REPORT OF THE 31ST MEETING OF THE EUROPEAN REGIONAL CERTIFICATION COMMISSION FOR POLIOMYELITIS ERADICATION (RCC)

Copenhagen, Denmark
31 May-1 June 2017
Abstract
The 31st RCC Meeting 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 wild poliovirus (WPV) transmission in the WHO European Region in 2016. Bosnia and Herzegovina, Romania and Ukraine remain at high risk of a sustained polio outbreak following importation due to suboptimal programme performance, including low population immunity. In line with the move towards collecting and collating evidence required for global certification, the RCC has progressively adopted an approach to evaluation of annual update reports based on risk-assessment and evidence of risk mitigation. A more stringent application of the risk-assessment approach has resulted in an increase in perceived risk in a number of Member States that had previously been considered at low or intermediate risk. The RCC expressed concern at the number of countries, particularly those at intermediary risk of polio transmission, where vaccine coverage is in decline, and the quality of poliovirus surveillance has declined. The RCC emphasized the importance that all Member States follow the guidelines previously provided on the composition and membership of national certification committees (NCCs) and avoid potential conflict of interest caused by employees of the polio eradication programme, ministries of health or public health institutes serving as members of the NCC.

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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<tr>
<td>AFP</td>
<td>acute flaccid paralysis</td>
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<td>APR</td>
<td>Annual Progress Report</td>
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<td>bOPV</td>
<td>bivalent OPV</td>
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<td>CAG</td>
<td>Containment Advisory Group</td>
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<td>CWG</td>
<td>Containment Working Group</td>
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<td>cVDPV</td>
<td>circulating vaccine-derived poliovirus</td>
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<td>cVDPV1</td>
<td>circulating vaccine-derived poliovirus type 1</td>
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<tr>
<td>cVDPV2</td>
<td>circulating vaccine-derived poliovirus type 2</td>
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<tr>
<td>e-APR</td>
<td>electronic Annual Progress Report</td>
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<td>fIPV</td>
<td>fractional dose IPV</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>GCC</td>
<td>Global Certification Commission</td>
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<td>GPEI</td>
<td>Global Polio Eradication Initiative</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>LDMS</td>
<td>Laboratory Data Management System</td>
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<td>mOPV2</td>
<td>monovalent OPV type 2</td>
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<td>MECACAR</td>
<td>Mediterranean, Caucasus and Central Asian republics subregion</td>
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<td>NAC</td>
<td>National Authority for Containment</td>
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<td>NCC</td>
<td>National Certification Committee</td>
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<td>NPCC</td>
<td>National Poliovirus Containment Coordinator</td>
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<td>NPEV</td>
<td>non-polio enteroviruses</td>
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<td>OPV</td>
<td>oral polio vaccine</td>
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<td>PCR</td>
<td>polymerase chain reaction</td>
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<td>Pol3</td>
<td>Third dose of polio vaccine</td>
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<td>Abbreviation</td>
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<tr>
<td>POSE</td>
<td>polio outbreak simulation exercise</td>
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<td>PV2</td>
<td>poliovirus type 2</td>
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<td>PEF</td>
<td>polio essential facility</td>
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<td>RCC</td>
<td>European Regional Certification Commission for Poliomyelitis Eradication</td>
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<td>SIA</td>
<td>supplementary immunization activities</td>
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<td>tOPV</td>
<td>trivalent OPV</td>
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<td>SL2</td>
<td>Sabin-like type 2 poliovirus</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 poliovirus</td>
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<td>WPV1</td>
<td>wild poliovirus type 1</td>
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<td>WPV2</td>
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Introduction

The 31st Meeting of the European Regional Certification Commission for Poliomyelitis Eradication (RCC) was held from 31 May to 1 June 2017 in Copenhagen, Denmark. Participants were welcomed on behalf of the WHO Regional Director for Europe by Dr Patrick O’Connor, Team Lead, Vaccine-preventable Diseases and Immunization Programme (VPI) of the WHO Regional Office for Europe (Regional Office).

The meeting was opened by RCC Chairman, Professor David Salisbury, who welcomed as an observer Dr Arlene King, Chairperson of the Regional Certification Commission for the Polio Endgame in the Americas, Pan American Health Organization/WHO Region of the Americas. 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

The scope and purpose of the meeting were:

- to brief the RCC on the current global and regional status of poliomyelitis (polio) eradication;
- to review annual progress reports (APRs) on polio eradication activities submitted by national certification committees (NCCs) of all Member States of the WHO European Region for 2016 and assess each Member State’s risk with respect to the sustained transmission of poliovirus in the event of an importation of wild poliovirus (WPV) or circulation of vaccine-derived poliovirus (VDPV);
- to review response and risk mitigation activities conducted in Member States defined to be in the high-risk group;
- to review the current status of regional laboratory containment of poliovirus type 2 (PV2);
- to brief the RCC on situation with availability of inactivated polio vaccine (IPV), and risks caused by global supply constraints;
- to update the RCC on post-switch polio outbreak response standard operation procedures (SOPs) of the Global Polio Eradication Initiative (GPEI);
- to recommend to the Regional Office strategies and/or actions to strengthen efforts to sustain polio-free status of the European Region (the Region) focusing on high-risk countries;
- to review working procedures of the RCC and to discuss a plan of activities for 2017-2018.
Plenary session 1: Update on global polio eradication and sustaining the European Region’s polio-free status

Update from WHO headquarters and GPEI

As of 30 May there had only been five WPV-associated cases reported in 2017, restricted to Afghanistan and Pakistan. In the 12-month period June 2016 to May 2017, 25 WPV type 1 (WPV1)-associated cases were detected, 4 of which in Nigeria and the remainder in Afghanistan and Pakistan. The last detected WPV1-associated case in Nigeria had onset of paralysis on 21 August 2016. The most recently detected cases in Afghanistan and Pakistan had dates of onset in February 2017. In the same period, 6 circulating VDPV (cVDPV)-associated cases were detected, 1 in Nigeria, 4 in Democratic Republic of Congo and 1 in Pakistan. In addition to the detection of polio cases, both WPV and cVDPV were detected through environmental surveillance. A total of 90 WPV-positive environmental samples were detected in Afghanistan and Pakistan over the year, with the most recent positive samples at the time of the meeting being collected in May 2017. In addition, 4 cVDPV-positive environmental samples were detected in Pakistan up until April 2017.

By implementing a number of new strategies, including the ‘Reach Every Settlement’ strategy, Nigeria’s immunization programme has gained access to more than 2000 communities that had been inaccessible for more than two years. However, between 285 000 and 445 000 children below 5 years of age remain potentially unreached by immunization services.

Six countries conducted supplemental immunization activities (SIAs) using monovalent oral polio vaccine type 2 (mOPV2) after the globally synchronized withdrawal of trivalent oral polio vaccine (tOPV) in April 2016. The use of mOPV2, supplied from the global stockpile, was intended to halt transmission of cVDPV type 2 (cVDPV2). There is currently no evidence to support the contention that use of mOPV2 exacerbates the emergence of cVDPV2, but several countries are now resistant to using mOPV2 in response to a cVDPV2 emergence. Monitoring for Sabin-like type 2 polioviruses continues globally, with virus detected in acute flaccid paralysis (AFP) cases for a few weeks after the SIA, and detected in environmental samples for several weeks longer.

The first phase of laboratory containment of PV2 is ongoing and countries are in the process of preparing inventories of any retained stocks for either their destruction or transfer to certified polio essential facilities (PEFs). The process of certifying nominated PEFs is ongoing. As of 31 May 2017, notification had been received from 205 Member States and territories, of whom 29 had notified of their intention to retain stocks of WPV type 2 (WPV2) and had designated 78 PEFs worldwide. New developments in the containment process included expanded terms of references of the Global Commission for the Certification of Polio Eradication (GCC), establishment of the WHO Containment Working Group (CWG) and the Containment Advisory Group (CAG). Guidance for non-polio facilities with potentially infectious materials were to be submitted to the CAG in June 2017. Countries using mOPV2 will need to wait up to three months after the last use of mOPV2 to complete the initial phase of PV2 containment.

The polio transition planning process is underway by developing mechanisms to maintain essential functions to sustain a polio-free world as funding provided through the Global Polio Eradication Initiative is withdrawn. The process is complicated by the recognition that in many countries the GPEI currently supports activities that may be critical to health programmes. The country planning
process, developing national transition plans, began in April 2017 involving 16 selected countries with a combined total population of over 2 billion.

Immediate challenges for the global programme include gaining full access to children in Nigeria, reaching mobile populations and improving programme performance in the last remaining WPV reservoirs in Afghanistan and Pakistan. Another challenge is to conduct risk assessments in priority countries and establish a multi-agency surveillance task team to work with regions and countries to identify weaknesses and develop plans to address these areas. The GPEI continues to work to fully fund the programme through the end of 2020, and plans are in place to address the current USD 1 billion funding shortfall.

**Polio programme annual update from the WHO Regional Office for Europe**

A total of 19 Member States in the Region successfully withdrew tOPV in April 2016. Belarus and Poland switched to the use of IPV only, while the remaining 17 Member States switched to bOPV. The Regional Office received confirmation of disposal of tOPV from all OPV-using Member States. A Sabin-like type 2 virus (SL2) was detected in the Russian Federation in October 2016, and the national authorities were requested to re-check the North Caucasus region to determine if any facilities were retaining and using tOPV. No remaining stocks of tOPV were reported. Forty-eight Member States in the Region have now introduced at least one dose of IPV, but introduction has been delayed in five Member States (Kyrgyzstan, Republic of Moldova, Tajikistan, Turkmenistan and Uzbekistan) due to global IPV supply issues. According to the global prioritization scheme, these five countries are considered to be at low risk for cVDPV2 transmission, and are not expected to receive IPV until 2018. In the interim, these countries have been encouraged to maintain high bOPV coverage, enhance polio surveillance and conduct polio outbreak simulation exercise (POSE) activities and additional outbreak response training. When IPV does become available these countries will need to conduct catch-up immunization activities to cover cohorts that do not have type 2 protection. Use of fractional dose IPV (fIPV) is not considered in these countries because it would involve off-label use of vaccines, which is unacceptable according to national regulations.

Detection of WPV1 in Afghanistan, approximately 2km from the border with Tajikistan, resulted in enhanced surveillance in Tajikistan, Turkmenistan and Uzbekistan, and the authorities in Tajikistan organized an SIA with WHO support targeting children <5 years of age in the border areas at the end of April and beginning of May 2017. Coverage in both rounds was reported to exceed 98.6%.

Collaboration with the WHO Regional Office for the Eastern Mediterranean in providing services for Syria continues, with establishment of an office in Gaziantep, Turkey, and coordination of immunization and surveillance activities in the border areas and northern Syria. Polio specimens from Syria continue to be tested in the polio laboratory in Ankara, Turkey.

The Regional Office for Europe currently has eight staff positions throughout the Region funded in whole or in part by the GPEI, and global funds are used to support specific functions, including laboratory-based surveillance, laboratory containment and some risk-mitigation activities. Since the Region has effectively been ‘ramping down’ reliance on global polio funds since regional certification in 2002, and most of the polio assets have already been transitioned to other programmes, the anticipated decline in global polio funding is not expected to be particularly onerous. The regional
budget for polio for 2018-2019 is, by global standards, relatively small and is expected to be stable and will be maintained.

Performance of the European Polio Laboratory Network in 2016-2017 and the current status of containment achievements

There are currently officially 47 polio laboratories in the European Polio Laboratory Network, with an additional laboratory in Donetsk, Ukraine. All 47 laboratories were fully accredited for 2016-2017. The average weekly workload across the network is approximately 200 samples, with no discernible seasonal workload variation. It is of programmatic concern that, despite requests made, neither the United Kingdom nor France provides routine reporting of laboratory results through the Laboratory Data Management System (LDMS).

The vast majority of poliovirus isolates detected in the Region are Sabin-like, with the occasional VDPV isolates detected. Isolates come from AFP surveillance, enterovirus surveillance and environmental surveillance, with the environmental surveillance providing the highest proportion of polio-positive samples. However, the polio positivity rate from environmental samples is extremely varied, with a multitude of confounding factors, including site selection, sample collection and catchment population, which can enhance or reduce proportional positivity. It was also noted that a significant proportion of countries provide data on enterovirus surveillance. Since enteroviruses represent a rather broad spectrum of clinical conditions, Member States will be requested to demonstrate that all non-typed enteroviruses isolated from patients with polio-compatible clinical conditions where aetiology was not established are screened to exclude poliovirus.

There has been close monitoring for SL2 isolates since the tOPV withdrawal took place in April 2016 and, following a sharp decline in detections during the first few weeks after the switch to bOPV, few isolates have been detected. Isolation of VDPVs has continued, with isolates coming not only from samples collected in the European Region but also from samples from selected sites in the Eastern Mediterranean Region. The majority of VDPV isolates originate from chronic excretors, mainly from individuals known to be suffering from primary immunodeficiency disorders.

In April 2017 there was a containment breach in a vaccine production facility in the Netherlands that resulted in release of WPV2. Two operators were present in the immediate vicinity at the time of the containment breach and one of these was infected. Both operators were closely monitored for infection and environmental surveillance around the residence of the operators was established. The infected individual stopped excreting poliovirus by the end of April 2017 and environmental surveillance ceased after the first week of May 2017. WHO is concerned that environmental surveillance was stopped too soon after the event and should have been continued for several more weeks.

All 47 laboratories in the network have switched to the new laboratory diagnostic algorithm for detection and characterization of polioviruses, providing more poliovirus-specific results in a shorter timeframe than the previous algorithm used. However, this has also resulted in a reduction in the non-polio enterovirus detection rate in network laboratories. The next step is to prepare the network for direct detection of poliovirus without the requirement for cell culture, making laboratory containment easier to manage in the long term. In preparation for this, plans are being
developed to equip every laboratory in the network with the capacity to conduct poliovirus
detection and identification using polymerase chain reaction (PCR).

Thirteen Member States, of which 10 in the European Union, have provided notification that they
intend to establish PEFs. Establishing a system for independent certification of PEFs according to
international requirements is not a simple undertaking and WHO is looking to collaborate with a
number of European bodies to synergize activities. The certification process is conducted within the
countries by a National Authority for Containment (NAC). Most countries with PEFs have already
established fully functional NACs, others have functional NACs that lack formal government approval.
Three countries with PEFs are yet to establish NACs. Several Member States have signalled their
intention to establish PEFs without deciding on the number of facilities they will require; the
estimated number of such facilities is 39. It is possible that this number will increase due to
commercial interests and future vaccine manufacturing.
Plenary Session 2: Sustainability of polio-free status in Europe: Review of national documentation and risk assessment for 2016 by subregions

Modifications to the APR and receipt of reports

Minor editorial changes were introduced into the APR for 2016, including an update of the section covering supplementary surveillance. Sections on laboratory containment and updating of the national plan of action were substantially revised. Reports for 2016 were received from all 53 Member States, but only 24 submitted APRs before the agreed deadline of 15 April, and 10 were received after 15 May. As in previous years, the risk assessment algorithm was used to evaluate information provided in the APRs against surveillance performance and population immunity criteria to determine each country's risk status with respect to transmission of poliovirus in the event of an importation. The risk status was raised for countries that failed to provide adequate supplementary information such as an updated preparedness plan.

The results of the risk analysis for countries of the Region are shown in Annex 1.

Nordic/Baltic subregion

Based on the information provided, the RCC concluded that the probability was high that WPV had not been circulating in the subregion in 2016 and that WPV importation or circulation of VDPV, if any, would have been detected promptly by existing health/surveillance systems. The assessed risk of transmission following importation of WPV or circulation of VDPV in individual countries of this subregion ranges from low to high. It is of concern that Denmark and Iceland have no action plans for outbreak response. The RCC noted the apparent significant decline in reported vaccination coverage in Finland, but accepts this may be a temporary artefact resulting from switching away from coverage survey estimates to use of the Finnish Vaccine Registry. NCC members for Estonia, Latvia and Lithuania include employees of national immunization and surveillance systems and, as such, have potential conflicts of interest that need to be addressed.

Feedback to the countries

- Denmark – is again considered to be at intermediate risk for transmission due to suboptimal reported population immunity and absence of a national action plan for outbreak response in line with the GPEI SOPs. The RCC acknowledged that changing to an electronic data collection system resulted in a temporary underestimation of vaccination coverage in 2015, and that this problem had since been corrected. However, the level of vaccination coverage reported for 2016 is still suboptimal at 91% and efforts are required to raise this level. The RCC would appreciate receiving greater detail on activities undertaken to address vulnerable populations, including refugees and migrants, and the outcomes achieved in providing immunization services appropriate to the needs of these populations.
- Estonia – is considered to be at low risk. However, contrary to WHO recommendations, all NCC members are employed in polio eradication activities, presenting a potential conflict of interests. This situation needs to be addressed, with replacement of NCC members who have potential conflicts of interest, before the APR for 2017 is prepared and submitted.
• Finland – is considered to be at intermediate risk due to reported population immunity well below 95%. The RCC recommends that either the level of vaccination coverage be raised or, if the true rate is high, that the NCC submit additional information demonstrating the actual vaccination coverage level. The RCC would appreciate receiving greater detail on activities undertaken to address vulnerable populations, including refugees and migrants, and the outcomes achieved in providing immunization services appropriate to the needs of these populations.

• Iceland – was provisionally considered to be at high risk of poliovirus transmission because of the lack of information provided to the RCC for assessment. Having submitted additional information and clarifications following the RCC meeting, Iceland is now considered to be at intermediate risk due to coverage below 95%, with some subnational coverage below 90% and average enterovirus surveillance. Since Iceland’s immunization schedule recommends that the third dose of polio vaccine be given at 12 months of age (which makes it impossible to have complete data on coverage at 12 months), Iceland is strongly encouraged to provide information on the third dose coverage at two years of age in future.

• Latvia – is considered to be at low risk and the RCC commends Latvia for conducting their POSE exercise in November 2016. However, three of seven NCC members are employed in polio eradication activities, presenting a potential conflict of interests. This situation needs to be addressed, with replacement of NCC members who have potential conflicts of interest, before the APR for 2017 is prepared and submitted.

• Lithuania – is considered to be at low risk. However, the updated national action plan needs to be provided for evaluation. Seven of ten members of the NCC are currently employed in the immunization programme, presenting potential conflicts of interest. This situation needs to be addressed, with replacement of NCC members who have potential conflicts of interest, before the APR for 2017 is prepared and submitted. The RCC is also concerned that PV2 is being retained in the national laboratory in the absence of adequate containment conditions. This situation should be addressed as a matter of urgency to remove the risk of laboratory-associated transmission: all PV2 must be destroyed with a formal confirmation being sent to the Regional Office.

• Norway – the risk of poliovirus transmission has been assessed as low, however, the updated national action plan needs to be provided for evaluation. The RCC would appreciate receiving greater detail on activities undertaken to address vulnerable populations, including refugees and migrants, and the outcomes achieved in providing immunization services appropriate to the needs of these populations.

• Sweden – is considered to be at low risk. The RCC would appreciate seeing details in the national action plan on the nature and source of polio vaccine to be used in responding to potential outbreaks. The RCC would also appreciate receiving greater detail on activities undertaken to address vulnerable populations, including refugees and migrants, and the outcomes achieved in providing immunization services appropriate to the needs of these populations.

Western subregion

Based on available information, the RCC concluded that the probability was high that WPV had not been circulating in this subregion in 2016 and that suspected case of polio would have been detected by existing health services. The assessed risk of transmission following importation of WPV
or circulation of VDPV in individual countries of this zone ranges from intermediate to high risk. AFP surveillance has been practically abandoned in the subregion but appears to have been effectively substituted by systematic nationwide supplementary surveillance in a few of the countries. At least eight countries in the subregion are known to have sizable vulnerable populations, in some cases associated with a recent influx of migrants, but the annual reports fail to document these vulnerable populations or the activities undertaken to provide appropriate vaccination cover. It is of concern to the RCC that three of seven AFP cases investigated in Ireland were above one year of age but had no record of receiving any doses of polio vaccine. It is also of concern that Luxemburg, Monaco and Switzerland lack appropriate action plans for outbreak response, and the plan provided by Austria is very superficial and lacking in detail. Copies of the action plans for France, Germany and Ireland were not provided with the APR. Four of the countries in the subregion (Belgium, France, Netherlands and United Kingdom) retain laboratory stocks of PV2 and have established PEFs. Potential conflicts of interest exist in the composition of the NCCs in Belgium, Germany, Ireland, Luxembourg, Netherlands and Switzerland.

Feedback to the countries

- **Austria** – is considered to be at intermediate risk based on its failure to provide vaccination coverage information. AFP surveillance is considered to be very insensitive and little information is provided on supplementary surveillance and its performance. The RCC recommends that the APR for 2017 contain detailed information on vaccination coverage, including the percentage of districts with the third dose of polio vaccine (Pol3) coverage <90%, and the requested information on laboratory-based supplementary surveillance activities and their results. The RCC would also appreciate receipt of a detailed national action plan for outbreak response in line with the GPEI SOPs.

- **Belgium** – is considered to be at intermediate risk because of the apparent lack of adequate surveillance, either for AFP or for enteroviruses. Once again the NCC is urged to provide data demonstrating that effective surveillance is being conducted. Contrary to WHO recommendations, 5 of 33 NCC members are actively employed in polio eradication activities, presenting potential conflicts of interests. This situation needs to be addressed, with replacement of NCC members who have potential conflicts of interest, before the APR for 2017 is prepared and submitted. As Belgium is hosting one of the leading IPV manufacturers and decided to retain PV2 stocks in a number of PEFs, the RCC urges that a NAC be recognized as soon as possible to initiate the PEF certification process.

- **France** – is considered to be at intermediate risk because of its failure to provide data on the vaccination coverage rate for 2016 and failure to provide a national action plan for outbreak response. The RCC noted again that the report failed to include information on vaccination coverage of vulnerable groups, including migrants, and would appreciate receiving this information in future reports.

- **Germany** - is considered to be at intermediate risk due to failure to provide data on the vaccination coverage rate for 2016. The RCC would also appreciate receipt of a detailed national action plan for outbreak response in line with the GPEI SOPs.

- **Ireland** – is considered to be at intermediate risk due to insufficient vaccination coverage and suboptimal surveillance for polio. The RCC would also appreciate receipt of a detailed national action plan for outbreak response in line with the GPEI SOPs.
• Luxembourg – is considered to be at intermediate risk due to suboptimal quality surveillance. Furthermore, the country has no action plan for polio outbreak response and is urged to establish a plan in line with the GPEI SOPs as soon as possible. Once again the general quality of the annual report provided is not high, and the RCC notes the lack of a statement from the NCC.

• Monaco – is considered to be at intermediate risk due to its failure to provide information on surveillance for polio and lack of an action plan for polio outbreak response. The NCC is urged to develop an appropriate plan in line with the GPEI SOPs as soon as possible.

• Netherlands – is considered to be at intermediate risk due to suboptimal vaccination coverage and a reported 2.2% of the population in districts with Pol3 coverage <90%. As the Netherlands decided to retain laboratory stocks of PV2 and nominated PEFs, the RCC urges that an NAC be established as soon as possible.

• Switzerland – is again considered to be at intermediate risk due to ongoing poor-quality surveillance and continued lack of a polio outbreak response plan. The RCC recommends that the country establish a detailed national action plan for outbreak response in line with the GPEI SOPs as soon as possible.

• United Kingdom – is considered to be at low risk. However the RCC noted the apparent decline in vaccination coverage which, if permitted to continue, will result in suboptimal coverage. RCC acknowledges the progress met by United Kingdom in poliovirus containment, however, urges that a NAC be fully empowered as soon as possible to initiate the PEF certification process.

Central subregion

Based on information available, the RCC concluded that the probability was high that WPV had not been circulating in the subregion in 2016 and that WPV importation or circulation of VDPV, if any, would have been detected by existing health/surveillance systems. The risk of transmission following importation of WPV or circulation of VDPV in countries of this zone is low to intermediate, due to generally good immunization systems, recognition and addressing of high-risk groups, and the presence of low- to good-quality surveillance. Of some concern are Hungary and Poland with poorly performing AFP surveillance and no evidence presented for effective supplementary surveillance systems. Evidence for suboptimal immunization coverage at subnational level in Bulgaria is also of concern. Belarus and Hungary retain laboratory stocks of PV2 and have established PEFs. Some NCC members for Czech Republic and Hungary are currently employed in national polio eradication activities and, as such, have potential conflicts of interest that need to be addressed. Reports were received from Bulgaria and Poland only immediately before the start of the meeting and neither can be considered to be finalized, pending an NCC conclusion or approval.

Feedback to the countries

• Belarus – is considered to be at low risk. The RCC would appreciate receipt of a detailed national action plan for outbreak response. The RCC commends Belarus on the quality of supplementary surveillance conducted.

• Bulgaria – is regarded as being at intermediate risk due to suboptimal population immunity, particularly due to low immunization coverage at subnational territories with populations of
significant size. The RCC would appreciate receiving the final APR, including the statement from the NCC.

- **Czech Republic** – is considered to be at low risk but the RCC would appreciate receiving vaccine coverage data for 2016. The RCC would appreciate more detail on supplementary surveillance activities conducted. Contrary to WHO recommendations, members of the NCC are currently employed in the national immunization programme, presenting potential conflict of interest. This situation needs to be addressed, with replacement of NCC members who have potential conflicts of interest, before the APR for 2017 is prepared and submitted.

- **Hungary** – is considered to be at intermediate risk. The RCC is concerned over the less than optimal AFP surveillance, and given the location within Europe, again urges Hungary to make every effort to improve the quality of surveillance. The RCC draws to the attention of the national health authorities that high population immunity and high-quality polio surveillance are prerequisite for establishing a PEF. Establishing a PEF in a country with sub-optimal surveillance would constitute a significant risk and may be the reason the GCC did not endorse certification of a PEF in Hungary. The RCC requests Hungary to submit its national action plan for outbreak response as a matter of urgency. Contrary to WHO recommendations, members of the NCC are actively employed in the national immunization programme, presenting potential conflicts of interest. This situation needs to be addressed, with replacement of NCC members who have potential conflicts of interest, before the APR for 2017 is prepared and submitted.

- **Poland** – is considered to be at intermediate risk due to less than optimal AFP surveillance and the failure to respond adequately to outbreaks of other vaccine-preventable diseases. The RCC urges Poland to submit the national action plan for outbreak response as a matter of urgency.

- **Slovakia** – is considered to be at low risk. The RCC noted that efforts should be made to improve AFP surveillance quality but RCC commends Slovakia on the quality of supplementary surveillance conducted.

- **Slovenia** – is considered to be at low risk. However, the RCC is concerned that a number of indicators continue to decline, including quality of surveillance and vaccination coverage.

**Southern subregion**

Based on the information available, the RCC concluded that the probability was high that WPV had not been circulating in the subregion in 2016 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 ranges from low to provisionally high. A broad issue of concern is the general suboptimal quality of surveillance, particularly in Croatia and Portugal. Greece is of particular concern because for the third year in succession it has failed to provide data on vaccination coverage. Italy is of concern because of the indication of a continuing decrease in immunization coverage with average surveillance quality, and San Marino has continued to report very low vaccination coverage figures. Cyprus failed to provide immunization coverage data for 2016. Croatia, Italy and Spain retain laboratory stocks of PV2 and Croatia and Italy have established PEFs. NCC members in Croatia and Israel are actively employed in national polio eradication activities and, as such, have potential conflicts of interest that need to be addressed. APRs were received from Andorra and San Marino only immediately before the start of
the meeting, and the San Marino report remained in draft format during the RCC meeting. The report from Italy was received from the Ministry of Health as Italy still did not have a nominated NCC.

Feedback to the countries

- Andorra – is considered to be at low risk, but the RCC is concerned that more effort is required to confirm the lack of AFP cases and improve polio surveillance. Considering the increasing importance of poliovirus containment activities, the RCC strongly recommends that Andorra nominate a National Poliovirus Containment Coordinator (NPCC).

- Croatia – is considered to be at intermediate risk on the basis of suboptimal population immunity, particularly due to low immunization coverage in a few subnational territories with populations of significant size. Evidence for declining coverage is of great concern. The Ministry of Health and the NCC should take note that additional efforts are required to improve vaccination coverage or Croatia will be considered at high risk next year. The RCC draws to the attention of the national health authorities that high population immunity and high-quality polio surveillance are prerequisites for establishing a PEF. Establishing a PEF in a country with suboptimal vaccination coverage would constitute a significant risk and may be the reason that the GCC would not endorse certification of a PEF in Croatia. Contrary to WHO recommendations, members of the NCC are employed in polio eradication activities, presenting potential conflicts of interest. This situation needs to be addressed, with replacement of NCC members who have potential conflicts of interest, before the APR for 2017 is prepared and submitted.

- Cyprus – is considered to be at intermediate risk due to RCC concerns over reliability of the polio vaccination coverage estimates provided.

- Greece – was provisionally considered to be at high risk because the NCC failed to provide meaningful data on population immunity for the past three years, the immunization activities in response to the large influx of refugees and migrants entering Greece over the past three years, and there appeared to be no national action plan for outbreak response. However, after considering additional information and clarifications submitted by the NCC following the meeting, including the detailed national action plan for outbreak response, the RCC concluded that Greece is at intermediate risk.

- Israel – is considered to be at low risk but the RCC is concerned about the apparent decline in the quality of polio surveillance. Contrary to WHO recommendations, members of the NCC are employed in polio eradication activities, presenting potential conflicts of interest. This situation needs to be addressed, with replacement of NCC members who have potential conflicts of interest, before the APR for 2017 is prepared and submitted.

- Italy – Based on the additional information provided by the Ministry of Health after the meeting, the RCC concluded that, if Italy had an NCC, it would have been assessed as being at intermediate risk based on suboptimal and declining vaccination coverage and suboptimal AFP surveillance in the absence of effective supplementary surveillance. The RCC was not able to issue a formal risk assessment in the absence of an NCC. The Italian Ministry of Health has committed to submit a detailed national action plan for outbreak response in line with the GPEI SOPs by November 2017. The RCC understands the challenges faced by Italy in establishing an independent NCC, and nevertheless urges the country to establish an independent NCC and replace the current Polio Working Group members who have
potential conflicts of interest, before the APR for 2017 is prepared and submitted. The RCC draws to the attention of the national health authorities that high population immunity and high-quality polio surveillance are prerequisites for establishing a PEF. Establishing a PEF in a country with suboptimal vaccination coverage and low-quality surveillance would constitute a significant risk and may be the reason for the failed endorsement of a PEF certificate by the GCC.

- Malta – is considered to be at low risk, but the RCC is concerned over the suboptimal AFP surveillance in the absence of supplementary surveillance. Considering the increasing importance of poliovirus containment activities, the RCC strongly recommends that Malta nominate an NPCC.
- Portugal – has been assessed as intermediate risk based on poor-quality AFP surveillance in the absence of adequate documentation on the quality of any supplementary surveillance.
- San Marino – was provisionally considered to be at high risk on the basis of suboptimal vaccination coverage, the absence of polio surveillance and lack of a national action plan for outbreak response. However, after considering additional information and clarifications submitted by the NCC following the meeting, including the detailed national action plan for outbreak response in line with the GPEI SOPs, the RCC concluded that San Marino is at intermediate risk. Considering the increasing importance of poliovirus containment activities the RCC strongly recommends to nominate an NPCC.
- Spain – has been assessed as low risk but the RCC is concerned about the suboptimal polio surveillance conducted.

Central-eastern subregion

Based on the information available, the RCC concluded that it was unlikely that WPV had been circulating in this subregion in 2016 and that despite suboptimal polio surveillance, WPV importation or circulation of VDPV, would have been detected by existing health/surveillance systems. The assessed risk of transmission following importation of WPV or circulation of VDPV in countries of this zone ranges from low to high. Due to suboptimal immunization services the risk of spread following importation of WPV or cVDPV remains high in Romania, Ukraine and Bosnia and Herzegovina. Suboptimal immunization coverage in many of the countries in this subregion is of major concern. The RCC is also concerned that WPV2 is being retained in Romania in the absence of adequate containment conditions and in Serbia in the absence of a nominated National Authority for Containment (NAC). NCC members in Bosnia and Herzegovina are actively employed in national immunization programmes and, as such, have potential conflicts of interest that need to be addressed.

Feedback to the countries

- Albania – is considered to be at low risk but the RCC is concerned that the APR for 2016 was submitted very late and is of low quality. The RCC requests that this be rectified next year and the report be provided well in advance of the meeting. The RCC also requests that the national action plan for outbreak response be updated and sent to the WHO Secretariat for review.
- Bosnia and Herzegovina – is considered to be at high risk due to suboptimal vaccine coverage, including among vulnerable groups, low-quality AFP surveillance and failure to
mount an adequate response to outbreaks of other vaccine-preventable diseases in the past three years. The RCC would appreciate receipt of a detailed and updated national action plan for outbreak response in line with the GPEI SOPs. Contrary to WHO recommendations, members of the NCC are actively employed in national immunization programme, presenting potential conflicts of interest. This situation needs to be addressed, with replacement of NCC members who have potential conflicts of interest, before the APR for 2017 is prepared and submitted.

- The former Yugoslav Republic of Macedonia – is considered to be at low risk. The RCC would appreciate receipt of an updated national action plan for outbreak response in line with the GPEI SOPs.
- Republic of Moldova – is considered to be at intermediate risk due to suboptimal population immunity. The RCC urges that efforts be made to increase vaccine coverage to the levels achieved in past years.
- Montenegro – is considered to be at intermediate risk due to sub-optimal population immunity that appears to be declining further. The RCC urges that every effort be made to increase the level of vaccine coverage in all groups and sub-national areas. Surveillance for polio, either AFP surveillance or supplementary surveillance, appears to be limited, and the country is urged to strengthen surveillance as a matter of urgency. The RCC also urges that a National Polio Containment Coordinator (NPCC) be nominated as a matter of urgency. RCC commends Montenegro for conducting national POSE exercise in December 2016
- Romania – is considered to be at high risk due to low population immunity, suboptimal quality of surveillance and the failure to mount an adequate response to outbreaks of other vaccine-preventable diseases in the past three years. Given the location within Europe, the RCC urges Romania to make every effort to increase the level of population immunity and improve the quality of surveillance. Furthermore, the RCC draws to the attention of the national health authorities that high population immunity and high-quality polio surveillance are prerequisites for establishing a PEF. Without these in place, compliance with the global poliovirus containment requirements will not be possible and the GCC may not endorse certification of a PEF.
- Serbia – is considered to be at intermediate risk due to suboptimal vaccine coverage and less than adequate surveillance. The RCC draws to the attention of the national health authorities that are prerequisites for establishing a PEF. Without them in place, compliance with the global poliovirus containment requirements will not be possible and the GCC may not endorse certification of a PEF. The RCC urges that an NAC be established as soon as possible to initiate the PEF certification process should it be decided to proceed given the current circumstances.
- Ukraine – is considered to be at high risk due to low vaccination coverage and the failure to mount an adequate response to outbreaks of vaccine-preventable diseases in the past three years. The RCC recognizes that some positive actions have been undertaken to improve the situation and looks forward to receiving the 2017 report describing those improvements (see more comments on the face-to-face meeting with representatives from Ukraine on page 18). The RCC urges that an NPCC be nominated as soon as possible to ensure the proper communication and advocacy on poliovirus containment activities in Ukraine.
**MECACAR subregion**

Based on information available, the RCC concluded that the probability was high that WPV had not been circulating in the subregion in 2016 and that WPV importation or circulation of VDPV, if any, would have been detected promptly by existing health/surveillance systems. The assessed risk of transmission following importation of WPV or circulation of VDPV in countries of this zone is low to intermediate. Primary areas of concern include the declining vaccination coverage in Kazakhstan resulting from problems encountered in vaccine procurement and the potential accumulation of age cohorts susceptible to PV2 in Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan due to delays in IPV introduction until 2018. The low virus isolation rate reported by most countries in this subregion, particularly the low isolation rates from stool specimens, is of concern to the RCC and requires further explanation as to possible causes. Several NCC members in Armenia and Tajikistan are currently employed in national immunization programmes and, as such, have potential conflicts of interest that need to be addressed.

Feedback to the countries

- Armenia – is considered to be at low risk. Contrary to WHO recommendations members of the NCC are actively employed in polio eradication activities, presenting potential conflicts of interest. This situation needs to be addressed, with replacement of NCC members who have potential conflicts of interest, before the APR for 2017 is prepared and submitted. The RCC would also appreciate receipt of a detailed, updated national action plan for outbreak response in line with the GPEI SOPs.
- Azerbaijan – is considered to be at low risk.
- Georgia – is considered to be at intermediate risk. The RCC is concerned about evidence of inadequate vaccination coverage and urges that efforts be made to improve routine immunization coverage.
- Kazakhstan – is considered to be at intermediate risk due to a decline in vaccination coverage associated with problems encountered in procurement of vaccines. The RCC would also appreciate receipt of a detailed national action plan for outbreak response in line with the GPEI SOPs.
- Kyrgyzstan – is considered to be at low risk. Considering the increasing importance of poliovirus containment activities, the RCC strongly recommends that Kyrgyzstan nominate an NPCC.
- Russian Federation – is considered to be at low risk (more comments from a face-to-face meeting with representatives from Russian Federation are included on page 19).
- Tajikistan – is considered to be at low risk. Contrary to WHO recommendations one member of the NCC is currently employed in polio eradication activities, presenting a potential conflict of interest. This situation needs to be addressed, with replacement of the NCC member who has a potential conflict of interest, before the APR for 2017 is prepared and submitted. Considering the increasing importance of poliovirus containment activities, the RCC strongly recommends that Tajikistan nominate an NPCC.
- Turkey – is considered to be at low risk. The RCC is concerned, however, about the evidence for declining quality of AFP surveillance and urges Turkey to take appropriate steps to improve polio surveillance.
• Turkmenistan – is considered to be at low risk. The RCC would appreciate receipt of a detailed national action plan for outbreak response in line with the GPEI SOPs.
• Uzbekistan – is considered to be at low risk.
Plenary Session 3: Regional risk mitigation activities

Developing online annual reporting system on polio eradication activities (e-APR)

A project has been initiated to improve and streamline the annual progress reporting process by switching from a paper-based reporting system to an online system (e-APR). All work has been conducted in-house by the WHO Secretariat, starting in March 2017 with the initial determination of system requirements and design of software necessary to establish a web-based system compatible with the existing information technology infrastructure within the WHO Regional Office. Software development was planned to continue through July, and beta-testing until the end of the year. It is intended that the system will be ready for pilot testing at the start of 2018. Further versions of the system are at the planning stage, and these will be developed following finalization and testing of the initial version.

In addition to streamlining the reporting process, the e-APR offers the potential advantages of having the national database always available and accessible to national authorities, the NCC and the WHO Secretariat, and the potential to link the evidence base more effectively to the risk assessment process. Discussions have started with PAHO on developing a common approach to e-APRs, but developing a common approach to reporting and risk assessment across all WHO regions will require a champion at WHO global level.

Polio Outbreak Simulation Exercises (POSE): 2016-2017

The WHO Regional Office has now developed three POSE models, for use at national, intercountry and interregional levels. An intercountry ‘POSE+’ was introduced in August 2016 with the aim of outlining the requirement for a new outbreak response action plan in line with the GPEI SOPs. POSE+ considered five different outbreak scenarios: detection of an ambiguous VDPV (aVDPV), detection of cVDPV, detection of WPV-associated cases and detection of WPV in the environment. A workshop on POSE+ conducted in Kazakhstan in August 2016 permitted cross-country review and evaluation of draft action plans and development of revised plans by all countries present (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan). National POSE workshops were conducted in Azerbaijan and Latvia (both in November 2016), Montenegro (in December 2016) and Tajikistan (in March 2017).

It has now been deemed necessary to tailor POSE more specifically to the risks faced by different countries. Every Member State should be conducting frequent POSE activities, bearing in mind that not every country is exposed to the same risks. For Member States bordering, or with epidemiological links to, remaining endemic foci of poliovirus, POSE should continue to focus on risks associated with spread of imported virus. For Member States that were recently using OPV and achieving sub-optimal coverage, POSE should focus on the risks associated with VDPV emergence and spread. For those Member States that host IPV manufacturing facilities and/or PEFs, the POSE should focus on risks presented by a potential breach of facility containment.
Session 4: Meetings with representatives from Russian Federation and Ukraine

Face-to-face meeting with representatives from Russian Federation to review response to VDPV2 events

Following detection of two genetically related VDPV2 isolates in Moscow and in the Chechen Republic of the Russian Federation in September and December 2016, authorities mounted a full, detailed epidemiological investigation and risk assessment of the Chechen Republic. Transient immunodeficiency was confirmed in the second VDPV2 case. In extensive testing of contacts and environmental surveillance, no other VDPV2 isolates were recovered, strongly suggesting no further transmission of the virus. In response to the detections, poliovirus surveillance was enhanced throughout the North-Caucasian region, additional training in polio diagnosis, prevention and surveillance were provided to health care workers, and supplementary immunization activities with IPV were undertaken.

The RCC concluded that appropriate and effective action had been taken by the Russian authorities and there was no evidence for further transmission of the virus. Mop-up vaccination activities and the additional measures undertaken to detect any additional instances of infection were appropriate and effective. The event underscores the importance of maintaining high population coverage in all subnational districts and of ensuring all children receive vaccination in a timely manner. Based on the extensive available data it is not possible to definitively classify the VDPV2 virus isolated as circulating, so it remains unclassified.

Face-to-face meeting with representatives from Ukraine to review cVDPV type 1 outbreak response activities, risks and mitigation activities

Following the cVDPV type 1 (cVDPV1) outbreak in Ukraine in 2015, and receipt of evidence from the Ukraine authorities that transmission had been halted, the RCC requested at its 30th meeting in 2016 a 12-month status update by October 2016 providing additional strong evidence that polio surveillance and vaccination coverage levels were adequate to protect against further outbreaks. While the RCC accepted that the cVDPV1 had indeed been halted in Ukraine, serious concerns continued over the ongoing poor performance of the polio programme in particular, and provision of immunization services in general.

The RCC greatly appreciated the open and honest approach to discussion of major programmatic problems presented by the representatives from Ukraine. The RCC was highly concerned that significant vulnerabilities in the immunization programme remain in Ukraine, with fundamental problems in measuring vaccine coverage and in determining who has received the vaccine. Vaccine procurement problems do not appear to have been resolved and from information available it appears that a significant proportion of the population remains unprotected. Proposed changes to the administrative structure of health services in Ukraine, with the potential severing of the linkage between disease surveillance and outbreak response, are very worrying.

The RCC has considered Ukraine to be at the highest risk for the past 5 years, and sees little overall improvement in the programme during this time. Ukraine has the weakest immunization programme in the Region and the government’s current capacity to provide health security for its
population is questionable. There is an urgent need to engage the highest-level officials in meaningful dialogue on the polio programme and public health responsibilities of the government. The RCC strongly urges that a meeting be arranged between the Minister of Health and the RCC, or the Independent Monitoring Board (IMB), to discuss responsibilities for public protection in Ukraine.

Conclusions and recommendations to Member States and WHO

Conclusions

The RCC remains optimistic about the imminent global interruption of WPV transmission, with only five WPV cases in the world detected in 2017 as of 24 May and transmission limited to Afghanistan and Pakistan. However, positive environmental samples for WPV mean that there must be ongoing transmission even in the absence of paralysed individuals (cases). The RCC urges all Member States to reduce remaining immunity gaps in underserved populations and maintain vigilance for evidence of transmission of vaccine-derived or wild polioviruses. The RCC considers that it will soon be called upon to assess the regional evidence required for global certification and appreciates the cooperation of all Member States in fully documenting efforts to maintain their polio-free status.

In line with the move towards collecting and collating evidence required for global certification, the RCC has progressively adopted an approach to evaluation of APRs based on risk assessment and evidence of risk mitigation. A more stringent application of the risk-assessment approach has resulted in an increase in perceived risk in a number of Member States that had previously been considered at low or intermediate risk. It has also resulted in a distinction being drawn between Member States that are at high risk due to programmatic failure and those considered to be at a potential risk due to administrative failure. Programmatic failures include failure to establish adequate population immunity; failure to establish or maintain adequate poliovirus surveillance; or failure to respond adequately to a previous outbreak of vaccine-preventable disease. Administrative failures include failure to provide the RCC with adequately documented evidence of high population immunity, high-quality poliovirus surveillance or successful control of previous events, outbreaks or challenges.

Based on the evidence provided, the RCC concluded there was no WPV transmission in the WHO European Region in 2016. However, Bosnia and Herzegovina, Romania and Ukraine remain at high risk of sustained transmission of polio following importation, due primarily to low population immunity. Greece, Iceland, Italy and San Marino were provisionally considered to be at high risk for virus transmission based on inadequate information provided in their APRs. The relevant ministers of health and NCC chairs were immediately informed on the specific country-by-country conclusions and provisional classifications of risk status, and invited to submit additional evidence within 10 weeks. Having provided acceptable evidence, three Member States were reassigned to a lower risk category. The RCC was not able to issue a formal risk assessment for Italy in the absence of an NCC.

The RCC commends the efforts made by the NCCs, national authorities and the WHO Secretariat to ensure that an APR was received from each of the 53 Member States in advance of the start of the meeting. However, only 24 reports were received before the agreed deadline of 15 April 2017, while 10 were received after 15 May 2017. Some of the reports received, especially those received immediately before the meeting, were superficial and lacking in detail. All NCCs are urged to make efforts to provide the WHO Secretariat with full and detailed reports in advance of the agreed deadline for submission.

The RCC greatly appreciates the opportunity provided once again by the Regional Office to conduct face-to-face meetings with representatives from Ukraine and the Russian Federation, and is grateful to the delegates from both countries for their open, honest and thorough responses provided to
questions asked. The RCC remains highly concerned that significant programmatic vulnerabilities remain in Ukraine, with continued fundamental problems in determining the level of vaccination coverage and identifying susceptible populations. Despite some progress, vaccine procurement problems appear to remain unsolved. Additional concerns appear to be emerging due to decentralization of services and reallocation of responsibilities away from the Department of Health to other government agencies. It is strongly advised that a meeting be arranged between the Minister of Health and the RCC, or the IMB, to discuss responsibilities for public health protection in Ukraine.

The RCC is convinced by the evidence provided by the delegation from the Russian Federation that following detection of VDPV2 in 2016, an appropriate intervention was made and extensive investigation has provided no evidence of further transmission of the virus. Mopping-up activities have been appropriate and effective, and additional measures have been instigated to detect any potential further events. Despite extensive investigation by the Russian authorities, the VDPV2 event remains unclassified.

The RCC noted with concern that due to significant delays in the global provision of IPV, five Member States in the Region (Kyrgyzstan, Republic of Moldova, Tajikistan, Turkmenistan and Uzbekistan) have been unable to introduce a single dose of IPV to supplement their introduction of bOPV. These countries are currently not providing their populations with protection against PV2. The RCC urges that as IPV becomes available in 2018 these countries be given a higher prioritization for IPV allocation by GPEI.

The RCC commends the Region on achieving complete implementation of the new diagnostic algorithm for isolating and characterizing polioviruses in WHO polio network laboratories. The RCC encourages the planned implementation of poliovirus intratypic differentiation in as many network laboratories in the Region as is feasible.

The RCC applauds the initiative by the Regional Office to develop an online annual reporting system and encourages the Secretariat to continue with plans to further develop and test the system.

The RCC congratulates the Regional Office on the success with which the POSE package has been developed and deployed, and the interest now being shown in POSE by other WHO regions. Every Member State should be conducting frequent POSE activities, bearing in mind that not every country is exposed to the same risks. POSE should now be tailored specifically to focus on the greatest risk faced by each country.

Recommendations to Member States and WHO

NCCs and APRs

- It is of concern to the RCC that although all Member States submitted an APR, 29 failed to do so before the agreed deadline of 15 April 2017. All Member States should make every effort to prepare their reports in the format provided and to ensure they arrive at the Regional Office in advance of the deadline, so that the reports can be given timely attention by the WHO Secretariat and RCC.

- It is essential that all Member States follow the guidelines previously provided on the composition and membership of NCCs. To avoid potential conflicts of interest, employees of the polio eradication programme, ministries of health or public health institutes cannot serve as members of an NCC. Member States with NCCs that include members who have potential conflicts of interest are strongly recommended to revise the membership of their NCCs as a matter of urgency. The RCC recommends that the Secretariat review the current composition of the NCCs and work with the countries to
ensure NCC members have no conflicts of interest prior to submission of the APRs for 2017 and onwards.

National action plan

- All Member States are required to have a current action plan to respond to detection of WPV/cVDPV, and this plan should be aligned with the GPEI SOPs on responding to a poliovirus event or outbreak. Member States are urged to ensure that their national action plans include details of the polio vaccine to be used in outbreak response and the intended source of this vaccine.

Vaccines

- The RCC continues to urge the Regional Office to press the GPEI to increase the priority level for provision of IPV to the five Member States in the Region that are currently not able to provide protection against PV2 through their immunization programmes.

Immunization

- The RCC again urges all Member States affected by the recent influx of refugees and migrants to provide more details on the activities undertaken and particularly on outcomes achieved in providing immunization services appropriate to the needs of these migrant populations.

- The RCC is increasingly concerned about the continuing decline in vaccination coverage in some countries, resulting in their inclusion in the intermediate risk category. These countries are urged to improve vaccination coverage of the population as a whole, and of at-risk groups in particular, and provide evidence of the improvements in the next APR.

Surveillance

- The RCC noted with concern that a significant number of Member States are not meeting the agreed requirements related to recommended surveillance standards and are urged to improve surveillance quality and provide full surveillance documentation in the requested format.

Laboratories and containment

- Member States considering the establishment of PEFs are again urged to become fully aware of the international requirements, including maintenance of an effective national routine childhood polio immunization programme and high national population coverage with polio vaccine, and the exacting PEF containment certification requirements described in the Containment Certification Scheme to support the WHO Global Action Plan for Poliovirus Containment.

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• The RCC urges Member States which still did not nominate an NPCC to appoint this national focal point to ensure the effective communication and implementation of poliovirus containment activities.

• All Member States should ensure that all non-typed enteroviruses isolated from patients with polio-compatible clinical conditions are screened to exclude poliovirus. All polioviruses detected must be forwarded to an accredited WHO polio laboratory for intratypic differentiation and any further characterization required.

• As the polio eradication initiative approaches the global eradication of polio, countries hosting WHO polio laboratories should ensure that adequate financial and human resources for laboratory-based polio surveillance continue to be provided through the period of global certification of eradication and into the post-certification period.

POSE

• All Member States should undertake POSEs as a matter of course and update the exercise frequently. Since not all countries face the same risks, POSE should be tailored to specific risk scenarios of greatest significance to the country conducting the exercise. Member States should prioritize their outbreak risk, i.e. WPV importation, cVDPV emergence or a containment breach at polio vaccine manufacturing facilities and PEFs.

Ukraine

• The RCC remains highly concerned that significant vulnerabilities persist in Ukraine’s immunization programme and strongly urges that a meeting be arranged between the Minister of Health and the RCC, or the IMB, to discuss responsibilities for public protection in Ukraine.
Annex 1. RCC conclusions on risk of sustained transmission in the event of WPV importation or emergence of VDPV, per Member State in the WHO European Region, based on available evidence for 2016

<table>
<thead>
<tr>
<th>Country</th>
<th>Surveillance quality</th>
<th>Population immunity</th>
<th>Other factors</th>
<th>Composite risk score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>Good</td>
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*Re-assessed based on receipt of additional information

** If Italy had an NCC, it would have been assessed as intermediate risk. The RCC was not able to issue a formal risk assessment in the absence of an NCC
**Annex 2: Programme**

**Wednesday, 31 May 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter</th>
<th>Organization</th>
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<tbody>
<tr>
<td>08:30-09:00</td>
<td><em>Registration</em></td>
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<tr>
<td>09:00-09:15</td>
<td><em>Opening</em></td>
<td>WHO Regional Office for Europe, RCC</td>
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<tr>
<td>09:15-09:45</td>
<td><strong>Plenary session 1:</strong> <em>Update on global polio eradication and sustaining polio free Europe</em></td>
<td>Khan, Zainul</td>
<td>WHO/HQ</td>
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<tr>
<td>09:45-10:15</td>
<td>Update from WHO/HQ/GPEI</td>
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<td>09:45-10:15</td>
<td>Polio programme annual update from the WHO Region Office for Europe</td>
<td>O’Connor, Patrick</td>
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<tr>
<td>10:15-10:30</td>
<td><em>Discussion</em></td>
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<td>10:30-11:00</td>
<td><em>Coffee break</em></td>
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<tr>
<td>11:00-11:30</td>
<td>Update on the European Polio Laboratory Network in 2016-2017 and Current status of containment achievements</td>
<td>Gavrilin, Eugene</td>
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<td>11:30-11:50</td>
<td><em>Discussion</em></td>
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<tr>
<td>11:50-12:00</td>
<td>Introduction to sub-regional review and risk assessment</td>
<td>Deshevoi, Sergei</td>
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<td>12:00-13:00</td>
<td><em>Lunch</em></td>
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<td>13:00-14:30</td>
<td><strong>Plenary Session 2:</strong> <em>Sustainability of polio-free Europe: Review of national updated documents and risk assessment for 2014 by epidemiological zones</em></td>
<td>Deshevoi, Sergei</td>
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<td>14:30-15:00</td>
<td><em>Coffee break</em></td>
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<td>15:00-16:30</td>
<td><em>Central Zone</em></td>
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<td>Huseynov, Shahin</td>
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<td>17:00-17:30</td>
<td><em>End-of-the-day discussion</em></td>
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<td>09:00-09:30</td>
<td>Developing online annual reporting system on polio eradication activities (e-APR)</td>
<td>Kaloumenos, Theodoros, WHO/Europe</td>
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<td>09:30-09:45</td>
<td>Polio Outbreak Simulation Exercises: 2016-2017</td>
<td>Deshevoi, Sergei WHO/Europe</td>
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<tr>
<td>09:45-10:10</td>
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<td>10:10-10:30</td>
<td>Coffee break</td>
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<tr>
<td>10:30-12:00</td>
<td>Face-to-face meeting with representatives from Ukraine to review cVDPV type 1 outbreak response activities, risks and mitigation activities</td>
<td>NCC &amp; RCC</td>
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<td>12:00-13:00</td>
<td>Lunch</td>
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<tr>
<td>13:00-15:00</td>
<td>Face-to-face meeting with representatives from Russian Federation to review VDPV type 2 events response activities</td>
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<td>15:00-15:30</td>
<td>Coffee break</td>
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<td>15:30-16:30</td>
<td>RCC discussion on conclusions and recommendations to Member States and WHO Review working procedures of the RCC</td>
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<tr>
<td>16:30</td>
<td>Closure</td>
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Annex 3: List of participants

European Regional Certification Commission (RCC) Members
Prof David M. Salisbury
Prof Donato Greco
Prof Tapani Hovi
Dr Anton Van Loon
Dr Ellyn Ogden (could not attend)

Observer (Regional Certification Commission for Polio Endgame, PAHO)
Dr Arlene King

US Centers for Disease Control
Dr Deblina Datta

United Nations Children’s Fund (UNICEF)
Dr Basil Rodriques
Dr Svetlana Stefanet

Representatives of the Russian Federation
Dr Olga Ivanova
Dr Albina Melnikova
Dr Natalia Kostenko

Representatives of Ukraine
Prof Victoria Zadorozhna
Dr Natalia Piven
Dr Oleksandr Zaika

Rapporteur
Dr Raymond Sanders

WHO headquarters
Dr Zainul Khan

WHO Regional Office for Europe
Mr Robb Butler
Dr Patrick O’Connor
Dr Sergei Deshevoi
Dr Eugene Gavrilin
Dr Shahin Huseynov
Dr Dragan Jankovic
Mr Simarjit Singh
Dr Vusala Allahverdiyeva
Dr Zhanara Bekenova
Ms Malika Abdusalyamova
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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Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
Norway
Poland
Portugal
Republic of Moldova
Romania
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San Marino
Serbia
Slovakia
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Spain
Sweden
Switzerland
Tajikistan
The former Yugoslav Republic of Macedonia
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

World Health Organization
Regional Office for Europe

UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark
Tel: +45 45 33 70 00  Fax: +45 45 33 70 01
Email: eucontact@who.int
Website: www.euro.who.int