



**World Health  
Organization**

REGIONAL OFFICE FOR **Europe**

**MEETING OF  
IMMUNIZATION  
PROGRAMME  
MANAGERS IN THE  
WHO EUROPEAN  
REGION**

**18–20 MARCH 2014  
ANTALYA, TURKEY**

## Abstract

National immunization programme managers from 46 Member States in the WHO European Region gathered in Antalya, Turkey, on 18–20 March 2014, together with WHO and partners, to share evidence and best practice and work towards a coordinated effort across the Region to control vaccine-preventable diseases.

Particular focus was placed on the Region's 2015 elimination target for measles and rubella, maintenance of its polio-free status through further implementation of the Polio Endgame Strategy, strengthening surveillance, decision-making with regard to new vaccine introductions and joint development of a European Vaccine Action Plan

## Keywords

COMMUNICABLE DISEASES  
IMMUNIZATION  
IMMUNIZATION PROGRAMS  
MEASLES  
POLIOMYELITIS  
ROTAVIRUS VACCINES  
RUBELLA

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## CONTENTS

	<i>Page</i>
Abbreviations .....	2
Introduction .....	2
Opening.....	3
VPI Programme overview .....	3
Session 1. Measles and Rubella: Moving Towards Elimination .....	4
Status of measles and rubella elimination in the WHO European Region .....	4
Update from the Regional Verification Commission for Measles and Rubella Elimination (RVC) .....	5
Measles and rubella: highlighting best practices from Member States.....	6
Improving measles surveillance in Belarus .....	6
UNICEF’s work on measles–rubella elimination .....	6
Measles and rubella elimination 2015: Package for accelerated action 2013–2015 .....	8
Widening the circle: engaging national professional societies .....	8
Putting it all together – What is your action pack for measles-rubella elimination?.....	9
Session 2. European Union commitment to control of communicable diseases .....	11
The EU legislative setting on communicable disease control and prevention and management of serious cross-border health threats .....	11
The International Association of Immunization Managers (IAIM) .....	9
Session 3. Moving towards global polio eradication .....	11
Polio Eradication and Endgame Strategy .....	11
Panel: Improving poliovirus surveillance .....	12
Preparedness and outbreak response for polio.....	13
Outbreak response in IPV-using countries.....	14
bOPV/IPV introduction .....	15
Session 4. Vaccine acceptance – Issues and strategies .....	18
Panel debate on strategies to tackle anti-vaccination sentiment.....	18
Introduction to the Guide to Tailoring Immunization Programmes (TIP) .....	19
Session 5. Further priorities .....	20
Session 6. Partner side sessions .....	23
Session 7. European Vaccine Action Plan.....	24
Translation of the Global Vaccine Action Plan (GVAP) into the European Vaccine Action Plan (EVAP).....	24
Strategic objective 1: All countries commit to immunization as a priority .....	25
Strategic objective 2: Individuals understand the value of immunization services and vaccines, and demand immunization be delivered as a right.....	25
Strategic Objective 3: The benefits of immunization are equitably extended to all people through tailored and innovative strategies.....	25
Strategic Objective 4: Strong Immunization systems are an integral part of a well-functioning health system .....	26
Strategic objective 5: Immunization programmes have sustainable access to long-term funding and quality supply.....	26
Annex 1. List of participants .....	27

## Abbreviations

bOPV	bivalent oral polio vaccine
cVDPV	circulating vaccine-derived poliovirus
CDC	United States Centers for Disease Control and Prevention
CRV	Congenital Rubella Syndrome
DTP	diphtheria, tetanus, pertussis
ECDC	European Centre for Disease Prevention and Control
EIW	European Immunization Week
ETAGE	European Technical Advisory Group of Experts on Immunization
GAVI	Global Alliance for Vaccines and Immunization
IPV	inactivated poliovirus vaccine
MMR	measles, mumps, rubella
MRI	Measles and Rubella Initiative
NIP	national immunization programme
NITAG	national immunization technical advisory group
NVC	national verification committee
OPV	oral polio vaccine
PMM	Meeting of Immunization Programme Managers in the WHO European Region
RCC	Regional Certification Commission for the Eradication of Poliovirus
RVC	Regional Verification Commission for the Elimination of Measles and Rubella
SAGE	Strategic Advisory Group of Experts (on Immunization)
SIA	supplementary immunization activity
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VDPV	vaccine-derived poliovirus
VPI	Vaccine-preventable Diseases and Immunization Programme
wPV	wild poliovirus

## Introduction

A meeting of national immunization programme managers in the WHO European Region and immunization partners was organized by the WHO Regional Office for Europe (Regional Office) in Antalya, Turkey, on 18–20 March 2014 to:

- brief participants on the current status of global and regional immunization programmes,
- including progress achieved and future priorities in countries of the WHO European Region;
- present and discuss programmatic areas of work and future priority areas towards strengthening national immunization systems;
- discuss and get feedback from Member States on a draft European Vaccine Action Plan (EVAP);
- discuss progress and key challenges related to measles and rubella elimination in the Region;
- discuss the role of national professional and civic societies in disease elimination strategies;
- facilitate integrated surveillance and laboratory support for measles/rubella elimination and polio eradication;
- address the planned introduction of inactivated polio vaccine (IPV) and programme implications;
- discuss strategies to address vaccine hesitancy and to increase acceptance and demand for vaccines;
- consider lessons learnt related to European Immunization Week and the future of the initiative;
- present and discuss key issues related to the introduction of new and under-utilized antigens (perspectives and support for decision-making);

- introduce the Tailoring Immunization Programme Guide (TIP) and present result of its initial implementation in Bulgaria and Sweden and future plans;
- review ways in which technology can be used to improve accountability and decision-making.

The meeting was expected to contribute to increased knowledge, understanding and ownership of regional programme priorities and strategies, update Member States on tools and support available to assist them in pursuit of Regional disease elimination targets and facilitate the sharing of lessons learnt and best practices and exploration of new joint initiatives and areas of collaboration.

## Opening

Dr Dina Pfeiffer, Programme Manager of the Vaccine-preventable Diseases and Immunization Programmes (VPI), welcomed representatives of 46 Member States, partners, stakeholders in communicable-disease prevention, the United Nations Children's Fund (UNICEF), the European Centre for Disease Control and Prevention (ECDC), United States Agency for International Development (USAID), GAVI Alliance, the United States Centers for Disease Prevention and Control (CDC), WHO, advisory bodies, national immunization technical advisory groups (NITAGs), and leaders of professional associations. She also thanked the Turkish Ministry of Health for hosting the meeting and for its unwavering support for immunization, which remains high on the national political agenda.

Dr Pfeiffer outlined the challenges facing the Region to be addressed at this meeting, and expressed WHO's ongoing commitment to deliver support and assistance to countries in their efforts to overcome them.

The WHO Representative to Turkey, Dr Cristina Profili, highlighted Turkey's unique position within the Region as a bridge between continents and cultures. She underlined the importance of sharing evidence and best practice among countries and welcomed development of the European Vaccine Action Plan as the means to ensure a coordinated effort across the Region to control vaccine-preventable diseases.

Secil Ozkan, President of the National Health Institute of Turkey, welcomed participants to Turkey and gave an overview of Turkey's history and progress in tackling vaccine-preventable diseases - through its national immunization programme and currently also through ongoing efforts to ensure protection of Syrian refugees entering the country.

### **VPI Programme overview**

Presented by Dina Pfeiffer

Since the previous VPI immunization programme managers meeting (PMM) in 2011, the European Region has maintained strong immunization programmes and regional coverage approaching 95%. But outbreaks of measles and rubella have increased, pointing to ongoing subnational gaps that are largely hidden in national statistics. The Global Vaccine Action Plan (GVAP) approved by the World Health Assembly in 2013 calls on Member States to improve performance and commit adequate resources to immunization. It also establishes an accountability framework, which necessitates more than ever timely and quality reporting by Member States. Translation of GVAP based on the regional context and policy framework Health 2020 was mandated by the European Regional Committee in 2013. A key objective of the 2014 PMM in Antalya was to receive Member States' input for further development and finalization of the European Vaccine Action Plan (EVAP).

As reflected in the draft EVAP, priorities for VPI in the coming years include:

- accelerated action towards measles and rubella elimination;

- implementation of the Polio Eradication and Endgame Strategy, including introduction of inactivated polio vaccine (IPV), the shift from trivalent to bivalent oral polio vaccine (OPV), complete withdrawal of OPV by 2016 and legacy planning;
- introduction of new vaccines;
- strengthening surveillance and immunization systems, including support for national immunization technical advisory groups (NITAGs);
- better data management – developing tools, networks, reports, and improving data quality in line with GVAP requirements;
- increasing attention to pertussis and hepatitis B.

## Session 1. Measles and Rubella: Moving Towards Elimination

Chaired by Guenter Pfaff and Nino Khetsuriani

### Status of measles and rubella elimination in the WHO European Region

Presented by Mark Muscat

Despite a dramatic decline in the number of reported measles and rubella cases since 1980, the European Region is off track to reach its 2015 measles-rubella elimination goal. All Member States in the Region agreed to this goal, and more effort is now needed to translate this commitment into action. The public also needs to be constantly made aware of the risks of vaccine-preventable diseases and benefits of immunization so that they are empowered to demand vaccination as a right.

All Member States in the European Region include at least two doses of measles-rubella-containing vaccines in their routine immunization schedules (usually measles-mumps-rubella (MMR)), with an interval between doses ranging from 1 month to 12 years.

#### *Measles*

Of 50 Member States reporting, 36 reported measles cases in 2013. Incidence reached an all-time low in 2007, however since that time momentum has been lost and the pool of susceptibles has been increasing unseen. Most outbreaks in 2013 were genotyped, with D8 being the most common genotype. Over 1/3 of cases were older than 20. In some countries outbreaks occurred among the general population, and in others they were concentrated in specific population groups. The differing characteristics of the outbreaks are indicative of the different approaches required.

#### *Rubella*

Incidence remains a problem in just a handful of the Member States that have data. 42 Member States in the Region submitted reports for rubella cases in 2013, of which 8 reported zero cases. Poland reported 99% of the total cases.

Four Member States do not have a mandatory notification system for rubella, although Germany planned to introduce such a system in 2014. Lack of genotype sequencing data is a global problem, and this data was received from only one Member State in the Region in 2013.

Challenges to achieving elimination of measles and rubella include:

- maintaining high coverage with measles-rubella-containing vaccines, especially the second dose
- closing immunity gaps
- overcoming barriers to vaccination
- improving surveillance
- improving outbreak response
- translating commitment into action.

*Additional point covered during the discussion*

Adults have emerged as a susceptible population group, and activities to target this group as done in Austria are commended.

It is important to predict what will happen in the coming years. It was suggested that WHO apply a similar system to measles-rubella as it does for polio to analyse the risk of outbreaks and issue recommendations for each Member State. WHO is indeed planning to use available data and modelling to develop a clearer picture of who is susceptible and where.

Ensuring a sufficient vaccine supply when needed is another important challenge. Tackling this issue will be addressed in EVAP.

## **Update from the Regional Verification Commission for Measles and Rubella Elimination (RVC)**

Professor Susanne Esposito (Chair)

Five lines of evidence are considered by the RVC in reviewing elimination status in individual Member States: population immunity, epidemiology and genotype data, surveillance performance, sustainability of immunization programme and supplementary evidence. Obtaining high-quality, consistent and complete data for the whole Region is critical to verify elimination and to understand what will happen in the coming years.

As of 5 March 2014, 12 Member States had not yet submitted their 2010-2012 report to the RVC. Political commitment to surveillance and reporting is essential to reach the elimination goal.

The status in the Region based on the 2010-2012 reports reviewed at the October 2013 RVC meeting was as follows:

- 41 Member States had established national verification committees
- 33 had submitted reports
- 15 had interrupted measles transmission
- 18 had interrupted rubella transmission.

The framework for the verification process was amended in line with the outcomes of subregional meetings with Member States and the RVC meeting in October 2013. Essential criteria supporting interruption of endemic transmission are now the absence of endemic measles and rubella cases, the presence of high-quality surveillance system and genotyping evidence. Two alternative indicators (timeliness of notification and rates of cases tested negative for measles or rubella IgM) can be used by countries that are unable to report standard indicators, to facilitate RVC judgement. The deadline for 2013 reporting was 31 July 2014. The next RVC meeting was scheduled for 4–6 November 2014.

The RVC welcomes feedback from Member States and is eager to work together to ensure high-quality control and reporting.

*Additional point covered during the discussion*

General practitioners do not like to send laboratory samples for diagnosis when the outcome does not impact treatment. It is nevertheless important that each country submit observations to WHO, and that a solution can be found across all countries.

To reach the elimination goal it is important to achieve coverage higher than 95% for the second dose and to adopt all existing strategies, including: using every opportunity to reach susceptibles, integrating all clinical and epidemiological data, ensuring good communication of technical information within the system, and providing reliable and understandable information to the public.

## **Measles and rubella: highlighting best practices from Member States**

Moderated by Dragan Jankovic

### **Improving measles surveillance in Belarus**

Presented by Veronika Shymanovich

Belarus has achieved success in controlling measles and rubella through a comprehensive case-based surveillance and reporting system, supported by periodic studies of population immunity, supplemental immunization activities (SIAs) among 20-29-year-olds based on analysis of 2011 measles outbreak, communication campaigns and active participation in European Immunization Week.

The surveillance system is based on the following principles.

- Identification of patients in accordance with standard case definition, submission of information to national level.
- Laboratory diagnostics in accordance with international criteria in an accredited laboratory.
- Mandatory verification of each measles-suspected case (implemented since 2002).
- Isolation/identification of disease agent, sequencing of diagnostically significant genome sections, provision of obtained information to international databases.
- Comparison of obtained nucleotide sequences of “Belarusian” strains with sequences provided in the databases to identify the origin of identified agent.
- Decoding of infection transmission chain based on molecular-epidemiological data.
- Differentiation of local and imported infection cases.
- Periodic (as required) studies of population immunity.

Every case of measles and rubella is reported to the Ministry of Health and information on all suspected cases is reported to the WHO Regional Office. A database of endemic cases is maintained and reported to WHO.

### **Closing the immunity gaps in United Kingdom of Great Britain and Northern Ireland**

Presented by Joanne Warwood

The United Kingdom has seen a reestablishment of measles over the past few years in England and Wales. Coverage declined starting in the late 1990s due to unfounded concerns that received great media coverage and greatly impacted parental confidence in the MMR vaccine. Routine MMR coverage began to rise again in 2003 (and has now reached historically high levels), however, many young people born between 1997 and 2003 remained unvaccinated.

A national catch-up campaign was launched in April 2013, supported by a communication campaign and positive media coverage. Surveillance was also put in place. More than 40 000 children were vaccinated in London alone. After the catch-up campaign cases dropped dramatically. Coverage with at least one dose in the target group now exceeds 95%.

The target group attends school and is therefore a relatively easy group to reach. General practitioners were asked to invite individuals to be vaccinated, but reminders were also sent out through schools. Some schools actively offered vaccinations, so several routes were used. Public Health England (PHE) is now strengthening contacts with schools about immunization in general. Checking immunization status and offering vaccines where missing will become a formal part of the regular health check upon entry to secondary school.

### **UNICEF’s work on measles–rubella elimination**

Presentation by Oya Afsar

Immunization coverage is an indicator of progress towards achieving Millennium Development Goal 4 on reducing child mortality. The United Nations Children’s Fund (UNICEF) is a founding partner of the



Measles and Rubella Initiative (MRI) and measles vaccination is among UNICEF's core commitments to humanitarian action. It uses its logistics and procurement capacity to support the purchase and supply of vaccines for SIAs (through the Measles and Rubella Initiative (MRI) using donor funds), and its procurement mechanism to procure routine vaccines at governments' requests and on their behalf (using government funds). UNICEF also heavily supports cold chain and vaccine management, communication and social mobilization and actions to identify and reach the unreached.

Supply is a key factor and sometimes a barrier due to problems with global capacity and allocation to larger countries. Country preferences can also limit their procurement options. UNICEF advises countries to integrate plans and supply as early as possible.

Challenges in the WHO European Region include:

- inequities within countries;
- inadequate outbreak response and prevention in some countries;
- weak political commitment to elimination goal;
- health system reforms that are changing the modality of provision, payment and incentives for prevention;
- low risk perception, including among health care workers;
- vaccine supply shortages, usually linked to weak planning and forecasting.

#### *Status of global supply of measles-containing vaccines (MCV)*

The bulk of global production is still monovalent measles vaccine. However, due to the introduction of rubella immunization in many countries globally, there is an increase in demand for the measles-rubella (MR) vaccine and a decline in demand for monovalent measles vaccine. This trend is likely to continue. Procurement of MMR through UNICEF is minimal (and MMR with Jeryl Lynn mumps strain is extremely limited). UNICEF has access to a sufficient supply of measles (monovalent) and MR vaccines, but this relies heavily on one manufacturer and procurement requires advanced planning. Any other requests may be difficult to accommodate.

Countries are advised to plan in advance as much as possible, and to provide a forecast of need by the end of the previous calendar year, to receive timely delivery of the vaccine presentation of choice and quantity. If the vaccine of choice is not available countries should be prepared to accommodate other types and presentations, and to register those vaccines. In the event of an outbreak, it is in the best interest of all to consider all available options rather than to delay the response.

### **Contributing to measles and rubella elimination – UNICEF and ECDC**

Presented by Niklas Danielson

ECDC's mandate is to prevent, identify and communicate threats in Europe. In 2012 it became clear that Europe was at acute risk of not meeting the 2015 measles-rubella elimination target. Only 11 European Union (EU) Member States met the elimination target in 2013, and the EU was a net exporter of measles to measles-free regions. ECDC therefore launched a Measles Action Plan encompassing five key areas: analysis of immunization gaps, generation of data for action, strengthening of public health capacities, evidence-based communication, and regional and international collaboration.

Since the 2012 launch of the Action Plan, over 20 products and activities have been delivered, including interactive data visualization tools and communication materials. ECDC will continue to provide evidence for action and develop tools to support measles and rubella elimination.

#### *Additional point covered during the discussion*

Everything that makes it easier for parents to vaccinate their children will have an impact. For example, Austria has introduced electronic registries and is working on an e-card for diseases, whereby a doctor can easily see if a patient is missing a vaccination. WHO is also working on a smart phone app that will remind parents when it is time for their child to be vaccinated.

In the EU, surveillance is done for both congenital rubella syndrome (CRS) and rubella incidence, but underreporting of CRS is substantial. Some countries do screen for rubella immunity during pregnancy, but do not report this information.

Many countries in the EU have compulsory vaccination in schools, but there is not a strong association between this policy and higher uptake.

ECDC provides training and materials and engages with health care providers with the assumption that this information will be filtered down. But the link to the public and policy-makers needs to be strengthened. There is a need for a broader range of interventions, including in medical education. ECDC welcomes ideas from medical associations on how to elaborate this effort.

The National Health Service (NHS) in the United Kingdom found that it is not just the information provided that influences vaccination behaviour, but also the way in which it is communicated. It is important that empathy is displayed in understanding concerns and addressing them in plain language.

Partnership at national and regional levels with associations of pediatricians and other health professionals is important to ensure that every opportunity can be used to provide information and encourage vaccination.

## **Measles and rubella elimination 2015: Package for accelerated action 2013–2015**

Abigail Shefer, Technical Officer, WHO Regional Office for Europe

The Package for Accelerated Action details five areas in which the WHO Regional Office is lending support to countries in their effort to reach elimination goals: strengthening of vaccination and immunization systems; surveillance, outbreak prevention and response; communications, information and advocacy; resource mobilization and partnerships; and verification of measles and rubella elimination. Activities in all of these areas have been initiated, and the Office is closely tracking milestones and progress. Needs and solutions vary per country. The Regional Office is therefore conducting consultations with national authorities in all high-priority Member States to help diagnose the problems and develop targeted activities to address them. The goal is for every country to develop its own “action pack” and the Regional Office is eager to help where needed.

Consultations on EVAP during the PMM would allow attendees to revisit and explore new areas of action.

## **Widening the circle: engaging professional societies**

Moderated by Andreas Konstantopoulos

### **Background and value added from national paediatric societies**

Andreas Konstantopoulos and Ronald de Groot

Collaboration with societies of health care workers is seen as an effective way to reach and educate health care workers throughout the Region, among whom vaccination rates are often below the 95% target. Both the International Pediatrics Association (IPA) and the European Society for Paediatric Infectious Diseases (ESPID) are eager to work with the Regional Office, ECDC and UNICEF to promote immunization among their broad networks.

IPA represents one million pediatricians through 147 national societies, 7 regional societies, 14 international paediatric subspecialty societies and a Committee for Pediatric Chairs. It is also an active partner of international organizations and foundations operating in the field of child health.

ESPID is the largest association of its kind in the world, with over 3000 professional members focused on pediatric infectious disease control through scientific research, health care, education and training.

## **Pediatrician's view of clinical characteristics of measles-rubella and congenital rubella syndrome**

Presented by Louis Cooper

After 50 years of work on the rubella vaccine, including participation in the Rubella Project (1962–1998), Dr Cooper still sees a tragic and largely unrecognized global burden of CRS, with enormous financial and immeasurable human costs. Experience has shown that political will defines success in immunization. Conflicting values and priorities within each country, including within the scientific community, all have an impact on the success of immunization programmes.

Strong partnership between the public health and clinician communities at national and global levels is key to advocating for immunization. This has contributed to the success of the Measles Rubella Initiative. Clinicians need to impress on the public and decision-makers that getting children immunized and on time is one of the most important things parents can do to protect their children.

## **National society perspectives – Georgia and United Kingdom**

Nino Kandelaki and David Elliman

Dr Kandelaki stressed the importance of forging ties between paediatric associations and donor organizations to improve children's health. Continuous education of pediatricians is important, as parents rely on paediatricians for information and thoughts on child health. This activity is still emerging in Georgia.

Although pediatricians in the United Kingdom do not provide primary care, they still have an important role to play in advocating for herd immunity to protect many underimmunized individuals with chronic disorders. The Royal College of Pediatric and Child Health in the United Kingdom concentrates on childhood disease and treatment but also prevention. Among its activities are an e-learning package for nurses.

Representatives of several international and national associations stressed that regional partnership is a driving force, but that we also have to focus on partnership at the country level to support resource mobilization and increased public awareness.

## **The International Association of Immunization Managers (IAIM)**

Presented by Gayane Sahakyan

IAIM is a professional association established by the Sabin Vaccine Institute with support from the Bill and Melinda Gates Foundation. Its main goal is to support immunization managers and other immunization workers by providing opportunities for professional development, including peer exchanges and training, a forum for sharing of best practices and support for international and regional networks. Membership is free of charge for national immunization managers from GAVI-supported countries. More information is available at [www.iaimanagers.org](http://www.iaimanagers.org)

## **Putting it all together – What is your action pack for measles-rubella elimination?**

Panel discussion moderated by Guenther Pfaff

Panelists were selected to highlight successful activities and challenges in their countries as well as the diversity of contexts and approaches in the Region. On the panel were representatives from Armenia, Bulgaria, Croatia, Ireland, Israel, Netherlands, Romania and Switzerland.

Armenia: Strong partnerships with WHO and UNICEF have been important in helping Armenia reach high routine coverage and interrupted transmission of measles and rubella. Armenia's NITAG, established in 2011, plays a great role in new vaccine introductions, providing recommendations to the Ministry of Health and working with the RCC and RVC. Other success factors include national guidelines

and operating procedures at all levels, a well-organized monitoring system, an MMR SIA campaign conducted in low-performing communities in 2002, and a good surveillance system. The latter includes mandatory reporting of all suspected cases to national level within 24 hours.

Bulgaria: In response to outbreaks in the past five years, Bulgaria has implemented a variety of measures to reach vulnerable populations, specifically the Roma. The Ministry of Health has good collaboration with paediatric associations and has increased the role and knowledge of health mediators related to infectious diseases. The intention is to increase the number of health mediators and not only involve them but also link them to paediatricians and general practitioners (GPs).

Croatia: Working together, an advisory committee serving as Croatia's NITAG, the health insurance fund, Ministry of Health, Public Health Institute and the epidemiological service successfully eliminated measles and rubella from Croatia. The country is still faced with imported cases, and must constantly work to maintain high-quality surveillance and high immunization coverage. In recent years a large anti-vaccination movement has also developed, which could become problematic in future.

Israel: Immunization is provided free of charge in Israel and administered mostly by nurses. Success is the diseases you do not see, but health professionals still need to be taught about vanished diseases. Israel has an alert system at national level and an online paediatric network, through which members can be notified immediately if an infectious disease has been detected, and epidemiological investigation can start on time to prevent future cases. Currently paediatricians do not ask parents whether their child is up to date with vaccinations, but a new national immunization registry will make it possible to check the status of every child and alert parents if anything is missing. A recent survey indicated that parents trust health care workers – 90% of parents responded that they would give their child any vaccine their paediatrician would recommend.

Romania: There has been a huge migration of GPs and specialists from Romania, as a result of which patients have become harder to reach and it has become more difficult for them to catch up on vaccinations. The new urban educated population is vulnerable to misinformation on internet and social media. The Romanian society of paediatricians holds a conference every two years and is trying to train GPs to communicate effectively with patient about vaccines.

Switzerland: The Ministry of Health has a political mandate to implement a measles elimination strategy together with all actors in the field. The three main goals of the strategy are to achieve 95% coverage with two MMR doses in every cohort in the coming years, close all immunization gaps developed over the past 30 years and intervene in the event of outbreaks.

A national campaign to raise awareness among young adults and motivate them to check their immunization status focused on not missing any important events due to measles (such as a wedding, football match etc). An electronic vaccination card is available through internet or apps that will provide automatic reminders about missing vaccines, and electronic reminders in patient files will help doctors identify which patients are not up to date.

Ireland: Similar to the situation in the United Kingdom, MMR coverage in Ireland dropped significantly in the 1990s, down to 69% by 2000. A number of interventions have been implemented to increase coverage through both routine and supplemental immunization. Low-uptake geographic areas and special groups were targeted, including the Traveler population. Defaulter lists for first dose of MMR were prepared and these families were provided with literacy-proofed and picture-based information materials. School-based catch-up campaigns were introduced to strengthen coverage with second dose MMR. Measles monitoring and surveillance have also been strengthened.

*Additional point covered during the discussion*

What is the best way to respond to the anti-vaccination movement? Whether to engage with vaccine opponents or ignore them depends on the context, but it is in any case important to listen and communicate directly or indirectly the dangers of not vaccinating. (See also panel discussion on this topic below.)

Lowering the age of the second MMR dose in routine schedules in many countries could increase coverage, because children are easier to reach at a younger age. Paediatric societies are also in favour of advancing the second dose because health care visits tend to decrease as children get older.

## **Session 2. European Union commitment to control of communicable diseases**

### **The EU legislative setting on communicable disease control and prevention and management of serious cross-border health threats**

Presented by Michael Sulzner

A new legislation framework passed in 2013 gave the European Union (EU) a legal mandate to support cooperation and coordination between Member States to improve control and prevention of communicable diseases and management of serious cross-border health threats. The Health Security Committee is responsible for its implementation, focusing on preparedness and response planning. This framework encourages Member States to place a high priority on vaccine-preventable diseases.

The measure includes a legal mechanism for joint procurement of medical countermeasures, which gives EU Member States on a voluntary basis the opportunity to benefit from group purchases of vaccines. The resulting better prices and flexibility in contracts can prevent delays and wasted resources experienced by individual countries in the past, which weakens immunization at the European level.

The new framework also establishes an epidemiological surveillance network and an Early Warning Response System for serious cross-border threats. Council conclusions in place since 2011 recognize among other things the added value in addressing childhood immunization issues at European level and in improving synergies with other EU policy areas.

The framework recognizes that vaccination is one of the most effective public health interventions available and it demands a more strategic approach built on strengthened political commitment. This includes systematic monitoring of vaccine concerns, cooperation between Member States and with health care associations, an integrated and broader approach to surveillance, better training for health care workers and development of evidence-based and tailored approaches in risk communication.

## **Session 3. Moving towards global polio eradication**

Chaired by Robert Kazala

### **Polio Eradication and Endgame Strategy**

Presented by Dina Pfeiffer

Polio is a diminishing disease, but the fight to eliminate the last cases, now only in the 100s, is proving to be difficult. The Polio Endgame Strategy focuses on four objectives: detection and interruption of transmission, immunization system strengthening and OPV type 2 withdrawal (by 2016), containment and certification (by 2018) and legacy planning.

As of March 2014: wild poliovirus type 1 (WPV1) was endemic in only three countries, no wild poliovirus type 2 (wPV2) cases had been reported since 1999 and no wild poliovirus type 3 (wPV3) cases since 10 November 2012. However, 63 cVDPV2 cases were detected in 7 countries in the previous year and an

82% increase in cases of wPV1 was reported in the period 2012-2013 due in part to the spread from endemic into vulnerable countries. Transmission in Syria and environmental circulation of wild poliovirus in Israel were under control. Among the remaining affected areas, Pakistan posed the most worrying challenges, including threats to the security of health care workers administering polio vaccines.

The next step for the European Region is cessation of type 2 in OPV. This requires introduction of at least one dose of IPV in all currently OPV-only countries, which will allow a shift from trivalent to bivalent OPV in countries using OPV in their routine schedules. Removal of trivalent OPV as planned is imperative to ensure that circulating vaccine-derived poliovirus type 2 (cVDWPV2) does not have the opportunity to revert back to wild and thereby reverse many years of progress.

Using a new risk assessment model, the Regional Certification Commission determined at its meeting in 2013 (based on data submitted for 2012) that four Member States in the European Region were at high risk of transmission in the event of importation: Bosnia and Herzegovina, Georgia, Romania and Ukraine.

The RCC also expressed concern regarding:

- the reduced quality of surveillance in the Region
- challenges to immunization programmes in some Member States
- the increased number of Member States that did not submit an annual update on polio
- the absence of a national certification committees (NCCs) in some Member States
- incomplete information or delays in NCC reports.

The next RCC meeting was scheduled for June 2014, and the deadline for reporting 2013 data was 1 April 2014.

### **Panel: Improving poliovirus surveillance**

Moderated by Sergei Deshevoi and Eugene Gavrillin

#### **Environmental surveillance in the Netherlands**

Presented by Erwin Dulzer

Environmental surveillance provides a tool for anonymous, non-invasive monitoring of virus circulation under targeted risk groups. Environmental surveillance in the Netherlands is conducted in combination with enterovirus surveillance (typing of enterovirus-positive clinical samples).

The 1992-1993 outbreak in the Netherlands took place in the “Bible belt”, where some villages and schools have only 30% immunization coverage. Environmental surveillance during that period provided valuable information on where and when the virus had been circulating. The current system of continuous environmental monitoring in this area works well but is subject to practical limitations (such as weather, laboratory capacity, timing of sampling at schools).

In light of circulation detected through environmental surveillance in Israel and clinical cases reported in Syria in 2013, in November 2013 environmental surveillance was intensified not only in high-risk population areas but also at a potential introduction site (Ter Apel asylum centre – the first residence for 95% of legal refugees from Syria and other poliovirus-affected countries).

The combination of environmental and enterovirus surveillance systems in the Netherlands provides regular detection of human enteroviruses, and a good match between the enterovirus types detected by the two systems in the Bible belt. Since 1997 only OPV strains have been detected in the sewage in the Netherlands (most recently in 2008). As of March 2014, no poliovirus had been detected in sewage samples covering Syrian refugees and no match had been identified between enterovirus types detected in Ter Apel sewage and clinical surveillance.

## **Enterovirus surveillance in Germany**

Presented by Ole Wichmann

The last clinical case of polio in Germany was detected in 1999. AFP surveillance has been conducted since 1997 and enterovirus surveillance based on aseptic meningitis/encephalitis was introduced in 2005. Responsibility for enterovirus surveillance was transferred to the Robert Koch Institute in 2009.

Over 200 (mainly paediatric) hospitals currently submit suspected enterovirus samples to participating labs, which report back to clinicians and report the data to the Robert Koch Institute and the national certification committee. A fast track procedure is in place for any suspected cases of polio.

Since 2005: over 20 500 samples have been tested, approximately 75% of enterovirus-positive samples have been serotyped and 2010-2013 reports included 51-75 AFP cases per year. 85% of samples were from children under 15 years of age.

Perfect surveillance is impossible to achieve. Among its weaknesses, Germany's system may underestimate the number of cases and it has limited representativeness. On the other hand, it aims to provide essential data for confirmation of polio-free status, allows international comparisons and benefits all stakeholders involved.

### *Additional point covered during the discussion*

From the lab perspective it doesn't matter whether samples come from environmental or enterovirus surveillance, as the investigations are similar. But there are huge disparities between countries in how they report and what the results are. There is great space for improvement of the non-laboratory component of surveillance.

Neither environmental nor enterovirus surveillance will be as good as AFP surveillance, which remains the global standard for certification purposes. But countries should try to capitalize on best practices and exploit the positive aspects of each system. Countries are encouraged to collect stool samples to complement other sampling, as assays ran on stool samples give a higher chance of detecting poliovirus. Spinal samples have a low chance of detecting the virus. Guidelines for enterovirus surveillance are being revised by WHO and will be widely circulated when finalized.

Lithuania: AFP surveillance is integrated in the common system of detection of communicable diseases. Health care providers report each suspected case and submit a sample to a public health centre, where it is investigated by experienced epidemiologists. Close links between public health specialists and between institutions make this surveillance system possible.

Russian Federation: The Russian 2012 report was well received by the RCC because it provided evidence based on AFP surveillance that there was no circulation of poliovirus. The system is well established and supported by the Government. Even rare forms of meningitis were identified as part of the AFP system. AFP surveillance will continue at a high level for the near future, but will be conducted in parallel with other forms of surveillance.

Participants were impressed with the sensitivity of the Dutch system for enterovirus surveillance.

## **Preparedness and outbreak response for polio**

Presented by Shahin Huseynov

Transmission of an imported poliovirus is considered a public health emergency that requires a rapid and high-quality response.

### *Preparedness*

WHO encourages all Member States, as mandated by the World Health Assembly (WHA) in 2007, to update or establish and test polio outbreak preparedness plans or equivalent documents. Updated risk management and communication plans are also a necessary component of national preparedness. As of March 2014, only 42 of 53 Member States in the European Region reported having updated plans in place. So far, three national and multinational polio outbreak simulation exercises (POSE) have been implemented to test existing plans. Additional POSE, including at subnational level, are planned for the near future.

### *Vaccine strategy*

The vaccine of choice for outbreak response is monovalent type-specific OPV. If this is not available or there is low routine coverage in the country, bivalent OPV is recommended. Trivalent should only be used when no other OPV is available. IPV can be used for immediate action and to protect contacts and thereby reduce clinical cases, but it has no effect on wPV transmission.

Member States are encouraged to define which vaccine would be used in the event of an outbreak and to identify the source and funding for its procurement. Of the 42 plans established so far, 21 mention that OPV would be used, 13 call for IPV, and 3 for a mixed IPV/OPV strategy. 16 do not include a policy on vaccine of choice. 29 have not identified the source of or funding for vaccines to be used in outbreak response.

### *Timeline*

Any detection of wPV from a human or other source must be reported within 24 hours to WHO. Within three days, enhanced surveillance, communication activities and planning for a catch-up vaccination campaign should be initiated. The first round of immunization with OPV should take place within the first four weeks after detection of the first case.

This should be followed after a short interval (10-14 days) by an additional dose (Short Interval Additional Dose approach). At least three large-scale rounds should take place, including two after the last detection of poliovirus. Enhanced surveillance, including preferably stool surveys, and independent monitoring are also crucial components of the response.

The WHO Regional Office is developing new guidelines for polio outbreak response, which will be published in 2015.

## **Outbreak response in IPV-using countries**

Moderated Dina Pfeifer

In a context of 95% national coverage with IPV and thanks to an early warning system that includes regular environmental surveillance, two environmental samples were found to be positive for wild poliovirus 1 in Israel in 2013. A comprehensive and prolonged response, including expanded surveillance, stool surveys, two rounds of OPV SIAs and a broad communication campaign, appeared to have successfully halted further environmental transmission of the disease and no cases were reported. No serious events following immunization, nor in particular any vaccine-associated paralytic poliomyelitis were reported. Considering its regional context, past experience with a similar scenario, and the disruptive nature of such campaigns, Israel added two doses of bOPV to its routine immunization schedule as part of its longer-term response.

Challenges encountered during the campaign included:

- communicating the importance of SIAs in a country with no clinical polio cases
- identifying the target population for SIAs
- reaching consensus in the medical community
- countering pressure from anti-vaccination groups
- ensuring compliance.



The following valuable lessons learnt through this experience can benefit other IPV-only using countries.

- Environmental surveillance is crucial for early detection and monitoring intervention.
- A successful evidence-based national public health response requires sufficient time for:
  - collecting data
  - reaching consensus among health care professionals
  - consultation with external experts
  - obtaining public trust.
- IPV does not provide gut immunity and therefore does not prevent transmission. So while IPV may be useful as an immediately available response to a small outbreak with few clinical cases, it is not considered by WHO to be the vaccine of choice for outbreak management. As demonstrated by the situation in Israel, in a context with high IPV-only coverage, where the likelihood of clinical cases is very low, transmission of the virus is of high concern.
- Transmission in Israel was not waterborne. Children interact differently than adults, and the virus can be transmitted through contact even in highly hygienic environments.
- Timing is essential. Preparing for an outbreak, by revisiting preparedness plans and conducting simulation exercises, will help save valuable time when an event does occur.
- WHO recommends monovalent OPV (or bivalent OPV if monovalent is not available) to manage an outbreak. A stockpile of 3 million pre-qualified doses is available globally and could be released for outbreak response through an emergency request to WHO and UNICEF. It takes time to organize a campaign, so most likely the vaccines would arrive at the country before the response plan could be rolled out. Maintaining a national stockpile is not recommended.

Bulgaria, Germany and Turkey are all facing an influx of refugees, and have taken steps to increase surveillance and vaccinate refugees as they enter the countries. Dr Pfeiffer emphasized that refugees from countries where polio is endemic or circulating should be vaccinated according to the host country's routine schedule at the first possible opportunity.

### **bOPV/IPV introduction**

Moderated by Michel Zaffran, with presentations by Abigail Shefer, Jennifer Ruben-Jorgensen, Sosler and Robb Butler

In May 2012, the WHA announced polio eradication to be a programmatic public health emergency. The ensuing Global Polio Endgame Strategy calls for type 2 withdrawal by April 2016 and introduction of at least one dose of IPV in all 124 OPV-using countries 6 months prior to type 2 withdrawal, by the end of 2015. The Plan calls for IPV introduction at an unprecedented accelerated scale-up compared to introductions of other new vaccines.

IPV introduction will reduce the risk of reemergence of wPV2 prior to the tOPV to bOPV switch, facilitate interruption of transmission with use of monovalent OPV2 if type 2 outbreaks were to occur, and hasten eradication by boosting immunity against types 1 & 3.

The Strategic Advisory Group of Experts (SAGE) endorsed the Plan in 2013 and recommends that a single dose be administered with DTP3 (in addition to OPV) at 14 weeks for the best immunization response. But countries have the flexibility to consider alternative schedules.

As of March 2014, there was a high diversity of routine schedules and licensing of IPV vaccines in the European Region. 34 used IPV only, 8 had a sequential OPV/IPV schedule and 11 used OPV only. Of the 11 OPV-only countries, 7 receive GAVI support for vaccines, 2 were scheduled to introduce IPV in 2014 and 2 were planning for a 2015 introduction.

Challenges in the Region include:

- parallel plans to introduce other new vaccines (such as against rotavirus, human papillomavirus and pneumococcal diseases);

- lack of a registered IPV product and difficulty in procuring sufficient supply of preferred product;
- public concerns in some countries regarding multiple injections;
- inadequate cold chain capacity at subnational level;
- lack of a NITAG to guide the process in some countries.

Based on need, the Regional Office will assist Member States over the coming year through baseline assessments of vaccine management, focus group interviews to assess parental concerns, a subregional planning workshop and technical assistance visits.

Information materials on IPV introduction and OPV2 cessation are available on the WHO website ([www.who.int](http://www.who.int)), many of which will be translated by the Regional Office into Russian.

### *Vaccine supply and procurement*

In support of the Endgame Strategy, the global community is aiming to achieve a price of 1 USD per dose of IPV. UNICEF issues a tender in October 2013 to:

- secure sufficient supply to meet an accelerated introduction of IPV for OPV-using countries procuring through UNICEF for the period 2014-2017/2018;
- achieve affordable prices from year 1 for all presentations;
- support the development of a healthy IPV market that is sustainable and affordable beyond the tender period.

Awards were made at the end of February 2014, and included no offers for IPV combination vaccines. The award encompasses 440 million doses of standalone IPV - enough to cover the full maximum demand for 2014-2017. The majority of the vaccines will be in 10-dose vials. Single dose vials will be available in limited quantities. No 5-dose products were pre-qualified as of March 2014, but by the end of 2016 UNICEF expects that all demand for 5-dose presentations will be met with pre-qualified products. Lead times for IPV supplies are expected to be 3-6 months, but could be as long as 9 months for the 10-dose vials produced by Sanofi.

Countries are advised to make their preferences known to UNICEF and register the products as soon as possible, and to include the noted lead times in introduction planning. Flexibility will be required from countries initially on preferred presentations to maximize introductions and utilization of available supply. For stock management and replenishment of ongoing programmes, lead times need to be built into the reordering process.

Bivalent OPV is currently licensed and available only for outbreak response. The global switch from trivalent to bivalent is tentatively scheduled to take place in mid-2016. UNICEF will work with WHO and Member States to ensure that sufficient supply is available by then and that the product is licensed for routine immunization.

Some countries are interested in IPV-containing combination vaccines to reduce the number of injections in the routine schedule. However, UNICEF received no offers for these products in response to the tender and there is a limited global supply. UNICEF has no control over the overall global supply. UNICEF Supply Division will be working with manufacturers and WHO to develop a strategy for increasing access to combination vaccines. Self-procuring countries can purchase combination vaccines with acellular pertussis directly from the manufacturers. They are encouraged to negotiate with manufacturers as early as possible due to long lead times.

### *Pricing*

There is naturally keen interest from countries regarding pricing of IPV. The prices for all countries procuring through UNICEF (both GAVI-supported and non-GAVI-supported) is USD 1.90 per dose for single and USD 2.80 per dose for 5-dose vials. Tiered pricing is available for 10-dose vials through Sanofi

Pasteur (for Albania, Serbia, the former Yugoslav Republic of Macedonia and Turkmenistan), starting at 75 euro cents per dose.

Details of prices available through UNICEF are available at the UNICEF website [www.unicef.org/supply/files/IPV.pdf](http://www.unicef.org/supply/files/IPV.pdf)

### *GAVI support for IPV introductions*

Both GAVI-eligible countries and those graduating from GAVI support for vaccines may apply for GAVI support of IPV introduction, provided they target introduction by the end of 2015. Considering the strict timeline, the application process is slightly different than with other vaccines, and countries are encouraged to regularly inform GAVI and partners of their plans. Applications for GAVI support for IPV introduction, including an introduction plan and other required documents, will be accepted from December 2013 to June 2015. Granted support will continue until 2024 and may thus outlive the graduation period for some countries (subject to funding availability beyond 2018). Co-financing is optional. All GAVI countries are also eligible for an introduction grant lump sum, calculated based on birth cohorts. Technical assistance for planning and preparations will be provided through partners. Once approved by the Independent Review Committee, decision letters will be sent within four weeks, and grants will be dispatched within 6 weeks of the decision letter.

Fourteen weeks was chosen as the recommended age to administer one dose of IPV in order to maximize immune response. The response is lower at an earlier age, and therefore a balance must be sought between optimizing the response and minimizing the risk of vaccine-derived poliovirus. WHO recommends that at least one dose of IPV be given at 14 weeks of age or older in addition to the regular OPV schedule. An additional dose of IPV at an earlier age is also acceptable.

GAVI IPV support guidelines including information on requirements, processes and timelines are available at [www.gavialliance.org/support/apply/](http://www.gavialliance.org/support/apply/).

For WHO guidance on developing vaccine introduction plans see: [www.who.int/immunization/policies\\_strategies/vaccine\\_intro\\_resources/nvi\\_guidelines/en/](http://www.who.int/immunization/policies_strategies/vaccine_intro_resources/nvi_guidelines/en/)

### *IPV introduction: communication considerations and overview*

Communication and advocacy efforts are needed to support all three key stages of IPV introduction, the switch from trivalent to bivalent OPV and withdrawal of IPV.

Objectives for WHO and Member States in this area are to:

- inform stakeholders, partners, health care workers and other key audiences;
- provide clear, consistent, and understandable ways of communicating about IPV Introduction and the importance of IPV;
- foster awareness now about what is about to happen, to garner support for IPV introduction and coming changes related to OPV;
- identify communication and advocacy needs. Thanks in part to UNICEF, there is good progress in the Region in developing communication plans for IPV introduction.

It is essential to address the questions or concerns of parents, health care workers and other stakeholders early on. Key messages to be communicated may include: why an extra injection is needed, why two polio vaccines will be administered during the same visit and the high safety profile of the IPV vaccine.

Some countries may need assistance from WHO and partners to identify the different groups to be considered and their primary concerns so that responses can be tailored accordingly.

Education and effective training of immunization providers and health workers on IPV use, administration and safety will also be needed to achieve success.

Communication and advocacy-related materials are available through WHO, UNICEF, PATH, Task Force for Global Health, Bill & Melinda Gates Foundation and others. WHO will make as many documents as possible available in Russian on its dedicated IPV web page [www.who.int](http://www.who.int).

## **Session 4. Vaccine acceptance – Issues and strategies**

Chaired by Christian Peronne

### **Vaccine acceptance, advocacy and communications**

Presented by Robb Butler

Vaccine acceptance by caregivers is influenced by numerous factors, including access to availability of vaccination, knowledge of vaccine-preventable diseases, appeal of vaccination points, vaccine attributes and social norms.

While studies show that people trust the advice of their health care providers above all others, caregivers' peers and information spread through traditional and online media can also influence their decision of whether or not to not vaccinate their children.

Individuals or groups who actively oppose vaccines can be funded spokespersons, proponents of alternative medicine, conspiracy theorists and their followers, anthroposophic communities, religious groups or others. They generally pin their arguments on pseudo-scientific evidence, anecdotes or sensationalist emotional stories. Such misinformation can make people fear the vaccines more than the unseen (and largely forgotten) diseases they effectively prevent.

The Regional Office and Member States have an important role to play in educating the public and especially health care workers by providing consistent, accurate, timely and accessible information. More attention needs to be paid to counterbalancing anti-vaccination sentiment and enabling vulnerable target groups to make well-informed decisions.

### **Panel debate on strategies to tackle anti-vaccination sentiment**

Moderated by Gary Finnegan

The panel discussion attempted to answer the questions: What is the most appropriate response to anti-vaccination sentiments and is there evidence to back this up? When misinformation about immunization appears in the public debate, is it more effective to "fight fire with fire" or to ignore it?

Vaccine hesitancy and complacency play a variable role across the Region among parents, health care workers, decision-makers and financiers. Trust and confidence in products, deliverers and authorities are wavering. While health authorities base their communication on evidence and facts, anti-vaccination advocates tend to communicate using personal stories and sensationalism, which are generally more effective in swaying public opinion.

Countries need to do a better job of understanding barriers to vaccination behaviour and addressing these barriers through tailored services and messages. Participants were asked to share their experiences in communicating the importance of immunization.

#### *Arguments and experiences in favour of "fighting fire with fire"*

Most countries have at least 90% immunization coverage, so the overwhelming majority of parents support vaccination and the anti-vaccine lobby is a small group. However, the media often gives the "anti" side equal weight.

Rather than ignore anti-vaccination sentiments it is better to try to understand where these ideas are coming from and respond appropriately. Negative attitudes may stem from negative experiences incorrectly attributed to vaccines. In contrast, people who have an “axe to grind” with institutions are harder to reach and will not be swayed by reason. In either case, spokespersons need to receive media training, build a good relationship with the media and then engage quietly and calmly where appropriate. The public sometimes wants someone to be the voice of reason. In the event of an adverse event following immunization, there should be a mechanism in place to inform the public and provide the facts, always being truthful about possible side effects but putting this risk into perspective. Ongoing communication and preparation are essential.

Additional options are to make use of the pro-vaccine lobby if present in the country and to use an emotional approach together with science, e.g. to speak out as a parent as well as an expert, ask disease survivors to share their experiences.

Both government authorities and health care workers need to be clear, consistent and credible in providing information. Governments need to maintain official online channels (websites, social media) where the public can access factual information. Including words like “risk” in the web texts will improve the search rankings of such sites. Comprehensive coverage of immunization topics in medical training of health professionals should enable them to be consistent in what they tell parents.

#### *Arguments against engaging with anti-vaccine individuals or groups*

It is not possible to counter nonscientific passion; and by sharing the platform, you are giving them credibility. Agree to seek a separate slot with the journalist or programme instead. Using anti-vax tactics, such as emotional appeals, will decrease one’s credibility.

#### *Country experiences*

Israel: During the period in 2013 when wild poliovirus was detected in the sewage but no clinical cases of polio were reported, authorities found it challenging to communicate the risk of transmission in the absence of any cases, and to communicate the need for reintroduction of OPV after its use had been stopped in 2005. The latter issue was a particular target of anti-vaccination groups. As part of a comprehensive communication campaign, all available information, including vaccine safety data, was released to the public in a timely manner; the Ministry of Health supplied uniform and consistent messages to the media, monitored anti-vaccination sentiments and invited polio survivors to speak out on the importance of vaccination.

United Kingdom: A positive environment with high public trust must be built through a communications campaign before introducing a new vaccine. During introduction of HPV in 2008, a girl died within two hours after receiving the vaccine. Authorities responded quickly, emphasizing the tragic situation for the family and immediately starting an investigation. Within 48 hours they could reassure the public that the death was not related to the vaccine. Nationally the incident had a slightly negative effect on vaccine uptake, but it did not derail the programme because the public was overwhelmingly positive to start with.

## **Introduction to the Guide to Tailoring Immunization Programmes (TIP)**

Presented by Robb Butler

Even with immunization coverage as high as 95% in any given country, pockets of susceptibility accumulate that can lead to outbreaks of vaccine-preventable diseases. In 2010 ETAGE advised the Regional Office to move beyond business as usual and gain better insight into vaccination motivators and barriers. Looking at the broader enabling environment could help Member States gauge the causes of low vaccination coverage in some groups and design evidence-based interventions to address them.

Various methodologies drawing from behaviour change models were developed by the Office and pilot tested in Bulgaria, which experienced a large measles outbreak in 2009-2011 despite almost 96%

national coverage for the first dose of MMR. The tools looked at why large numbers of people in the Roma community (which accounted for 89% of all cases during the outbreak) were not vaccinating, and how services could be oriented to address those factors. Specific outcomes of the exercise included recommendations to increase the number of health mediators serving the communities, revise their job description, provide them with job aids and continuing education in this area, and develop and disseminate print materials for the Roma community.

Based on the Bulgaria experience the methodology was further developed and published as the Guide to Tailoring Immunization Programmes (TIP Guide) in April 2013.

The Guide was next implemented in Sweden to address coverage gaps in the Somali immigrant population in northern Stockholm and the anthroposophic community. Based on literature research and interviews with parents and other key persons in the communities, "maps" of pro and con drivers in each context were made. It was found, for example, that the screening of Somali immigrants to establish their immunization status upon entering the country was not functioning well and many Somali parents feared that the vaccination would lead to autism. Among the anthroposophic parents, varying degrees of vaccine hesitancy were found, and the overriding driver against immunization was the belief that natural immunity is preferable. The findings provided a good basis to reach these small but very important communities with information to increase understanding and thereby vaccination coverage.

The TIP approach is now being used to investigate the needs of refugee groups in Bulgaria and the Orthodox Jewish community in London, England, and adapted to promote seasonal flu vaccination among health care workers (TIP FLU) and rational use of antibiotics (TAP).

## Session 5. Further priorities

### **Making decisions on introduction of rotavirus vaccine: new information to consider** Moderated by Liudmila Mosina

In the WHO European Region, rotavirus is responsible for 25-63% of gastroenteritis in children less than 5 years of age. In its 2013 position paper, WHO advised that rotavirus vaccines be included in all national immunization programmes and be considered a priority.

As of 2013, the vaccine had been introduced in 12 Member States with plans underway for introduction in 5 more. In Member States where the vaccine has not been introduced, reasons have included an unfavourable cost-effectiveness estimate and lack of capacity.

New developments influencing NITAGs' decision-making on rotavirus introduction include new evidence on vaccine impact, declining prices and opportunities for middle-income countries to procure the vaccine through UNICEF.

WHO continues to support countries in obtaining local evidence and strengthening national decision-making mechanisms, including by advocating for the establishment and capacity building of NITAGs.

#### *Country examples*

United States: Dr Margaret Cortese of the United States CDC presented information on the impact of rotavirus introduction in the United States in 2016. National estimates indicate that approximately 30 000-40 000 hospitalizations were prevented in both 2008 and 2009. Considering its demonstrated effectiveness and the small excess risk of intussusception, the CDC continues to recommend that all infants (following the age and precaution/contraindication criteria) receive rotavirus vaccine. Parents and health care providers do need to be aware of the small risk of intussusception and the need to seek care if it develops.

Germany: Dr Ole Wichmann presented key considerations in Germany's 2013 decision to introduce rotavirus vaccine into the routine immunization schedule, with the main goal of preventing rotavirus-associated hospitalizations. These included evidence on the disease burden, efficacy/safety of rotavirus vaccines, impact studies and modelling of expected impact and cost-effectiveness, the intended immunization goal, possible alternative preventive measures and potential barriers to success such as the level of public acceptance.

Republic of Moldova: Anatoliy Melnik presented the experiences of the Republic of Moldova in introducing rotavirus vaccine into its national immunization programme in 2012. Preparations for introduction included a broad communication campaign aimed at health care workers and the public, a series of workshops for health care workers and other stakeholders and promotion activities during European Immunization Week. Despite these efforts, coverage (at 40% with two doses) is lower than planned. The main reasons for this low uptake are false contraindications for vulnerable children, parental vaccine refusal (influenced by anti-vaccination publications on internet and anti-vaccination religious leaders) and large migratory populations that are difficult to reach. Even with low coverage, there has been a significant (up to 50%) decrease in the number of cases of rotavirus gastroenteritis.

### **Introduction of electronic immunization registries**

Moderated by Jan Grevendonk

Immunization registries are a hot topic for good reasons. They have the potential to become immunization information systems with myriad benefits, including:

- the possibility to send out automatic reminders to parents
- provision of feedback from public health services to the health care physicians
- potential use of bar codes to register vaccinations
- identification of unimmunized children in outbreak situations.

But before embarking in this direction, countries should learn from both the positive and negative experiences of others that have already introduced these systems. They should also first consider:

- data protection and confidentiality issues;
- pilot testing in a limited number of clinics/regions/territories;
- the time needed for the users (health care workers and parents/caregivers) to get used to the system and to recognize its benefits;
- type of system desired (e.g. comprehensive immunization information system, simple vaccination registry, stock management system);
- affordability;
- possible linkages between several databases (e.g. health financing, insurance).

WHO can help in this effort by sharing guidelines and best practice.

### **Improving access to vaccine pricing information**

Moderated by Oleg Benes

Costs for immunization programmes are escalating and most countries are looking for ways to achieve affordable prices within a demanding immunization context. This session reviewed the challenges, country experiences, and tools proposed to increase access of countries to information on pricing.

An introduction by Oleg Benes and Tania Cernuschi on the topic and the vaccine product price and procurement (V3P) project was followed by presentations on vaccine costs and price challenges in Albania and Latvia.

The aim of the V3P project is to improve the sustainable introduction and use of priority vaccines in GAVI graduating and middle-income countries through improved access to and use of vaccine product, price, and procurement data and information for evidence-based decision making. It can lead to

potentially significant cost savings through improved market knowledge and a better understanding of the factors influencing a price and the components constituting a price.

It additionally provides an up-to-date single source of relevant documents and web links to sources providing information on vaccine product characteristics, WHO prequalification and pipeline products.

The project is in the implementation and roll-out phase now after testing with pilot countries. Support to countries will also be provided through capacity building activities, building on identified needs and utilizing information provided by and lessons learnt through V3P. The added value of the V3P database depends on the participation of its users. The more countries share their data, the more informative and effective the database will become. Countries are requested to provide information on the product, contract, price, price inclusions and procurement.

In Albania vaccine price information is available at the national level and on a public domain. Vaccine pricing data is published by UNICEF (previously updated in May 2013) and the Ministry of Health annually. There are no legal provisions nor contractual provisions restricting the sharing of information. However, it is difficult to get prices for vaccines not included in the immunization programme. Pharmaceutical companies share the price only with their distributor and mainly the price comes from them. Also, due to small market, a producer may not want to register its own vaccine, if there is another one already registered.

Latvia has benefited from an informal exchange of vaccine prices between the three Baltic states during the meetings of Baltic Experts group. Vaccines are procured centrally by the National Health Service and according to public procurement law all results are publicly available. There is now a publicly available list of prices. There are no legal or contractual restrictions for the sharing of prices of vaccines procured through the public procurement procedure. In May 2012, the three Baltic States entered into a Partnership Agreement on "Joint Procurements of Medicinal Products and Medical Devices and Lending of Medicinal Products and Medical Devices Procurable Centrally." This provided them with economic benefit and the possibility to lend. Challenges have included the need to establish clear rules on who does what and agreement on a Lead Partner. Such a system requires strong leadership from the lead partner and the countries must have very similar registration, procurement and logistics systems.

### **European Immunization Week (EIW): past, present and future – sharing lessons learnt, the role of EIW in the coming years**

Moderated by Stephanie Brickman

With an eye to EIW's 10th anniversary year in 2015, this session looked at how some Member States have used EIW very effectively over the years as a focus for vaccine advocacy. Along with best practices, participants brainstormed on the future direction of EIW and how the Regional Office can further support national efforts.

The group comprised representatives from a broad variety of countries in the Region and began with presentations on EIW experiences in Belgium and Kyrgyzstan. Through lively discussions, the group agreed that European Immunization Week is an opportunity:

- to refresh our approach
- to go to the media with a renewed focus
- to focus the minds of the public and update them
- to get the attention of senior managers and politicians
- to advocate for vaccination and counter ambivalence
- to look at the value and benefits of immunization including the cost-benefit argument
- to reassure on vaccine safety
- to reflect on what we do
- to help foster recognition of diversity of populations/regions and specific needs



- to conduct education and training
- to highlight parents' stories of disease and other testimonials.

European Immunization Week is a time to reach out to health care professionals, to stimulate and update their knowledge and help them promote vaccination.

European Immunization Week is also a time for cooperation. It underlines the cross-border and global aspect of immunization and can help foster cooperation for resource mobilization, including among charities and NGOs.

Ideas for European Immunization Week in the future.

- It is important to say something new, possibly by focusing on something other than childhood immunizations (travel, older people, etc.).
- WHO should try to provide documents and materials early to allow time for translation.
- VPI could reach out within WHO to involve other programmes, collaborating centres, Country Offices and facilitate synergy with other United Nations agencies.
- EIW activities and the website should keep going all the year round.
- Workshops could be conducted with WHO support and tools for specific topics such as hard-to-reach populations.
- We could make more use of social media and broadcast media, and provide more information for parents and young people.
- Could WHO facilitate gaining the attention of parliaments by writing a letter?

## Session 6. Partner side sessions

### **Update on new GAVI Grant Approval Monitoring and Renewal process for GAVI support eligible countries**

Presented by Nilgun Aydogan

At its meeting on 11-12 June 2013, the GAVI Alliance Board approved a new Grant Application, Monitoring, and Review (GAMR) process that will change how the Alliance reviews both applications for support and requests for renewal of existing support. The changes are intended to increase country ownership, country voice and alignment with the country processes. The changes will be phased in during 2014.

**Application:** The Expression of Interest and application will be submitted through a more user-friendly portal. To improve quality and timeliness of applications and GAVI support. This first document in the application process must be received at least four months prior to application submission. The Independent Review Committee will meet three times a year to review new applications, which may include both new vaccines support and health systems strengthening through the same application and review timelines. The outcome will be either "Recommended for approval" or "Recommended for resubmission", in which case the country will be invited to resubmit at a subsequent application round.

**Monitoring:** The monitoring process will be fully IT-based. Routine monitoring will be phased-in towards end of 2014 and based on an online quantitative Performance Framework – building upon countries' existing mechanisms.

**Review:** Joint appraisal forms will follow a country-differentiated approach. The Annual Progress Report will be replaced by a new, shorter Annual Report, to be submitted by the government through a new more user-friendly GAVI portal.

The Secretariat will process all information, and share this with Alliance partners, which will give comments in a concise Concept Note prior to consideration by a Panel High Level Review Panel. The Panel will meet 3 times per year to match with the countries' funding cycles.

The Panel's recommendations are submitted to GAVI's CEO and Board. Decision Letters promptly issued to countries, and Panel's comments are fed back into grant routine management. Any outstanding Financial Statements and Audits must be submitted to GAVI before any disbursement of further cash support.

Regarding applications for IPV support, it is important that countries make their preferences known well in advance to enable forecasting and prioritization. Available quantities and deadlines for 2015 were not yet known at the time of the meeting.

### **European Union side session with European Union Member States and accession countries**

Moderated by Michael Sulzner

This session was a follow-up of an earlier presentation on the EU legislative setting on communicable disease control and management of cross-border health threats. The side session provided an opportunity for Member States to informally exchange experiences and ideas for possible future collaboration on this issue. They were also encouraged to ask questions and express their needs regarding implementation of the new legislation.

Topics discussed included the potential added value of the new legislation and how it will affect work in decentralized systems, vaccine regulatory and stock out issues, outbreak preparedness planning and simulation exercises.

## **Session 7. European Vaccine Action Plan**

### **Translation of the Global Vaccine Action Plan (GVAP) into the European Vaccine Action Plan (EVAP)**

Presented by Niyazi Cakmak

GVAP is the product of a global consultation process that involved about 1100 individuals and 290 organizations in more than 140 countries. Based on guiding principles (country ownership, shared responsibility and partnership, equitable access, integration, sustainability and innovation) GVAP establishes a set of 6 strategic objectives to meet 5 ambitious goals. In endorsing the Plan, the 65th World Health Assembly (WHA) requested that it be translated into respective regional plans.

At its 63rd session in 2013, the WHO Regional Committee for Europe mandated the Regional Office to develop a regional plan to address the remaining immunization challenges and priorities in the Region, building on the GVAP and aligned with regional policies and commitments, including the Region's policy framework Health 2020.

With input from ETAGE, the Regional Office developed a draft Plan, which was presented for review to the Member States of the European Region at the PMM. Based on a strong and ambitious vision of a Region "free of vaccine-preventable diseases where all countries provide access to high-quality, safe, affordable vaccines and tailored, equitable and universal immunization services throughout the life course," the draft Plan laid out six region-specific goals, five strategic objectives to achieve them and a framework to monitor implementation progress. Actions, targets and indicators were also defined, against which progress could be assessed. Reporting on EVAP progress will be based on the established annual WHO/UNICEF Joint Reporting Form.

The entire third day of the PMM was dedicated to group discussions on the proposed vision statement, strategic objectives, and the corresponding strategies, actions, indicators and targets. The PMM offered Member States a unique opportunity to ask questions, express concerns and make recommendations to ensure that the final Plan would reflect their national contexts and needs. All of the detailed feedback was compiled and considered by the Regional Office in finalizing the Plan, which was presented to and approved by the Regional Committee for Europe in September 2014. A selection of main points discussed by the five working groups (one assigned to each strategic objective) is provided below.

### **Strategic objective 1: All countries commit to immunization as a priority**

This objective was considered comprehensive and broad enough to capture the situation and needs of all countries. Concrete steps to accomplish the objective will need to be established at national level. It was also noted that guidelines will be needed to measure the proposed targets and indicators.

All proposed actions were approved, although they may need to be adapted for countries that have a federal system. Participants suggested that the strategies include the private sector, specify elements to be included in public health law, address government accountability for providing immunization to the population and consider peer-to-peer exchange for politicians at regional levels.

The third strategy (Strengthen national capacity to formulate and implement evidence-based policies) should emphasize the independence of NITAGs and mention a mechanism to disseminate their results.

### **Strategic objective 2: Individuals understand the value of immunization services and vaccines, and demand immunization be delivered as a right**

The regional indicators for this objective require a different slant than the global indicators, because most of the global indicators have been achieved already in this Region. The intention is still to drive demand, but this objective is also seen as a tool to advocate for governments to protect the right to health by ensuring the sustainability of immunization programme budgets.

Participants felt that emphasis on individual *responsibility* for the good of the community should be added as well as the importance of educating children and vaccinators. The group debated how often attitudes need to be assessed and noted that few countries will have the resources to measure vaccine hesitancy and attitudes towards vaccination on a regular basis. There is a clear need to share best practices and data among countries; however, it will be challenging to obtain comparable data. Communication plans should be not only for new vaccines but also for routine vaccination programmes.

### **Strategic Objective 3: The benefits of immunization are equitably extended to all people through tailored and innovative strategies**

At national level, immunization services in the European Region have been generally successful in serving the target audience. It is at subnational/district/facility level that we start to see inequitable distribution of services. This is why this objective focuses on equitable access to all.

Participants suggested that that this objective underline the need for continuity/sustainability and that the words “through tailored and innovative strategies” be deleted from the title. Addition of the following strategy was also proposed: “Identify underserved populations at country level” along with criteria to define underserved population. Electronic immunization registries should be more clearly defined.

#### **Strategic Objective 4: Strong Immunization systems are an integral part of a well-functioning health system**

Comments related to this strategic objective related primarily to a need for greater specification, for example with respect to intersectoral and private sector collaboration, risk groups targeted in the life course approach and essential functions of immunization programmes. The group disagreed with some specific wording, preferring for example incentive mechanisms over "performance-based payments", and asked for greater emphasis on immunization as a *prominent component* of the medical nursing curricula.

#### **Strategic objective 5: Immunization programmes have sustainable access to long-term funding and quality supply**

The participants were satisfied with the relevance of the objective but made several suggestions regarding the categorization and wording of various actions. It may be necessary, for example, to clarify the meaning of "more resources" and to note that funding of immunization programmes refers not only to vaccines, but also to monitoring and evaluation, etc.

Although no change was proposed, there was some discussion about setting the "sharing of price information" as an indicator. Although this is intended to increase transparency and empower countries to negotiate lower prices for vaccines, some countries feared that it could unexpectedly lead to price increases. It was agreed that EVAP should focus on regional responsibilities and functions, and therefore not address global supply-related issues.

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