World Health Organization

Global Immunization News

Inside this issue:

Technical Information

ROTAVIRUS VACCINE INTRODUCED IN ZAMBIA

31/01/2012 from WHO Zambia

Minister, Community Development Mother and Child Health, Dr Joseph Katema speaking before the vaccination of some babies at Chawama clinic

The Rotavirus vaccine (Rotarix) has been introduced in the immunization programme in Zambia in order to address the high infant mortality from diarrhoeal diseases caused by rotaviruses. The introduction of the vaccine was announced on 23 January 2011 by the Minister for Community Development, Mother and Child Health, Dr Joseph Katema at the official launch of the programme for Awareness and Elimination of Diarrhea in Zambia. This programme has been sponsored by Absolute Return for Kids (ARK), a British charity working in collaboration with the Centres for Infectious Disease Research in Zambia (CIDRZ) and the Ministries of Health and Community Development, Mother and Child Health. The Rotarix™ vaccine was introduced in Lusaka district as a pilot project and the lessons learnt will be used during the scale-up phase to the rest of the country. The Zambian government plans to introduce the rotavirus vaccine in all districts countrywide in 2013. The programme will also combine community projects to teach mothers to stop children from getting diarrhoea.

Dr Jeffrey Stringer, Director, CIDRZ vaccinating children at Chawama clinic

In his statement, Dr Katema stated that the introduction of the vaccine was a long awaited intervention. The Minister emphasized the need for the interventions to fight diarrhoea to be community-based, comprehensive, integrated, simple and sustainable. Dr Katema urged mothers to continue with other measures for preventing diarrhea especially hand washing, proper use of toilets and use of clean and safe water. The WHO Representative Dr Olusegun Babaniyi commended the Zambian government for demonstrating strong and effective leadership and national ownership of the immunization programme and for the timely introduction of Rotavirus Vaccine and the planned introduction of the pneumococcal vaccine in 2012. Huge investments are being made in improving health services, human resources for health, equipment including the introduction of new vaccines with support from the Global Alliance for Vaccines and Immunization (GAVI) and other partners.

Technical Information

HIB CONTAINING PENTAVALENT (DPT+HEPB+HIB) VACCINE LAUNCHED IN INDIA

31/01/2012 from WHO National Polio Surveillance Project, India

"Immunizing in the context of global independence"

The use of Hib-containing pentavalent vaccine (DPT+HepB+Hib) in India's Universal Immunization Programme was officially launched in Trivandrum, capital of Kerala state on 14 December 2011. Three days later (17 December 2011), Tamil Nadu became the second Indian state to introduce Hib-containing pentavalent vaccine in its public programme. Both events were presided by the respective State Health Ministers and attended by government officials, civil society organizations and representatives from WHO, UNICEF, and the GAVI Alliance.

Two-and-half-month old Ardra became the first child to receive pentavalent vaccine at Kerala state's launch ceremony in Trivandrum

The introduction of Hib-containing pentavalent vaccine is the culmination of years of advocacy, discussion and debate following the 2008 India's National Technical Advisory Group on Immunization (NTAGI) recommendation to introduce the vaccine. Kerala and Tamil Nadu, both situated in southern India, were selected for pentavalent vaccine introduction because of their strong public health structures and high routine immunization coverage rates. With a combined total population of more than 100 million people, an annual birth cohort of 1.6 million infants will receive protection from the traditional vaccines for diphtheria, pertussis, tetanus, hepatitis B and now *Haemophilus influenzae* type b disease. These events have increased the interest of other Indian states to introduce Hib-containing pentavalent vaccine and the Government of India is currently considering requests from several additional states.

The information contained in this Newsletter depends upon your contributions

Please send inputs for inclusion to:

gaudink@who.int

The GAVI Alliance is providing commodity support for the purchase of pentavalent vaccines for both states. As illustrated by the recent national scale-up of hepatitis B vaccine through central government resources, well placed partner support can have a catalytic effect on the overall immunization programme.

MEASLES INITIATIVE CONGRATULATES INDIA ON ONE-YEAR POLIO-FREE ACHIEVEMENT

31/01/2012 from Hayatee Hasan, WHO/HQ

"Integrating Immunization, other linked health interventions and surveillance in the health systems context"

On 13 January 2011, India achieves a significant milestone for polio eradication, immunization and global public health: zero new wild polio cases for one year. India has traditionally recorded amongst the largest numbers of new polio cases globally and was an epicentre of the virus.

However, government-led efforts to reach all children with polio vaccine and ensure highly sensitive surveillance have resulted in a dramatic reduction in polio and culminated in zero new cases recorded since 13 January 2011. If all pending laboratory investigations return negative, in the coming weeks India will officially be deemed to have stopped indigenous transmission of wild poliovirus.

The Measles Initiative joins the Global Polio Eradication Initiative, and all immunization and health partners in congratulating the government and people of India for this remarkable achievement.
This milestone, attained in the world's second largest country, demonstrates the public health successes that are possible when governments at central, state and local levels, communities and partners work together. The Measles Initiative encourages India's efforts to remain vigilant, maintain high population immunity and sensitive surveillance for polio as the WHO South-East Asia region aims to certify polio-free status in 2014.
India's success further demonstrates the power of vaccines – one of the world's most effective public health interventions.

To read the full Measles Initiative statement, see this link.

Technical Information

REPORT OF THE SAGE NOVEMBER 2011 MEETING PUBLISHED

31/01/2012 from Hayatee Hasan, WHO/HQ

During its meeting of 8-10 November 2011, the Strategic Advisory Group of Experts (SAGE) on immunization discussed issues including polio eradication, Decade of Vaccines and the Global Vaccine Safety blueprint.

Polio eradication

SAGE stated unequivocally that the risk of failure to finish global polio eradication constitutes a programmatic emergency of global proportions for public health and is not acceptable under any circumstances. Moreover, the country reports produced by the Global Polio Eradication Initiative Independent Monitoring Board must identify the root causes why some infected countries are failing to interrupt transmission and hold appropriate individuals, agencies and authorities responsible. Failure, SAGE warned, would lead to a resurgence of the disease and would be seen as the most expensive public health failure in history.

Decade of Vaccines

SAGE welcomed the Decade of Vaccines collaboration as a new initiative to create a global coalition to fully realize the potential of immunization in saving lives. SAGE reviewed the draft Decade of Vaccines global action plan and although they supported the overall direction, it was agreed that the plan needed to be more exciting and innovative, extending the benefits of immunization beyond childhood. SAGE requested the planning teams to identify a few major "game-changers" which if implemented would have a significant impact. In addition, SAGE felt that the action plan should strongly address the emerging global challenge of vaccine hesitancy which posed a major threat to immunization programmes worldwide.

Global vaccine safety Blueprint

SAGE welcomed the Blueprint — developed by WHO with partners — aimed at addressing gaps in vaccine management and communication infrastructure around the issue of vaccine safety. SAGE endorsed the revised Blueprint's vision statement and strategic goals. SAGE emphasized the critical importance of country ownership in monitoring vaccine safety and responding to safety concerns, therefore, country needs should be a particular focus during Blueprint implementation.

Other topics discussed at the meeting included the negotiations around the legally binding instrument on mercury and thiomersal containing vaccines; monitoring national immunization coverage and reinforcing surveillance; optimizing immunization schedules for conjugate pneumococcal vaccines; use of hepatitis A vaccines; and progress of tuberculosis vaccine candidate trials.

Full report
Background documents and presentations
More information on SAGE

COLD CHAIN & LOGISTICS (CCL) TASKFORCE UPDATE

31/01/2012 from Osman Mansoor, UNICEF New York

As a follow-up to the CCL Workshop where the Effective Vaccine Management (EVM) tools and methods were reviewed (reported in last GIN), UNICEF organized a webinar on 17 January. It can be viewed at this link.

The Webinar was intended to shine a light on how to support countries to implement the EVM *Improvement Plan* (IP), based on an assessment of the findings of performance over the past year. It starts with a short Child Survival context, and provides slides, but limited presentation on the EVM background – as this section had been voted as least useful, using the 'polling option' of the webinar. This was also used to vote on the main 'locks & keys' identified by the Country Offices' respondents in a small survey. The survey and participants suggested that advocacy, resource mobilization and management issues are critical for the EVM *Improvement Plan* implementation.

The EVM is the key diagnostic tool for CCL systems, with the *Improvement Plan* intended to fix the systemic problems. But unless the IP is governmentally owned and led, there is little value in doing an EVM! Partner support remains critical, but competing priorities, limited resources and sometimes technical capacity issues appear to be obstructing implementation. The role of the GAVI review of implementation - to be included in the annual progress report – remains to be seen. Partner support and advocacy is likely to be critical.

For sending feedback from countries on the locks and keys for implementing the IP; please send an email.

"Introducing new vaccines and technologies"

GAVI related Information

Next GAVI Review Dates: GAVI Call for Proposals for New Vaccine Support (only): Closing date 15 May 2011

"Integrating Immunization, other linked health interventions and surveillance in the health systems context"

Technical Information

SURVEILLANCE: FONDATION MÉRIEUX TACKLES TYPHOID FEVER DIAGNOSTICS

31/01/2012 from Leah Harvey and Christopher B. Nelson, Coalition against Typhoid Secretariat, Sabin Vaccine Institute, Washington, DC USA

Photo credit: Fondation Mérieux

Recent epidemics of typhoid fever in Fiji, Philippines, Zambia, and Zimbabwe highlight the need for integrated approaches to typhoid control, including adequate diagnostic and treatment options. As numerous studies have demonstrated, current diagnostic methods lack sensitivity and are not well adapted for use in developing countries. Delayed and inaccurate diagnosis and treatment of typhoid fever result in increased costs and higher rates of serious complications and deaths.

In recognition of this need, Fondation Mérieux, a member of the Coalition against Typhoid (CaT), is working to improve typhoid diagnostics. Fondation Mérieux has recently launched a project to develop a sensitive molecular diagnostic test for the detection of *Salmonella* in suspected cases of typhoid and paratyphoid fever. The test is intended for use in high burden communities and will be able to detect *S.Typhi, S.paratyphi A, S.typhimurium* and *S.enteritidis* in blood samples.

This project will also involve five partner organizations, including the Pasteur Institute (France), West of Scotland Specialist Virology Centre (UK), Fast Track Diagnostics (Luxembourg), Kemri-CDC (Kenya), and the Child Health Foundation (Bangladesh).

"Fondation Mérieux thanks the Bill and Melinda Gates Foundation for this opportunity and looks forward to working with the Coalition against Typhoid and other partners to promote the use of improved diagnostics in high burden areas," states Guy Vernet, Scientific Director of Fondation Mérieux.

The Coalition against Typhoid (CaT) is a global forum of scientists and immunization experts working to save lives and reduce suffering by advancing typhoid vaccination in high burden communities.

ADVOCACY FOR IMMUNIZATION FINANCING TRAINING ENTERS FINAL PHASE

31/01/2012 from Sabrina Gaber and Sam Davies, Agence de Médecine Préventive

Advocacy for Immunization (ADVIM)—a project run by the Agence de Médecine Préventive (AMP) —is now carrying out the third and final phase of a training programme to develop skills in advocacy for immunization financing. The 34 participants include members of health, planning and finance ministries as well as representatives of civil societies from Benin, Burkina Faso and Côte d'Ivoire.

The training programme includes six months of blended learning, developed by AMP in collaboration with international experts to meet local needs. The first phase, which started mid-October 2011, involved one and a half months of distance learning featuring tailor-made learning modules. The second phase, held mid-December 2011, comprised one week of classroom learning in Benin, led by national and international experts in advocacy, health promotion, communications, and negotiation.

The students are now developing advocacy mini-projects in their professional environments. Overall, 19 mini-projects, covering ten themes, will be implemented in the first quarter of 2012. Students will receive technical support from experts in each of the three countries and ADVIM team members. The best mini-projects will be discussed at AMP's EPIdemiology and VACcinology (EPIVAC) third technical conference from 16-18 February 2012.

Established in 2009 with funding from the Bill & Melinda Gates Foundation, ADVIM is a three-year project that develops advocacy initiatives for immunization financing at all levels of the health system in participating countries (Benin, Burkina Faso, Côte d'Ivoire). Efforts are carried out in collaboration with the ministry of health and partner ministries, WHO, UNICEF, WAHO, civil society, and the private sector.

For more information on AMP.
For more information on ADVIM.

HSS= Health Systems Strengthening;
IST = Inter Country Support Team;
ISS = Immunization Services Support;
INS = Injection Safety Support;
NVS = New Vaccine Support;
DQA = Data Quality Audit;
DQS = Data Quality Self Assessment;
RED = Reach Every District;
cMYP = Fully costed multi-year plan;
NITAG = National Immunization Technical Advisory Group;
NRA = National Regulatory Authority

"Protecting more people in a changing world"

Technical Information

RECOGNIZING THE VACCINE WORLD SPECIFICITIES, LEARNING FROM THE MEDICINE PRICE INFORMATION MECHANISMS

31/01/2012 from Miloud Kaddar, WHO HQ and International Development Opportunities (IDO)

The Vaccine Product, Price and Procurement (V3P) project continues to make progress in its current information gathering and analysis phase. Work stream 3, one of the project's four work streams, focuses on the assessment of existing medicine information systems designed to provide information on product, price and procurement details.

In September 2011, the V3P Steering Committee selected four mechanisms providing categories of medicine information also pertinent to the vaccine sector for further analysis by the project team : the WHO Global Price Reporting Mechanism (GPRM); the WHO- Health Action International (HAI) Medicines Prices Project (HAI): the Price and Quality Reporting (PQR) (Global Fund); the Price Information Exchange (PIE) WPRO Regional Database (WPRO PIE). These four mechanisms have different characteristics, with respect to their architecture, design and user interface. Specific parameters of these mechanisms, such as methodology, target audience, user "friendliness" and complexity, are being reviewed in order to assess the mechanisms' functionality and potential adaptability and applicability to the vaccine sector. In addition to direct reviews of the various mechanisms, the project team is conducting stakeholder interviews with experts working directly with and on these databases.

The goal of this exercise is not to conduct an in-depth evaluation of the existing mechanisms. Rather, it intends to collect lessons learned throughout the various phases of development and implementation of existing medicine information mechanisms. The project team is compiling a set of "best practices" with regard to the four medicine information systems under review, which will help to determine some aspects of medicine-related mechanisms that would be most beneficial for adaptation in the potential creation of an effective information system for vaccines on product characteristics, price and procurement. It is also critical to recognize that the vaccine world is specific and has its own features and requirements.

The conclusion of this work stream will provide a set of recommendations that will allow the V3P project to avoid repeating any identified mistakes, oversights or ineffective aspects of the existing medicine information systems. This will be particularly useful for the eventual development of a tool that will enable countries graduating from GAVI support, as well as other Low and Middle Income Countries (LMICs), to gain access to information that will allow them to introduce new vaccines and procure vaccines in the most efficient manner possible.

For more information, contact Miloud Kaddar at kaddarm@who.int, +41 227911436.

2011 IN REVIEW: KEY HEALTH ISSUES

31/01/2012 from Hayatee Hasan, WHO/HQ

This photo feature presents a selection of some of the major health issues in 2011, including Immunization Week and World Hepatitis Day.
To read the photo story, visit this site.

EPIDEMIOLOGICAL EVALUATION OF VACCINES: EFFICACY, SAFETY, POLICY SHORT COURSE - LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE

31/01/2012 from Karen Edmond, LSHTM

The Epidemiological Evaluation of Vaccines, which runs from 9-20 July 2012 in London at the London School of Hygiene and Tropical Medicine. The course is designed to provide an understanding of the methods used in the evaluation of vaccines (from phase I trials through to population impact and policy) - it is aimed at public health professionals and field researchers with a strong interest in vaccine efficacy, safety and policy impact. More information can be found at this link.

WHO PREQUALIFICATION NEWS

NEW VACCINES PREQUALIFIED

MMR vaccine Priorix (Two dose presentation) produced by GSK Biologicals in Belgium was prequalified on 21 December 2011 and has been added to the list of prequalified vaccines.

"Introducing new vaccines and technologies"

GAVI related Information

Next GAVI Review Dates: GAVI Call for Proposals for New Vaccine Support (only): Closing date 15 May 2011

"Integrating Immunization, other linked health interventions and surveillance in the health systems context"

Technical Information

WHO GLOBAL VACCINE SAFETY NEWS

NEW! INFORMATION SHEETS ON VACCINE REACTION RATES

31/01/2012 from Philipp Lambach, WHO HQ

An important part of post-licensure vaccine safety surveillance is to collect and analyse reports of Adverse Events Following Immunization (AEFI). Analysing multiple AEFI reports helps determine if the observed reaction rate to a specific vaccine is higher than the expected vaccine reaction rate which is often determined from published studies or trials. If a vaccinated group and a placebo group have identical background rates of an event any differences between groups can be attributed to the vaccine, taking into account factors leading to variation of background, observed and vaccine reaction rates of events.

To help strengthen the capacity to introduce vaccines in Member States WHO will publish information sheets online shortly to provide details on selected vaccines that are relevant to the analysis of reported events. These information sheets include a short summary of the vaccine as well as details of mild and severe adverse reactions (local and systemic) following immunization. Where possible the information presented includes the expected rates of vaccine reactions as published in the literature.

The papers primarily target national public health officials and immunization programme managers but may appeal to others interested in such information. Data from these sheets can be used in the evaluation of AEFI reported during national immunization programmes, but also in preparing communication materials about specific vaccines.

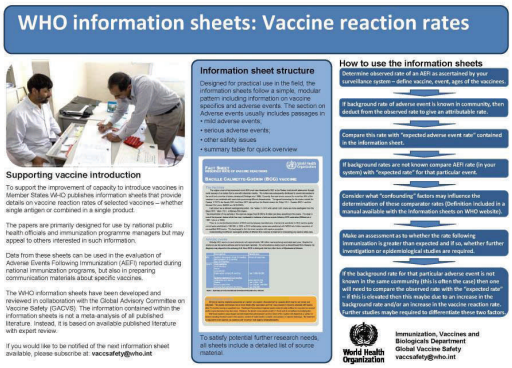
In total, information sheets of over 20 of the most important licensed vaccines will be developed and gradually posted on our website.

If you and your colleagues would like to receive email notification when the first batch of the information sheets is available, you can subscribe by sending an email to: vaccsafety@who.int.

Information sheet structure

Designed for practical use in the field, the information sheets follow a simple, modular pattern including information on vaccine specifics and adverse events. The section on Adverse events usually includes passages in • mild adverse events;
• serious adverse events;
• other safety issues
• summary table for quick overview

To satisfy potential further research needs, all sheets include a detailed list of source material.



HSS= Health Systems Strengthening;
IST = Inter Country Support Team;
ISS = Immunization Services Support;
INS = Injection Safety Support;
NVS = New Vaccine Support;
DQA = Data Quality Audit;
DQS = Data Quality Self Assessment;
RED = Reach Every District;
cMYP = Fully costed multi-year plan;
NITAG = National Immunization Technical Advisory Group;
NRA = National Regulatory Authority

"Protecting more people in a changing world"

THE GLOBAL NETWORK FOR THE POST MARKETING SURVEILLANCE OF VACCINES-UPDATE

31/01/2012 from Madhav Balakrishnan, WHO HQ

The Global Network for Post-marketing Surveillance (PMS) of Vaccines was established by WHO in early 2008 with a primary objective to monitor the safety of WHO prequalified vaccines supplied through UN agencies. By 2011, twelve countries, Albania, Brazil, China, India, Iran, Kazakhstan, Mexico, Senegal, Sri Lanka, Tunisia, Uganda and Vietnam have been included in the network. These countries were trained in Vaccine Pharmacovigilance, on the methods of causality assessment for vaccine Adverse Event Following Immunization (AEFI) classification and the use of Vigiflow© (a software platform to report and upload AEFI cases to the WHO Programme for International Drug Monitoring, which is maintained by the Uppsala Monitoring Centre (UMC) in Sweden).

As of 31 December 2011, eight of the twelve countries in the Global PMS network were uploading AEFI case reports to the Uppsala Monitoring Centre (UMC) in Sweden, using the Vigiflow system. Reports pertaining to 6,099 AEFI have been uploaded into the WHO UMC database. Of these, 2,770 involved multiple vaccines. DTP vaccines were associated to the largest number (3,745) of adverse events. Most events related to DTP were reported from Iran (3,516) and Sri Lanka (187) both of which have well established AEFI surveillance systems.

With one more year for the project, the PMS Network has improved the reporting of AEFI for vaccines in most participating countries. Systems are being established to ensure harmonization of the surveillance and reporting systems, including case report forms, software systems, and type of AEFI reported. The network countries have identified the need for a more simple data processing tool that could be more specific for vaccines and that could be operated off-line given the internet limitations in many countries. Currently the WHO and UMC are exploring the prospects of creating a simpler tool based on the experience gathered.

New Publications

DOCUMENTING THE IMPACT OF HEPATITIS B IMMUNIZATION: BEST PRACTICES FOR CONDUCTING A SEROSURVEY (WHO/IVB/11.08)

This document is now online. It is specifically about impact assessment through serosurveys. This may be a standalone method or as part of a broader evaluation of hepatitis B control. Surveys of this kind have been carried out in a number of areas of the world. This document will be a resource for countries whishing to carry out a hepatitis B survey and is primarily aimed at the lead investigator(s) to assist them in designing the surveys.

"Protecting more people in a changing world"

Country Information by Region

AFRICAN REGION

THIRD MEETING OF THE SUB REGIONAL WORKING GROUP FOR CENTRAL AND WEST AFRICA

31/01/2012 from Auguste Ambendet, WHO IST/Central

The third 2011 meeting of the Sub Regional Working Group (SRWG) for Central and West Africa, was held on 9 December 2011, Windhoek, Namibia. It was immediately following the Task Force on Immunization (TFI) and the Annual Regional Conference on Immunization in Africa (ARCI). The main objective of this meeting was to give an update on the SRWG activities in 2011 and to set the priorities and the strategic lines of work for 2012: Assessment of the 2011 activities; Analyse the Routine EPI challenges, those linked with the introduction of new vaccines in 2011 and the perspectives for 2012; Define the contribution of the SRWG in implementing the recent decisions from the GAVI Board; Adopt the measures and strategies allowing the optimization of the work of the SRWG in the current context; Define the priorities for 2012

The main conclusions were on the following critical points:

- Immediately start the revitalization process of the SRWG which will include revising the SRWG's terms of reference (TOR) and creating other sub commissions such as the governance and institutionalization of the national immunization programmes, Health systems and Immunization, etc…
- Focus on stopping the spread of the Wild Poliovirus in countries of both sub regions
- Adopt the revised TORs and the priorities for 2012 during the next SRWG meeting.

PROGRESS ON MATERNAL AND NEONATAL TETANUS (MNT) ELIMINATION AS OF END 2011 BY MATERNAL AND NEONATAL TETANUS ELIMINATION (MNTE) TEAM

31/01/2012 from Rownak Khan, Azhar Abid Raza and Flint Zulu, UNICEF HQ

The year 2011 ended on resounding note for the MNT Elimination programme as two more countries, Liberia and Senegal, attained MNT elimination. This brings the total number of countries that conducted validation surveys to six (Ethiopia (all except Somali Land), Ghana, Indonesia part, Liberia ,Senegal and Uganda) by the end of 2011, and have all been validated as having eliminated MNT. Consequently, 23 out of 59 countries that were at high risk for MNT since 2000 have achieved elimination. In addition 15 states out of 33 in India, Ethiopia (all except Somali Region) and 29 provinces out of 33 in Indonesia have also eliminated MNT. MNT is still a public health issue in the remaining 36 countries. Furthermore, pre-validation assessments were conducted in Burkina Faso, Guinea Bissau, Tanzania and Timor Leste in 2011 and the countries are scheduled for validation surveys by WHO in the first quarter of 2012. Funding for MNTE activities was made possible through the successful partnerships with National Committees for UNICEF, Procter & Gamble Pampers and the Kiwanis International who made their initial contribution towards meeting more than the US$100 million funding gap.

TRAINING ON THE IMMUNIZATION DATA QUALITY SELF-ASSESSMENT TOOL IN SAO TOME AND PRINCIPE

31/01/2012 from Auguste Ambendet, WHO IST/Central

A second training on DQS was also conducted in Sao Tome and Principe on 5-9 December 2011. It is a follow-up to the training held in June 2011 and gathered staff from the five provinces of the country.

HSS= Health Systems Strengthening; **IST** = Inter Country Support Team; **ISS** = Immunization Services Support; **INS** = Injection Safety Support; **NVS** = New Vaccine Support; **DQA** = Data Quality Audit; **DQS** = Data Quality Se lf Assessment; **RED** = Reach Every District; **cMYP** = Fully costed multi-year plan; **NITAG** = National Immunization Technical Advisory Group; **NRA** = National Regulatory Authority

Country Information by Region

AFRICAN REGION

A SUCCESSFUL PARTNERSHIP WITH THE INDUSTRY FOR VACCINATION CAMPAIGN WASTE MANAGEMENT IN COTE D'IVOIRE

31/01/2012 from Crépin Hilaire Dadjo (WHO/IST West Africa), Atténéné Godiskine, Aka Tano-Bian (WHO Cote d'Ivoire), Olivier Ronveaux (WHO/IST West Africa)

HSS= Health Systems Strengthening;
IST = Inter Country Support Team;
ISS = Immunization Services Support;
INS = Injection Safety Support;
NVS = New Vaccine Support;
DQA = Data Quality Audit;
DQS = Data Quality Self Assessment;
RED = Reach Every District;
cMYP = Fully costed multi-year plan;
NITAG = National Immunization Technical Advisory Group;
NRA = National Regulatory Authority

Mass vaccination campaigns produce a huge amount of biomedical waste including syringes, whose management remains a challenge in African countries. A successful new approach to waste management was initiated in December 2011 in Cote d'Ivoire by the Institut National de l'Hygiène Publique (Ministry of Health) in collaboration with the WHO Country Office. Two sugar cane production plants based in Ferkessedougou (700 km North of Abidjan) and Touba (800 km West of the country) were contacted to explore solutions for the disposal of the syringes. Both companies agreed to collaborate at no cost, and measures were taken to incinerate (at 1300°C) the filled safety boxes generating steam used to produce electricity to run some of the machines. To ensure a high level of safety for handling staff, security equipment (boots, gloves, helmets, etc.) was acquired and staff was trained accordingly in the premises of the factories; supervisors oversaw the operations.

Placing safety boxes of dirty syringes in the furnace. Photo credit: O. Ronveaux

Safety Boxes collected after a Yellow Fever campaign in Cote d'Ivoire. Photo credit: O. Ronveaux

Plans were made to store and transport the safety boxes from 102 districts to the plants. Within 7 days, a total of 103,359 safety boxes which had been utilized during the campaigns of measles (December 2011), yellow fever (January 2011) and tetanus (2010 and 2009) were fully incinerated without any reported injury or damage to the equipment. Ashes were disposed of by the industrial sites without reported problem. The incineration captured 63% of all syringes used during the three campaigns. Observed deficiencies included the incomplete collection of safety boxes, and on site burning in some districts. The average cost per disposed syringe was 1.47 cent (USD) (or 7.35 XOF) and the costs were mainly due to transport (64.2%) and supervision (30.1%), then storage (2.1%) and purchase of equipment (3.6%).

This collaboration was successful thanks to a careful planning and monitoring of the actions. The experience should be sustained and efforts should be made to explore similar collaboration with industries and reduce the charge.

TRAINING ON THE IMMUNIZATION DATA QUALITY SELF-ASSESSMENT TOOL IN THE DEMOCRATIC REPUBLIC OF CONGO (DRC)

31/01/2012 from Auguste Ambendet, WHO IST/Central

"Protecting more people in a changing world"

WHO IST/Central organized two training workshops of the EPI staff on the Immunization Data Quality Self assessment tool (DQS) in DRC. The first workshop took place in Kinshasa on 7-12 December 2011 and regrouped 25 health agents coming from the centralized and decentralized EPI (Kinshasa Province). The second took place in Matadi, Province of Bas Cong, from 15-17 November 2011 with the participation of 11 EPI and Surveillance agents from this region.
After this second workshop, the following results were obtained: DRC renewed its central knot of trainers mastering the DQS tools. The questionnaires for the evaluation of the quality of the EPI monitoring system and the accuracy of data were revised and tested at the Zones and health centres level in Kinshasa. Surveillance of vaccine-preventable diseases was also introduced.The introduction of changes in the immunization data quality in the DQS process constitutes a new approach allowing a better follow-up in enhancing data quality. A plan for expanding the DQS to all provinces was elaborated.

Country Information by Region

"Protecting more people in a changing world"

EASTERN MEDITERRANEAN REGION

STRENGTHENING EVIDENCE-BASED DECISION MAKING PROCESS

31/01/2012 from Nahad Sadrazodi, WHO EMRO

With the recently announced Decade of Vaccines, there are more resources and attention directed to introduction of life-saving vaccines. A key component of introducing life-saving vaccines is rigorous and scientific decision-making independent of political and industry influence. National Immunization Technical Advisory Groups (NITAGs) are best positioned to ensure transparent and evidence-based discourse amongst policy-makers and scientific community.

Per a regional survey in 2008, 13 countries in Eastern Mediterranean claimed to have NITAGs. Since then, the Regional Office developed an action plan, guidelines and standards and provided technical assistance and training to help countries establish and strengthen their NITAGs. Accordingly, eight additional countries have established new NITAGs by issuing ministerial decrees, bringing the total to 21 in the Region. As well, ten of the already-established NITAGs have developed plans of action to help strengthen and meet the seven regional standards. We are already witnessing dividends in even resource-poor countries, such as Sudan, where the NITAG and government decided on introducing rotavirus vaccine based on disease burden data.

Yet, the majority of the countries still face some very basic operational or structural constraints. So far only three countries in the Region have fully met the regional standards. Accordingly, in 2012, the WHO Regional Office will build on the great achievements of the Member States, and support them on several fronts, including establishing NITAGs in the remaining two countries, meeting the seven regional standards, and focusing on improving the quality of exchanges, meetings and recommendations.

EUROPEAN REGION

EUROPEAN IMMUNIZATION WEEK 2012: FOCUS ON KEEPING DEMAND FOR VACCINES HIGH, HIGHLIGHTING VITAL ROLE OF HEALTH WORKERS

31/01/2012 from Robb Butler, WHO/EURO

The seventh European Immunization Week (EIW) will take place from 21-27 April 2012. The WHO Regional Office for Europe (WHO/Europe) looks forward to taking part this year in what will be a truly global effort, as all regions of the world will simultaneously recognize immunization awareness weeks. In 2011, the WHO European Region had the highest participation of Member States since the inception of EIW in 2005: a total of 52 countries. This year, WHO/Europe hopes to have the participation of all 53 Member States, which would provide a compelling display of the Region's unified commitment to immunization.

European Immunization Week 2012 comes at a time, and in a Region, where the majority of individuals can access vaccines, so the focus must now turn to making sure that the demand for these life-saving vaccines remains high. Measles outbreaks across the Region provide stark evidence as to what happens when people and communities become complacent about vaccination. EIW offers an opportunity to raise awareness about immunization and to educate health workers, policy makers and the public about why vaccines are vital to the health and wellbeing of both the individual and the community.

WHO/Europe will highlight a few key points during EIW 2012: The vital role played by front-line health workers in ensuring the success of national immunization programmes; The importance of making sure all people of the Region are vaccinated against measles, given the prevalence of measles outbreaks and the recognition of the ten-year anniversary since the European Region was declared polio-free (in 2002)

As in the past, WHO/Europe will coordinate EIW from a regional level, but participating countries have the freedom to plan and execute EIW activities at the national, regional and community level based on their specific needs. WHO/Europe plans to produce promotional and informational materials (both traditional and multimedia) that can be used by participating countries.

HSS= Health Systems Strengthening; **IST** = Inter Country Support Team; **ISS** = Immunization Services Support; **INS** = Injection Safety Support; **NVS** = New Vaccine Support; **DQA** = Data Quality Audit; **DQS** = Data Quality Se lf Assessment; **RED** = Reach Every District; **cMYP** = Fully costed multi-year plan; **NITAG** = National Immunization Technical Advisory Group; **NRA** = National Regulatory Authority

Country Information by Region

EUROPEAN REGION

JOINT HEALTH AND IMMUNIZATION REVIEW IN KOSOVO

31/01/2012 from UNICEF Central and Eastern Europe and the Commonwealth of Independent States (CEECIS)

UNICEF Regional Office for CEECIS and UNICEF Kosovo have conducted a review of the ongoing health and immunization programmes from 5-9 December 2011. The review included meetings with the Minister of Health and other officials and professionals to agree on priorities and support areas, visits to field health institutions, discussions with the non-health sections to identify synergies and areas of collaboration, and a visit to the Innovations Lab.

Young people in Kosovo discussing new ideas in Innovations Cafe

The immunization programme in Kosovo has been well sustained through the ongoing health reforms, as verified by the high vaccination coverage in 2010 lot quality survey. Immunization records constitute the best available data regarding under-five children, and can be instrumental in supporting the health information system and scaling up reporting systems for other primary health care interventions. Low access to services among the marginalized populations due to different reasons is a key challenge requiring the use of tailored strategies. UNICEF will continue to support Kosovo in strengthening the immunization programme, procurement services, assessments and developing the multi-year strategic plan.

The Innovations Lab provides a space for young people in Kosovo, who constitute half of the total population, to connect with each other and transform their most innovative ideas into concrete projects that benefit their peers and communities, and address some key institutional challenges. Immunization-related themes among ongoing projects include vaccine management, data visualization, and outreach to marginalized communities. The centre and projects are financially supported by UNICEF Kosovo.

COMMUNICATION FRAMEWORK FOR NEW VACCINES & CHILD SURVIVAL: NOW IN RUSSIAN!

31/01/2012 from Osman Mansoor, UNICEF

Pneumonia and diarrhoea remain the top two causes of child deaths. The availability of new vaccines against the top causes of pneumonia (Hib, PCV) and diarrhoea (RV) in children offers the opportunity to rapidly reduce child deaths towards the achievement of MDG4. However, these vaccines cannot prevent all cases of pneumonia and diarrhoea and it is important that these new vaccines do not give rise to unrealistic expectations that could eventually damage the Expanded Programme on Immunization (EPI). In addition, the introduction of new vaccines offers the opportunity to promote the other interventions that will reduce deaths – especially breast-feeding, hand washing and care-seeking if a child develops danger signs.

UNICEF has developed a Framework for developing evidence-based communication strategies to mobilize and engage communities to adopt these healthy actions, including demanding for immunization. It is available at this link where a Translate button offers translation into hundreds of languages. However, these machine translations are not perfect. The site also includes the Framework in a Word version in English and French. Now a Russian translation is available in word. Please contact Osman Mansoor for a proper translation into another language to help a country use the Framework to develop a communication plan.

Any tools, materials, and resources that have been used for new vaccine introduction, are also sought so that country-developed resources can be shared globally.

"Protecting more people in a changing world"

The information contained in this Newsletter depends upon your contributions

Please send inputs for inclusion to:

gaudink@who.int

Country Information by Region

EUROPEAN REGION

WHO REGIONAL WORKSHOP ON PREPAREDNESS FOR INTRODUCTION OF ROTAVIRUS VACCINES

31/01/2012 from Liudmila Mosina, WHO/EURO

The WHO Regional Office for Europe, in collaboration with UNICEF, is conducting a workshop on preparedness for introduction of rotavirus vaccines. The workshop will be held in Copenhagen, Denmark on 31 January–1 February 2012. National Immunization Programme Managers, immunization staff and communication specialists form Armenia, Georgia, and Moldova as well as representatives of WHO and UNICEF regional and country offices will attend the workshop. The objectives of the workshop are to review country readiness for introduction of rotavirus vaccines and discuss further steps in implementation of Introduction Plans; to consider safety of rotavirus vaccines and adjustment of AEFI systems prior to introduction; and to discuss how short-term false contra indications to improve vaccination timeliness can be addressed.

The second day of the workshop will be dedicated to development of national advocacy and communication strategies and plans. The workshop should provide an opportunity to update progress, analyse challenges, and define further steps in implementation of National Plans for Introduction of Rotavirus Vaccines, and strengthen coordination of WHO and UNICEF support to countries to insure smooth introduction of rotavirus vaccines.

ARMENIA INTRODUCED VSSM TOOL FOR VACCINE STOCK MANAGEMENT

31/01/2012 from UNICEF Central and Eastern Europe and the Commonwealth of Independent States (CEECIS)

Following the decision of Armenian Ministry of Health (MoH) and the National Communicable Diseases Control Centre (NCDC) to use Vaccination Supplies Stock Management tool (VSSM) version 4.8 for their National Vaccine Store in Yerevan, VSSM was translated into Armenian language by UNICEF, and a training course was organized for 8 staff from NCDC and MOH supported jointly by UNICEF and WHO Country Offices from 5 to 9 September 2011.

With this initiative, Armenia has joined the 20 countries in different regions using VSSM. In general, the national vaccine store in Yerevan has been observed as well equipped and organized with trained and motivated staff. The exclusive use of VSSM in the national store will facilitate coordination between MoH and NCDC and contribute to the effectiveness and accuracy of the stock control and supply management system as well as to the overall quality of immunization programme planning and management. It is also expected to reduce the risk of vaccine stock-outs.

VSSM is an open-source computer software designed by WHO to assist immunization programme managers and vaccine storekeepers to organize and manage the stock of vaccines and immunization supplies. It is based on existing WHO/UNICEF policies on vaccine management, with consideration for common field practices in developing countries. Although the focus is on vaccines, it also caters for all other health supplies, particularly the ones provided through primary health care services. VSSM is a multilingual tool and has easily been translated into several local languages until now.

On the success of the VSSM stand-alone used in 20 countries, a web-based application is being developed and tested by Ministry of Health and Medical Education in Iran and by Project Optimize in Tunisia. The demo version of wVSSM version 1.3 is now uploaded on the web for public view (username: Admin, password: 123)

HSS= Health Systems Strengthening;
IST = Inter Country Support Team;
ISS = Immunization Services Support;
INS = Injection Safety Support;
NVS = New Vaccine Support;
DQA = Data Quality Audit;
DQS = Data Quality Self Assessment;
RED = Reach Every District;
cMYP = Fully costed multi-year plan;
NITAG = National Immunization Technical Advisory Group;
NRA = National Regulatory Authority

Country Information by Region

SOUTH EAST ASIA REGION

CHOLERA SITUATION IN BANGLADESH AND PREVENTIVE MEASURES AHEAD

31/01/2012 from Firdausi Qadri, International Centre for Diarrhoeal Disease Research, Bangladesh

Cholera is a major cause of hospitalization of patients with severe to moderate dehydration at the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR, B) diarrheal hospitals in Bangladesh where over 30,000 cholera patients, both adults and young children are treated each year. Estimates of incidence of cholera in the catchment areas of the ICDDR, B hospitals range between 280 and 474 per 100,000 showing high disease burden in the population. Cholera increases after floods and cyclones and in addition, epidemics and outbreaks are also reported frequently.

Shanchol being delivered to a child by National Professor, Dr M R Khan. Photo credit: Firdausi Qadri

The continuous high burden of cholera highlights the need for immunoprophylactic measures to prevent the disease. Control of cholera with an affordable oral vaccine, Shanchol™ is a preventive option that needed to be tested in a high cholera endemic setting. A mass immunization programme was conducted successfully in urban Dhaka in a high risk cholera prone population in Mirpur in the first quarter of 2011. Over 141,294 children and adults (aged one year and above) were vaccinated with Shanchol™. A total of 263,684 doses of the vaccine were delivered and 87% received two doses. The programme was carried out in collaboration with the Ministry of Health and Family Welfare of the Government of Bangladesh and utilized the national immunization tools of the Expanded Programme on Immunization (EPI). The programme was supported by the Bangladesh Pediatric Association. The study also has a behavior change component (handwashing and chlorinated water) and is testing for the first time, two public health control measures together which is ongoing in the field now.

Passive surveillance for cholera is being conducted to determine effectiveness of the vaccination in decreasing cholera and results are expected by June 2013. This cholera initiative will create better awareness about the disease in the country and also aid the development of local capacity for cholera vaccine production. It is hoped that the results from this study will

CONSULTATIVE MEETING ON JAPANESE ENCEPHALITIS IN NEPAL

31/01/2012 from the Programme for Immunization Preventable Diseases (IPD), WHO Country Office for Nepal

On 17-18 November 2011 the Government of Nepal and Nepal's National Committee on Immunization Practices (NCIP) convened a Consultative Meeting on Japanese Encephalitis. Participants included NCIP members, staff members of the Department of Health Services including the Director General and many Division Directors, experts from Nepal, WHO, UNICEF, CDC and the International Vaccine Institute (IVI).

The topic of the meeting included developing next steps in Nepal's Japanese Encephalitis (JE) Control programme. Nepal initiated its JE control programme in 2006 when it initiated phased implementation of JE campaigns. Districts with very high rates of confirmed JE transmission (~16.0/100,000) were prioritized to receive vaccines first. Age groups targeted for vaccination included all persons more than 12 months of age. Districts with intermediate rates of JE transmission (~1.6/100,000) were included for JE vaccination later on with target age groups including children 12 months to 15 years.

JE vaccine was introduced in the routine immunization programme in post-campaign districts beginning in 2009. In 2010, the US Centers for Disease Control and Prevention conducted a disease impact evaluation and concluded that the JE vaccination programme had resulted in significant decrease in JE transmission in post-campaign districts. Based on their findings, the Government of Nepal decided to include persons of all ages in JE campaigns beginning in 2010. As of 2011 all high-risk and intermediate risk districts had completed JE campaigns and 31 post-campaign districts had initiated JE in routine immunization for children 12-23 months of age. Incidence rates of all districts in Nepal dropped dramatically and when averaging three year JE incidence rates from 2009 to 2011 only four districts had JE incidence of more than 1.0 per 100,000 population. Two of the four districts (Kathmandu and Surkhet) recently completed JE campaigns during the interval between 2009 and 2011.

Based on these discussions, the recommendation was that in the future, mass vaccination campaigns would be conducted in response to documented increasing incidence of JE and that routine immunization programme already implemented in post-campaign districts with a single dose of live attenuated SA-14-14-2 vaccine at 12 months of age should be expanded to non-campaign districts.

"Protecting more people in a changing world"

The information contained in this Newsletter depends upon your contributions

Please send inputs for inclusion to:

gaudink@who.int

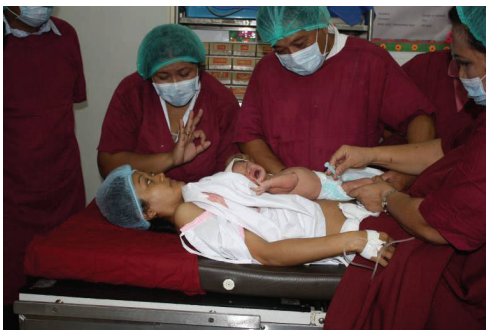
Country Information by Region

WESTERN PACIFIC REGION

HEPATITIS B CONTROL IN THE WESTERN PACIFIC REGION: TONGA BECOMES THE 5TH COUNTRY TO BE OFFICIALLY VERIFIED TO REACH THE REGION'S HEPATITIS B CONTROL MILESTONE

31/01/2012 from Karen Hennessey, WHO/WPRO

The Western Pacific Region has adopted a milestone to reduce chronic Hepatitis B infection rates in children to <2% by 2012 and a goal of <1%, the target year has yet to be established. Timely Hepatitis B birth dose vaccination (within 24 hours of birth) followed by at least two more doses is the key strategy for preventing chronic Hepatitis B infection in newborns and children. To verify achievement of targets the Region established a Hepatitis B Expert Resource Panel to serve as independent experts on country-specific verification panels.



Newborn hepatitis B vaccination and instruction on need for 3 doses to protect baby, Philippines, 2011

In January 2012, Tonga became the fifth country in Western Pacific to be officially verified to reach the Region's Hepatitis B Control Milestone. Hong Kong (China), Macau (China), Malaysia, and the Republic of Korea have been verified to reach the goal of <1% chronic infection rates in children.

With the milestone year upon us, the Region and Member States are preparing to document and verify the important impact that Hepatitis B vaccination has had on preventing newborns and children from lifelong Hepatitis B infection.

NEONATAL TETANUS SURVEILLANCE WORKSHOP IN LAO PEOPLE'S DEMOCRATIC REPUBLIC

31/01/2012 from Sigrun Roesel, WHO/WPRO

The Lao People's Democratic Republic continues to make progress towards the national goal of maternal and neonatal tetanus elimination (MNTE). With the recent completion of three rounds of tetanus toxoid (TT) supplementary immunization activities (SIAs) in the majority of districts and mop-up immunization campaigns based on district risk assessment strengthening of neonatal tetanus (NT) surveillance has become a priority in MNTE approaches towards validation. With support of WHO, UNICEF and Luxemburg Development, the Ministry of Health conducted a NT surveillance training 18-20 January 2012. Participation of immunization, surveillance and mother and child health (MCH) staff from the national level and all provinces provided an excellent opportunity to review the current situation of MNTE in the country and defined jointly the way forward. The workshop enhanced technical skills of different MNTE strategies, identified through interactive group work relevant aspects of community involvement and opportunities for future collaboration of the three groups (EPI, surveillance, MCH) and drafted workplans for future collaboration.

As a first time approach to conduct such vaccine preventable diseases (VDP) surveillance training for EPI, surveillance and MCH staff, this workshop succeeded as an innovative approach to foster greater coordination between different health programmes.

HSS= Health Systems Strengthening;
IST = Inter Country Support Team;
ISS = Immunization Services Support;
INS = Injection Safety Support;
NVS = New Vaccine Support;
DQA = Data Quality Audit;
DQS = Data Quality Self Assessment;
RED = Reach Every District;
cMYP = Fully costed multi-year plan;
NITAG = National Immunization Technical Advisory Group;
NRA = National Regulatory Authority

Country Information by Region

WESTERN PACIFIC REGION

WESTERN PACIFIC REGIONAL WORKSHOP ON CERVICAL CANCER CONTROL AND HPV VACCINATION

31/01/2012 from Kimberley Fox, WHO/WPRO

More than 100,000 cases of cervical cancer occur among women in the Western Pacific Region each year, causing nearly 50,000 deaths. Cervical cancer is a preventable disease, and a high level of control has been achieved in many high-income countries through comprehensive programmes including HPV vaccination, cervical cancer screening, and treatment.

To support countries in planning and implementing cervical cancer control programmes, a regional workshop on Cervical Cancer Control and HPV Vaccination was held in Manila, Philippines during 28-30 November 2011. Fifteeen countries participated in the workshop, where technical updates were provided and countries with successful programmes shared experiences, leading to the development of country action plans to strengthen cervical cancer control.

"Protecting more people in a changing world"

Technical updates included information on HPV vaccines, GAVI plans to support HPV vaccination, newer approaches to screening such as VIA (visual inspection with acetic acid), cancer registries, and approaches to costing and cost-effectiveness analysis of cervical cancer screening and HPV vaccination programmes. In addition, the Australian monitoring system – which recently identified a reduction in CIN-2 and -3 among young women following introduction of HPV vaccine – was presented. Five participating middle-income countries had introduced HPV vaccine through country-driven initiatives, and these countries shared lessons learnt in the implementation process. Two additional countries plan phased-introduction beginning 2012 and shared their plans.

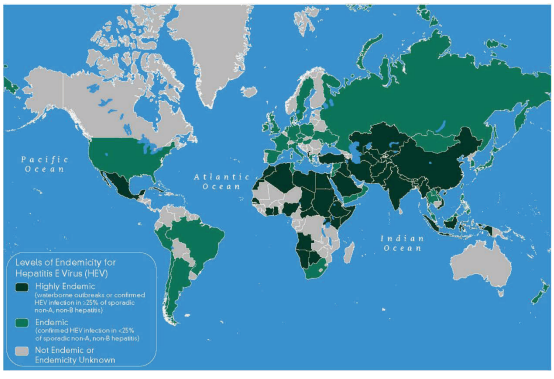
Key challenges identified for cervical cancer screening and HPV vaccination were the costs of equipment and vaccine, programme logistics (particularly in the Pacific Island setting), reaching the target age group with vaccine, and appropriate training of staff. Countries applied the technical updates and lessons learnt from others to address these challenges in their country action plans for 2012.

WORLD'S FIRST HEPATITIS E VACCINE APPROVED IN CHINA

31/01/2012 from Sonia Pagliusi, DCVMN Secretariat.

China's State Food and Drug Administration (SFDA) recently approved the world's first hepatitis E vaccine (Chinese, English), Hecolin™, which was jointly developed by the China National Institute of Diagnostics and Vaccine Development in Infectious Diseases and Xiamen Innovax Biotech Co., Ltd. A total of 112,604 healthy adults aged 16–65 years participated in the phase III trial in China, which demonstrated that Hecolin™ was well tolerated and 100% effective in preventing hepatitis E disease. Experts hope that Hecolin™ can play a vital role in controlling the spread of hepatitis E around the world. Initial introduction will focus on high-risk populations, such as child-bearing-age women, chronic liver disease patients and food industry workers, with advice from international organizations to introduce the vaccine where needed.

Innovax Hecolin Phase 3 Immunizations



HepE - Map of the distribution of the Hepatitis E Infection - 2010

Hepatitis E is a waterborne disease, transmitted from person-to-person via the faecal-oral route. No approved treatment exists and epidemics have been reported in Asia, the Middle East, Africa and Central America. According to the WHO, one third of the global population may have been infected by the virus and there are an estimated 14 million symptomatic cases of hepatitis E worldwide annually, with 300,000 deaths and 5,200 stillbirths (The Lancet, Volume 376, Issue 9744, Pages 895-902, 11 September 2010).

Innovax is a member of the Developing Countries Vaccine Manufacturers Network (DCVMN), a voluntary public health driven alliance of vaccine manufacturers that supplies quality-vaccines to people in developing countries. The company is also developing the first HPV vaccine based on virus-like particles derived from an E.coli expression system, which has completed phase II trials. For more information, please see this site or send an email.

The information contained in this Newsletter depends upon your contributions

Please send inputs for inclusion to:

gaudink@who.int

Regional Meetings & Key Events Related to Immunization

Title of Meeting	Start	Finish	Location	Region
2012 Meetings				
AFRO Eastern and Southern African Pneumococcal surveillance Lab Training workshop, NICD, South Africa	13-Feb	17-Feb	South Africa	AFRO
Expanded Programme on Immunization Manager Meeting for IST Central Africa	20-Feb	24-Feb	TBD	AFRO
Expanded Programme on Immunization Manager Meeting for IST West Africa	27-Feb	29-Feb	TBD	AFRO
Caribbean EPI managers meeting	27-Feb	02-Mar	Barbados	PAHO
EURO Regional Reference Lab Meeting	Feb	Feb	TBD	EURO
Expanded Programme on Immunization Manager Meeting for IST Southern & East Africa	06-Mar	08-Mar	TBD	AFRO
SEARO Technical Advisory Group on Immunization Meeting	29-Mar	30-Mar	New Delhi, India	SEARO
Strategic Advisory Group of Experts (SAGE) on immunization	10-Apr	12-Apr	Geneva, Switzerland	Global
AFRO HPV consultation meeting	11-Apr	13-Apr	Johannesburg, South Africa	AFRO
Immunization Practices Advisory Committee IPAC	17-Apr	19-Apr	Geneva, Switzerland	Global
AFRO Cervical Cancer Prevention and Control Meeting	Apr	Apr	TBD	AFRO
EURO Rotavirus surveillance sub-regional meeting	May	May	TBD	EURO
Task Force on Immunization in Africa (TFI) meeting	10-May	12-May	TBD	AFRO
Global New and Under-utilized Vaccines meeting	14-May	18-May	EMRO	Global
WPRO Third Meeting on Vaccine-Preventable Diseases Laboratory Networks	May	May	Manila, Philippines	WPRO
Global Advisory Committee on Vaccine Safety meeting (GACVS)	06-Jun	07-Jun	Geneva, Switzerland	Global
Regional review workshop on rotavirus and VP-IBDs surveillance	11-Jun	15-Jun	Casablanca	EMRO
13th meeting of Developing Countries' Vaccine Regulators Network (DCVRN)	12-Jun	12-Jun	Bangkok, Thailand	Global
SEARO Expanded Programme on Immunization Managers Meeting	20-Jun	22-Jun	New Delhi, India	SEARO
20th Meeting of the Technical Advisory Group on Immunization & Vaccine Preventable Diseases	Aug	Aug	Manila, Philippines	WPRO
Regional NUVI conference	26-Sep	27-Sep	Brazzaville, Congo	AFRO
EURO Regional GAVI Working Group meeting	Sep	Sep	TBD	EURO
EURO Invasive Bacterial Disease (IBD) surveillance sub-regional meeting	Sep	Sep	TBD	EURO
EMRO Regional Expanded Programme on Immunization managers meeting-Regional meeting on measles/ Rubella elimination	16-Sep	18-Sep	Marrakesh, Morocco	EMRO
Global Invasive Bacterial Disease (IBD) Surveillance meeting	Oct	Oct	Washington, USA	Global
WPRO Cervical Cancer Prevention and HPV	Nov	Nov	Manila, Philippines	WPRO

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

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

Global Websites

International Vaccine Access Center

American Red Cross Child Survival

PAHO ProVac Initiative

NUVI Website

Gardasil Access Program

Maternal and Child Health Integrated Program (MCHIP)

EXPAND THE NETWORK

Invite a friend, colleague, organization or network to subscribe to the GIN.
Invite them to subscribe by asking them to send an email to listserv@who.int with the following exact text in the body of the email:
"subscribe GLOBALIMMUNIZATIONNEWS"

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*

The Civil Society Dose - A quarterly newsletter of the GAVI CSO Constituency

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

World Health Organization unicef GAVI ALLIANCE