12th meeting of the European Technical Advisory Group of Experts on Immunization (ETAGE)

3-4 October 2012. Copenhagen, Denmark

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ABSTRACT

The European Technical Advisory Group of Experts on Immunization (ETAGE) met on 3-4 October 2012 to review and discuss immunization activities and developments in the WHO European Region and provide advice to the WHO Regional Office on appropriate activities. Five new members of the ETAGE were present for the meeting. Main topics for discussion included adult immunization strategies, National Immunization Technical Advisory Groups (NITAGs), tailoring immunization activities for susceptible populations, introduction of combined vaccines, introduction of rotavirus vaccine, Regional application of the Global Vaccine Action Plan (GVAP), rubella and congenital rubella syndrome.

Abbreviations

aP	acellular pertussis vaccine component
CRS	congenital rubella syndrome
DoV	Decade of Vaccines initiative
ETAGE	European Technical Advisory Group of Experts on Immunization
GVAP	Global Vaccine Action Plan
HCWs	health care workers
IPV	inactivated poliovirus vaccine
IS	intussusception
NITAG	National Immunization Technical Advisory Group
OPV	oral polio vaccine
RCC	Regional Commission for the Certification of poliomyelitis eradication
RVC	Measles and Rubella Regional Verification Commission
SAGE	Strategic Advisory Group of Experts on Immunization
SIA	supplementary immunization activity
SIVAC	Supporting National Independent Immunization and Vaccine Advisory Committees initiative
TIP	Tailoring Immunization Programmes
UNICEF	United Nations Children's Fund
VENICE	Vaccine European New Integrated Collaboration Effort
VPD	Vaccine-preventable diseases
VPI	Vaccine-preventable Diseases, Immunization and Influenza Programme of WHO
WHO	World Health Organization
WHO EURO	World Health Organization European Regional Office, Copenhagen
WHO HQ	World Health Organization Headquarters, Geneva

Executive summary

The twelfth meeting of the European Technical Advisory Group of Experts on Immunization (ETAGE) was held on 3 and 4 October 2012 in the WHO Regional Office for Europe, Copenhagen, Denmark. Five new members of the ETAGE were present for the meeting. Main topics for discussion included adult immunization strategies, National Immunization Technical Advisory Groups (NITAGs), tailoring immunization activities for underserved population groups, introduction of combined vaccines, introduction of rotavirus vaccine, Regional application of the Global Vaccine Action Plan (GVAP), rubella and congenital rubella syndrome. Updates were provided on conclusions and recommendations from appropriate recent Regional and Global technical, administrative and advisory meetings.

Although the intention is for ETAGE to meet formally at least once every year, the last meeting was held in March 2011. A primary reason for the delay was the staffing changes that have taken place in the WHO Regional Office associated with the organisational restructuring. In addition, the terms of reference for ETAGE membership have been revised to make the new terms more closely aligned with those of SAGE members. Six new members of ETAGE have been appointed, and as this was their first attendance at ETAGE a significant portion of the presentation material in each meeting session was devoted to providing background information on the history and strategies of the programme. Also present at the meeting were representatives from the newly formed NITAGs from Armenia, Belarus, Kazakhstan, Kyrgyzstan and Uzbekistan. Again, during each session time was taken to solicit the views, opinions and responses from the NITAG members to specific discussion points.

Development of the Tailoring Immunization Programmes (TIP) toolkit by the WHO secretariat was welcomed and further refinement leading to roll-out next year was encouraged. Establishment of an ETAGE working group to oversee and support the further development and roll-out would be of benefit and was recommended by the Group.

Outbreaks of measles among adults continue to be a problem with 27% of cases reported since 2009 being ≥20 years of age. Among reported adult cases, data suggest that 70% have no history of measles immunization. In addition, many European countries with measles outbreaks have reported nosocomial measles transmission involving health care workers (HCWs). The problem is not restricted to measles as approximately 20% of reported rubella and 29% of reported mumps cases in the Region also occur among adults. However, it is clear that targeting immunization services on adult populations faces considerable challenges. While there is a continuing need to focus immunization resources on the highest priority groups it is still unclear if adults, with the possible exception of HCWs, represent one of the highest priority groups.

While the Global Vaccines Action Plan (GVAP) and Decade of Vaccines (DoV) initiatives present an opportunity to establish a global approach to immunization, the nature and implications of GVAP reporting and monitoring requirements remain unclear, as does the expected role of ETAGE. It remains uncertain how much additional reporting burden this will place on Member States, and questions remain over the added value of this Plan to upper middle- and high income countries. It is also unclear where additional resources will come from. While ETAGE is supportive of the goals of the GVAP, there are reservations and concerns over how this Plan will be implemented in the Region.

There is an increasing use of combination vaccines in middle-income countries within the Region. This move is driven by the adoption of vaccines containing inactivated poliovirus vaccine (IPV) and acellular pertussis (aP) components, and by the desire to use vaccines without preservatives, particularly thimerosal. Available evidence suggests that these

vaccines are safe and effective and introduction can bring advantages, but in some countries their introduction can create additional problems for immunization services, including complicated schedules, increased number of vaccine formulations, related increased cost and a requirement for increased cold chain and storage facilities. ETAGE is concerned that Member States should be supported in developing optimal immunization schedules by choosing vaccine products that take into account programmatic feasibility and cost-effectiveness.

NITAGs are now established in 35 countries, but the status, stage of development and extent of activity varies considerably. WHO has provided support in establishment of NITAGs in middle-income countries and capacity-building training support to NITAG members. Further training, on evaluation of cost effectiveness of vaccine introduction, will be provided later this month. SIVAC has continued its role in supporting countries to establish and strengthen NITAGs, and in providing information exchange through the web-based NITAG Resource Centre.

Questions on the effectiveness of NITAG information sharing have been raised as it appears that for some NITAGs information sharing is vertical, between the NITAG and the national health authorities. Clearly more horizontal information sharing mechanisms would be beneficial to the process of strengthening NITAGs and increasing their effectiveness. Increasing transparency of NITAG activities may also be an issue. NITAGs should not be allowed to drift into the role of national regulators. Recommendations from NITAGs should be used to engender public trust in national immunization services.

At its meeting in April 2012 SAGE recommended that the current age restrictions for the first dose of rotavirus vaccine (>15 weeks) and last dose (<32 weeks) are preventing vaccination of many vulnerable children. By removing the age restrictions, programmes may be able to immunize children who are currently excluded receiving vaccine. However, ETAGE recommends that relaxation of the age-limit restrictions for the receipt of rotavirus vaccines may be considered only as an exception by Member States based on careful consideration of local rotavirus disease epidemiology and available immunization resources. For many countries in the Region it is more important to focus on increasing timeliness of rotavirus vaccination to prevent rotavirus diarrhoea in infants.

While there has been a decline in the reported incidence of rubella over the past decade, reported immunization coverage appears to have plateaued and outbreaks of rubella continue to occur. Romania and Poland have reported the highest incidence of disease in the past two years, with continuing endemic transmission in Poland and a large outbreak from the end of 2011 to mid-2012 in Romania. ETAGE is extremely concerned over the apparent lack of national or international capacity to mount an effective and timely response to the outbreak in Romania. This outbreak predominantly involved adolescents and young adults, the age cohorts most likely to have missed both natural infection and immunization when rubella was introduced to the national childhood immunization schedule in 2004. The lesson to be learned for other countries that have introduced childhood rubella immunization over the past decade or so is that they need to conduct catch-up campaigns to protect persons in known at-risk age cohorts. Surveillance for CRS continues to be problematic with few Member States reporting annual CRS case counts.

Introduction

The European Technical Advisory Group of Experts on Immunization (ETAGE) meets to review the progress of the Vaccine-preventable Diseases and Immunization programme (VPI) towards the European Regional disease prevention goals. The 11th meeting of the ETAGE was conducted from 17-18 March 2011; the 12th meeting was held at the WHO Regional Office for Europe, Copenhagen, from 3-4 October 2012.

Professor Pierre Van Damme chaired the meeting, Professor Christian Perronne was vice-chair, and Dr Ray Sanders was rapporteur.

Objectives of the meeting were to:

1. Request advice and guidance from ETAGE members on the following key topics and issues:
    - Adult immunization strategies
    - National Immunization Technical Advisory Groups
    - Tailoring activities for underserved population groups
    - Immunization schedules and inactivated polio vaccine
    - Regional recommendations on rotavirus vaccine
    - Regional interpretation and applicability of the Global Vaccine Action Plan (GVAP)
    - Rubella surveillance (and related issues) and congenital rubella syndrome
    - The challenges of silent reporting areas in the European Region
2. Provide updates on:
    - Activities to strengthen National Immunization Technical Advisory Groups in the Region; Polio (the European Regional Certification Commission) and progress towards maintaining the polio-free status of the European Region;
    - Measles (the European Regional Verification Commission for Measles and Rubella Elimination),
    - Strategic Advisory Group of Experts on Immunization (SAGE) recommendations
    - Outcomes of the WHO European Regional Committee (RC)
3. Provide insight and activity reports, as required by ETAGE, from the different sub-teams and technical officers of the Vaccine Preventable Diseases and Immunization Programme.
4. Discuss Terms of Reference for ETAGE, Membership and composition of the newly formed ETAGE, and the schedule for the ETAGE meetings in 2013 (closed session).

Opening remarks

Dr Guenael Rodier, Director, Division of Communicable Diseases, Health Security, and Environment (DCE), opened the meeting and welcomed ETAGE members, representatives of partner agencies and Regional immunization initiatives, representatives of selected NITAGs, and staff from WHO headquarters on behalf of the WHO Regional Director.

Professor Pierre Van Damme welcomed the five new ETAGE members present and explained that one other new member was unable to attend due to a conflicting commitment. He informed the meeting that the terms of reference for ETAGE membership were being revised and that new terms are more closely aligned with those of SAGE members.

Introduction and report on responses to recommendations of the 11th ETAGE

In accordance with the revised terms of reference for ETAGE membership, each member is required to complete a declaration on conflict of interests. All new members have done so, and the meeting was informed of their responses.

Although the intention is for ETAGE to meet formally at least once every year, no meeting was held in the past 16 months. This delay was due to the staffing changes that have taken place in the WHO Regional Office associated with the organisational restructuring. Organograms of the new administrative structure of the WHO Regional Office were provided to the meeting. Despite the lack of formal meetings, the Secretariat has maintained close working communications with ETAGE and meetings with the ETAGE Chair and Vice-chair have been conducted.

Of the recommendations made during the 11th meeting of ETAGE, most have been addressed or are in process. At its 11th session ETAGE requested VPI to collate all ETAGE recommendations made during that and previous meetings to provide a comprehensive list to serve as a reference for new ETAGE members. This has not yet been completed, and at the request of ETAGE, the checklist, indicating the implementation status of each recommendation, will be provided as soon as possible.

Reviewing the experience of ETAGE over the past 7 years, improvement in quality and quantity of data presentation and analysis was most obvious and the efforts of the WHO secretariat in achieving this were acknowledged. Although greatly improved, connections between ETAGE and the NITAGs and national immunization programmes remains less than optimal and the recent nomination of a focal point within the VPI should strengthen the exchange of information level of collaboration between the Regional and country levels. However, transferring the expertise and experience of ETAGE members to country level in support of immunization activities remains a challenge.

Session 1. Tailoring Immunization Programme (TIP) activities, vaccine advocacy and communications

In the European Region, reasons for not vaccinating an infant or child are complex and multiple. Lack of access, marginalisation, low risk perception, fear, distrust, hesitancy and complacency, as well as alternative philosophical health beliefs, are some of the myriad of reasons vaccination of an infant or child may not take place. With the guide to Tailoring Immunization Programmes (TIP), WHO/Europe offers an approach that proposes practical solutions to help Member States to shape innovative and targeted responses to immunization programming and communications that reach out to populations susceptible to VPD. The guide aims to place vaccination of infants and children as a positive care-giving practice, with important community and societal benefits.

The overall aim of TIP is to provide proven methods and tools to design targeted programmes that increase uptake of infant and child vaccination, thereby increasing immunization coverage rates and curbing the risks of VPD in the region.

To do this, the TIP guide offers:

- A step-by-step approach to segment groups of caregivers based on a child's vaccination status: up-to-date on vaccinations – missing vaccinations – not vaccinated.

- Formative research tools and conceptual maps to provide a detailed level of understanding of what drives caregivers' vaccination practices.
- Maps and tools to explore the role that vaccination providers play in influencing caregivers' vaccination choices and actions.
- Resources for designing, implementing, monitoring and evaluating TIP interventions based on the results of the segmentation and profiling process. This includes a menu of lessons learned and best practices in immunization programming.

TIP has been piloted in Bulgaria to target immunization resources on underserved populations there. It is currently being piloted in Sweden (November 2012). It is expected that the toolkit will be finalized for publication by the end of 2012 and roll-out will take place starting in 2013. It is not yet determined who the institutional partners contributing to the roll-out process will be, or how ETAGE will be involved in the roll-out process.

Discussion:

It is essential to avoid stigmatization, or further stigmatization of target populations, when introducing new approaches to delivery of immunization services. For this reason the term ***hard to reach*** should be replaced by ***underserved***, and it is essential to work with existing minority-linked mediator groups such as NGOs and community associations. It should be emphasised that this toolkit is designed as a self-help measure. It is not designed to institute individual behaviour change but is concerned with identifying problems in accessing immunization services from an individual perspective. Use of the toolkit requires endorsement of the National health authorities, but implementation should be by non-governmental and community groups.

The toolkit has been developed as a generic instrument that will require tailoring to specific needs. Prioritization of the determinants used to tailor the instrument requires further work. It may be possible to conduct a literature review and determine the highest priority determinants through a meta-analysis.

It is difficult to formally evaluate the effectiveness of the toolkit at this stage. As the toolkit is rolled out and used in countries it should be possible to make an evaluation through observation of the impact on target populations. Recognising the need for evaluation, an appropriate tool is in development by John Snow International.

This clearly represents an important initiative from the EURO secretariat that should benefit National immunization programmes throughout the Region and in other WHO Regions. This toolkit requires further refinement and development and the establishment of an ETAGE working group to oversee and support continued development and roll-out would be of benefit.

Session 2: Adult immunization strategies (with focus on measles and rubella elimination)

Discussions for this session focussed on measles and rubella cases. Within the Region, since 2009, 27% of the total number of reported measles cases was aged 20 years and older. Some children who were not targeted with measles and rubella containing vaccines through routine and supplemental immunization activities are now susceptible teenagers and young adults. Among reported adult cases, data suggests that 70% have no history of measles

immunization. The problem is not restricted to measles as approximately 20% of reported mumps cases in the Region also occur among adults. In addition, many European countries with measles outbreaks have reported nosocomial measles transmission, including cases among health care workers (HCWs). Available data suggests that because of proximity and frequency of contact, risk of acquiring measles is 13-19 times higher for susceptible HCWs than for the general public.

The WHO position papers on measles and rubella recommend immunization for both susceptible children and adults for whom vaccination is not contraindicated. It also stresses the importance of vaccinating HCWs. For Member States focusing on interrupting transmission of rubella virus, WHO recommends that depending on the burden of disease and available resources, countries may choose to accelerate their progress towards elimination by conducting rubella immunization campaigns that target a wide age-range of both males and females. WHO also recommends that strategies to control mumps should be closely integrated with existing goals of measles and rubella control or elimination, particularly where MMR vaccine is used as a common tool.

According to the VENICE II Report (2010) and Kanitz et al (2012)[1] 12 out of 30 European countries do have recommendations for vaccinating specific risk and age groups, including adults. However, the interpretation and implementation of these specific recommendations vary within and between countries. All countries should undertake activities to increase immunization coverage among adults. These may include specific recommendations from health authorities to guarantee the immunization of HCWs and other professionals at risk (e.g. teachers, military personnel, airport staff, and shopkeepers) and improve vaccine services availability by e.g. establishing mobile vaccination clinics visiting workplaces. In addition, countries should stress implementation of WHO recommendations on MMR vaccine use as a pre-travel vaccine for susceptible adults.

Discussion:

ETAGE's opinion is that there is not enough evidence of the extent that adults play in sustaining measles or rubella transmission. Therefore, for the purposes of disease elimination and rational use of resources, it is critical to achieve and maintain high coverage through immunization of children. The WHO Secretariat stressed that in some of the MS most of cases are among older age groups. It is clear that susceptible pools of adults exist and should be adequately addressed with SIAs. However, more information is required on the relative contribution of transmission by adults before targeting them with SIAs. It may be possible to determine the size of susceptible populations by conducting serosurveys, but again, this is dependent on resource availability.

In 2011, an outbreak of measles in Denmark prompted the government to establish a temporary programme for the administration of a single dose of measles vaccine to all adults born between 1974 and 1994 who had not been infected with measles or were without a documented measles vaccine history. Preliminary estimates for the first three months for the programme showed that of the estimated target population of 20,000 males (as adult woman of childbearing age are already covered by the existing programme), less than 1,000 received the vaccine. The recommendation for the temporary adult programme was made by the

[1] Kanitz et al. Variation in adult vaccination policies across Europe: an overview from VENICE network on vaccine recommendations, funding and coverage. Vaccine. 2012:30(35):5222-8.

National Board of Health, however, communications and advocacy for the programme appear to have been sparse. As yet no decision has been made to continue the programme into 2013.

There is extensive data to show that some adult groups at risk, e.g. HCWs, are under-immunized. It is also clear that reaching adults for immunization is challenging. However, to reach disease elimination it is essential to immunize all susceptible groups. Given the measles and rubella elimination goals, and based on the experience of other WHO Regions, notably the Americas, mass immunization across all age-groups should be the strategy applied.

Session 3: Updates: RC, SAGE, RCC, RVC, AOB

Update information was provided to ETAGE from recent meetings of the WHO Regional Committee (RC), the Regional Certification Commission (RCC), the Regional Verification Commission for Measles and Rubella Elimination (RVC) and the Strategic Advisory Group of Experts on Immunization (SAGE).

Discussion:

Polio risk indicators for 2012 were reviewed during the RCC. Although the assessment of risk has changed over the years, the highest risk areas have remained fairly constant. For 2012 the number of high risk countries has reduced slightly, but the RCC concluded that significant risk of polio reintroduction remains because of low population immunity in several countries. Ukraine in particular, is considered at significant risk since disruption of immunization services in May 2008. There is a clear need to improve population immunity and surveillance quality in all at-risk countries, but there is no room for complacency in other Member States as many also have sub-populations with sub-optimal immunization coverage.

The framework for the Regional verification of measles and rubella elimination has been developed, in line with the global recommendations and indicators. Member States are expected to submit their first reports to the RVC in 2013. Letters from the RD and RVC had been sent to Member States requesting them to nominate NVC members. Some Member States with limited numbers of available experts may need to combine the functions of existing polio National Certification Committees (NCC) with the new NVCs, but they need to be aware of potential conflict of interests and make appropriate arrangements.

During its April meeting SAGE was presented with a review of the influenza disease burden, vaccine performance, and safety in populations of all ages and at-risk groups, incorporating available data from low and middle-income country settings. Based on the review, SAGE proposed specific recommendations with the objective of revising the 2005 WHO position paper on influenza vaccines.

SAGE recommended pregnant women as the most important risk group for inactivated seasonal influenza vaccination. Other risk groups to be considered include HCWs, children aged 6–59 months, the elderly and those with high-risk conditions. SAGE recommended that countries with existing influenza vaccination programmes targeting any of these groups should continue to do so and should incorporate immunization of pregnant women into such programmes. Countries should decide which other risk groups to prioritize for vaccination based on burden of disease, cost-effectiveness, feasibility and other appropriate considerations. It must be recognised, however, that many countries lack appropriate evidence on disease burden, cost-effectiveness and feasibility and would need to collect additional data before decisions on target groups can be made, particularly immunization of pregnant women. This issue of lack of country data should be raised with SAGE.

Session 4: Global Vaccine Action Plan (GVAP)

The GVAP and Decade of Vaccines (DoV) initiatives present an opportunity to establish a global approach to immunization. Despite the advances made in recent years, VPDs remain a major cause of morbidity and mortality, and for many middle- and low-income countries immunization needs remain unmet.

Six principles have guided development of the Global Vaccine Action Plan:

- Country ownership: countries have primary ownership and responsibility for establishing good governance and for providing effective and quality immunization services for all.
- Shared responsibility and partnership: immunization against vaccine-preventable diseases is an individual, community and governmental responsibility that transcends borders and sectors.
- Equity: equitable access to immunization is a core component of the right to health.
- Integration: strong immunization systems, as part of broader health systems and closely coordinated with other primary health care delivery programmes, are essential for achieving immunization goals.
- Sustainability: informed decisions and implementation strategies, appropriate levels of financial investment, and improved financial management and oversight are critical to ensuring the sustainability of immunization programmes.
- Innovation: the full potential of immunization can only be realized through learning, continuous improvement and innovation in research and development, as well as innovation and quality improvement across all aspects of immunization.

The GVAP was endorsed by the 65th meeting of the World Health Assembly in May this year, so Member States, WHO Regional Offices and their advisory groups need to be aware of the Plan and of their expected roles and responsibilities. Although the plan has been endorsed, considerable work remains on defining the process and developing requirements for implementation.

Discussion:

The nature and implications of GVAP reporting and monitoring requirements remain unclear, as does the expected role of ETAGE. This may be an area for establishment of an ETAGE working group to determine the roles and responsibilities at regional and national levels in translating GVAP into Regional and national operational plans, complying with GVAP requirements and developing the Regional review process. It remains unclear how much additional reporting burden this will place on Member States, and questions remain over the added value of this Plan to upper middle- and high income countries. It is also unclear where additional resources will come from. While ETAGE is supportive of the goals of the GVAP, there are reservations and concerns over how this Plan will be implemented in the Region.

Session 5: Combination vaccines schedules (IPV)

There is an increasing use of combination vaccines in middle-income countries within the Region. This move is being driven by the adoption of vaccines containing inactivated poliovirus vaccine (IPV) and acellular pertussis (aP) components, and by the desire to use vaccines without preservatives, particularly thimerosal. Only 10 Member States in the Region now use oral poliovirus vaccine (OPV) in their schedules. Reasons for adopting combined vaccines differ among Member States, and for most the advantages are clear. Available

evidence suggests that these vaccines are safe and effective but in some countries their introduction created additional problems for immunization services, including complicated schedules, increased number of vaccine formulations, increased cost and a requirement for increased cold chain and storage facilities. WHO has provided detailed information on childhood immunization schedules, including age at first dose and intervals between doses to assist national immunization programmes, key decision-makers and to NITAGs in optimizing national immunization schedules. Political, administrative and commercial pressures, however, can lead Member States to ignore these recommendations.

Discussion:

There is no revolving fund for procurement of vaccines in this Region, although the possibility of establishing one was investigated and few Member States expressed an interest. Countries can make use of the UNICEF procurement system if national legal requirements permit. There is an EU vaccine procurement system in development, but this is not yet available.

Immunization schedules are often based on historical precedent, leading to significant diversity but also to schedules tailored to national requirements. Rather than demanding standardization and uniformity of schedules, the heterogeneity of existing schedules should be used to investigate the strengths and weaknesses and develop best practices guidelines. Furthermore, the use of combination vaccines has raised questions regarding the duration of protection afforded by these vaccines.

When countries decide to include combination vaccines they should be supported to adopt a flexible approach best suited to their circumstances based on WHO recommendations (on routine immunization schedule) and taking into account programmatic feasibility and cost-effectiveness. A flexible approach does not always permit following the recommended use and safety information provided by the vaccine manufacturers in their package insets. Unfortunately, due to legal restrictions associated with vaccine licensing, countries may not be able to deviate from the recommended use and safety information. This situation is further complicated by vaccine producers using different package inserts, containing different information, in different countries. This problem needs to be addressed at the global level.

Session 6: National Immunization Technical Advisory Groups (NITAGs)

An update on the development and status of NITAGs in the region and the continuing role of SIVAC in supporting countries to establish and strengthen NITAGs was provided. NITAGS are now established in 35 countries, but the status, stage of development and extent of activity varies considerably. There have been requests from some smaller Member States with a shortage of appropriate experts for advice on combining the responsibilities of different advisory groups, for example AEFI, within the NITAGs.

WHO has provided support in establishing NITAGs in middle income countries and capacity-building training support to NITAG members. Further training, on evaluation of cost effectiveness of vaccine introduction, will be provided later this month. Future training will be provided on data acquisition and analysis and making evidence-based recommendations for immunization programmes. Members of established NITAGs have attended meetings of newly-established NITAGs, and representatives of NITAGs have been invited to the ETAGE meeting. It is essential that information and recommendations from ETAGE are disseminated

to all NITAGs. SIVAC continues to support countries to establish and strengthen NITAGs through provision of direct support and hosting of its web-based NITAG Resource Centre.

The potential role of NITAGs with respect to implementation of the GVAP was discussed. GVAP calls for countries to develop a national immunization monitoring framework, and NITAGs will be expected to support this development. NITAGs will also be expected to review national progress in developing the new framework and in advocacy with national authorities. It is possible that some NITAGs will be required to update their terms of reference in order to do this.

Discussion:

With regard to setting the agenda for NITAG meetings, responsibility is often taken by the national health authorities and the addenda is set to address current national priorities. For many new NITAGs the highest priorities have been introduction of new vaccines and changes to immunization schedules. Although polio eradication and measles/rubella elimination are important, they have not been considered highest priorities for many NITAGs.

Questions on the effectiveness of NITAG information sharing have been raised. It appears that for some NITAGs information sharing is vertical, between the NITAG in the national health authorities. Clearly more horizontal information sharing mechanisms would be beneficial to the process of strengthening NITAGs and increasing their effectiveness. Language barriers are a challenge to more horizontal information sharing, as is the different levels of development of NITAGs in different countries. It is sometimes not apparent to newly-formed NITAGs how they can learn from the experience of established NITAGs.

Transparency of NITAG activities may also be an issue. NITAGs should not be allowed to drift into the role of national regulators. Recommendations from NITAGs should be used to engender public trust in national immunization services. In several countries the recommendations of the NITAG presently go only to the national health authority or the Interagency Coordinating Committee (ICC). ICCs are national bodies representing the lead agencies in selected countries that oversee broad programme activities and ensure interagency collaboration.

Potential roles for ETAGE in strengthening NITAGs were discussed. Representative members of NITAGs present welcomed the involvement of ETAGE in capacity building, training and sharing of expertise with the NITAGs. Details of how ETAGE members can be included in NITAG development and training activities remain to be formulated, but the opportunity to participate was welcomed, in principle, by the ETAGE members present.

Session 7: Rotavirus vaccines schedule

At its meeting in April 2012 SAGE recommended that the current age restrictions for the first dose of rotavirus vaccine (<15 weeks) and last dose (<32 weeks) are preventing vaccination of many vulnerable children. By removing the age restrictions, programmes should be able to immunize children who are currently excluded from the benefits of rotavirus vaccines and this is likely to include some of the children most vulnerable to severe rotavirus disease. Globally, many thousands more deaths would be averted, but with a small additional increase in intussusception (IS) cases. Countries using rotavirus vaccine, or planning introduction, should consider the SAGE recommendation in light of their own circumstances and local information on rotavirus epidemiology. There is a need for improved surveillance for IS and

countries would benefit from support in improving their surveillance and integrating this into their national programmes.

Rotavirus mortality in the Region is low, with most countries reporting rotavirus-associated mortality rates of <5/100,000. Only 2 countries report mortalities in the region of 51-100/100,000. Within the Region there are 6 countries that have introduced rotavirus vaccine. Moldova is the first MIC in the country to introduce the vaccine; Armenia and Georgia will introduce the vaccine; and Uzbekistan is considering introduction. For most countries in the Region the risk-to-benefit-ratio for rotavirus introduction is low, and to increase the benefit they need to increase the vaccine coverage level. One way to do this is to increase timeliness of rotavirus vaccination to prevent rotavirus diarrhoea in infants.

Discussion:

It is possible that by removing the age restrictions on rotavirus immunization, programmes may be able to immunize children who are currently excluded receiving vaccine. However, ETAGE recommends that relaxation of the age-limit restrictions for the receipt of rotavirus vaccines should be considered only as an exception by Member States, based on careful consideration of local rotavirus disease epidemiology and available immunization resources.

There is a need to improve the timeliness of delivery of all childhood vaccines, particularly DTP if rotavirus vaccine is to be introduced. It is also essential to understand the risk of IS before rotavirus is introduced, recognising that much of the evidence on IS is based on estimates rather than hard data.

Session 8: Rubella and CRS surveillance in the context of elimination efforts

An overview of the history and current status of the rubella and congenital rubella syndrome (CRS) elimination initiative in the Region was presented. While there has been a decline in the reported incidence of rubella over the past decade, reported immunization coverage appears to have plateaued and outbreaks of rubella continue to occur. Decreasing commitment to rubella elimination, the effects of health sector reforms and increasing momentum of the vaccine refusal movement are all slowing further progress towards the Regional elimination goal. There are also unimmunized or under-immunized communities in both the marginalized/underserved populations and in the general population in several countries.

Romania and Poland have reported the highest incidence of disease in the past two years, with continuing endemic transmission in Poland and a large outbreak from the end of 2011 to mid-2012 in Romania. The Romania outbreak predominantly involved adolescents and young adults, the age cohorts most likely to have missed both natural infection and immunization when rubella vaccine was introduced to the national childhood immunization schedule in 2004. Both countries initially implemented selective rubella immunization in the programme, subsequently introduced as universal vaccination.

Challenges to rubella surveillance in the Region include the absence of specific rubella surveillance systems in Belgium, Denmark and France, with Germany only starting surveillance this year; aggregate reporting in more than 20 countries; lack of comparability between the numbers of laboratory reported results and clinically reported cases. But even for countries with case-based reporting, the data are frequently incomplete and of low quality. In addition, there is a lack of genotyping data for molecular epidemiological analysis. Therefore, all countries have been requested to establish or strengthen case-based surveillance and

reporting to WHO Europe by 2013. Surveillance for CRS continues to be problematic with few Member States reporting annual CRS case counts.

Discussion:

ETAGE is extremely concerned over the apparent lack of national or international ability to mount an effective and timely response to the outbreak in Romania. This was hindered by financial, legal and institutional challenges to procure and allocate vaccine. Given the size of the outbreak (with more than 17,000 reported cases), mainly among adolescent and adults, Romania is anticipating an increased number of CRS cases over the next few months.

ETAGE is also concerned that similar challenges persist and will affect response to eventual measles and rubella outbreaks in other Member States. The lesson to be learned for other countries that have introduced childhood rubella immunization over the past decade is that they need to assess the susceptibility profile of the population and to implement effective strategies, including supplemental immunization activities, to protect at-risk-age cohorts. There is a clear responsibility here for WHO to remind and alert Member States to assess the risk of rubella outbreaks and subsequent risk of CRS, based on the period that vaccine was in use in the immunization programme, implemented vaccination schedules, achieved immunization coverage and current rubella epidemiology.

Conclusions and recommendations

Conclusions:

- ETAGE welcomes the development of revised ETAGE terms of reference and appreciates this opportunity to introduce new ETAGE members to the programme. The group also appreciates the opportunity for representatives from newly established National Immunization Technical Advisory Groups (NITAGs) to participate in the meeting.
- ETAGE appreciates the designation of a nominated ETAGE focal point within the VPI Unit to facilitate communications and coordination between ETAGE and the WHO Regional Office and recognises the significant contributions to the programme the focal point has already made.
- ETAGE recognises that restructuring of the WHO Regional Office and associated staff changes have caused delays in fully implementing all recommendations made at the 11th session of ETAGE and urges the VPI Unit to collate all ETAGE recommendations made during this and previous meetings of ETAGE to provide a comprehensive list to prevent repeating key recommendations. This list can be used to establish a prioritised 'to do' list for ETAGE activities and be a helpful reference for new ETAGE members.
- ETAGE appreciates the update and summary of SAGE activities and strongly endorses the requirement to maintain strong working relationships between SAGE, ETAGE and the NITAGs.
- ETAGE is encouraged by progress made in the development of NITAGs within the Region, and acknowledges the high level of commitment shown by Member States, WHO and its partners, particularly SIVAC, in establishing and strengthening these groups.

- ETAGE recognises that NITAGs have specific requirements for information and support and encourages sharing of data and expertise both between NITAGs and with ETAGE and WHO. ETAGE encourages Member States to make good use of the NITAG Resource Centre developed by the SIVAC initiative.
- While supporting the aims of the Global Vaccine Action Plan (GVAP), ETAGE recognises that some specific requirements of the plan have yet to be fully defined and that the Region will need to address Region-specific challenges related to monitoring and reporting.
- ETAGE is greatly concerned that health care workers (HCWs) in many Member States do not recognise the importance and benefits associated with immunization. Urgent action is needed to improve the perception among HCWs on the need to immunize and protect themselves and the communities they serve from vaccine-preventable diseases.
- ETAGE recognises the pressures being placed on Member States to adopt combined vaccines, particularly IPV and aP-containing vaccines. It must be recognised that whilst these vaccines are safe, effective and offer potential advantages, adoption may lead to potential disadvantages if national immunization programmes introduce complicated schedules, select multiple formulations of vaccines which require additional cold-chain and vaccine storage capacity. Member States are advised to learn from the example of other countries in adopting combination vaccines that are in line with WHO recommendations and pursue a flexible approach to introduction that results in the greatest benefit and the least disruption to existing services.
- ETAGE is concerned that for some Member States the global eradication of polio and regional elimination of measles and rubella are no longer high priorities. There is a lack of high quality case-based rubella and CRS surveillance in many Member States and ETAGE fully supports the WHO Regional Office in urging all countries to establish and maintain systems meeting the standards described in the WHO surveillance guidelines. High level surveillance and immunization for polio must be maintained and immunization coverage and surveillance quality for measles and rubella must be improved throughout the Region if Global and Regional goals are to be achieved.
- ETAGE is concerned by the recent outbreaks of rubella in older age groups, not targeted by rubella immunization programmes. This risk needs to be recognized by Member States. The apparent inability of national authorities to respond to these outbreaks by holding SIAs is also of great concern and institutional barriers to mounting emergency immunization responses must be overcome.

Recommendations:

1. ETAGE recommends that development and evaluation of the Tailoring Immunization Programmes (TIP) toolkit be continued and that a strategy for implementation and evaluation of impact be developed. ETAGE urges institutional partners to support roll-out of the toolkit and promotion of its use by Member States and recommends establishment of an ETAGE working group to support and oversee implementation.
2. Recognising that recent outbreaks of measles and rubella have been associated with unimmunized adult populations, ETAGE urges WHO to continue with the

development of strategies, including use of serosurveys, to identify needs and develop approaches to immunize these susceptible groups.

3. ETAGE urges all NITAGs to ensure that polio eradication and measles/rubella elimination remain priority goals for all national immunization programmes and recommends WHO to take every opportunity to remind Member States of the Global polio eradication and Regional measles and rubella elimination goals.
4. ETAGE recommends that WHO encourage, and where appropriate facilitate, opportunities to share information and expertise between NITAGs and ensure that NITAG members have full access to information on ETAGE concerns and recommendations.
5. ETAGE recommends establishment of an ETAGE working group to determine the roles and responsibilities at regional and national levels in translating GVAP into Regional and national operational plans, complying with GVAP requirements and developing the Regional review process.
6. To ensure early protection and high impact of vaccination, ETAGE recommends that Member States introducing, or considering the introduction, of rotavirus vaccine to their infant immunization schedules, should take effective measures to improve timeliness of delivery of all infant vaccines. ETAGE further recommends Member States may consider relaxation of the age-limit restrictions for the receipt of rotavirus vaccines as an exception, based on careful consideration of local rotavirus disease epidemiology and available immunization resources.
7. ETAGE urges WHO to continue the support of Member States in strengthening their AEFI monitoring and to include the addition of surveillance for intussusception for countries introducing or considering introduction of rotavirus vaccine.
8. ETAGE recommends that Member States, with the support of WHO, review their rubella immunization programmes, identify susceptible populations and implement appropriate immunization strategies. Member States must also develop mechanisms to overcome existing institutional barriers to providing timely and effective responses should an outbreak threaten or occur.