29th Meeting of the European Regional Certification Commission for Poliomyelitis Eradication European Region
Report of the 29th Meeting of the European Regional Certification Commission for Poliomyelitis Eradication

Sarajevo, Bosnia and Herzegovina

9-10 June 2015
Abstract

The 29th Meeting of the European Regional Certification Commission for Poliomyelitis Eradication (RCC) reviewed annual updates submitted by the Member States of the Region on the status of the national polio eradication programme. The RCC concluded, based on available evidence, that there was no WPV or VDPV transmission in the WHO European Region in 2014, but the risk of importation and subsequent transmission remains high in some countries. The RCC also identified issues that threatened the future polio-free status of the Region and proposed actions to be taken by Member States and the Regional Office for reducing the risk of polioviruses circulating in the Region. While three Member States were considered to be at high risk of establishing substantial poliovirus transmission in the event of reintroduction, the current situation in Ukraine is of particular concern. If wild poliovirus were to be introduced into Ukraine, the RCC has no doubt that the consequence would be a significant disease outbreak, threatening the polio-free status of the European Region and presenting a significant setback to the Global Polio Eradication Initiative.

Keywords

POLIOMYELITIS – prevention and control
IMMUNIZATION PROGRAMS
EPIDEMIOLOGIC SURVEILLANCE – standards
CONTAINMENT OF BIOHAZARDS – standards
LABORATORY INFECTION – prevention and control
STRATEGIC PLANNING

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**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AFP</td>
<td>acute flaccid paralysis</td>
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<td>bOPV</td>
<td>bivalent OPV</td>
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<td>CSF</td>
<td>cerebrospinal fluid</td>
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<td>cVDPV2</td>
<td>circulating vaccine-derived type 2 polioviruses</td>
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<td>GAPIII</td>
<td>Global action plan to minimize poliovirus facility-associated risk after type-specific eradication of wild polioviruses and sequential cessation of OPV use</td>
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<td>IPV</td>
<td>inactivated polio vaccine</td>
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<td>ITD</td>
<td>intratypic differentiation (of poliovirus isolates)</td>
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<td>JRF</td>
<td>WHO/UNICEF Joint Reporting Form</td>
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<td>LDMS</td>
<td>Laboratory Data Management System</td>
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<td>mOPV</td>
<td>monovalent OPV</td>
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<td>MECACAR</td>
<td>Mediterranean, Caucasus and central Asian republics subregion</td>
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<td>NCC</td>
<td>National Certification Committee</td>
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<td>NPEV</td>
<td>non-polio enteroviruses</td>
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<td>NRAc</td>
<td>National Regulatory Authorities for Containment</td>
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<td>OPV</td>
<td>oral poliovirus vaccine</td>
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<td>RCC</td>
<td>European Regional Certification Commission for Poliomyelitis Eradication</td>
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<tr>
<td>SIA</td>
<td>supplementary immunization activities</td>
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<td>tOPV</td>
<td>trivalent OPV</td>
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<td>SOAS</td>
<td>South Asian lineage of WPV1</td>
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<td>SOP</td>
<td>Standard Operating Procedure</td>
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<td>VDPV</td>
<td>vaccine-derived poliovirus</td>
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<td>VPI</td>
<td>Vaccine-preventable Diseases and Immunization Programme of the WHO Regional Office for Europe</td>
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<td>WPV</td>
<td>wild-type poliovirus</td>
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<td>WPV1</td>
<td>wild-type poliovirus serotype 1</td>
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Table of Contents

Introduction 7
Scope and purpose of the Meeting 7
Update on global polio eradication and sustaining polio-free Europe 7
Update from GPEI, including GAPIII 7
Polio programme annual update from the WHO Regional Office for Europe. 9
Performance of the European Polio Laboratory Network in 2014-15; containment activities. 11
Introduction of IPV and switch to bOPV by 2016: status update 12
Introduction to subregional overview and regional risk assessment 13
   Nordic/Baltic subregion 14
   Western subregion 15
   Central subregion 16
   Central-Eastern subregion 17
   Southern subregion 18
   MECACAR subregion 20
Regional outbreak response and risk mitigation activities 21
   Face-to-face meeting with representatives from Bosnia and Herzegovina 21
Updated information on actions and plans for 2013-14 from selected countries 22
   Romania 22
   Ukraine 23
Polio outbreak response and new SOPs from the GPEI 24
Conclusions of the RCC and recommendations to Member States and WHO 25
   Conclusions 25
   Recommendations 27
Annex 1. Risk of wild poliovirus transmission, WHO European Region, 2015 28
Annex 2: Programme of the Meeting 30
Annex 3: List of participants 32
Introduction

The 29th Meeting of the European Regional Certification Commission (RCC) for Poliomyelitis Eradication was held from 9 to 10 June 2015 in Sarajevo, Bosnia and Herzegovina. Participants were welcomed on behalf of the WHO Country Office by Dr Boris Rebac, WHO Project Manager. Mr Robb Butler, acting Programme Manager, Vaccine-preventable Diseases and Immunization Programme (VPI), welcomed participants on behalf of the WHO Regional Director and provided an overview of the scope and purpose of the meeting.

The meeting was opened by RCC Chairman, Dr David Salisbury. Rapporteur for the meeting was Dr Ray Sanders. The meeting programme is provided as Annex 2 and the list of participants as Annex 3.

Scope and purpose of the Meeting

The scope and purpose of the Meeting were:

- To brief the RCC on the current global and regional status of polio eradication;
- To review annual updated certification documentation on poliomyelitis in all Member States of the WHO European Region for 2014;
- To review response and risk mitigation activities in Member States, which are defined to be in the high risk group, and discuss further actions required to assure sustainability of polio-free status face-to-face with national staff in Bosnia and Herzegovina;
- To review the current status of regional laboratory containment in view cessation of use of oral poliovirus vaccine (OPV) in routine immunization programmes and planned switch to bivalent oral poliovirus vaccine (bOPV) globally in 2016;
- To brief the RCC on introduction of inactivated poliovirus vaccine (IPV) and switch to bOPV by 2016;
- To brief the RCC on new polio outbreak response Standard Operating Procedures (SOPs) from the Global Polio Eradication Initiative (GPEI);
- To recommend the Regional Office strategies and/or actions to strengthen efforts to sustain polio-free status of the Region focusing on high-risk countries;
- To review working procedures of the RCC and to discuss a plan of activities for 2015-16.

Update on global polio eradication and sustaining polio-free Europe

Update from GPEI, including GAPIII

According to the World Health Assembly resolution (WHA 68.3) adopted on 25 May 2015 all Member States are now required to implement appropriate containment of type 2 wild polioviruses (WPV) in essential facilities by the end of 2015 and of type 2 Sabin polioviruses within 3 months of global withdrawal of the type 2 component in oral poliovirus vaccine (OPV) expected
in April 2016. As of April 2016 it is expected that global trivalent oral poliovirus (tOPV) use will be replaced by bOPV use. The 5 criteria to be met for global withdrawal of tOPV include:

- All Member States will have included at least one dose of IPV into their immunization schedules;
- All Member States continuing to use OPV will have access to bOPV that is licenced for routine immunization;
- All Member States will have implemented global surveillance and response protocols for type 2 poliovirus (including constitution of a stockpile of monovalent oral poliovirus vaccine type 2);
- All Member States will have completed phase I poliovirus containment activities, with appropriate handling of residual type 2 materials;
- Verification of global eradication of wild poliovirus type 2 will have been completed.

The trigger for setting a date for global withdrawal of type 2 OPV will be the absence of all persisting circulating vaccine-derived type 2 polioviruses (cVDPV2) for at least 6 months.

The *WHO global action plan to minimize poliovirus facility-associated risk after type-specific eradication of wild polioviruses and sequential cessation of OPV use (GAPIII)* were published as a working draft document in 2014\(^1\). This action plan aligns the safe handling and containment of poliovirus infectious and potentially infectious materials with the *WHO Endgame Strategy*\(^2\), and describes timelines and requirements to be completed in preparation for poliovirus type 2 containment, implemented throughout the poliovirus type 2 containment period, and applied in the post-eradication and post-bOPV phase. It also addresses type-specific containment of WPV as well as OPV/Sabin polioviruses, consistent with the goal of sequential cessation of OPV use after type-specific WPV eradication.

The plan calls for all WHO regions to identify WPV2 and OPV2/Sabin 2 infectious and potential infectious materials, and either destroy, transfer or contain the WPV2 materials by the end of 2015. All OPV2/Sabin2 materials should be destroyed, transferred or contained by July 2016. Regions have been requested to reduce the number of facilities containing polio, as all poliovirus facilities will be required to demonstrate that appropriate and validated risk reduction procedures have been established and implemented. It has been proposed that National Regulatory Authorities for Containment (NRAc) should certify all remaining polio facilities according to the requirements of GAPIII, and that the certification reports be submitted to the RCC for evaluation.

**Discussion**

Concerns were raised over both the apparent lack of detail provided in the plan regarding implementation and the very limited timeframe provided. Of particular concern was the requirement for an NRAc in every Member State to provide certification of containment. The

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identity, roles and responsibilities of an NRAc in many countries in the Region remain unclear, and it is possible that several Member States do not currently have a national body capable of carrying out this role. The prospect of each Member States repeating the poliovirus inventory process for each type of poliovirus was raised, but the exact requirements for repeating inventories remain unclear. Validation of containment of OPV2/Sabin 2 in the Region may be problematic, as many laboratories have significant volumes of stored materials that may include potential infectious materials but are undocumented for polio. These issues need to be addressed as a matter of urgency if the proposed timeline is to be achieved.

Also of great concern was the apparent gap between the resources required to implement the plan and the resources currently available to WHO. Some aspects of the plan, particularly verification of poliovirus facilities, will require on-site inspections, technical validation visits and a significant additional workload for WHO Regional Offices. Questions were raised over the projected availability of additional resources, both funding and staffing, that will be required.

Issues around the verification of containment requirements for vaccine production facilities were discussed at length. Implementation of containment requirements in vaccine production facilities will be a complex, technically demanding process requiring physical modifications to the facilities and changes to work practices that will have significant cost implications. A ‘phased approach’ to certification of vaccine production facilities has been proposed, but the details of how this approach will be implemented remain unclear.

While the RCC acknowledges and understands the important role it is expected to play on behalf of the Region, with regard to both ongoing laboratory containment and containment of vaccine production facilities, major reservations were expressed over the feasibility of plans outlined in GAPIII. Chances of successful implementation appear to be slight when set against the extremely short timeline proposed and the apparent lack of available resources.

### Polio programme annual update from the WHO Regional Office for Europe.

In the past year, after an extensive period of consultation and deliberation, the European Vaccine Action Plan 2015-2020 has been developed and published\(^3\). The role of this document is to guide the 53 Member States in their vaccination and immunization policies and to provide recommendations for implementation. One of the key components of this plan is maintenance of Regional polio-free status. The Regional Office is currently engaged in operationalizing the plan in Member States, working with them to develop new policy components to strengthen immunization programmes and harmonize national plans with the Regional goals and objectives. A next iteration of the plan will be required in the coming year to address issues surrounding the monitoring and evaluation framework following feedback from Member States and review by the Regional Committee.

Polio vaccine coverage in the Region remained generally high in 2014, with the majority of countries reporting >95% coverage with the third dose of polio vaccine. Not all Member States were able to provide official data or estimates of vaccine coverage, most notably Ukraine.

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Although most countries have provided coverage estimates, there remains no common method for evaluating coverage, making intercountry comparisons and Regional summaries very difficult. It has been proposed that a peer review be conducted of the different methods currently used in order to have a clear grasp of the current situation in Member States.

A total of 9 countries in the Region reported acute flaccid paralysis (AFP) surveillance as their only polio surveillance system in 2014, and additional 9 reported exclusive use of other types of surveillance in the absence of AFP surveillance. The remaining 34 countries (except San Marino) reported AFP together with a variety of supplementary surveillance systems or activities. For those countries continuing to report AFP surveillance, the AFP index of surveillance quality remains high in Member States from the eastern part of the Region, and poor in those in the south-western part of the Region. Five countries claiming to maintain AFP surveillance failed to confirm any AFP cases in 2014.

At the 28th meeting of the RCC, Bosnia and Herzegovina, Ukraine and Romania were considered to be at high risk because of low population immunity. Turkey was considered to be at low risk, but given special consideration because of the outbreak of polio in Syria in 2013. The last case reported from Syria occurred in January 2014, the country is no longer considered to present such a high risk to its neighbours, and Turkey has demonstrated that it can mount an effective immunization response to such threat. Israel’s NCC report was received and reviewed at the 28th meeting of the RCC but standard criteria for annual analysis of the eradication status could not be implemented due to know wild poliovirus circulation in 2013-2014. A supplemental report from Israel provided evidence that polio transmission had been halted for a period of at least 6 months was accepted by the RCC in October 2014. In May 2015 the International Health Regulations Emergency Committee accepted the evidence provided that the polio outbreak had been controlled and transmission had been stopped in a period of less than 12 months. Israel, however, remains in the category of ‘states no longer infected by wild poliovirus, but which remain vulnerable to international spread’.

A variety of supplementary immunization activities (SIAs) were conducted by 8 countries in the Region in 2014. These ranged in scale from full national Immunization days (NIDs) to catch-up campaigns targeted to specific population groups or territories. Overall reported coverage achieved was moderate to high. AFP surveillance reviews were conducted in Georgia and Turkey in 2014, and a similar review has been proposed for Romania in 2015.

Of the 53 Member States in the Region, only 2 failed to provide annual update reports for review. Six countries still have no outbreak response action plan, while the plans of an additional 7 have expired. Nineteen countries plan to use OPV in response to any potential outbreaks, 16 plan to use IPV alone, and 9 plan to use both OPV and IPV. OPV is licenced in 23 countries, is not licenced in 19 countries, and the situation is unclear in the remaining 11 countries. Only 20 Member States claim to have either vaccine or funding for vaccine secured for outbreak response.

Discussion

While the RCC were pleased to note that the International Health Regulations Emergency Committee has removed Israel from the list of outbreak countries, current inclusion in the ‘states no longer infected by wild poliovirus, but which remain vulnerable to international spread’ list is not an accurate description of the current situation in Israel. All countries in the Region remain vulnerable to international spread, with some more vulnerable than Israel, yet this label is not
applied to them. The RCC expressed concern that for countries considered at risk, the risk should be expressed not as ‘vulnerable to international spread’, but as at risk for spread of infection following importation.

To better appreciate the impact on the Region of continued use of OPV it would be helpful to show the proportion of the population of the Region covered, rather than simply showing the number of Member States still using OPV.

Although 6 Member States have no formal outbreak response action plan, 28 have stated they may use OPV in response to any possible poliovirus introduction, and all have provided WHO informally on proposed actions, should importation and transmission be detected.

Performance of the European Polio Laboratory Network in 2014-15; containment activities.

The Regional Polio Laboratory Network continues to support polio eradication activities with a total of 48 laboratories situated in 37 Member States. All laboratories have been accredited for 2015 and 2016, with all passing the virus isolation proficiency test, and all laboratories performing intratypic differentiation (ITD) and genomic sequencing passing the appropriate proficiency tests. In 2014 almost 130,000 samples of all types were tested in network laboratories.

A total of 24 vaccine-derived polioviruses (VDPV), from 7 Member States, were isolated in 2014. Of these 12 isolates were characteristic of viruses shed by immunodeficient individuals (iVDPV) and the remaining 12 were characteristic of virus isolates undergoing limited replication (aVDPV) but without any detected chains of transmission. Of concern are the three aVDPVs isolated from samples collected in Ukraine. These three viruses show no genetic linkage and represent three independent emergences under conditions of low vaccine coverage. Two of the aVDPV isolates show limited divergence from Sabin type 2 virus and were only detected through use of a revised ITD testing algorithm that includes a VDPV step for all detected Sabin-like isolates. Development and adopting of the new testing algorithm was prompted by the lack of availability of traditional typing sera for ITD. It is expected that all samples in all 48 laboratories in the Regional network will be tested according to the new algorithm by the end of the first quarter 2016.

Supplementary surveillance, including enterovirus and environmental surveillance for polio has been a long-standing feature in many countries in the Region, and an increasing amount of information from supplementary surveillance is now being reported to WHO. Regional guidelines for enterovirus surveillance have been published⁴, and draft global guidelines for environmental surveillance are available⁵.

Of concern to the Regional Polio Laboratory Network is the large number of stool samples from Syria and Palestine being sent to European laboratories for testing. More than 800 samples have

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been received since 2013, and these have caused workload concerns in the Ankara and RIVM laboratories. To date in 2015 the rate of receipt of these samples appears to be increasing.

The laboratory containment process continues, with 50 countries providing 2014 annual updates to their laboratory registries. Twenty-three Member States claim to be retaining WPV materials in a total of 69 different facilities. GAPIII training for the network is planned for September 2015 and it is expected that additional support from WHO will be forthcoming for implementation of the new containment requirements.

**Discussion**

The RCC voiced its concerned over the increased workload for network laboratories in Turkey resulting from the receipt and testing of samples from Syria and Palestine. The RCC looks to WHO to find an appropriate, safe, effective and rapid solution to this problem to prevent overloading key laboratories in the Region.

While publication of the enterovirus surveillance guidelines was welcomed, continued references to the use of cerebral spinal fluid (CSF) samples for detection of enteroviruses were of some concern. The RCC would prefer to see clear advice that only faecal samples should be tested, and that testing of CFS samples was of little value. Data on supplementary surveillance is now being reported to WHO in the annual updates, so the RCC would like to see some analysis of the different populations being surveyed and comparative sensitivity of the different systems used in different countries.

**Introduction of IPV and switch to bOPV by 2016: status update**

As of May 2015, thirty-three Member States in the Region had introduced IPV as the only polio vaccine in their routine immunization schedule, and a further 11 had introduced a mixed OPV/IPV schedule. Only 9 Member States continued to use OPV alone in their routine systems, but all have provided plans to introduce at least 1 dose of IPV into the schedule before the end of 2015. Seven of the countries plan to introduce IPV as a standalone vaccine, and the other 2 will introduce it as a combination vaccine.

By the end of 2015, ten Member States are expected to be using OPV as their primary polio vaccine, and a further 10 will be using OPV as a booster dose. These 20 countries will be required to switch from tOPV use to bOPV use in April 2016 and destroy of all unused tOPV stocks. Operational frameworks for the recall of unused tOPV are in place in some Member States, others have yet to provide details on how they will achieve this. In some countries there will be legal consequences if state-procured vaccines are destroyed, and countries are being urged to develop plans for the full utilization of all projected tOPV stocks in advance of the switch to bOPV. Of the 20 countries concerned, 9 are procuring polio vaccines through UNICEF, and 11 are self-procuring. Consultations on the switch have been initiated with those Member States procuring through UNICEF, and discussions and assessments are ongoing with self-procuring countries to develop advanced planning for bOPV procurement.

Foreseen challenges include switching to bOPV in Ukraine, where a large procurement of tOPV has been arranged for an accelerated catch-up immunization activity starting in September 2015. Given the general level of dysfunction in the country, it is feared that a significant proportion of
this procured vaccine will remain unused by April 2016. Also of concern is the licensure of bOPV in the Russian Federation. This is a very complex issue being handled by WHO headquarters. An additional challenge is posed by the rigid funding and procurement cycles in some countries. The SAGE recommendation on the switch to bOPV by April 2016 is expected in October 2015, and this is too late for the systems established in several Member States. Member States using, or planning to use, OPV as a booster dose only, have requested more extensive guidance from WHO over whether they should switch to bOPV before April 2016, or simply drop the OPV booster dose from their schedules.

Discussion

The Secretariat is confident that according to currently available information the Region is considered to be on-track to meet the target for all countries to have introduced at least 1 dose of IPV into the routine schedule by the end of 2015.

Despite the challenges and concerns, the RCC is confident that good progress is being made in the Region towards switching from tOPV to bOPV. Activities being undertaken and planned by the Secretariat are appropriate and timely and favour a successful switch in the Member States that decide to continue routine OPV use.

Sustainability of polio-free Europe: Review of national updated documents and risk assessment for 2014 by epidemiological zones

Introduction to subregional overview and regional risk assessment

As of the 8th of June 2015, fifty-one Member States had submitted annual progress reports to WHO. The deadline for submission was 31 April 2015. Thirty-one Member States submitted reports before the deadline, a further 16 submitted during May and four submitted between 1 and 8 June. No reports were submitted by San Marino and Ukraine.

Following recommendations from the RCC a number of small modifications to the format of the report were made, including inclusion of contact details of national focal points, addition of information on the percentage of the population in subnational territories with vaccine coverage below 90%, and inclusion of a definition of ‘high risk groups’. Format for the presentation of summary data to the RCC remained largely unchanged.

The risk factor analysis for countries of the Region is shown in Annex 1.

Discussion

While the RCC greatly appreciated the improved quality and scope of the summary information provided by the Secretariat, some additional demographic data would be helpful. For example, percentages of the population in the <5 years and <15 years age-groups. This information is already provided through the Joint Reporting Form (JRF) and the Secretariat could provide this as a separate summary in addition to the information provided through the annual update reports.
Nordic/Baltic subregion

The 8 countries in this subregion were considered to be at low to intermediate risk of transmission in 2013. Denmark and Iceland were considered to be at intermediate risk. Both were very slow to submit their 2015 annual update reports, and the report from Iceland did not include a statement from the NCC.

Historically all countries in this subregion have reported high vaccination coverage rates. Denmark has reported the same coverage (91%) with the third dose of polio vaccine for the past 5 consecutive years, but there has been no explanation provided for the uniformity. Iceland failed to provide coverage data for 2014, having reported 89% coverage for 2013.

All countries in the subregion conduct some form of enterovirus or environmental surveillance, or both, in support of polio surveillance. Denmark, Finland, Iceland and Sweden have no AFP surveillance. Both Estonia and Latvia previously reported APF surveillance, but have not reported any cases in 2014. All countries appear to have collected and tested a greater number of enterovirus or environmental samples per head of population than they would have done through AFP surveillance alone.

All Member States have a plan of action to respond to WPV importation, but Latvia has no formal plan, only national regulatory documents. These regulatory documents currently prevent Latvia for mounting a mass immunization event in response to WPV importation. None of the countries have considered using OPV as an outbreak response measure, and none currently licence OPV for use.

Based on the information provided, the Secretariat concluded that the probability was high that WPV had not been circulating in the subregion in 2014 and that WPV importation or circulation of VDPV, if any, would have been detected promptly by existing health/surveillance systems. The risk of transmission following importation of WPV or circulation of VDPV in countries of this zone was considered to be low to intermediate. Issues of concern included inadequate action plans for outbreak response in all countries and the de facto discontinuation of AFP surveillance in Estonia and Latvia.

Feedback to the countries:

- Denmark – the RCC recommends the national outbreak response plan be reviewed and updated.
- Estonia – the RCC recommends that the size of the IPV stockpile for outbreak response be reviewed as this appears to be inadequate to mount a meaningful response to WPV importation. Estonia could confirm if they have abandoned AFP surveillance in favour of supplementary surveillance.
- Finland – no problems recognized.
- Iceland – the RCC has concern that polio vaccine coverage appears to have been declining over recent years and no coverage data for 2014 have been provided. The country has been given an ‘intermediate’ risk allocation, based on assumptions made of current vaccine coverage. The RCC also notes lack of a statement from the NCC.
Latvia – the risk of WPV transmission has been assessed as ‘intermediate’ based on suboptimal immunization coverage. The RCC recommends that Latvia conduct a polio outbreak simulation exercise (POSE) as soon as possible. It would be helpful to the RCC if Latvia could confirm if they have abandoned AFP surveillance in favour of supplementary surveillance.

Lithuania – the RCC notes and commends the continued increase in reported vaccine coverage and the high quality AFP surveillance.

Norway – the risk of WPV transmission has been assessed as ‘intermediate’ based on suboptimal immunization coverage.

Sweden – no problems recognized.

Western subregion

Germany and the United Kingdom were considered to be at intermediate risk in 2014 due to suboptimal population immunity. This year the report from Austria was submitted after 1 June, and the statements from Luxembourg and Monaco did not contain statements from the NCC. No coverage data for 2014 have been provided by Austria, Germany and Switzerland. Vaccine coverage for the last year reported is high in all countries except Ireland and Luxembourg.

Most of the countries rely on enterovirus and/or environmental surveillance, with only Austria, Belgium and Switzerland continuing to report AFP surveillance results. Belgium has reported an AFP index of zero since 2012, and the indices for Austria and Switzerland have been low for the past 5 years. For the countries relying on enterovirus surveillance, the reported numbers of samples tested are very high, and in general the non-polio enterovirus isolation rates are at levels that would be expected.

Luxembourg, Monaco and Switzerland do not have an outbreak response plan. Half of the countries (5/10) have either not considered or not reported consideration of the use of OPV in case of WPV importation. Only 2 Member States (Netherlands and the United Kingdom) are known to have vaccine stockpiles for outbreak response.

Based on available information the Secretariat has suggested that the probability is high that WPV had not been circulating in this epidemiological zone in 2014 and that suspected case of poliomyelitis would have been detected by existing health services. AFP surveillance has been practically abandoned in the subregion but does not appear to have been substituted by systematic and effective supplementary surveillance in some countries, particularly Switzerland and Belgium. The risk of transmission following importation of WPV is considered to be low to intermediate.

Feedback to the countries:

- Austria – is considered to be at ‘low risk’ but the RCC urges that the next annual update report be submitted in a more timely manner.
Belgium – is considered to be at ‘low risk’ based on information available but the RCC is concerned over the apparent lack of adequate surveillance, either for AFP or for enteroviruses.

France – no problems recognized.

Germany – is provisionally considered to be at ‘low risk’ that will be confirmed on receipt of further information on actions taken to improve population immunity. The RCC would like to commend Germany on the actions taken to address issues with vulnerable and high risk population groups in the country, including the migrant/refugee populations. The RCC would appreciate more detailed information on the actions taken and vaccine coverage achieved in these groups.

Ireland – no problems recognized. The RCC commends Ireland on the quality of their annual report.

Luxembourg – no problems recognized. The RCC notes the lack of a statement from the NCC.

Monaco – no problems recognized. The RCC notes the lack of a statement from the NCC.

Netherlands – is assessed as ‘low risk’, but there continues to be concern over the known large pockets of polio susceptible communities that are not adequately reflected in the national data.

Switzerland – surveillance quality continues to be poor, and urgently needs improvement.

United Kingdom – has been placed in the ‘low risk’ category, but compared with other countries in the subregion the quality of supplementary surveillance remains low. The number of stool samples tested through the enterovirus surveillance system is considered to be too low and needs to be increased. The country is urged to implement systematic environmental surveillance as a matter of urgency.

Central subregion

With the exception of Bulgaria, reported vaccine coverage in this zone is generally high. Bulgaria reported a decline in coverage to below 90% for 2014, and reported a vulnerable population. All countries conduct AFP surveillance, but the quality is generally not high. The non-polio AFP rate and completeness and timeliness of reporting are suboptimal for most countries. All countries have introduced supplementary surveillance but, with the exception of Belarus, quality appears to be low and sensitivities appear questionable. Low virus isolations rates, in the subregional as a whole but particularly in Bulgaria, are of concern as they raise doubts over the quality of samples being received in the laboratories.

Based on information available the Secretariat concluded that the probability is high that WPV has not been circulating in this subregion in 2014 as immunization coverage appears to be good and WPV importation would have been detected by existing surveillance systems in most of the countries. The overall risk of spread following importation of WPV is mostly low or intermediate in the countries due to generally good immunization services. Overall surveillance quality is not
good, however, and needs to be improved. Bulgaria is of concern due to suboptimal surveillance and population immunity and the presence of high risk population groups.

Feedback to the countries:

- Belarus – no problems recognized.
- Bulgaria – is regarded being at ‘intermediate risk’ due to lack of actions to improve immunity among existing vulnerable population groups. The RCC would appreciate receiving information on plans to overcome vaccine procurement problems and to provide catch-up vaccinations to the cohort of children missed during recent vaccine shortages.
- Czech Republic – both AFP and supplementary surveillance quality appear to be of low quality and both need to be improved. The low virus isolation/identification rates are of concern.
- Hungary – no problems recognized.
- Poland – is considered a ‘low risk’ despite the national inability to contain a large outbreak of rubella. The polio outbreak response action plan should be completed as soon as possible.
- Slovakia – AFP surveillance quality needs to be improved.
- Slovenia – no problems recognized.

**Central-Eastern subregion**

There were 3 countries in this zone considered to be at high risk for poliovirus transmission in 2013 and 2014: Bosnia and Herzegovina, Romania and Ukraine. Ukraine failed to submit an annual report for 2014 and continues to present a major challenge with low vaccine coverage for the past 5 years, less than optimal coverage in most of the subnational administrative units, and the general level of disruption caused by the current conflict. The report from Albania did not include a statement from the NCC.

All countries except Bosnia and Herzegovina and Ukraine report reasonably high routine vaccine coverage, although several have sizable vulnerable and/or migrant population groups that are underserved by the routine systems. The former Yugoslav Republic of Macedonia, the Republic of Moldova and Montenegro have conducted SIAs targeted specifically at these populations. No coverage data for 2014 was available from Ukraine, but it is assumed that overall coverage is low and there are many districts with coverage less than 80%.

All countries continue to conduct AFP surveillance, although the quality appears to vary. The quality of AFP surveillance in Romania has improved in the past year, but the overall standard remains low. Albania, the Republic of Moldova, Romania and Ukraine also conduct supplementary surveillance. There are concerns that while Romania has introduced environmental surveillance in support of its weak AFP surveillance system, it is non-representative of the population as a whole. Despite the current problems, the quality of surveillance in Ukraine appears to be high.

Based on available evidence the Secretariat has concluded that the probability is high that WPV has not been circulating in this subregion in 2014 as WPV importation would have been detected.
by existing surveillance systems. As in previous years, the risk of transmission following importation of WPV is high in Bosnia and Herzegovina, Romania and Ukraine primarily due to low population immunity. Ukraine remains of particular concern due to the overall deterioration of the immunization programme in the country.

**Feedback to the countries:**

- **Albania** – is considered to be at ‘low risk’ but need to update their national preparedness plan of action.
- **Bosnia and Herzegovina** – is considered being at ‘high risk’ due to reported suboptimal vaccine coverage and inability to respond appropriately to a large measles outbreak. The RCC has requested that the report be revised to include supplementary information on the true vaccine coverage rates and be resubmitted within 3 months.
- **the former Yugoslav Republic of Macedonia** – no problems recognized.
- **Republic of Moldova** – is considered being at ‘intermediate risk’ and improvements in population immunity are recommended.
- **Montenegro** – is considered being at ‘intermediate risk’ due to suboptimal population immunity and surveillance quality.
- **Romania** – is considered to be at ‘high risk’, due to suboptimal population immunity and surveillance quality.
- **Serbia** – is considered to be at ‘intermediate risk’ due to less than adequate vaccine coverage. There appear to be a significant number of zero dose AFP cases. The RCC would appreciate more information and an update on actions taken to improve immunization coverage and timeliness of vaccination.
- **Ukraine** – considered being at ‘high risk’ due to low vaccine coverage and circumstances beyond the immediate control of national authorities.

**Southern subregion**

No annual report was received from San Marino, and the reports from Italy and Malta did not include statements from the NCC. Reported vaccine coverage in all countries remains reasonably high, with the exception of San Marino, which has not provided data for 2014. Vaccine coverage for Greece and Cyprus are estimated through periodic survey rather than ongoing assessment or systematic administrative review of immunization programme performance, and the validity of estimates provided for 2014 is uncertain.

Many of these countries have been exposed to increased pressure from migrant and refugee groups crossing the Mediterranean. All have responded with measures to meet the immunization needs of these groups, but there has been no standardized response, and there is no current method in place to assess the adequacy of the measures taken. This is of particular concern for Italy, Malta and Greece. While all countries in the subregion are commended for their actions in tackling this problem, they are reminded of the need for follow-up vaccination and that additional activity to identify and immunized these populations there may be necessary. The risk of spread of
WPV is not restricted to the migrant/refugee population, and national population immunity needs to be maintained at a high level.

With the exception of Greece and Israel, AFP surveillance quality is not high. Cyprus has not reported AFP cases in 2014, but has reported samples tested in the laboratory. Countries are increasingly moving away from AFP surveillance towards supplementary surveillance, but the quality of enterovirus and environmental surveillance systems appears to be very variable. The quality of enterovirus surveillance in Spain and Portugal appears to be higher than the quality of AFP surveillance, but there is no standardization of the surveillance conducted and it is not nationally representative. Italy and Israel have established environmental surveillance systems generating large numbers of samples, although in the case of Italy, the proportion of the total population covered is small.

Andorra, Italy, San Marino and Spain have no plan of action to respond to WPV importation. Of greatest concern is Spain, which appears to have no plan to use OPV in the event of an outbreak and no capacity to license OPV should it be necessary. Most other countries in the subregion plan to use IPV in an initial outbreak response but have the capacity to move to OPV use if necessary.

Based on the information available the Secretariat has concluded that the probability is high that WPV had not been circulating in the subregion in 2014 and that importation would have been detected promptly by existing surveillance systems. Risk of spread following importation of WPV is estimated to be low to intermediate due to generally good immunization systems including high-risk groups in the presence of average to good surveillance quality. Cyprus is of concern due to the decreasing quality of surveillance and the questionable reliability of immunization coverage estimates.

Feedback to the countries:

- Andorra – the RCC notes lack of an outbreak response plan.
- Croatia – risk status has been assessed as low.
- Cyprus – has been assessed as ‘intermediate risk’ on the basis of the declining quality of surveillance and questionable reliability of the coverage estimates provided.
- Greece – has been assessed as ‘intermediate risk’ due to less than adequate vaccine coverage.
- Israel – no problems recognized.
- Italy – has been provisionally assessed as ‘low risk’ subject to receipt of further information on actions taken to improve population immunity. There is an urgent need to formally re-establish the NCC and for the the latter to meet to develop a national preparedness plan and initiate preparatory activities for responding to importation of WPV.
- Malta – has been assessed as ‘low risk’ but the RCC has concerns over the low quality of surveillance.
- Portugal – has been assessed as ‘low risk’ but needs to improve the quality of surveillance.
- San Marino – has been assessed as ‘intermediate risk’ on the basis of suboptimal surveillance and vaccine coverage.
Spain – has been assessed as ‘low risk’ but the RCC is concerned over the lack of an outbreak response plan and the apparent lack of preparedness to deal with an outbreak. It would be helpful to the RCC to receive coverage data from the Region of Catalonia as evidence for the improved vaccine coverage reported for 2014.

MECACAR subregion

All countries have reasonably high reported vaccine coverage with the exception of Georgia, which has had long-standing problems with vaccine coverage. Although some doubts exist over the very high coverage reported by some Member States, it is believed that the true coverage level equals or exceeds 95% in all except Georgia. Georgia has reported that in 2014 almost 26% of the population resided in subnational districts with less than 90% coverage with the third dose of polio vaccine. Eight of the countries conducted some form of SIA in 2014, including Georgia. Turkey continues to host a large number of refugees from Syria, and conducted a large-scale mop-up vaccination campaign in 2014.

All countries conduct AFP surveillance and the general standard is acceptable. With the exception of Turkmenistan, which experienced logistical problems in shipping stool samples to the laboratory, the AFP index for 2014 is high or reasonable. Several countries continue to struggle to meet completeness and timeliness criteria. Kyrgyzstan reported no virus isolations from more than 100 samples collected, but data from the Regional Reference Laboratory suggested that at least 10% were positive for NPEV. Five of the countries have established supplementary surveillance.

All countries in this subregion have polio outbreak response action plans. All are aware of the risks posed by increasing polio transmission in Afghanistan and are attempting to respond appropriately to the threat.

Based on information available the Secretariat concluded that the probability is high that WPV has not been circulating in this subregion during 2014 as WPV importation would have been detected by existing surveillance systems in most of the countries. The countries in this zone have significantly improved performance through continued implementation of risk mitigation activities and strengthening polio surveillance. Kyrgyzstan remains of concern because of the apparent inability of the health system to respond to the recent measles outbreak.

Feedback to the countries:

- Armenia – no problems recognized.
- Azerbaijan – no problems recognized. The RCC commends Azerbaijan for their supplementary immunization activities.
- Georgia – is considered to be at ‘intermediate risk’ due to suboptimal routine vaccine coverage. The RCC commends Georgia for their supplementary immunization activities.
- Kazakhstan – no problems recognized.
- Kyrgyzstan – is considered to be at ‘intermediate risk’ because of poor surveillance quality and the failure to respond to the recent measles outbreak. The RCC commends Kyrgyzstan for their supplementary immunization activities. The RCC requests that the NCC take
greater care in accurately reporting their data, particularly information on virus isolation from stool samples.

- Russian Federation – is considered to be at ‘low risk’ but the RCC has concerns over the large number of unimmunized or underimmunized AFP cases >1 year of age would appreciate some explanation from the NCC. If this situation persists it will compromise the RCC’s assessment of the level of population immunity to polio.

- Tajikistan – is considered to be at ‘low risk’ but needs to make further improvements to its surveillance quality. The RCC commends Tajikistan for their supplementary immunization activities and increased response to the threat of WPV importation from Afghanistan.

- Turkey – is considered to be ‘low risk’ but needs to make further improvements to its surveillance quality. The RCC commends Turkey for their supplementary immunization activities and increased response to the problems associated with hosting large numbers of refugees from Syria.

- Turkmenistan – is considered to be at ‘intermediate risk’ due to poor surveillance quality. The RCC commends Turkmenistan for their supplementary immunization activities

- Uzbekistan – has taken steps to improve surveillance quality and is now considered to be low risk.

**Regional outbreak response and risk mitigation activities**

**Face-to-face meeting with representatives from Bosnia and Herzegovina to discuss current status, and action plan to reduce the risk of wild poliovirus transmission in the country**

While progress has clearly been made in 2014 in Bosnia and Herzegovina, the RCC has remained greatly concerned over the apparent significant gap in vaccine coverage, with 6 regions reporting less than 75% coverage at 1 year of age and an accumulating young population not reported as having received vaccine. There is also concern that the polio eradication programme is weak, with low vaccine coverage being accompanied by low quality AFP surveillance and no supplementary polio surveillance.

Despite extensive efforts to establish signed agreements between the different entities, the continuing administrative complexity in Bosnia and Herzegovina remains a major challenge to providing accurate coverage and surveillance information on time. Vaccines provided by the private sector are not reported in the government figures, leading to an underestimation of actual coverage achieved.

As requested in the annual report format, the NCC has provided vaccine coverage estimates for children at 1 year of age. However, in Bosnia and Herzegovina many children receive the third dose of vaccine during their second year, resulting in the coverage at <1 year of age being low, but the coverage <2 years of age being high. This has not been reflected in the NCC report and additional information explaining the situation would be helpful.
There are also ongoing vaccine procurement problem throughout the country. Although a new law on procurement allows multiyear planning, producers and distributors of pentavalent vaccine are not responding to the tenders raised, and orders are not being filled. Given that the vaccine market is contracting and the number of manufacturers is declining, rules on vaccine procurement, particularly the permitted roles played by the United Nations agencies, may require further revision. Given that European vaccine producers are moving away from IPV production, the government of Bosnia and Herzegovina may need to consider purchasing future vaccine supplies from producers outside of Europe. UNICEF would welcome discussions on likely national vaccine requirements for the coming 2-5 years and on the possibility for providing tOPV for use in catch-up campaigns before end of 2015.

Discussion:
The RCC requests the NCC of Bosnia and Herzegovina to revise the 2014 report to include additional information on vaccine coverage <2 years of age and some estimate of the coverage contribution made by the private sector. The revised report should be submitted to the WHO Secretariat within 3 months.

The RCC also urges that weaknesses of the immunization programme over the past several years be addressed, either through demonstration that recent changes have resulted in increased population immunity, especially in the older age groups, or through conducting SIAs targeted on groups that have been missed by immunization services.

The RCC reminds the immunization programme managers and public health authorities that the quality of surveillance for polio should be improved to the required level.

Updated information on actions and plans for 2015-16 from selected countries

Romania

Romania has remained on the list of high-risk countries since 2013. Reported routine vaccine coverage has been relatively high for 2014 as 94.3%, but there has been no validation of the data collection system. Additional activities to immunized high-risk populations are reported to have taken place, but no data has been provided. Catch-up immunizations have taken place, but there is confusion over the coverage levels achieved, and the reported levels are low. The NCC appears to be updating annual coverage data between reports, with coverage levels rising and changes made to the number of districts with <90% coverage, but no explanation of the changes has been provided. Although both AFP and environmental surveillance are conducted, no viruses were reported isolated from 27 AFP cases reported, and the environmental surveillance covers less than 10% of the population.

Discussion:
The RCC requests the NCC to clarify and explain the changes to the coverage rates that appear to have been made in subsequent annual reports, and provide more information on coverage.
achieved through the catch-up campaign and the additional activities targeted on high-risk populations.

The national programme is urged to improve vaccine coverage, particularly in those districts with coverage <90%.

The RCC notes that there have been improvements in the quality of surveillance but the national programme should take all measures to further improve the quality of AFP surveillance, especially the virus isolation rate, and to extend the environmental surveillance to include a greater proportion of the total population.

A full programme review should be undertaken in Romania as a matter of urgency.

Ukraine

Ukraine has not submitted a report for 2015, but information from a variety of sources is available to WHO. There have been long-standing problems with immunization coverage since 2009, and information gained through country missions suggests that national coverage with a third dose of polio vaccine was <50% in 2014, and <10% for the first quarter of 2015. The birth cohort is 450,000 per year. A plan for accelerated catch-up immunization has been developed, and vaccine specifically to meet the requirements of this plan has been identified through the international community. This, however, is recognized as a short term solution to address immediate needs and a long-term strategy is necessary.

AFP surveillance in most of the country has remained strong, with an AFP rate of 2.31 in 2015 and a 100% adequate stool collection rate. There is also an expanded environmental surveillance system in place. However, no information is currently available for those areas not under government control, and it is deeply concerning that there is no access to a significant portion of the country that is densely populated. The recent detection of 3 independent VDPVs, while not unexpected, is of great concern.

The RCC firmly believes there is strong potential for a very large outbreak of polio in Ukraine. Should such an outbreak occur, there would be significant implications not only for the country, but also for the Region and the Global Polio Eradication initiative.

Discussion:

The RCC was pleased to note the new appointment of a WHO consultant to Ukraine. The Commission remains deeply concerned about the current status of immunization services in general, and polio vaccination in particular, and recognizes that the situation has been made very much more difficult by the conflict.

It appears clear that the most significant problem is inadequate vaccine supply, and that if both short-term and long-term vaccine supply issues could be resolved it is considered likely that high coverage levels could be restored.

The RCC appreciated the plan for an accelerated catch-up programme, particularly with a focus on IPV as a first immunization, to protect the population from the risk of disease. Efforts being made in community mobilization, improving the prospect of success for the outreach programme, were also appreciated.
The Commission looks to WHO headquarters to recognize the importance of preventing any polio outbreaks in Ukraine and to providing the necessary support. The International Community was applauded for efforts in providing vaccines for the immediate needs, but this will only provide a short-term solution and mid- and long-term solutions are required to restore the immunization programme and increase population immunity to a level that will prevent a polio outbreak.

The RCC was encouraged by the continuing ability of the programme to identify cases of AFP and to obtain and test stool samples from these children. To date, no evidence for WPV transmission has been presented, although the emergence of recent VDPVs is of concern. If WPV were to be introduced into Ukraine, the RCC had no doubt that the consequence would be a major outbreak causing significant disease and threatening the polio-free status of the European Region.

The invitation to the RCC members to visit Ukraine, particularly during the period of accelerated catch-up immunization, was noted, and it remains in the hands of the Regional Office to follow-up and make the appropriate arrangements.

Polio outbreak response and new SOPs from the GPEI

Standard operating procedures (SOPs) for a new polio outbreak in a polio-free country were published by the GPEI in February 2015. These SOPs were developed to support polio-free countries experiencing a polio reintroduction to rapidly control the outbreak and re-establish polio-free status. The document seeks to ensure a common understanding of the critical actions required to support affected countries, documents the roles and responsibilities of GPEI partners mandated to support government-led action and provides a standard against which an outbreak response can be assessed. The SOPs introduce the concept of ‘grading’ a polio outbreak to establish the extent of the response required and the resources needed. They also describe responses necessary for dealing effectively with circulating VDPVs.

Discussion:
The RCC noted the existence of the new SOP and appreciated receiving the briefing.

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Conclusions of the RCC and recommendations to Member States and WHO

Conclusions

The Regional Certification Commission (RCC) greatly appreciated the opportunity provided by the WHO Regional Office and the government of Bosnia and Herzegovina to conduct the meeting in Sarajevo and to discuss the current status of polio eradication activities and achievements in Bosnia and Herzegovina directly with representatives of the National Certification Committee (NCC).

Based on the evidence provided, the RCC concluded that there was no wild polio virus (WPV) or vaccine derived polio virus (VDPV) transmission in the WHO European Region in 2014. All countries currently remain at risk of importation, but the RCC concluded that Bosnia and Herzegovina, Romania and Ukraine remain at high risk of polio outbreak following importation due to low population immunity. An additional fourteen Member States (Bulgaria, Cyprus, Georgia, Greece, Iceland, Kyrgyzstan, Latvia, Montenegro, Norway, Poland, Republic of Moldova, San Marino, Serbia and Turkmenistan) were considered to be at intermediate risk of polio outbreak, predominantly because population immunity was considered to be lower than necessary to prevent virus transmission.

The RCC was pleased to note the new appointment of a much-needed WHO consultant to Ukraine. The Commission remains deeply concerned over the current status of immunization services in Ukraine, and recognized that the situation has been made very much more difficult by the conflict. It appears that the most significant problem is lack of vaccine, and that if both short-term and long-term vaccine supply issues could be resolved it is likely that high vaccine coverage levels would be restored. The RCC appreciated the plan for an accelerated catch-up immunization programme, particularly with a focus on IPV as a first immunization, to protect the population from the risk of disease. Efforts being made in community mobilization, improving the prospect of success for the programme, are also appreciated. It is deeply concerning that there is no access to a significant portion of the country that is densely populated, and the RCC has no knowledge if any immunization activities are taking place there.

The Commission looks to WHO headquarters to recognize the importance of preventing any polio outbreaks in Ukraine and to providing the necessary organizational support. The International Community, particularly Canada, was applauded for efforts in providing vaccines for the immediate needs, but this will only provide a short-term solution and mid- and long-term solutions are required to restore the immunization programme and increase population immunity to a level that will prevent a polio outbreak. The RCC was encouraged by the continuing ability of the programme to identify cases of AFP and to obtain and test stool samples from these children. So far, no evidence for WPV transmission has been presented, although the emergence of recent VDPVs is of concern. If WPV were to be introduced into Ukraine, the RCC has no doubt that the consequence would be a major outbreak causing significant disease, threaten the polio-free status of the European Region and present a significant setback to the Global Polio Eradication Initiative.

The RCC was concerned that several countries in the Region have sizable mobile and/or marginalized communities that continue to have inadequate access to health services in general and to immunization services in particular. In some cases it appears that the quality of AFP or polio
surveillance within these communities is suboptimal. The RCC would welcome more details from NCCs for countries that have sizable mobile and/or marginalized populations on measures being taken to provide immunization services appropriate to their needs and for ensuring that surveillance quality in these populations meet the required standards. The RCC would also appreciate receiving information from NCCs for countries receiving the large refugee and migrant populations entering the Region from Syria, Iraq and North Africa on how the immunization needs of these populations are being met.

The Commission was pleased to note that the International Health Regulations Emergency Committee, in its statement of 5 May 2015, accepted the evidence provided by Israel that the polio outbreak had been controlled and transmission stopped. The RCC considered, however that placing Israel in the category of ‘states no longer infected by wild poliovirus, but which remain vulnerable to international spread’ is misrepresentative and unnecessarily discriminatory since every country that receives travellers from polio-endemic or polio-outbreak countries is vulnerable to importation.

The RCC was pleased to note that the general standard of reports received from the NCCs has again improved, and that most countries are now correctly using the report format provided. The number of countries submitting inadequate reports, lacking in relevant information or detail, has declined, but there remains room for further improvement. The number of NCCs submitting reports has again increased over last year, but the RCC regrets that two countries (San Marino and Ukraine) failed to submit reports this year. Although a greater proportion of reports were received in a timely manner this year, 20 of the 51 were received after the deadline for receipt had expired.

The Commission was gratified to be informed that the proposed introduction of IPV and switch to bivalent oral polio vaccine (bOPV) throughout the Region by 2016 is on-track for success. Although a number of challenges have been foreseen, including the unstable situation in Ukraine, implementing monitoring in disputed or unrecognized territories and inflexible funding and procurement cycles in some countries, it is expected that the introduction and switch will take place on time.

The Commission commended the Regional Polio Laboratory Network on the continuing high standard of work being conducted in the face of an increasing workload. Concerns were raised over the potential overloading of key laboratories due to receipt of stool specimens from countries neighbouring the Region, and the Commission looked to WHO to find an appropriate safe and effective solution to prevent any disruption to key laboratory services. The RCC noted that information on the quality of supplementary surveillance for polioviruses was now being included in national update reports, and the Commission was in a position to start to compare the quality of supplementary surveillance in different Member States.

The RCC was grateful to receive a detailed presentation on the plans and proposed timeline for laboratory containment of polioviruses described in the WHO global action plan to minimize poliovirus facility-associated risk after eradication of wild polioviruses and cessation of routine OPV use (GAPIII). While the RCC recognized and appreciated the need for comprehensive containment of polioviruses, and understands the important role the Commission has to play in monitoring implementation of the plan in the Region, reservations were expressed over the potential for success given the current lack of available resources and the very short time-line proposed.
Recommendations

NCCs and their reports

It continues to be of concern to the RCC that two countries failed to submit an annual report. All countries must have a functional NCC and every NCC must submit an annual report in the format provided by the WHO Secretariat.

Although the standard of reporting continues to improve, reports from 20 of the 53 submitting countries were received after expiration of the deadline. All NCCs are urged to provide their update reports in advance of the agreed deadline for submission.

Immunization

The current situation with regard to immunization services in Ukraine is of great concern. The RCC appreciates the plan for an accelerated catch-up programme, particularly with a focus on IPV as a first immunization, and urges the national government, WHO and the International Partner Agencies to implement the plan as a matter of highest priority.

There is an urgent need to resolve vaccine supply problems in Ukraine. The RCC urges the national government, WHO and the International Partner Agencies to develop mechanisms to ensure both immediate and long-term vaccine supply to Ukraine.

The RCC notes with concern that a number of countries host sizable mobile and/or marginalized populations underserved by immunization services. The RCC urges all members States to strengthen measures being taken to provide immunization services appropriate to the needs of these populations.

Vaccines

The RCC appreciates the progress being made towards the introduction of IPV and switch to bOPV. Member States are urged to implement the planned changes according to WHO recommendations and be ready to complete the changes by the end of 2016.

Surveillance

The Commission encourages national surveillance programmes conducting supplementary surveillance for polio to ensure that the sampling, testing and confirmation systems are appropriate to support polio surveillance. Revised WHO guidelines for enterovirus surveillance systems have now been published and all Member States are urged to follow the advice provided in these guidelines.

Laboratories

The increased volume of samples being received from Syria is of concern as it threatens to overload key laboratories in the Region. WHO is urged to find a solution to this problem, either by providing more support to the laboratories concerned or by redistributing the workload.
<table>
<thead>
<tr>
<th>Country</th>
<th>Surveillance quality</th>
<th>Population immunity</th>
<th>Other factors</th>
<th>Composite risk score</th>
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*Provisional based on receipt of further information on actions taken to improve population immunity*
## Annex 2: Programme of the 29th Meeting of the European Regional Certification Commission (RCC) for Poliomyelitis Eradication, Sarajevo, Bosnia and Herzegovina, 9-10 June 2015

**Tuesday, 9 June 2015**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter(s)</th>
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<tbody>
<tr>
<td>08:30-09:00</td>
<td>Registration</td>
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<tr>
<td>09:00-09:30</td>
<td>Opening</td>
<td>WHO Regional Office for Europe, Regional Certification Commission</td>
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</table>
| **Plenary session 1:** Update on global polio eradication and sustaining polio free Europe | Previsani, Nicoletta Claudia WHO/HQ  
Butler, Robb  
Deshevoi, Sergei WHO/Europe |
| 09:30-10:00 | Update from GPEI, incl. GAPIII                                                            |                                        |
| 10:00-10:30 | Polio programme annual update from the WHO Region Office for Europe                        |                                        |
| **Discussion** |                                                                                           |                                        |
| 10:30-11:00 | Coffee break                                                                              |                                        |
| 11:00-11:30 | Performance of the European Polio Laboratory Network in 2014-2015; containment activities | Gavrilin, Eugene WHO/Europe             |
| **Discussion** |                                                                                           |                                        |
| 11:30-12:00 | Introduction of IPV and switch to bOPV by 2016: status update.                            | Huseynov, Shahin WHO/Europe             |
| **Plenary Session 2:** Sustainability of polio-free Europe: Review of national updated documents and risk assessment | Deshevoi, Sergei WHO/Europe |
| 13:00-13:10 | Introduction to sub-regional review and risk assessment                                     |                                        |
| 12:00-13:00 | Lunch                                                                                      |                                        |
13:10-14:40  - Baltic/Nordic Zone  
- Western Zone  
- Central Zone  
Deshevoi, Sergei  
Jankovic, Dragan  
WHO/Europe

14:40-15:00  
Coffee break

15:00-16:30  - Central Eastern Zone  
- Southern Zone  
- MECACAR Zone  
Jankovic, Dragan  
Huseynov, Shahin  
WHO/Europe

16:30-17:00  
End-of-the-day discussion  
All

17:30-20:00  
Dinner on the occasion of the 28th Meeting of the European Regional Certification Commission for Poliomyelitis Eradication

**Wednesday, 10 June 2015**

**Plenary Session 3: Regional risk mitigation activities**

09:00-11:00  
*Face-to-face meeting with representatives from Bosnia and Herzegovina to discuss current status, and action plan to reduce the risk of wild poliovirus transmission in the country*  
Donato Greco, RCC  
Representatives from Bosnia and Herzegovina

11:00-11:30  
Coffee break

11:30-12:00  
*Updated information on actions and plans for 2015-16 from selected countries (presentations by RCC members 10 minutes; discussion 15 minutes)*  
Romania, Ukraine  
Anton van Loon, RCC  
Huseynov, Shahin  
WHO/Europe

12:00-13:00  
Lunch

13:00-13:30  
*Polio outbreak response and new SOPs from the GPEI*  
Deshevoi, Sergei  
WHO/Europe

13:30-15:00  
*Conclusions of the RVC and recommendations to Member States and WHO*  
Review working procedures of the RCC  
Closing  
RCC, WHO/Europe
Annex 3: List of participants

European Regional Certification Commission (RCC) Members

Prof David M. Salisbury
Chairperson
Wallingford
United Kingdom of Great Britain and Northern Ireland

Prof Donato Greco
Member
National Centre for Epidemiology
Surveillance and Health Promotion
Istituto Superiore di Sanita
Rome
Italy

Prof Tapani Hovi
Member
National Institute for Health and Welfare
Helsinki
Finland

Dr Anton van Loon
Member
VJ Den Dolder
The Netherlands.

Ms Ellyn Ogden
Member
USAID Worldwide Polio Eradication Coordinator
Washington, DC
United States of America

Representatives

Centers for Disease Control and Prevention (CDC)
Deblina Datta
Medical Epidemiologist
Global Immunization Division
Centers for Disease Control and Prevention
Atlanta
United States of America

European Centre for Disease Prevention and Control (ECDC)
Niklas Danielsson
Senior Expert Communicable Diseases
European Centre for Disease Prevention and Control
Solna
Sweden

United Nations Children’s Fund (UNICEF)
Dr Oya Zeren Afsar
Immunization Specialist
UNICEF Regional Office for CEE/CIS
United Nations Children’s Fund
Geneva
Switzerland

Temporary Advisors

The European Regional Verification Commission for Measles and Rubella Elimination (RVC)
Dr Günter Pfaff
Regierungspräsidium Stuttgart
Stuttgart
Germany

Dr Vladan Saponjic
Consultant
Kraljevo
Serbia

Rapporteur

Dr Raymond Sanders
Worcester
United Kingdom of Great Britain and Northern Ireland
World Health Organization

WHO Headquarters
20, Avenue Appia, CH-1211 Geneva 27, Switzerland

Dr Nicoletta Previsani
Technical Officer Containment
Surveillance, Monitoring & Information
Polio Operations & Research

Regional Office for Europe
UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark

Mr Robb Butler
Programme Manager i.a.
Vaccine-preventable Diseases and
Immunization Programme

Dr Sergei Deshevoi
Medical Officer
Vaccine-preventable Diseases and
Immunization Programme

Dr Eugene Gavrilin
Coordinator, EURO Polio Laboratory Network
Vaccine-preventable Diseases and
Immunization Programme

Dr Shahin Huseynov
Technical Officer, VPI CARK
WHO Country Office, Tashkent, Uzbekistan

Dr Dragan Jankovic
Technical Officer
Vaccine-preventable Diseases and
Immunization Programme

Support staff

Mr Mirza Muminovic
Administrative assistant
WHO Country Office for Bosnia and Herzegovina
Representatives from Bosnia and Herzegovina:

Drazenka Malicbegovic
Assistant, Ministry of Civil Affairs of Bosnia and Herzegovina, Sarajevo;

Alen Seranic
Assistant, Ministry of Health and Social Welfare of the Republika Srpska, Banja Luka;

Janja Bojanic
Epidemiologist, Institute of Public Health of the Republika Srpska, Banja Luka;

Jela Acimovic
Epidemiologist, Institute of Public Health of the Federation of Bosnia and Herzegovina, Sarajevo.

Mirsada Mulaomerovic
Epidemiologist, Institute of Public Health of the Federation of Bosnia and Herzegovina, Sarajevo.
The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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