
Annual Report 2008



Network for Education and Support in Immunisation
Réseau d'éducation et d'appui à l'immunisation



Front cover: Participants and facilitators of the Regional vaccinology course for Anglophone countries, Nairobi, Kenya 4-9 August 2008

Table of contents

TABLE OF CONTENTS	I
LIST OF ABBREVIATIONS	II
EXECUTIVE SUMMARY	III
ABOUT NESI	V
EDUCATION AND TRAINING	1
Education and training in the African Region	1
1. Workshop on vaccinology training materials and tools	1
2. Second WHO/AFRO Anglophone Regional Vaccinology course, Nairobi, Kenya, 4-9 August 2008	1
3. Second WHO/AFRO Regional Francophone Vaccinology Course, Ouidah, 4-11 October 2008	2
4. Sub-regional vaccinology symposium, Pretoria, South Africa, 24-26 February 2008	4
5. Southern African Vaccinology Course, Windhoek, Namibia, 8-13 September 2008	5
6. TROPED Vaccinology course, Rixensart, Belgium, 7-11 January 2008	5
7. In-country EPI management course, Rep. du Congo, December 2008	6
Education and training in the Eastern Mediterranean Region	7
8. Capacity Building Training on Surveillance and Data Management, Amman, 19-30 December 2008	7
9. Arab Vaccinology Meetings: vaccination in older children and adolescents, 26-30 October 2008	8
TECHNICAL SUPPORT	10
1. General peer review meeting: HPV and genital cancer prevention, Sitges, Spain, 7-9 February 2008	10
2. Protocol development workshop for delivery strategies of HPV vaccination, Geneva, 12-13 February 2008.	10
3. Meeting on cervical cancer prevention through HPV vaccination in the WHO/EMRO Region, Rabat, 25-27 March 2008	11
4. Second workshop on pooled vaccine procurement for Maghreb Union, Tunis, 9-11 July 2008	12
5. WHO/AFRO Regional consultation on cervical cancer prevention and control, Ouagadougou, 16-17 September 2008	14
6. Capacity building for multi-year planning, Gabon	15
NETWORKING AND ADVOCACY	17
1. Global Immunisation Meeting, Geneva, 18-21 February 2008	17
2. East and Southern Africa EPI managers meeting, Dar es Salaam, 27-29 February 2008	17
3. EMRO 25 th Inter-country EPI managers meeting, Alexandria, Egypt, 21-23 October 2008	18
4. 16 th Task Force on Immunisation in Africa Annual Meeting, Mauritius, 3-5 December 2008	19
5. 15 th African Regional Inter-Agency Coordination Committee Annual Meeting, Mauritius, 6 December 2008	19
SYMPOSIA	20
1. 37 th Annual conference of the Parasitological Society of Southern Africa, Pretoria, 1-3 October 2008	20
2. Vaccinology Symposium, Hermanus, Cape Town, 26-29 October 2008	20
Fourth NESI Oversight Committee, Brussels, 9 June 2008	21
PUBLICATIONS	22

List of abbreviations

AEFI	Adverse Events Following Immunisation
AFP	Acute Flaccid Paralysis
AMC	Advanced Market Commitment
AMP	Agence de Médecine Préventive
ARICC	African Regional Inter-Agency Coordinating Committee
CDC	Centers for Disease Control and Prevention
DTP	Diphtheria-Tetanus-Pertussis
DQS	Data Quality Self-Assessment
EPI	Expanded Programme on Immunization
GAVI	Global Alliance for Vaccines and Immunization
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GIVS	Global Immunisation Vision and Strategy
GSK	GlaxoSmithKline
HepB	Hepatitis B
Hib	<i>Haemophilus influenzae</i> type b
HIV	Human Immunodeficiency Virus
HPV	Human Papillomavirus
HSV	Herpes Simplex Virus
ICO	Institut Catala d'Oncologia
IDSR	Integrated Disease Surveillance and Response
IPV	Inactivated Polio Vaccine
IVD	Immunization and vaccines development
MEDUNSA	Medical University of Southern Africa
MLM	Mid-Level Management
MoH	Ministry of Health
MVI	Malaria Vaccine Initiative
MYP	Multi-Year Plan
NESI	Network for Education and Support in Immunisation
NGO	Non-Governmental Organisation
NITAG	National Immunisation Technical Advisory Group
NRA	National Regulatory Authority
PAHO	Pan American Health Organisation
PATH	Program for Appropriate Technology in Health
RED	Reaching Every District
SADC	Southern African Development Community
SAGE	Strategic Advisory Group of Experts
SAVIC	South African Vaccination and Immunisation Centre
STI	Sexually Transmitted Infection
TB	Tuberculosis
TFI	Task Force on Immunization
UAE	United Arab Emirates
UCT	University of Cape Town
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VPD	Vaccine Preventable Diseases
WHO	World Health Organization
WHO/AFRO	WHO Regional Office for Africa
WHO/EMRO	WHO Regional Office for the Eastern Mediterranean
WHO/HQ	WHO Headquarters
WHO-IST	WHO Inter-country Support Team

Executive summary

Vaccine preventable diseases are still a major cause of morbidity and mortality in developing countries. Recent studies confirmed that there has been a steady increase in global DTP3 vaccination coverage from 59% in 1986, to 65% in 1990, 70% in 2000 and 74% in 2006. Increased access to immunisation has played an important role in reducing child mortality.¹ Routine vaccination remains the cornerstone of successful immunisation programmes and is a key component of the primary health care approach. Outreach activities and mass vaccination campaigns can further increase vaccination coverage and increase immune protection. Combined with other highly effective child health interventions (such as vitamin A distribution and deworming) the impact on child survival is further increased.

An additional 20% of the 10 million children under the age of five who die each year in the developing world from poverty diseases could be prevented by currently available vaccines. In the context of the Millennium Development Goal 4 (2/3 reduction of child mortality by the year 2015) vaccination is the most cost-effective way of preventing childhood mortality against an ever increasing number of infectious diseases².

The availability of competent health staff at district level is the most important determinant of immunisation coverage³. Capacity building of health personnel in developing countries is therefore essential for strengthening immunisation programmes to reach the target of 90% vaccination coverage.

NESI has been involved since 2002 in capacity building for EPI managers based on the specific needs in their respective countries, in collaboration with WHO, UNICEF and other partners⁴. So far 653 EPI managers and teachers of medical faculties and nursing schools have been trained through WHO/AFRO regional management courses. In 2008 NESI continued to support capacity building of immunisation programme managers mainly through in-country training.

In 2006 WHO/AFRO and NESI developed pre-service immunisation curricula for medical faculties and nursing schools⁵. This approach ensures that graduates of schools of health sciences have the required competencies to implement the immunisation programme as a strong component of the primary health care approach. In 2008 NESI continued its collaboration with universities and nursing schools in updating their curricula in particular within the Southern African sub-region.

To optimise the benefits of new developments in immunisation, WHO/AFRO and NESI initiated in 2007 a bilingual regional vaccinology course in Douala, Cameroon. The main objective of this course was to introduce participants to the various disciplines associated with vaccinology including immunology, clinical trials, new vaccines, vaccine safety, vaccination strategies, evaluation of immunisation programmes and vaccine economics.

Based on the feedback on the first bilingual course, two separate vaccinology courses were organised in 2008 for Anglophone countries in Nairobi, Kenya and for Francophone countries in Ouidah, Benin. So far, 51 EPI programme managers, 36 academics and 27 WHO and UNICEF staff members participated in these courses and 41 facilitators from WHO/AFRO, WHO/HQ, African Universities, NESI and the vaccine industry gave lectures and assisted in group work.

-
- 1 Lim SS, Stein DB, Charrow A, Murray CJL. Tracking progress towards universal childhood Immunisation and the impact of global initiatives: a systematic analysis of three-dose diphtheria, tetanus, and pertussis immunisation coverage. *Lancet* 2008; 372: 2031-2046.
 - 2 Salama, Chief of Health for the United Nations Children's Fund (UNICEF). Global Immunisation Meeting, New York 20 Feb 2009.
 - 3 Anand S, Bärnighausen T. Health workers and vaccination coverage in developing countries: an econometric analysis. *Lancet* 2007; 369: 1277-1285.
 - 4 Mutabaruka E, Nshimirimana D, Gailav C, Meheus A. EPI Training Needs Assessment in 12 African Countries, 2002-2004. *Communicable Diseases Bulletin for the African Region* 2005; 3: 1-4.
 - 5 Prototype curriculum on immunization for medical schools in the WHO African Region, 1st Edition March 2007.

It is expected that through these courses, national academics and immunisation programme staff, including members of national technical advisory groups, will provide critical input to guide the process of new vaccine introduction.

NESI also participated in the preparation and facilitation of the sub-regional vaccinology course in Windhoek and of the vaccinology module of the TROPED course in Rixensart with the Universities of Cape Town and Berlin as local organisers.

Comprehensive planning of the technical, logistical and financial aspects of immunisation is essential for the success and sustainability of immunisation programmes. As in previous years, NESI continued supporting comprehensive Multi-year planning in collaboration with WHO and other partners.

In addition to childhood vaccination there is a need for extending immunisation to other age groups. Adolescent vaccination through school health programmes has already been successfully used for hepatitis B vaccination to prevent liver cancer as well as for tetanus boosters. Now that HPV vaccination is available, school-based vaccination programmes are likely to be the most effective strategy to reach (pre) adolescent girls. At several occasions, NESI has given presentations on adolescent vaccination to stimulate discussions on strengthening school health programmes.

EPI staff collects many data on immunisation activities. Compiling, processing and analysing these data provides good indicators on the local performance of the programme. Sharing this information with district health teams provides important feedback on the quality of the collected information. Capacity building in assessing local data improves the quality of data collection as well as the performance of the programme. On request by WHO/EMRO, NESI supported a successful workshop on data quality assessment in Jordan for participants from several countries in the region.

NESI provided technical assistance for a peer review meeting on HPV and genital cancer prevention in Sitges, Spain and for a meeting organised by WHO/HQ to build consensus on operational research priorities for HPV implementation. In addition, NESI co-facilitated two important regional meetings on HPV vaccination in the WHO/EMRO and WHO/AFRO regions.

Following the concern of low-middle-income countries to gain access to new vaccines that was raised during the First Arab Vaccinology Meeting in Amman in December 2007 organised by the University of Jordan and NESI, a meeting in Tunis on pooled vaccine procurement for the countries of the Maghreb region was organised by WHO/EMRO and NESI.

Furthermore, NESI participated in five 'networking activities' with EPI staff and immunisation partners which are crucial for monitoring, planning and coordinating NESI's activities and maximise their efficiency and impact. These included the Annual Global Immunisation meeting, WHO EPI managers meetings in the WHO/AFRO and EMRO region, the Annual Meeting of the WHO/AFRO Task-Force for Immunisation and the African Regional Immunisation Coordination Committee.

NESI also participated in conferences and symposia on immunisation and was (co)-author of several scientific publications as listed at the end of the report.

The Annual Report 2008 represents the highlights of NESI's activities during the year 2008 in capacity building in immunisation through curriculum reform, training and networking. We hope you will find the report informative and we are looking forward to receiving your comments or requests for more information about our work.

About NESI

The Network for Education and Support in Immunisation (NESI) was established in 2002. NESI was built on the experience of the International Network for Eastern and Southern Africa on Hepatitis B Vaccination, which was established in 1999 by five universities in Eastern and Southern Africa (Kenya, Tanzania, Zambia, Zimbabwe and South Africa), ministries of health in Africa and the University of Antwerpen. The purpose of this network was to translate research on hepatitis B through capacity building and advocacy into universal access to hepatitis B vaccination in the partner countries.

With the development of new vaccines and increased commitment by development partners and private sector initiatives to strengthen vaccine supply and immunisation services, there are more opportunities to prevent more diseases in more children. This led to the establishment of NESI, which is a collaborative network of capacity building for the strengthening of existing immunisation systems and introduction of new vaccines with a broad technical scope and wide geographical focus.

NESI closely coordinates its activities with the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), the Global Alliance for Vaccines and Immunization and the GAVI Fund, international NGOs, the private sector, and other immunisation stakeholders.

Due to its links with universities and other health professional training institutions, which are vital to achieving sustainable capacity and competence building in the field of vaccinology, NESI is unique in its attention on pre-service training, particularly on the development of curricula and training for nurses, medical doctors, pharmacists, and other related health professionals.

A Memorandum of Understanding between NESI and the WHO Regional Office for Africa (WHO/AFRO) clearly defines the overall goals and actions of NESI in the area of capacity building. With the Eastern Mediterranean Region, NESI works on the basis of a detailed annual joint plan of action for key areas of capacity building. This validates the position of NESI as an integral partner in capacity building within the WHO African and EMRO regions.

Objectives

The mission of NESI is to improve the development, quality, and sustainability of immunisation programmes and services in low- and middle-income countries through the development of and advocacy for immunisation education and training. NESI aims to build the capacity of Ministry of Health managers and staff working in the Expanded Programme on Immunization (EPI) in their respective countries as well as to improve pre-service and post-graduate training for the different university faculties involved in immunisation, which include medicine, nursing, pharmacy, and public health.

Services

To accomplish its mission, NESI engages in a number of activities, which are grouped into three main areas: education and training, technical support, and networking and advocacy. NESI offers the following in each area:

Education and training

- Organises training events in collaboration with other organisations;
- Monitors and evaluates currently implemented education and training programmes;
- Validates the content of educational and training materials; and
- Develops up-to-date, high-quality training materials for different audiences involved in immunisation programmes.

Technical support

- Performs needs assessments for education and training in collaboration with academic and other partners;
- Provides support to universities to improve the curriculum of health professionals involved in immunisation and advises on regular refresher courses in collaboration with ministries of health;
- Assists countries in developing comprehensive training plans as part of their Multi-Year Plans (MYPs);
- Provides support to country staff to implement training activities; and
- Improves national and regional capacity to deliver education and training.

Networking and advocacy

- Facilitates a forum to discuss and coordinate actions related to education, training, and support for immunisation programmes in low- and middle-income countries;
- Maintains a network of specialists drawn from international organisations, universities in both industrialised and developing countries, national immunisation programmes, Non-Governmental Organisations (NGOs), industry, and other relevant stakeholders, to deliver high-quality training in all aspects of immunisation and at different stages of implementation of immunisation programmes;
- Collaborates with local, regional, and global training initiatives to advocate for better education and training; and
- Offers a website that houses on-line training materials and links to other relevant sites.

Structure

NESI is a public-private partnership between the University of Antwerpen and the private sector. An Executive Secretariat coordinates and implements activities for the network. The Executive Secretariat is based at the Department of Epidemiology and Social Medicine, University of Antwerpen, Belgium.

The Executive Secretariat reports to a 12-member Oversight Committee, which advises on strategy and budget allocation, and reviews outcomes. The Oversight Committee is composed of representatives from the public/private partnership, representatives from international health organisations and alliances, and international vaccinology experts.

NESI has full operational and scientific independence.

Funding

NESI is currently supported by an unrestricted educational grant from GlaxoSmithKline Biologicals and by funds from bilateral governmental university collaboration. The University of Antwerpen provides infrastructure, IT and administrative support. Additional funding, participation, or support from other national or international agencies or partners is actively being pursued.

Education and training

Education and training in the African Region

1. Workshop on vaccinology training materials and tools

Two workshops were scheduled for the course faculty of the two regional WHO/AFRO vaccinology courses (Anglophone and Francophone countries). These workshops covered an overview of immunisation in Africa, an introduction to the content of the course syllabus, the role and responsibility of the facilitator and the outline of lectures. Moreover, facilitators were briefed about objectives and background documents for group work.

Faculty members reviewed their lectures in small groups based on these orientations. During the following day, lectures were presented to the faculty for peer review. After incorporating the feedback from the faculty the presentations were finalised.

This process resulted in a more structured and standardised format of the lectures. However, further development of training modules is needed, which is foreseen within the WHO/AFRO-NESI Joint Plan of Action for the years 2009 and 2010.

2. Second WHO/AFRO Anglophone Regional Vaccinology course, Nairobi, Kenya, 4-9 August 2008

Following a successful first vaccinology course in Douala in 2007, the second regional WHO/AFRO vaccinology course for Anglophone countries was hosted by the Ministry of Health of the Republic of Kenya. The course was supported by WHO/HQ, UNICEF, GAVI, USAID and NESI. The purpose of the course was to build capacity of immunisation key players in the field of vaccination on the scientific aspects related to vaccine development. The capacity building of these national experts is an important initial step towards the establishment of national immunisation technical advisory groups (NITAGs). These advisory groups are expected to play an important role in evidence-based decision-making on the introduction of new vaccines.

The vaccinology course participants included lecturers and teachers from medical schools, national EPI managers as well as EPI focal persons from WHO/UNICEF and other partners to build individual, institutional and national capacity in the areas of vaccine research, development, and training. The objectives of this regional vaccinology course were to train trainers in vaccinology, to equip participants with the basic principles of immunology, clinical trials and specificities of vaccine development, production, testing, registration, WHO pre-qualification and utilisation. As countries take up the challenge of deciding which new vaccines to introduce they will need to have all available information at their disposal to make informed evidence-based decisions.

There were 33 participants and 18 co-facilitators. Participants and facilitators were from the following 15 countries: Botswana (2), Ethiopia (4), Ghana (3), Kenya (8), Malawi (3), Nigeria (4), South Africa (4), Tanzania (1), Uganda (2), Zambia (3), Zimbabwe (3), Burkina Faso (1) and Congo (5), Switzerland (2), and Belgium (4). Among the participants were 12 academic staff members, 12 national EPI managers and 9 WHO/UNICEF EPI focal persons.

The facilitators were equally distributed among WHO staff and academics. WHO facilitators were from WHO/AFRO (5), WHO/HQ (2), WHO-IST/South & East (1), and WHO-IST/West (1). The remaining facilitators were from the following academic institutions: University of Ghana, Accra (1) the Kwame Nkrumah University of Science & Technology in Kumasi (1), University of Limpopo-MEDUNSA Campus (2), and University of Antwerp/NESI (4).

The course was opened by Dr. David Okello, WHO Representative in Kenya, a representative of the Ministry of Health and the UNICEF Representative in Kenya.

The course content included: the scientific basis of vaccinology; the vaccine development process including vaccine clinical trials, the prequalification, registration, production and quality control of a vaccine; the status and new developments of routine EPI vaccines and their implementation strategies; practical aspects of development and testing of new vaccines and specific management aspects of new and under-utilised vaccines; vaccine safety, vaccination in special target groups (immuno-compromised, pregnant women, adolescents, adults and elderly), vaccine cost-effectiveness; future vaccines; EPI training and vaccine research. The sessions were very interactive through daily plenary sessions, group discussions and case studies. Balance between participants and facilitators led to very dynamic exchanges.

Participants evaluated the course daily regarding objective achievement, content relevance, effectiveness of facilitation and participation and appropriateness of material organisation. Those evaluations were very positive and revealed a satisfactory index between 68% and 91%. The qualitative evaluation of vaccinology training sessions was rated at a satisfactory index of 86%. Among the recommendations the need to improve the course through the development of standard training modules and handouts was stressed by participants and facilitators. Organisers, participants and facilitators thanked MOH/Kenya, WHO/Kenya and UNICEF/Kenya for their strong support. Overall this 2nd regional vaccinology course for Anglophone countries was very well appreciated.

Some key recommendations of the course included:

- To organise a workshop to develop descriptive modules and handouts on vaccinology in collaboration with WHO/HQ, UNICEF, NESI and the EPI pre-service training network.
- To support countries and training institutions to update their training materials in line with new developments in EPI and vaccinology, and to replicate similar trainings.
- To conduct subsequent regional vaccinology courses in order to get a critical mass of potential facilitators within countries.
- To support pre-service training institutions to use EPI curricula prototypes.
- To mobilise needed financial and human resources to support inter-country and in-country vaccinology training.

3. Second WHO/AFRO Regional Francophone Vaccinology Course, Ouidah, 4-11 October 2008

The second regional vaccinology course for Francophone countries was hosted by the Ministry of Health of Benin and was organised by WHO/AFRO, in collaboration with UNICEF, NESI and the University Cheikh Anta Diop (Dakar, Senegal). The course took place in the Institut Régional de Santé Publique from 4 to 11 October 2008. The purpose of this vaccinology course was similar to the course for Anglophone countries in Nairobi with as main objective building the capacity of immunisation key players in francophone countries of the AFRO Region in scientific and public health aspects of vaccines and vaccination programmes.

The course aimed to contribute to the establishment of competent national immunisation technical advisory groups (NITAGs), capable of preparing evidence-based recommendations to Ministries of Health on the introduction of under-utilised, new and future vaccines. The under-utilised vaccines include Hepatitis B, Hib, and Yellow Fever vaccines. New vaccines include conjugated pneumococcal and meningococcal vaccines, rotavirus and HPV vaccines. In the future, these technical advisory groups may also consider vaccines that are in the pipeline, e.g. against malaria, TB and HIV. As countries take up the challenge of deciding which vaccines to introduce, WHO/AFRO and partners want to ensure that these technical advisory groups have the available information at their disposal to make informed, evidence-based decisions.

Participants included professors/academics/researchers (13), EPI managers (17) and WHO/UNICEF staff members and EPI focal points. The course was attended by 41 participants of the following countries: Benin, Burkina Faso, Burundi, Cameroon, Côte d'Ivoire, Guinée, Madagascar, Mali, Niger, RDC, Rwanda, Senegal and Togo. Facilitators were from WHO/AFRO and Inter-country teams (5), WHO/HQ (2), NESI (3), WHO/Benin (4), UNICEF/Benin (1), University of Bamako (1) and PATH/MVI (1).

The vaccinology course was preceded by a two-day Training of Trainers workshop, to enable the facilitators to peer review course content and group work. Teaching methods of the course included individual pre-reading, lectures and short presentations using active media, group work, discussions in plenary and group sessions, case studies and role playing. Each session of lectures was followed by questions, answers and discussions.

The overall evaluation of the course was very positive: all topics were rated above 70%, and 79% of all the topics were rated between 80 and 90%. Lectures which were most appreciated included: scientific aspects of vaccine development, vaccine terminology, immunology, clinical trials, ethical aspects, and the different presentations on new vaccines.

The main technical recommendations on the course were the following:

For the Ministries of Health:

- Establish or activate the National Regulatory Authorities (NRAs) to allow them to fully assume their role in post marketing surveillance and monitoring of AEFIs.
- Ensuring vaccine safety and quality.
- Collaboration with the national vaccination services.
- Establish or activate the national ethical committees, taking into account the integrity, independence, expertise and the competence of its members.

For health training institutions

- Strengthen the collaboration between training institutions, medical faculties and other schools of health sciences, scientists involved in vaccine research, and immunisation services to optimise the quality of surveillance, monitoring, clinical trials and the introduction of new vaccines.
- Promote vaccinology teaching in the training curriculum of doctors, nursing staff, pharmacists and other vaccination service providers.

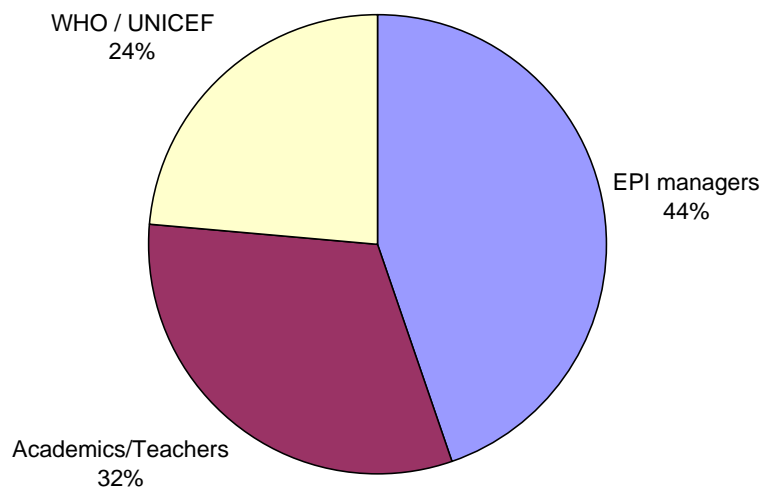
For WHO, UNICEF and other partners

- Expand the course to other programmes (TB, HIV, malaria, etc.).

For WHO/AFRO

Support countries in the development and implementation of a plan for institutional capacity building of the NRAs.

Figure 1 Distribution of participants at the regional vaccinology courses 2007-2008



4. Sub-regional vaccinology symposium, Pretoria, South Africa, 24-26 February 2008

The SADC vaccinology meeting 'PROTECTING THE HEALTH OF FUTURE GENERATIONS THROUGH VACCINATION' hosted by the South African Ministry of Health and the World Health Organisation was organised by the South African Vaccination and Immunisation Centre (SAVIC), the MEDUNSA Campus of the University of Limpopo and the University of Antwerpen.

The overall aim of the course was to strengthen immunisation programmes in the SADC region through building capacity on immunisation.

The specific objectives of this 3-day symposium were:

- To update participants on policies and strategies for immunisation in the WHO/AFRO region
- To strengthen immunisation programmes through partnership building between national and provincial departments of health, schools of health sciences and the private sector
- To update participants on key issues related to vaccine development, new vaccines and the process of introduction into national immunisation programmes
- To discuss methods of capacity building for pre-service training for medical and nursing schools
- To share experiences learned from public-academic-private partnerships such as SAVIC and its impact on immunisation programmes
- To discuss mechanisms of integrating EPI with other childhood survival strategies
- To propose a way forward on strengthening capacity building for immunisation in the SADC region

Group work on day one focused on identifying policy and programmatic issues related to the introduction of HPV, rotavirus and pneumococcus vaccines.

The course was attended by clinicians, public health practitioners, EPI managers and scientists from Southern Africa, which are involved in vaccine research and immunisation activities.

The focus on new vaccines and the process of new vaccine introduction was highly relevant as it gave an opportunity to the participants and high-level government officials to receive updated information on the value of new vaccines and the scientific evidence to support the decision-making process of the South African Ministry of Health to move ahead with the accelerated introduction of new pneumococcus and rotavirus vaccines.

5. Southern African Vaccinology Course, Windhoek, Namibia, 8-13 September 2008

This vaccinology course started as a South African version of the Rixensart vaccinology course (see below) with the University of Cape Town (UCT), South Africa, as local organiser. The course in Windhoek was the fourth course of this type. The 2008 course was hosted by UCT, with technical support from NESI and GSK and was sponsored by GSK and Sanofi-Pasteur.

The main objective of this course was to build sustainable research capacity to develop vaccines and/or to conduct quality standard phase I to phase IV vaccine clinical trials. It also aimed to provide participants with the necessary expertise to support public vaccination programmes and related activities.

The course aimed to introduce participants to the various disciplines associated with vaccinology including vaccine development, immunology, microbiology, clinical trials, vaccine safety, ethics, communication and advocacy for immunisation, vaccine economics, and new vaccine introduction.

Participants included clinicians of the public and private sector, researchers, programme managers, microbiologists, pharmacists and representatives of the vaccine industry.

Group work focused on rotavirus, conjugated pneumococcus vaccination, and malaria vaccination.

6. TROPED Vaccinology course, Rixensart, Belgium, 7-11 January 2008

Since 2003, The University of Berlin/Charité, NESI and GSK co-organise a one-week vaccinology course in Rixensart, which is an accredited module of the TROPED Master course for International Health for about 45 participants from developing and industrialised countries.

The course offers a broad spectrum of lectures covering the scientific basis of immunisation, vaccine development, efficacy and safety testing through clinical trials as well as ethical aspects of vaccine research. From the outset, NESI provided technical support for lectures and facilitation of group work.

At the end of the course, all participants choose a vaccinology subject for an assignment that is reviewed and marked by the course organisers.

7. In-country MLM EPI management course, Rep. du Congo, December 2008

In 2002, vaccination coverage in the Republic of Congo was estimated at 40%. Since 2003, significant improvement has been achieved with up to 80% coverage for DTP and 67% for HepB. This is still far below the WHO/AFRO targets for 2015 of 90% national coverage and at least 80% coverage in every district.

There are considerable disparities in coverage among districts. It is therefore important to train EPI managers in the key aspects of immunisation programme management. The Ministry of Health programmed four national MLM courses (Brazzaville, Pointe-Noire, Madingou and Owando) in collaboration with WHO and support of NESI.

The courses covered a broad range of topics including the role of the EPI manager, implementing the RED approach, integrated district micro-planning of EPI activities, increasing vaccine coverage and reduction of missed opportunities, vaccine management and logistics, injection safety, cold chain management, data collection, reporting and data quality surveillance, formative supervision and communication on immunisation for community mobilisation, and new vaccines introduction.

Education and training in the Eastern Mediterranean Region

8. Capacity Building Training on Surveillance and Data Management, Amman, 19-30 December 2008

The effectiveness of immunisation programmes mainly depends on the quality of the vaccines and the vaccination coverage. Implementing immunisation programmes requires uninterrupted and optimal implementation of vaccine logistics (including cold chain), vaccine management, correct administration of vaccines, safe waste disposal. In addition, it includes the organisation of campaigns to increase vaccination coverage and effectiveness.

Vaccination programmes require an effective regular and ongoing measurement of the level of achievement in vaccination coverage and other immunisation system indicators at district level and it is closely linked with reporting because it involves data collection and processing. Appropriate monitoring enables EPI managers at different levels to assess the achievements of the immunisation programme and to identify problems that need to be addressed.

The Data Quality Self assessment (DQS) is a flexible method to evaluate different aspects of the immunisation monitoring system at district and health unit levels.

The DQS workshop in Amman was organised by WHO/EMRO with support of NESI from 19-30 December 2008 with the purpose to build the capacity of the participating EPI managers to implement Data Quality Self Assessments in their respective countries, to assist EPI staff in diagnosing problems and to provide orientation to improve district monitoring, as highlighted in the Reaching Every District (RED) approach.

The course was attended by 33 participants: 18 from Jordan and 15 from other countries; Afghanistan, Iraq, Pakistan, Somalia, Sudan and Yemen.

The DQS workshop was conducted through the following sequence of activities:

- Meeting with EPI director and EPI staff members on the methodology of DQS and standard qualitative questionnaires and data forms
- Adapting the tools to the local situation
- Pilot testing of the data collection tools
- Sample selection
- Data collection
- Preparing the DQS software for data entry
- Data entry
- Data revision, compilation and aggregate analysis
- Interpretation of compiled data
- Group presentations
- Preparation of mission report
- Debriefing with the Ministry of Health and other stakeholders

Participants were allocated to working groups. Each group was given a task to work on one level in the health system (district and health unit level respectively). They had to select, adapt, add and weigh each question. For each group one facilitator joined the group work (supervisors).

Each group presented the final form of each questionnaire. In addition, a summary of required data sources was identified. Briefing on field testing of questionnaires was done. Five groups were nominated to test the tools for each level of the existing health services (district and health unit).

The prepared forms were revised and printed for field testing. One district and 4 health units were chosen for testing the tools. After completion of the field testing, the tools were adapted and the final forms were printed and distributed to the different teams. Selecting the sample size was done by systematic, random and convenient sampling techniques. Ten districts and 30 health centres were selected. The total number of selected districts and health units represented about 75% of the total population in Jordan. Field work was completed in 3 days as scheduled and the completed forms were revised and corrected where needed. Participants were classified into 12 teams; each team received the final forms for data collection at the district level and at 3 health units. All 12 district clusters and 36 health units were visited as foreseen. Data analysis was done and data quality was assessed for each domain: for every district and health unit, each domain had a maximum score of 10. An overall % quality index was calculated for each health unit facility and district and the aggregated national accuracy ratio was also calculated.

Results

Each group presented the results of the district and health units, including detailed interpretations and recommendations. A debriefing was done about the results of all visited sites with the Ministry of Health of Jordan and other stakeholders. Findings and recommendations were presented followed by open discussion. The Ministry of Health shared its appreciation for the workshop activities and debriefing and thanked WHO/EMRO and all attendants for their excellent work.

9. Arab Vaccinology Meetings: vaccination in older children and adolescents, 26-30 October 2008

The Arab Vaccinology Meetings on vaccination in older children and adolescents took place in Dubai, Abu Dhabi, Amman and Beirut, from 26-30 October 2008.

The Global Immunization Vision and Strategy (GIVS) stresses in the first strategic area the need 'to protect more people - i.e. expand immunisation beyond infancy to older age groups'. An important age group to consider are adolescents (10-19 year olds).

The rationale for adolescent vaccination is threefold:

- (1) To counter a specific risk in older age = e.g. primary series of vaccines to prevent sexually transmitted infections such as HPV vaccine and HSV or HIV vaccines in the future
- (2) A need for vaccine booster doses due to waning of immunological response, e.g. tetanus booster
- (3) Incomplete vaccination or no vaccination (missed opportunities) in infancy/early childhood (=catch-up vaccination), e.g. hepB vaccine, polio, measles, etc.

Channels to reach adolescents with vaccination include school-based facilities, routine visits in primary care and through campaigns. Reasons to vaccinate at school include: (1) school attendance is required by law and is very high, at least in primary school (= easy catchment of target population); (2) adolescents rarely consult in primary care; (3) cost-effectiveness of vaccination is much better in school settings than for primary care; and (4) vaccination can be included in a package of health interventions, e.g. the concept of 'health promoting schools' of UNESCO, WHO and others. Reaching out-of-school children (often deprived, disadvantaged groups at greater health risks) must be considered. Each country will have to consider carefully which adolescent vaccination is adequate based on the local situation.

In each country, the meeting started with an introduction to GIVS and adolescent vaccination, setting the scene for the other presentations. Specific presentations covered the different antigens which could be considered for adolescent vaccination: bacterial vaccines (diphtheria, tetanus, pertussis and meningitis) and viral vaccines (measles, mumps, rubella, varicella and influenza, hepatitis A and B, and HPV).

Each meeting was attended by 100 to 150 participants, with the majority from the private sector. In Dubai, the meeting was chaired by Dr. Ali Al-Marzooqi, Director of Public Health Affairs; Dr. Hamed Yehia Yaseen, Department of Health and Medical Services, gave a very informative presentation on school health systems in Dubai. It was an excellent example of a functioning school health system.

In Abu Dhabi, the meeting was chaired by Prof. Sayenna A. Uduman, Department of Pediatrics, UAE University, Al Ain.

The attendance was very good and the meetings were highly appreciated in all four locations.

Technical support

1. General peer review meeting: HPV and genital cancer prevention, Sitges, Spain, 7-9 February 2008

The general peer review meeting: Human Papillomavirus (HPV) and genital cancer prevention monograph programme - Regional reports for Latin America and Asia-Pacific regions was organised by the Catalan Institute of Oncology (ICO) in collaboration with WHO/ICO HPV Information Centre. The first Monograph was published in August 2006 in English and Spanish (Vaccine, Vol 24 Suppl. 3, 2006) with major input from NESI e.g. organising and editing of the public health section. The purpose of the meeting was to accelerate the process of developing Monograph Series on Cervical (and other genital) cancer prevention.

In 2008, three new monographs were being prepared, including an updated overview of the epidemiology, technical developments and recent advances in the prevention of HPV-related diseases, as well as two region-specific reports focusing on Latin America and the Caribbean and the Asia Pacific region. The peer review meeting, organised by the Catalan Institute of Oncology, was a major effort to ensure quality and consensus of the monographs. The meeting gathered leading authors of each chapter, the editors, relevant key experts and observers. Public presentations were made of the essential contributions of each chapter and comments and additions were received from the audience. After the meeting the leading authors finalised their chapters, taking into account the comments and suggestions made during the meeting. The monographs can be downloaded from the website: <http://www.who.int/hpvcentre/publications/en/index.html>.

Two additional regional reports are planned that describe the scientific advances in the field and review the current status of cervical cancer prevention and options for the Eastern European and African regions.

2. Protocol development workshop for delivery strategies of HPV vaccination, Geneva, 12-13 February 2008.

The protocol development workshop to study effective delivery strategies of HPV vaccination in adolescents was organised by WHO/HQ and took place in Geneva, Switzerland, from 12-13 February 2008.

The purpose of the workshop was:

- To agree on the study objectives, outcomes and research design
- To define the content of the adolescent health package
- To plan the scoping missions to countries where the study could take place

The workshop started with a presentation by WHO on the characteristics of the two HPV vaccines currently available.

Experiences of 3 studies on acceptability of HPV vaccines were presented and discussed:

- A study being conducted in the United Kingdom
- PATH demonstration projects in Uganda and Vietnam
- A sexual health promotion programme in Belgium

From these presentations and discussions critical questions for operational research on HPV vaccine introduction were identified and will be further explored in scoping missions.

- Should the communication on HPV vaccination present it as a cancer or STI vaccine?
- Should there be specific communication about the HPV vaccine for boys?

-
- What is the best delivery system for HPV vaccines (e.g. schools or health services)?
 - Which programmes within the health services should be involved or take the lead (reproductive health, EPI, school health, cancer prevention programme)?
 - Which staff at health facility level will be in charge of HPV vaccination?
 - Which type of research should be conducted to produce best evidence on effectiveness of HPV delivery strategies?
 - How should the effectiveness of HPV delivery and communication strategies be measured?

The meeting concluded to prepare guidelines for scoping missions. Eligible countries should have the following characteristics:

- Political interest in the HPV vaccination programme
- School health system
- Adolescent friendly health services
- Funding interest
- Local research partners

3. Meeting on cervical cancer prevention through HPV vaccination in the WHO/EMRO Region, Rabat, 25-27 March 2008

A meeting of policy-makers and programme managers was organised by WHO/EMRO and WHO/HQ in Rabat, Morocco from 25 to 27 March 2008 on strengthening cervical cancer prevention in the Eastern Mediterranean Region through human papillomavirus (HPV) vaccine introduction.

The meeting was attended by participants from member states in the EMRO region: Egypt, Islamic Republic of Iran, Morocco, Oman, Pakistan, Saudi Arabia, Sudan, Syrian Arab Republic and Tunisia. Pakistan and Sudan were the only GAVI-eligible countries present. Other participants were from: WHO/EMRO, WHO/HQ, the International Agency for Research on Cancer, PATH, Institut Catala d'Oncologia (ICO) and NESI.

The main objectives of the meeting were to:

1. Form a regional surveillance network to build country capacity for decision making on HPV vaccine introduction;
2. Share information on cervical cancer burden and HPV genotypes among countries in the WHO/EMRO Region;
3. Update country prevention teams on HPV vaccine;
4. Build multi-disciplinary country prevention teams; and
5. Draft a regional strategy as well as country work plans addressing disease burden and comprehensive prevention strategies including HPV vaccine introduction.

The objective of the group work was to describe the situation in each country and to develop a framework for building/scaling up cervical cancer prevention. Questions to address included: (1) burden of cervical cancer in the country; (2) current ongoing programmes on cancer prevention in terms of national policy, plan of action, presence of national cervical cancer team, guidelines, registers and advocacy plan with stakeholders; (3) screening and type of test used, national coverage, implementation, availability of results and required staff. Countries were divided into three groups: (1) Iran, Oman, Saudi Arabia; (2) Egypt, Morocco, Syria, Tunisia; and (3) Pakistan and Sudan.

Discussions showed that there is no comprehensive cervical cancer prevention and control programme in the participating countries of the EMRO region. Some activities, at different

levels of strength, are ongoing in different countries but there is urgent need to mobilise necessary resources—human, financial, technical—in order to establish a cervical cancer prevention and control programme.

The second group work discussed whether surveillance should be undertaken and, if so, what objectives should be established. The group agreed that there is a strong need to establish a regional HPV surveillance system, and that it should be established under the auspices of ministries of health. WHO should develop standard operating procedures for HPV surveillance. The objectives of surveillance include: (1) establish baseline data for disease burden to support evidence-based decisions; (2) evaluate efficacy of a vaccination programme when implemented; and (3) attempt establishment of markers of chronic HPV infection.

Conclusions

- There is need for building a comprehensive approach to prevention and control of cervical cancer in countries of the EMRO region, including primary prevention, early detection and treatment.
- Screening, treatment and HPV vaccination should form the basis of the national comprehensive cervical cancer prevention and control programmes.
- A successful comprehensive cervical cancer prevention and control programme will require collaboration and coordination between different concerned sectors, including immunisation, school health, adolescent health, reproductive health and cancer control programmes.
- Establishing a comprehensive cervical cancer prevention and control programme will require both financial and human resources. Partner support will be highly needed, especially in the area of developing guidelines and standards as well as human resource development.

Countries were recommended to (1) establish national comprehensive cervical cancer prevention and control programmes; (2) consider introduction of HPV vaccine; (3) establish surveillance/survey activities to study the burden of HPV infection, HPV-related cancers and precancerous lesions and the prevalence of vaccine-related HPV types associated with these conditions. Data generated should constitute the evidence base for decisions on options for HPV vaccine introduction.

4. Second workshop on pooled vaccine procurement for Maghreb Union, Tunis, 9-11 July 2008

The second workshop on pooled procurement of vaccines for the countries of the Arab Maghreb Union was held in Tunisia from 9 to 11 July 2008. This meeting followed a meeting held in December 2007, and after the adoption in May 2008 by the Ministers of Health of the Maghreb, of a resolution calling for the establishment of a framework for coordination to permit pooled procurement of vaccines and sera for the benefit of all the Maghreb countries. The meeting was organised by WHO/EMRO in collaboration with NESI.

The meeting was attended by representatives of the five countries concerned (Morocco, Tunisia, Libya, Mauritania and Algeria), and representatives of WHO/HQ, WHO/EMRO, the Arab Maghreb Union, NESI and UNICEF.

It is good to restate here the original objectives:

- present national immunisation programmes and examine vaccine procurement procedures in each country in the Maghreb;
- present pooled procurement models and experiences with group procurement in Latin America and member states of the Gulf Cooperation Council (GCC);

-
- explore potential options for pooled procurement, identify feasible options and determine how to implement them;
 - draw up a road map, illustrated by a plan of action, describing the task to be performed at national and sub regional level.

The procurement situation is highly different in the five countries, what makes this initiative rather complex.

(1) Mauritania is a GAVI country and all vaccines are procured through UNICEF;

(2) Algeria, Morocco and Tunisia are low-middle-income countries; Morocco gets its vaccines also through UNICEF (this is exceptional, but is a good-will service to Morocco as this country participated in the Vaccine Independence Initiative of UNICEF;

(3) Libya is a higher-middle-income country and has more resources to pay for its vaccines than Algeria and Tunisia (state procurement by these three countries).

UNICEF gives priority to procure for the GAVI countries; for other countries UNICEF sees its role as giving technical assistance for procurement.

In all countries funding for vaccine purchase is assured by the Government. Mauritania receives considerable support for vaccine purchase from GAVI.

The quality of the vaccine registration systems varies enormously from one country to another and there are major shortcomings in certain countries.

The introductory presentations by WHO/HQ and EMRO set out the stage and presented the main elements of the December 2007 Action Plan. Each country described recent trends in EPI, the progress made and the constraints affecting implementation of the Plan of Action. UNICEF gave a description of the trends and changes in the global vaccine supply and of its vaccine-procurement principles, methods and procedures. Group work enabled participants to examine in detail the practicalities of implementing pooled vaccine procurement mechanism.

The following are the principal conclusions and recommendations of the July 2008 workshop:

- 1) The determination to set up a system of pooled procurement of vaccines and related products has now been clearly affirmed and has received technical and political support following the December 2007 workshop in Tunis and the resolution adopted by the Maghreb Health Ministers Council in May 2008.
- 2) The main questions, opportunities and difficulties in respect of implementation of the pooled procurement process were identified during the December 2007 and July 2008 workshops.
- 3) The process of pooled procurement should be gradual and adaptive and take account of the situation in and possibilities of each country concerned, while pursuing the strategic objective of centralizing supply and funding of vaccine procurement.
- 4) Immediate measures are designed to establish and maintain a regular flow of information and experiences to strengthen the individual and collective capacities of the Maghreb countries. This flow of information should first of all concern the supply of vaccines, manufacturers, suppliers, prices, quality, needs and demand forecasting and supply-chain management, regulation and quality controls.
- 5) Progress is expected with regard to mutual recognition of market authorisation of product and licensing of vaccines and suppliers, strengthening of National Regulatory Authorities and in particular observance of the separation of roles, harmonisation of technical and programme specifications, actual batch release, and generalisation of international calls for tenders.
- 6) A Maghreb committee for coordination of pooled procurement of vaccines and sera should be set up. This committee would work through three specialised commissions

(planning and programming, regulation, and procurement and funding) and a permanent secretariat.

- 7) In view of the diversity of the situations in the five countries, the contracts already signed and the commitments made, the workshop's participants decided to begin, in 2009, pooled procurement procedure with non-EPI vaccines, as far as possible for all five countries. This approach would minimize risks of upsetting EPI, preserve the acquired advantages and make it possible to reinforce and test pooling management capacities in order gradually to build up a system that included all countries, vaccines and related products.
- 8) Tunisia, Libya and Algeria will be able to introduce pooled procurement of combined vaccines (e.g. pentavalent) in 2009 or 2010. All the Maghreb countries will be able to join them to acquire new vaccines (rotavirus, pneumococcal, HPV).
- 9) A feasibility study will identify all aspects of implementation of the strategy and make recommendations for consideration and discussion by the countries at the inter-country workshop in 2009. WHO and UNICEF will be invited actively to contribute thereto.

5. WHO/AFRO Regional consultation on cervical cancer prevention and control, Ouagadougou, 16-17 September 2008

The regional consultation on cervical cancer prevention and control in the African Region, Ouagadougou, Burkina Faso, 16-17 September 2008 was organised by WHO/HQ and WHO/AFRO to review information on the epidemiology, diagnosis, treatment, control and prevention of cervical cancer in Africa, as a contribution towards developing a WHO/AFRO policy on cervical cancer prevention and control. The meeting was attended by representatives of the following countries: Angola, Benin, Botswana, Burkina Faso, Cabo Verde, Congo, Ethiopia, Gabon, Ghana, Guinea Bissau, Guinée Conakry, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nigeria, Senegal, South Africa, Togo, Uganda, Zambia and Zimbabwe. Other participants were from WHO/AFRO, WHO/HQ, ICO, GAVI and NESI.

The objectives of the consultation meeting included: (1) to share available information on prevention and control of cervical cancer; (2) to share, inform and discuss African countries experiences in cervical cancer prevention and control, including challenges and opportunities for scaling-up; (3) to discuss challenges and opportunities in introducing HPV vaccines within other public health interventions for preventing cervical cancer; (4) to identify actions that can be carried out at regional and country level for increasing access to cervical cancer prevention and control interventions; and (5) to strengthen collaboration, partnership and resource mobilisation for cervical cancer prevention and control in the African Region.

Participants recognised the importance of cervical cancer prevention and control in the WHO African Region and called for urgent action to reduce the high burden of cervical cancer in Africa and to save women's lives. A strong commitment and actions from governments, multilateral agencies, the international donor community and development partners, health professionals and civil society is therefore required.

Countries are recommended to: set up a National Coordination Committee for Cervical Cancer Prevention; raise awareness of the burden of cervical cancer and the strategies for prevention and control; mobilise and allocate resources for the prevention and control of cervical cancer.

Training institutions are recommended to incorporate and strengthen cervical cancer prevention and control programmes in their curricula.

WHO is recommended to: advocate for scaling up visual inspection methods and introducing HPV vaccines; disseminate research findings on the prevention and control of

cervical cancer to country decision-makers; provide guidelines and Terms of Reference for the establishment of the national coordination committees; revise guidelines for standardisation of cervical cancer prevention and control programmes; support national training workshops of cervical cancer prevention; provide technical support for HPV vaccine introduction in collaboration with other partners; support countries to negotiate with industry affordable HPV vaccine prices; support MoH in tailoring existing educational materials about HPV vaccines to the country's local languages, religious and cultural context; provide countries with regional strategies for HPV vaccine introduction within existing cervical control programmes; write operational guidelines for decision-making and HPV vaccine introduction and uses that are consistent with and complement other WHO guidelines on good immunisation practices.

The industry is urged to provide adequate supplies of the new technologies at radically tiered prices.

6. Capacity building for multi-year planning, Gabon 2008-2011

The development of a comprehensive Multi-Year Plan (cMYP) is one of the key strategies to establish sustainable vaccination programmes. A cMYP analyses all relevant operational and economic aspects of national EPI programmes, including personnel, vaccine supply, cold chain components, maintenance, transport and communication with the purpose to address the existing problems and plan for the strengthening of the programme so that the objectives of the WHO/AFRO vaccination targets will be reached.

Vaccine procurement is done by the Government through the UNICEF Supplies Division in Copenhagen through a Memorandum of Understanding with UNICEF.

An analysis of the EPI programme in Gabon end 2007 found that the performance of the programme was very weak:

- only 13% of the health facilities offered vaccination services
- the cold chain was not functioning properly and is outdated
- the Reach Every District approach, recommended by WHO and UNICEF was not implemented

Since this initial assessment, significant improvement has been achieved compared to the situation in 2006:

- DTP coverage increased from 44% in 2006 to 81% in 2007 and
- Measles and Yellow Fever vaccination coverage reached the target objective of 60%.

The agreed targets and time schedule for Gabon for the development of the cMYP 2008-2011 is as follows:

- Reach a national vaccination coverage of >90% and of >80% in all districts
- Introduce Hib vaccination in 2009 and pneumococcus vaccination in 2011
- Improve the cold chain capacity taking into account the introduction of new vaccines up to 2011
- Achieve the standard performance criteria for active surveillance of vaccine preventable diseases
- Strengthen the EPI management capacities
- Sustain the budget increase for the EPI programme

The principal strategies proposed by the cMYP to achieve these objectives include the implementation of the RED approach in all districts, expansion of the access to vaccination, strengthening of EPI staff capacities and the integration of activities to make better use of existing resources.

According to the financial analysis for the year 2007, the Government contributed 92% of the total expenditure of USD 6,775,212 which represents 0.04% of the GDP. Of this amount, USD 4,775,212 was spent on routine vaccination.

The future cost of the programme is linked to the introduction of new vaccines and the organisation of vaccination campaigns (against tetanus in 2008, measles in 2010 and yellow fever in 2011). The projected increase of expenditures for the EPI between 2008 and 2011 is considerable. To sustain this increased budget, the cMYP proposes to increase the contribution by the Government and to introduce a contribution by the private sector.

Networking and advocacy

1. Global Immunisation Meeting, Geneva, 18-21 February 2008

The third Global Immunisation Meeting of WHO and UNICEF was organised in Geneva from 19-21 February 2008. The meeting was attended by 204 participants from WHO, UNICEF, GAVI, PATH, CDC, National Governments, NESI, AMP, the vaccine industry, American Red Cross, Gates Foundation, Johns Hopkins Bloomberg School of Public Health, Immunization Basics.

The objectives of the third Global Immunisation Meeting included: (1) provide WHO and UNICEF global and regional staff, as well as immunisation partner representatives, with technical updates focusing on the programmatic issues related to global immunisation efforts; (2) update on progress of the Global Immunisation Vision and Strategy (GIVS) and the global immunisation and mortality reduction goals; and (3) share the policy recommendations from SAGE and the conclusions from the Global Advisory Committee on Vaccine Safety. The agenda of the meeting was built around the 4 strategic areas of GIVS.

Parallel breakout sessions were held on new vaccine introduction: Meningitis, Japanese Encephalitis and Rubella. The objectives of the breakout sessions included: (1) update on global status of the vaccine; (2) regional plan for introduction of the vaccine; and (3) identification of key challenges.

A GAVI satellite session focused on the Advance Market Commitment (AMC). An update was given on the first pilot AMC for pneumococcal vaccines. This pilot AMC was designed to demonstrate the feasibility of the AMC mechanisms, production scale-up, and introduction.

2. East and Southern Africa EPI managers meeting, Dar es Salaam, 27-29 February 2008

The annual EPI managers' meeting for East and Southern Africa was hosted by the Ministry of Health of Tanzania and organised by WHO/AFRO. It is an essential forum for updating country teams on WHO technical issues and sharing country experiences.

The East and Southern Africa sub region comprises 18 countries: Botswana, Comoros, Eritrea, Ethiopia, Kenya, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Seychelles, Tanzania, Uganda, Zambia and Zimbabwe.

The specific objectives of the meeting included: (1) to share experiences and chart the way forward on implementing the RED strategy; (2) to share experiences in integrating other interventions with EPI and determine the way forward; (3) to improve capacity of country staff to collect, analyse, and use accurate and up-to-date data monthly; (4) to share experiences with implementing the DQS as a way of improving data quality; (5) to present and discuss routine immunisation and GAVI issues; (6) to improve capacity of country staff to sustain AFP surveillance and integrate it with other disease surveillance activities including IDSR; (7) to share experiences in addressing accelerated disease control through conducting immunisation campaigns in 2008 and provide guidance on planning for high quality campaigns; and (8) to update countries on issues related to vaccine procurement and regulation in Eastern and Southern Africa.

3. EMRO 25th Inter-country EPI managers meeting, Alexandria, Egypt, 21-23 October 2008

The combined WHO/EMRO EPI managers and EPI Regional Technical Advisory Group meeting is the most important annual gathering of immunisation experts and decision makers in the WHO/EMRO region.

The purpose of the meeting was:

- To review national and regional progress in EPI (routine immunisation and VPD control, elimination and eradication goals): achievements, constraints and way forward;
- To discuss recent advances in new vaccines/technologies and their use;
- To discuss progress towards polio eradication (achievements, constraints and way forward);
- To discuss progress and constraints relating to introducing new vaccines and technologies.

The meeting programme gives a detailed overview of the national and regional progress in EPI achievements, constraints and way forward, discusses recent advances in new vaccines and their use, as well as the progress and constraints relating to introducing new vaccines and the progress towards polio eradication.

A total number of 64 participants and facilitators attended the meeting, including 20 EPI programme managers, 9 members of the EPI regional technical advisory group, 26 staff members of WHO/EMRO, WHO/Geneva, UNICEF and 9 representatives of other organisations, including CDC, GAVI, Public Health Agency, Hib Initiative, NESI, PATH, Pneumo-ADIP, and USAID.

Overall there were 33 presentations during the meeting as well as 3 group work sessions on the introduction of new vaccines (for low-income, middle-income and high-income countries). In addition, a specific side-meeting was organised to discuss the situation in Somalia and South Sudan with vaccination coverage of less than 40%.

In the opening address the Regional Director Dr. Hussein A. Gezairy gave a strong message on the achievements in increased vaccination coverage and the importance of immunisation to achieve the important millennium development goal of reducing child mortality by 2/3. So far, all countries in the WHO/EMRO region except Somalia have introduced HepB vaccine, and 18 countries have introduced Hib vaccine or are in the process of doing so soon.

Dr. Gezairy pointed out that introduction of pneumococcal and rotavirus vaccines are crucial for reaching the 2015 goal. To facilitate this process, WHO has launched regional surveillance networks aimed at documenting the burden of disease relating to these pathogens, as well as the suitability of current vaccines for the circulating serotypes and genotypes.

All the member countries of the Gulf Cooperation Council have already introduced the pneumococcal vaccine or are in the process of doing so, while 5 out of the 6 GAVI-eligible countries in the Region have already applied or plan for the introduction of these vaccines through GAVI. However, none of the remaining 10 middle-income countries have yet taken steps to introduce these vaccines despite the existing evidence of high disease burden. The main obstacle is the current price of these vaccines which constitutes a major constraint for their introduction.

The Regional Director has written to the WHO Director-General about the situation of low middle-income countries. This resulted in the adoption of the World Health Assembly (resolution WHA61. EB 122.R7) requesting the Director-General "to collaborate with international partners and donors as well as vaccine producers to mobilise necessary resources to support low-middle-income countries with the aim of increasing the supply of affordable vaccines of assured quality". In addition, UNICEF is currently considering expanding their vaccine supply services to low-middle-income countries and GAVI also supports revising its eligibility criteria in 2010.

In parallel, the Regional Office has been exploring other solutions, such as a regional or sub-regional pooled vaccine procurement system, like that in the GCC countries or the PAHO revolving fund. Two initiatives are actually going on: one in collaboration with UNICEF and the League of Arab States aiming at establishing an Arab or a regional pooled vaccine procurement system; and the other in collaboration with the Arab Maghreb Union which has previous experience with pooled drug procurement, and aiming at using this experience to establish a sub-regional pooled vaccine procurement system.

4. 16th Task Force on Immunisation in Africa Annual Meeting, Mauritius, 3-5 December 2008

The TFI meeting is the most important meeting for planning, follow-up and coordination on immunisation activities in Africa.

The purpose of the TFI meeting is to:

- assess the progress made since the previous TFI,
- share key information on achievements and challenges of national EPI programmes,
- give updates on specific programmes (such as polio eradication, measles and MNT elimination, Yellow Fever control, the Meningococcus A project),
- provide feedback from recent expert meetings such as the Strategic Advisory Group of Experts on Immunisation (SAGE) and the Advisory Committee on Polio Eradication,
- present new initiatives such as integrated training for national health logistics officers and comprehensive training for child survival interventions and complementary integrated campaign strategies (such as child health weeks).

The TFI meeting provides an important opportunity for NESI to plan next year's activities and to share experiences of NESI with other immunisation partners.

Based on this information and the discussions, the TFI defines resolutions on priority areas for achievement for the next year period.

5. 15th African Regional Inter-Agency Coordination Committee Annual Meeting, Mauritius, 6 December 2008

The ARICC meeting covered a review of the 2007 ARICC recommendations, financial reports and the presentation of the 2009 IVD strategic plan. Thereafter, multilateral, bilateral and philanthropic organisations presented partner statements, including USAID, Rotary International, GAVI, NESI and AMP. NESI pledged continued technical and financial support for capacity building in the WHO/AFRO and WHO/EMRO regions. NESI emphasises training of academics, EPI managers and potential members of National Immunisation Technical Advisory groups, through regional vaccinology courses, regional and national management courses and national as well as institutional capacity building on vaccination for schools of health sciences.

Symposia

1. 37th Annual conference of the Parasitological Society of Southern Africa, Pretoria, 1-3 October 2008

The 37th Annual Conference of the Parasitological Society of Southern Africa was hosted jointly by the ARC-Onderstepoort Veterinary Institute and the Department of Veterinary Tropical Diseases of the University of Pretoria. The theme of the conference was "Parasites in a changing environment". Two keynote speakers were invited: Dr. François Engelbrecht from the University of Pretoria gave a keynote speech on 'Climatic change over South Africa: projections and perceptions'. Prof. David Hunt from the University of Witwatersrand and the National Institute for Communicable Diseases, gave a keynote speech 'Is *Plasmodium knowlesi* the fifth human malaria parasite?'. International participants were Prof. Godwin Kaaya from the University of Namibia and Dr. Carine Dochez from NESI. Dr. Dochez presented on 'The effect of deworming on EPI programmes', highlighting the potential benefit of deworming programmes before the start of vaccination programmes. Abstract of presentations will be published in the *Journal of the South African Veterinary Association* as conference proceedings.

2. Vaccinology Symposium, Hermanus, Cape Town, 26-29 October 2008

The meeting in Hermanus was the fifth national vaccinology symposium of South Africa. The symposium was attended by experts from the major universities, the national and provincial departments of health, and the private sector. The symposium was organised by Prof. Barry Schoub from the National Institute of Communicable diseases/National Health Laboratory Service, and linked with Witwatersrand University in Johannesburg. The meeting aimed to foster national (South African) expertise teams in vaccinology, an objective in line with NESI objectives and activities. South Africa being the only sub-Saharan country with a significant private sector, the public/private sector collaboration and schedule harmonisation were interesting issues for discussion. Prof. André Meheus was invited guest speaker and presented on 'Introduction of new vaccines: public health and policy decisions' and on 'Adolescent vaccination'. Both topics were of great relevance as South Africa recently took the decision to introduce pneumococcal and rotavirus vaccines and a combination vaccine (pentavalent) including IPV. The national advisory group of experts also supports introduction of HPV vaccine but here the policy decision has not yet been taken. The topic on adolescent vaccination was of great interest related to potential HPV vaccine introduction, the need for booster doses and catch-up vaccinations for young adolescents.

Fourth NESI Oversight Committee, Brussels, 9 June 2008

The Fourth NESI Oversight Committee took place in Brussels on 9 June 2008. The oversight committee advises on strategy and budget allocation, and reviews outcomes. Specifically, the committee:

- shapes a strategic vision and direction for NESI;
- advises on the strategy to follow;
- defines priorities;
- stimulates/fosters participation of GAVI partners and others in the implementation of NESI activities;
- reviews the plans, evaluates the postulated goals and endorses the work plan and the related budget allocation;
- facilitates networking and collaboration with other bilateral and multilateral stakeholders engaged in the area of capacity building for immunisation programmes;
- ensures the academic freedom of NESI in planning and implementing its activities;
- verifies the independency of the activities organised by NESI in relation to its sponsors.

The Executive Secretariat reported to the oversight committee on the implementation of the Plan of Action and the financial report for the year 2007. After the discussion of the reports, the secretariat presented the work plan for 2008. Based on the discussions of the report for the year 2007 and the work plan for the year 2008, the members of the committee formulated recommendations and approved the NESI work plan and the related budget allocation for the year 2008.

Publications

François G, Mphahlele MJ, Hoosen A, Leroux-Roels G, Kew M, van den Heever J, Meheus A (eds). Childhood vaccination programmes in South Africa and Belgium: public health issues. *Southern African Journal of Epidemiology and Infection* 2008; 23:1-60

G. Francois, C. Dochez, M. J. Mphahlele, R. Burnett, G. Van Hal and A. Meheus, 2008. Hepatitis B vaccination in Africa; mission accomplished? *The Southern African Journal of Epidemiology and Infection* 23(1): 24-28.

A. Meheus and C. Dochez, 2008. Burden of Hepatitis B virus infection in Belgium. *The Southern African Journal of Epidemiology and Infection* 23(1): 45-49.

G. Francois, A. Kramvis, G. Van Hal, A. Lambin, C. Dochez and A. Meheus, 2008. Vaccination in the line of fire. *The Southern African Journal of Epidemiology and Infection* 23(1): 53-57.

In preparation:

Mutabaruka E, Dochez C, Nshimirimana D, Meheus A. Evaluation of Mid-Level Management Training in Immunisation in the African Region. To be submitted to the *East African Journal of Public Health*.

Contacts

Prof. André Meheus, Head
andre.meheus@ua.ac.be

Technical staff

Dr. Carine Dochez
carine.dochez@ua.ac.be

Dr. Fred Van Der Veen
fred.vanderveen@ua.ac.be

Administrative staff

Mr. Gino Verwimp
gino.verwimp@ua.ac.be

<http://www.nesi.be>

NESI
Network for Education and Support in Immunisation
Department of Epidemiology and Social Medicine

University of Antwerpen
Campus Drie Eiken
Building R, 2nd Floor
Universiteitsplein 1
BE-2610 Antwerpen
Belgium

Telephone	+32 (0)3 265 25 15
Telephone	+32 (0)3 265 28 91
Facsimile	+32 (0)3 265 28 75
Website	www.nesi.be