15 May 2008**. The annual progress reports will be reviewed from **16-30 June 2008**.

COUNTRY INFORMATION¹ BY REGION

WEST AFRICA

REGIONAL INFORMATION

28/03/08 from AFRO West:

EPI Managers' Meeting - This meeting was convened from 5-7 March 2008 in Ouagadougou, Burkina Faso. The meeting was attended by EPI Managers from the 17 countries within the West African Block, and relevant partners - WHO, UNICEF, ImmunizationBASICS, CDC Atlanta and GAVI Secretariat. The major objective of this meeting was to look at how far the countries have fared since the last meeting by taking a critical look at their activities, successes and failures with a view to planning for the priorities for 2008, keeping in mind the global goal of reducing childhood mortality by two-thirds in 2015 from the 1990 levels using strategies in-line with the global vision on immunization. Major areas considered included strengthening immunizations systems, accelerated disease control, integration of child survival activities, data quality issues, health systems strengthening and partner collaboration.

At the end of the three-day meeting, important recommendations were made, including implementing all strategies of the RED approach to raise immunization coverage using appropriate plans of action as drawn from the comprehensive multi-year plans, improving quality of vaccination campaigns especially in Nigeria and Niger, improving quality of surveillance for vaccine-preventable diseases, conducting risk assessments in countries at risk of yellow fever, ensuring the mobilization of 50% of operational costs for measles vaccination campaigns at the country level and collection of relevant data in countries earmarked for validation for MNT elimination.

Other recommendations included the need for:

- Countries to adapt and use the integrated monitoring tool as well as defining the set of strategies to be integrated;
- Data cleaning, analysis, and use at all levels; and
- Countries to submit integrated and strategic plans and/or proposals for resources mobilization.

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;

Partners were also requested not only to monitor the implementation of co-financing at country level but also to help develop innovative strategies for supporting non-GAVI eligible countries which might want to introduce new vaccines in-line with related 2007 TFI recommendations.

GAVI West & Central African Sub-Regional Working Group met on 8 March 2008 and was attended by partners from WHO, UNICEF, GAVI Secretariat, AMP and selected countries (Cape Verde, DR Congo, Nigeria).

The meeting provided a forum to discuss the 2007 performance of countries and plans for 2008 in the areas of cMYP development, introduction of new vaccines and logistics and vaccine management. Members of the working group were also briefed on GAVI updates on the issue of co-financing and reacting to countries defaulting on their commitment to co-financing.

The 2008 plan of action detailing how to support countries developing cMYPs and or planning to introduce new vaccines was discussed and adopted.

Peer Review Workshop on cMYP and GAVI Applications - a workshop is planned to peer-review the cMYPs and draft country applications to GAVI for Hib and pneumococcal vaccines in Lome, Togo from 8-11 April 2008. The targeted countries are Gambia, Mauritania, Mali and Togo in West Africa, Central African republic, DR Congo, Gabon and Sao Tome & Principe in Central Africa.

EASTERN MEDITERRANEAN

REGIONAL INFORMATION

28/03/08 from EMRO:

Inter-country Meeting on Maternal and Neonatal Tetanus Elimination:

An Inter-country Meeting on Maternal and Neonatal Tetanus Elimination was held by WHO/EMRO in collaboration with WHO/HQ and UNICEF/HQ in Sana'a Republic of Yemen from 11-13 March 2008.

The key objectives of the meeting were to update the participants on the latest WHO-UNICEF recommended strategies for MNTE, enhance their capacities for identifying high risk districts for TT SIAs and agree on a country specific plan of action for MNTE.

The participants included concerned nationals primarily from EPI and national/international staff from country offices of WHO and UNICEF from the participating countries (Afghanistan, Pakistan, Somalia, Sudan, Southern Sudan, Yemen and Iraq).

Following is the summary of the recommendations from the meeting:

- MNT Elimination is an integrated program, based on community involvement and political support, as well as active participation from all partners working in Child and Maternal Programs.
- As available data might not be sufficiently accurate, the identification of high risk areas should be based on a review of several district-level indicators, including NT rates, DTP1, DTP3, TT2+, ANC, access to primary health care, clean delivery rates, etc.
- Efforts should be made to increase immunity against TT through routine immunization services and ANC services.
- All selected high risk districts should be targeted with three properly-spaced and well planned rounds of TT SIAs, targeting all women of child-bearing age.
- All TT SIAs should be completed over a period of 24-36 months maximum.
- Social mobilization and communication must involve communities and address their concerns.
- Monitoring of TT SIAs should be by dose (TT1, TT2, TT3) and by round.
- NT Surveillance is an essential part of MNT Elimination. It should be optimized, using and building on existing systems. Community involvement should be sought to the extent possible to improve information-gathering on vital events (births and neonatal deaths).

Joint WHO-UNICEF-GAVI missions to countries receiving GAVI Support:

In order to monitor the progress of GAVI support utilization by countries and to provide timely support by all concerned, the EMR Regional Working Group on GAVI has initiated joint country missions, comprising of the key EMR RWG partners: WHO, UNICEF and GAVI.

These missions during 2008 are planned for the following countries:

- Pakistan: 31 March - 4 April 2008
- Yemen: 19-22 April 2008
- North and South Sudan: 11-17 July 2008
- Afghanistan: 20-24 September 2008
- Djibouti: 1-4 November 2008

EUROPEAN REGION

REGIONAL INFORMATION

28/03/08 from EURO:

Review of draft Regional MLM Training Modules in Russian - The draft Russian version of the Regional Mid Level Managers (MLM) Training Modules were reviewed from 10-14 March 2008 during an expert group meeting held at the WHO Regional Office for Europe in Copenhagen, Denmark.

The meeting brought together immunization experts from four different countries and WHO/EURO technical staff from the Communicable Diseases Unit, who reviewed and edited the Russian version of the eighth draft regional MLM modules and the facilitator's guide, so that they would correspond to the English version. The experts also discussed steps and actions to be taken to field testing the regional training package and the core regional MLM training programme.

The recommended changes to the draft modules will be included in both Russian and English edited versions. The inter-country and national MLM training programmes will be implemented after the field testing of the draft regional training package, which will take place in July 2008.

Sub-regional workshop on diphtheria surveillance - A sub-regional workshop on diphtheria laboratory diagnosis and surveillance was organized in Riga, Latvia from 12-14 March 2008 by WHO/EURO, DIPNET and the Ministry of Health of Latvia. Epidemiologists and laboratory specialists from the Baltic States, the Russian Federation, and a subset of countries from the newly independent states where diphtheria remains endemic, participated in the workshop.

Participants were briefed on the current status of diphtheria incidence in the region, current laboratory methods to isolate and type diphtheria-causing strains of *Corynebacteria*, and possible research strategies to address the persisting problem of diphtheria transmission in the region despite high immunization coverage. Azerbaijan, one of the countries that participated in the workshop, plans to conduct a diphtheria SIA during European Immunization Week, in response to a recent re-emergence of cases in that country.

SOUTH EAST ASIA

REGIONAL INFORMATION

28/03/08 from Tom O'Connell, WHO/SEARO: The GAVI Alliance and Fund Board have approved HSS funding to begin for Bhutan, Nepal and Sri Lanka. All three applied in October 2007 for HSS support. Bhutan and Nepal were approved in late 2007. Sri Lanka's support has just been approved by the GAVI Board, following acceptance of their answers to the clarifications requested by the GAVI HSS Independent Review Committee.

WESTERN PACIFIC

REGIONAL INFORMATION

28/03/08 from WPRO:

Staff Training Workshop on New and Under-Utilized Vaccines - WPRO is organizing a staff training course/retreat on new vaccines involving WHO and UNICEF country and regional office staff from 15-17 April 2008. A total of 10 country staff and six regional office staff from WHO, and another nine country and one regional staff from UNICEF will participate in the training. Resource persons have been invited from PATH, WHO/HQ, RotaADIP, Hib Initiative, IVI and other institutions.

Measles Elimination Activities - Six countries (Cambodia, three provinces of China, Lao PDR, Mongolia, Philippines and Viet Nam) conducted large scale supplementary immunization activities (SIAs) against measles in 2007. Most countries conducting SIAs also provided Vitamin A and deworming medicine to children.

A follow-up SIA in Cambodia reached 1,526,530 (104.8%) of 1,457,235 targeted children ages 9-59 months with measles vaccine. China vaccinated 3,981,000 (98.8%) of 4,030,000 targeted children eight months to <15 years old in Sichuan Province, and also conducted SIAs in Hebei and Shaanxi Provinces. Lao PDR reached 2,086,190 (95.9%) of 2,175,340 targeted children nine months to 14 years old. Mongolia reached 401,575 (97.1%) of 413,673 targeted children 2-10 years of age. Philippines reached 8,198,160 (94.8%) of its 8,648,860 targeted children 9-48 months old. Viet Nam recently completed a sub-national SIA targeting 3.7 million persons 1-20 years old living in mountainous areas of 17 provinces in the northern region. China, Papua New Guinea and Viet Nam are conducting measles SIAs in 2008.

LAO PDR

28/03/08 from WPRO: Lao PDR is planning to introduce Hib vaccine in a pentavalent presentation in 2009. WPRO provided technical support in February 2008 to develop the GAVI application for pentavalent vaccine, update the comprehensive multi-year plan including the detailed financial assessment, and the assessment of the cold chain for pentavalent introduction. The country plans to submit the application to GAVI by 2 May 2008.

MALAYSIA

28/03/08 from WPRO:

Assessment of school-based immunization program in Malaysia - Dr Sigrun Roesel from WPRO and Dr Kaushik Banerjee from WHO/HQ visited Malaysia from 25 February to 3 March 2008 to document the national school-based immunization program. School-based immunization in Malaysia is part of comprehensive School Health Program (SHP), which was established in 1967, as a joint program between the Ministry of Health and the Ministry of Education. SHP covers all primary and secondary schools under the Ministry of Education and private schools are covered on request. Services under the SHP including immunization are delivered by the school health team based at district health offices or by health clinics. Immunization is currently provided under SHP include DT, OPV, MMR, rubella and TT.

VIET NAM

28/03/08 from WPRO: Viet Nam is planning to introduce Hib vaccine in a pentavalent presentation in 2009. WPRO provided technical support in March 2008 to develop the GAVI application for pentavalent vaccine, update the comprehensive multi-year plan including the detailed financial assessment, and the assessment of the cold chain for pentavalent introduction. The country plans to submit the application to GAVI by 2 May 2008.

LIST OF MEETINGS & KEY EVENTS RELATED TO IMMUNIZATION

Regional Meetings & Key Events Related to Immunization: March 2008 onwards					
Title of Meeting	Start	Finish	Location	Responsible Partner	Region
Apr-08					
Pre-GAVI Application workshop for West & Central African countries	07-Apr	11-Apr	Lomé, Togo	AFRO (W&C)	AFR
Strategic Advisory Group of Experts (SAGE) meeting	08-Apr	10-Apr	Geneva	WHO/HQ	Global
GAVI Independent Review Committee Meeting for HSS proposals (Submission Deadline: 7 March 2008)	14-Apr	26-Apr	Geneva	GAVI	Specific
GAVI Eastern Mediterranean Regional Working Group Core Meeting	16-Apr	17-Apr	Cairo, Egypt	EMRO	EMR
WPRO Training Course on New Vaccines	15-Apr	18-Apr	Manila, Philippines	WPRO	WPR
Immunization Week in the Americas	19-Apr	26-Apr	Region-Wide	PAHO	PAHO
European Immunization Week	21-Apr	27-Apr	Region-Wide	EURO	EUR
May-08					
EMRO 23rd RTAG Meeting	04-May	08-May	Riyadh, Saudi Arabia	EMRO	EMR
GAVI Joint Executive Committee Meeting	06-May	06-May	Washington DC	GAVI	Global
GAVI South East Asian Regional Working Group Meeting	12-May	12-May	Kathmandu	SEARO	SEAR
WHO Regional Meeting on HPV Vaccine: Towards Comprehensive Cancer Control: HPV Vaccine Policy and Planning Meeting for the Region of the Americas	12-May	14-May	Mexico City, Mexico	PAHO	PAHO
Jun-08					
Eight International Rotavirus Symposium	02-Jun	03-Jun	Istanbul, Turkey	Sabin, RVP, CDC	Global
GAVI Independent Review Committee Meeting for ISS, INS, NVS and Measles 2nd Dose proposals (Submission Deadline: 2 May 2008)	06-Jun	15-Jun	Geneva	GAVI	Specific
EMRO 25th Inter-Country EPI Managers Meeting	15-Jun	18-Jun	Riyadh, Saudi Arabia	EMRO	EMR
GAVI Monitoring Review (Submission Deadline: 15 May 2008)	16-Jun	30-Jun	Geneva	GAVI	Specific
New and Under-Utilized Vaccines Implementation Meeting	23-Jun	25-Jun	Montreux	WHO	Global
European Technical Advisory Group of Experts	June/July	June/July	tbd	EURO	EUR
WPRO Pacific Immunization Strengthening Meeting	June	June	tbd	WPRO	WPR
Global Vaccine Research Forum 2008	29-Jun	02-Jul	Paris	WHO	Global
Jul-08					
WPRO Regional Technical Advisory Group (TAG) meeting	07-Jul	11-Jul	Manila, Philippines	WPRO	WPR
Aug-08					

SEAR EPI Program Manager and ITAG Meeting	20-Aug	22-Aug	Kathmandu	SEARO	SEAR
PAHO Meeting of the Technical Advisory Group on Vaccine-Preventable Diseases	25-Aug	29-Aug	Lima, Peru	PAHO	PAHO
Sep-08					
GAVI South East Asian Regional Working Group Meeting	22-Sep	23-Sep	Bhutan	SEARO	SEAR
Oct-08					
PneumoADIP and Hib Initiative Surveillance Networks Investigators	4Q 2008	4Q 2008	tbd	WHO/HQ	Global
GAVI Independent Review Committee Meeting for HSS proposals (Submission Deadline: 12 September 2008)	03-Oct	15-Oct	Geneva	GAVI	Specific
EMRO Measles Inter-Country Meeting for Priority Countries (GAVI Eligible, Iraq and Lebanon)	21-Oct	23-Oct	Dubai, UAE	EMRO	EMR
GAVI Independent Review Committee Meeting for ISS, INS, NVS and Measles 2nd Dose proposals (Submission Deadline: 25 September 2008)	23-Oct	31-Oct	Geneva	GAVI	Specific
EMRO Measles Inter-Country Meeting for Remaining Countries	26-Oct	28-Oct	Dubai, UAE	EMRO	EMR
EMRO 24th RTAG Meeting	29-Oct	29-Oct	Dubai, UAE	EMRO	EMR
Nov-08					
Strategic Advisory Group of Experts (SAGE) meeting	04-Nov	06-Nov	Geneva	WHO/HQ	Global
EMRO Bacterial Meningitis and Pneumococcal Regional Surveillance Networks Follow-Up meeting	11-Nov	13-Nov	Casablanca, Morocco	EMRO	EMR
Meeting of the Caribbean Expanded Program on Immunization Managers	17-Nov	21-Nov	tbd	PAHO	PAHO
GAVI Eastern Mediterranean Regional Working Group Meeting	18-Nov	20-Nov	Cairo, Egypt	EMRO	EMR
Dec-08					
WPRO RCC Meeting	02-Dec	03-Dec	tbd	WPRO	WPR
EMRO Rotavirus Regional Surveillance Network Follow-Up Meeting	16-Dec	18-Dec	Amman, Jordan	EMRO	EMR
2009 Meetings					
Strategic Advisory Group of Experts (SAGE) meeting	07-Apr	09-Apr	Geneva	WHO/HQ	Global
PAHO Sub-Regional Meeting of the Central American Region, Mexico and the Spanish Caribbean on Vaccine Preventable Diseases	08-Jun	11-Jun	tbd	PAHO	PAHO
PAHO Sub-Regional Meeting of the Andean and Southern Cone Regions on Vaccine Preventable Diseases	10-Aug	13-Aug	tbd	PAHO	PAHO
Strategic Advisory Group of Experts (SAGE) meeting	27-Oct	29-Oct	Geneva	WHO/HQ	Global
Meeting of the Caribbean Expanded Program on Immunization Managers	16-Nov	20-Nov	tbd	PAHO	PAHO

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/>

IMMUNIZATIONbasics (JSI)

www.immunizationbasics.jsi.com

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:

