Report on the

Twenty-ninth meeting of the Eastern Mediterranean Regional Commission for Certification of Poliomyelitis Eradication

Muscat, Oman
19–21 April 2015
CONTENTS

1. INTRODUCTION ............................................................................................................ 1

2. REGIONAL OVERVIEW OF POLIO ERADICATION .................................................. 2
   2.1 Current epidemiology of poliovirus in the Eastern Mediterranean Region ............. 2
   2.2 Implementation of the recommendations of the 28th meeting of the Regional
       Commission for Certification of Poliomyelitis Eradication .................................... 3

3. GLOBAL UPDATE OF POLIO ERADICATION ............................................................ 3
   3.1 Global status – polio epidemiology ............................................................. 3
   3.2 Status of outbreaks starting in 2013 ......................................................... 3
   3.3 Recommended activities to mitigate risks of renewed outbreaks ....................... 4
   3.4 Situation in Pakistan ................................................................................ 4
   3.5 International spread of polio as a public health emergency of international
       concern ................................................................................................................. 4
   3.6 Preparations for the switch from trivalent oral polio vaccine to bivalent
       oral polio vaccine for routine immunization ......................................................... 5
   3.7 Status of introduction of inactivated polio vaccine ......................................... 5
   3.8 Availability of sufficient bivalent oral polio vaccine ....................................... 6
   3.9 Monovalent oral polio vaccine 2 stockpiles and type 2 outbreak response
       strategy .................................................................................................................. 6
   3.10 Global Action Plan III for containment ....................................................... 6
   3.11 Validation of the absence of wild poliovirus type 2 ...................................... 6
   3.12 Status of persistent transmission of circulating vaccine-derived poliovirus type 2. 7

4. INTERREGIONAL COORDINATION ........................................................................... 7
   4.1 Update on polio eradication in the WHO European Region ................................ 7
   4.2 Update on polio eradication in the WHO South-East Asia Region ..................... 8

5. POLIOVIRUS CONTAINMENT GLOBAL ACTION PLAN III .................................... 9

6. LESSONS LEARNT FROM OUTBREAKS ................................................................. 9
   6.1 Iraq ............................................................................................................... 9
   6.2 Somalia ......................................................................................................... 10
   6.3 Syrian Arab Republic ................................................................................ 11
   6.4 Discussion .................................................................................................. 12

7. DISCUSSION OF THE REPORTS ............................................................................... 12
   7.1 Annual updates: Bahrain, Islamic Republic of Iran, Kuwait, Libya, Qatar,
       Oman, Palestine, Saudi Arabia and the United Arab Emirates ......................... 12
   7.2 Annual update: Egypt .................................................................................. 12
   7.3 Annual update: Jordan ................................................................................ 13
   7.4 Annual update: Lebanon ............................................................................... 13
   7.5 Annual update: Morocco ............................................................................. 13
   7.6 Annual update: Tunisia ............................................................................... 14
7.7 Annual update: Yemen .................................................................14
7.8 Djibouti...........................................................................................15
7.9 Final national documentation for regional certification of Sudan .......................15

8. OTHER MATTERS..........................................................................................15

Annexes
1. PROGRAMME ............................................................................................17
2. LIST OF PARTICIPANTS ...............................................................................19
1. INTRODUCTION

Since reporting of the wild poliovirus type-1 (WPV1) outbreak in Syria in October 2013, which spread to Iraq in 2014 causing two polio cases, a multi-country outbreak response has been implemented in two phases. A meeting was convened on 26–27 January 2015 in Beirut to review Phase II and plan for Phase III. The review meeting was preceded by multi-country desk reviews and field assessments of the polio eradication response by the WHO Regional Office for the Eastern Mediterranean and UNICEF Regional Office for the Middle East and North Africa supported by the Polio Eradication Country Support Group, Geneva.

The Eastern Mediterranean Regional Commission for Certification of Poliomyelitis Eradication (RCC) held its 29th meeting in Muscat, Oman during the period 19–21 April 2015. The meeting was attended by members of the RCC, chairpersons of the national certification committees or their representatives, and national polio eradication officers of 19 countries of the Region (Afghanistan, Bahrain, Egypt, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Pakistan, Palestine, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia and United Arab Emirates). The meeting was also attended by representatives from Rotary International and World Health Organization (WHO) staff from headquarters, the regional offices for the Eastern Mediterranean and South-East Asia, and country offices for Afghanistan, Jordan, Pakistan and Somalia. The meeting programme and the list of participants are attached as Annexes 1 and 2.

The meeting was opened by Dr Yagob Al Mazrou, Chairman of the RCC, who welcomed the participants and thanked the Government of Oman and the Minister of Health for hosting the meeting and providing excellent support.

Dr Abdalla Assa’edi, WHO Representative Oman, delivered a message from Dr Ala Alwan, WHO Regional Director for the Eastern Mediterranean. In his message, the Regional Director referred to the challenges facing polio eradication in the Region, particularly the uncontrolled transmission in Afghanistan and Pakistan. He also noted the success achieved in controlling the outbreaks in Somalia, the Syrian Arab Republic and Iraq. He referred to the plans for withdrawal of the type 2 component of the oral polio vaccine (OPV) in 2016 and the need for Member States to introduce at least one dose of the inactivated poliovirus vaccine and the use of bivalent OPV (bOPV) in their routine immunization. Referring to Pakistan and Afghanistan, the Regional Director emphasized the need to ensure reaching all children, particularly chronically missed ones, and accepted shifting the polio paradigm from children covered to continuously missed children and expanding effective monitoring and evaluation.

His Excellency Dr Ahmed Mohammed Al-Saidi, Minister of Health of Oman welcomed the participants. He referred to the national polio eradication programme and reaffirmed the commitment of the Government of Oman to supporting polio eradication efforts globally and regionally. Significant efforts had been made by WHO and partners in controlling the outbreaks in Iraq, Somalia the Syrian Arab Republic although there were still some worries about the impact of the recent developments in Yemen on polio eradication. These required vigilance and immediate response.
2. REGIONAL OVERVIEW OF POLIO ERADICATION

2.1 Current epidemiology of poliovirus in the Eastern Mediterranean Region

Mr Christopher Maher, WHO Regional Office for the Eastern Mediterranean

Apart from few cases in the African Region, almost all the polio cases reported during the past 12 months are from the Eastern Mediterranean Region. The Region is responsible for 99% of all the polio in the world – Pakistan alone is now reporting more than 90% of the world's polio. As of April 2015, all 23 confirmed polio cases reported in 2015 are from Member States in this Region, 22 in Pakistan and one in Afghanistan. The last case reported from the African Region was in July 2014. Circulating vaccine-derived polioviruses were also reported from Pakistan in 2014.

The multicountry, coordinated and effective response to the Middle East outbreak has resulted in containment of the outbreak: it is more than 12 months since the date of onset of the most recent cases – from Iraq on 7 April 2014 and from the Syrian Arab Republic on 21 January 2014. The outbreak in the Horn of Africa appears to have been halted: the last case was from Somalia on 11 August 2014. Moreover, surveillance performance indicators (zero-dose children and stool adequacy) in the Middle East and the Horn of Africa have considerably improved as part of the outbreak response interventions.

There is ample evidence of recent progress in Pakistan and Afghanistan, brought in by the comprehensive implementation of the 2015 low transmission season plan. The immediate objective of polio operations is to achieve maximum impact before the high transmission season and to prepare for a better-organized and concerted drive incorporating successful and innovative interventions in the 3rd quarter of 2015. This will place both countries in a strong position to stop transmission. However, in 2015 it is likely that Pakistan and Afghanistan will be the only countries in the world with polio.

People from Pakistan and Afghanistan (especially from polio-endemic areas) travel to and work in other countries of the Region, especially in the countries of the Gulf Cooperation Council and the Middle East. Consequently, if transmission continues, there is an ongoing risk that wild poliovirus from Pakistan or Afghanistan will re-infect other countries in the Region.

The RCC is extremely concerned about developments in these two endemic countries in 2014. Considerable efforts are being made, particularly in the low transmission season, for effective implementation of the eradication strategies. Efforts are also being made to secure government commitment and enhance accountability, and these efforts are beginning to show an impact. The RCC will be more persuaded of the epidemiological improvement in Pakistan when at least two high transmission seasons have passed without cases.
2.2 **Implementation of the recommendations of the 28th meeting of the Regional Commission for Certification of Poliomyelitis Eradication**

*Dr Humayun Asghar, WHO Regional Office for the Eastern Mediterranean*

Participants were informed about the implementation status of the recommendations of the 28th RCC meeting held in Amman in April 2014.

- The initiatives agreed during the meeting to control poliovirus circulation in Pakistan were fully implemented.
- Strong efforts were made to control the Middle East and Horn of Africa outbreaks and to interrupt wild poliovirus circulation: the date of onset of the last cases in the Middle East was April 2014 and in Somalia August 2014.
- The outbreak assessments confirmed the solid progress made, but identified some surveillance gaps which need to be addressed by the national authorities. The WHO Secretariat regularly updates the assessment of the risk of spread of wild poliovirus after importation for all countries of the Region, and supported the national programmes to make similar assessment at the subnational level. In June and September 2014, acute flaccid paralysis (AFP) surveillance system training, including subnational level risk assessment, was carried out for all national programmes in the countries of the Region.
- The national plans of action for preparedness to respond to wild poliovirus importation were tested in field simulation exercises in Oman and Bahrain only.
- Guidelines on environmental surveillance are being finalized by WHO and will soon be circulated to Member States.
- The comments on the respective reports were sent to the national certification committees for their review and revision of the reports.

3. **GLOBAL UPDATE OF POLIO ERADICATION**

*Dr Rudolf Tangermann, Medical Officer, WHO/HQ*

3.1 Global status – polio epidemiology

In 2014, 359 cases of paralytic poliomyelitis due to wild poliovirus were reported globally compared with 416 in 2013. All cases were caused by wild poliovirus type 1 and most (85%) occurred in Pakistan, where intense transmission was ongoing. In Afghanistan 28 cases were reported. In the only other remaining country in which poliomyelitis is endemic, Nigeria, the systematic application of eradication strategies resulted in a substantial reduction in the number of cases, with six reported cases for the year; date of onset of paralysis in the most recent case was 24 July 2014.

3.2 Status of outbreaks starting in 2013

Progress was also reported by countries in which there had been either cases or transmission following an importation of wild poliovirus in 2013 and 2014, and which had implemented outbreak response measures. In the Horn of Africa, the date of onset of the last case in Somalia was 11 August 2014. In Ethiopia a single case was reported with onset on 5 January 2014. In central Africa, Cameroon and Equatorial Guinea each reported five cases, with onset in the most recent cases on 9 July and 3 May 2014 respectively. In the Middle East,
the date of onset of the last case in Iraq was 7 April 2014 and in the Syrian Arab Republic 21 January 2014; in Israel, the last positive environmental sample detected was collected on 30 March 2014.

3.3 Recommended activities to mitigate risks of renewed outbreaks

The Middle East is considered to remain at particularly high risk of reinfection, given the intense virus transmission in Pakistan and further deterioration of immunization systems in the Syrian Arab Republic and Iraq owing to conflict and the security situation.

To sustain progress and complete wild poliovirus eradication in the African continent, the following actions are required: intensifying surveillance in areas with the highest risk of undetected transmission, particularly in Cameroon, Central African Republic, Equatorial Guinea, Gabon, Somalia and South Sudan; reinforcing the innovative approaches being used to reach all children in northern Nigeria; and ensuring cessation of outbreaks through full implementation of intensive response measures in central Africa and the Horn of Africa.

In the Middle East, synchronized immunization campaigns will need to continue in order to enhance population immunity to poliomyelitis and reduce the risk of new outbreaks, especially in areas affected by the ongoing crisis in the Syrian Arab Republic. Particular attention will need to be paid to improving the sensitivity of surveillance in parts of Iraq, Lebanon, the Syrian Arab Republic and Turkey.

3.4 Situation in Pakistan

The interruption of wild poliovirus transmission increasingly depends on Pakistan filling chronic gaps in strategy implementation and being able to vaccinate children in infected areas that have been difficult to access owing to ongoing conflict or threats and attacks on health workers in the Federally Administered Tribal Areas, Khyber Pakhtunkhwa, Balochistan and the city of Karachi.

At the end of 2014, public health leaders and managers from all levels and partners prepared a robust “low season emergency plan” for the first half of 2015. This plan incorporates important lessons learnt to reach repeatedly missed children in insecure and underperforming areas, rigorous monitoring and accountability mechanisms, the establishment of emergency operations centres at federal and provincial levels to coordinate and oversee implementation, and the regular reporting of status to the Office of the Prime Minister. The plan has all the necessary elements in place for rapid eradication of polio; its success, however, hinges on full implementation in all areas of Pakistan. In Afghanistan, the remaining priority is to interrupt transmission of residual endemic virus in the southern region and respond to new cross-border importations from Pakistan.

3.5 International spread of polio as a public health emergency of international concern

Concerned at the international spread of wild poliovirus in the first three months of 2014, the WHO Director-General convened a meeting of the Emergency Committee under the International Health Regulations (2005) on 28 and 29 April 2014. The Committee advised that
the situation could, if left unchecked, result in failure to eradicate globally one of the world’s most serious vaccine-preventable diseases. On 5 May 2014, the Director-General declared the international spread of wild poliovirus a public health emergency of international concern and issued temporary recommendations.

These temporary recommendations contained advice on measures to reduce the risk of international spread of wild poliovirus, such as declaring and managing the event as a national public health emergency and vaccinating travellers from affected countries against poliomyelitis. On the advice of the Emergency Committee, the Director-General extended the original temporary recommendations on 3 August 2014, 14 November 2014 and 27 February 2015, at which time Pakistan was the only country that continued to export wild poliovirus internationally.

Preventing new international spread of wild polioviruses requires full implementation of the eradication strategies in the remaining infected areas, particularly in Pakistan; comprehensive application of the temporary recommendations issued by the Director-General; and heightened surveillance globally to facilitate a rapid response to new cases.

3.6 Preparations for the switch from trivalent oral polio vaccine to bivalent oral polio vaccine for routine immunization

In October 2014, the Strategic Advisory Group of Experts (SAGE) on immunization reviewed the progress made on the five criteria for assessing global readiness for the coordinated withdrawal of the type 2 component in OPV: the introduction of at least one dose of inactivated poliovirus vaccine in all countries; licensure of bOPV for routine immunization; establishment of a global stockpile of monovalent type 2 vaccine and protocols for its use; appropriate containment and handling of poliovirus type 2 infectious and potentially infectious materials; and verification of the eradication of wild poliovirus type 2 globally.

The SAGE concluded that preparations were on track for the global withdrawal of the type 2 component in OPV in April 2016, and recommended that Member States accelerate their preparations. At its 136th session in January 2015, the Executive Board noted this approach and members underlined the need to ensure global readiness by the end of 2015 for the coordinated withdrawal of OPVs containing the type 2 component.

3.7 Status of introduction of inactivated polio vaccine

By February 2015, all but one Member State had either already introduced inactivated poliovirus vaccine or planned to do so by the end of 2015. The country concerned accounts for less than 0.01% of the global birth cohort and is not at high risk of emergence of a circulating vaccine-derived type 2 poliovirus. Of the 73 countries eligible for support from Gavi, the Vaccine Alliance for the introduction of inactivated poliovirus vaccine, 66 had successfully applied. The Polio Oversight Board of the Global Polio Eradication Initiative approved financial support for 12 months for a further 25 low-income and low–middle income countries in order to facilitate the introduction of the vaccine by the end of 2015. Work is ongoing to facilitate technology transfer for the domestic production of inactivated poliovirus vaccine using Sabin-strain polioviruses where requested.
3.8 Availability of sufficient bivalent oral polio vaccine

Withdrawal of the type 2 component in OPV from routine immunization systems globally will require replacement of the trivalent formulation of the vaccine (tOPV) with the bivalent (bOPV) (types 1 and 3) formulation in all countries that continue to use OPV. Work is continuing with manufacturers of bOPVs and their national regulatory agencies to extend the current licence for these products to include use in routine activities. It is imperative that all countries wanting to use OPV after April 2016 complete national licensure requirements for the use of bOPV in their routine immunization programmes by the end of 2015. WHO recommends acceptance of the use of bOPV in routine immunization on the basis of its prequalification by WHO while national registration processes are ongoing. A protocol has been drafted to facilitate national planning for the switch from tOPV to bOPV in the context of the globally coordinated withdrawal of the type 2 component. This approach was noted by the Executive Board of WHO at its 136th session.

3.9 Monovalent oral polio vaccine 2 stockpiles and type 2 outbreak response strategy

The SAGE reinforced its previous recommendation that stockpiles of monovalent OPV type 2 should be established and maintained only at the global level in order to minimize the risk of inadvertent reintroduction of serotype 2 poliovirus after withdrawal of the type 2 component in OPV globally. UNICEF has contracted two manufacturers of the WHO-prequalified product to establish a global stockpile of 500 million doses of monovalent OPV type 2 by the end of 2015. The SAGE also endorsed a protocol on the release and use of vaccine from the stockpile, which suggests giving decision-making authority to the Director-General, acting on the advice of an expert panel, with the express remit of determining whether detection of a type 2 poliovirus constituted confirmed or probable transmission requiring a vaccination response. This approach was noted by the Executive Board at its 136th session.

3.10 Global Action Plan III for containment

In 2014, the strategic approach and plan for fully aligning the containment of polioviruses with the milestones and timelines of the Polio Eradication and Endgame Strategic Plan 2013–2018 were finalized and endorsed by the SAGE and noted by the Executive Board. The WHO global action plan to minimize poliovirus facility-associated risk after type-specific eradication of wild polioviruses and sequential cessation of OPV use establishes specific measures for the poliovirus type 2 containment phase of the polio endgame; differentiates the requirements for facilities holding wild versus Sabin strain polioviruses; and sets general parameters for the long-term containment of polioviruses following the eventual cessation of vaccination with all OPVs after 2019.

3.11 Validation of the absence of wild poliovirus type 2

The Secretariat is requesting Member States to submit to their relevant regional commissions for the certification of poliomyelitis eradication, by mid-2015, formal documentation confirming that type 2 wild poliovirus transmission has been interrupted; phase 1 containment activities have been completed or will be completed by the end of 2015; and appropriate plans are in place to contain any residual type 2 wild polioviruses, as outlined
in the WHO global action plan to minimize poliovirus facility-associated risk after type-specific eradication of wild polioviruses and sequential cessation of OPV use. The relevant documentation will be reviewed by the Global Commission for the Certification of Poliomyelitis Eradication, which will take a formal decision on whether the eradication of wild type 2 poliovirus can be declared and whether the criteria for withdrawal of the type 2 component in OPV have been met.

3.12 Status of persistent transmission of circulating vaccine-derived poliovirus type 2

Global withdrawal of the type 2 component in OPV is currently scheduled for April 2016 (during the low transmission season for polioviruses). Final confirmation of the timing will depend on whether transmission of all persistent circulating vaccine-derived type 2 polioviruses (cVDPV2s) has been interrupted.

As at 3 March 2015, cVDPV2s had not been detected in northern Nigeria since the most recent case which had onset of paralysis on 16 November 2014, bringing the total to 30 cases in 2014. In Pakistan in 2014 two “old” lineages of cVDPV2s caused 21 cases of paralysis, with most detected in the Federally Administered Tribal Areas and adjacent areas of Khyber Pakhtunkhwa province. These two lineages have not been detected since June 2014.

A new persistent lineage emerged in Gadaap, Karachi in July 2014 and was last detected in January 2015 in an environmental surveillance sample. Authorities in both Nigeria and Pakistan have increased their coverage with poliovirus vaccines containing the type 2 component during the recent supplementary immunization campaigns, with encouraging results. Additional campaigns with tOPV are planned in 2015 to ensure that transmission of type 2 polioviruses is stopped, thereby enabling the global withdrawal of OPV containing the type 2 component on schedule in 2016.

4. INTERREGIONAL COORDINATION

4.1 Update on polio eradication in the WHO European Region

Professor David Salisbury, Chairman, European Regional Certification Commission

At its 2014 meeting, the European Regional Commission for Certification of Poliomyelitis Eradication concluded that there was convincing evidence of no ongoing transmission of wild poliovirus within the region. There was interim evidence that environmental transmission of polioviruses had stopped in Israel and this was confirmed later in the year, allowing the Regional Commission to conclude that transmission had indeed stopped. The Regional Commission continued to undertake annual risk assessments of all countries and concluded that Bosnia and Herzegovina, Romania and Ukraine were at high risk of poliovirus transmission, and surveillance and routine immunization needed to be improved. Good progress is being made with regard to the switch from the bivalent vaccine to the inactivated polio vaccine. National and subregional exercises continue to be undertaken, with an interregional exercise planned for 2015.
4.2 Update on polio eradication in the WHO South-East Asia Region

Dr Sunil Bahl, Medical Officer, WHO Regional Office for South-East Asia

The South-East Asia Regional Commission for Certification of Poliomyelitis Eradication certified the region polio-free on 27 March 2014 following a three year period without wild poliovirus detection. In addition, all circulating vaccine-derived poliovirus outbreaks in the region were interrupted through effective outbreak control measures.

Despite tremendous success in polio eradication, the South-East Asia region remains at high risk of an importation of wild poliovirus from currently-infected areas and subsequent spread of the virus in the region. Maintaining its polio-free status is, therefore, a top priority for the Region.

The region continues to maintain high vigilance through a sensitive surveillance system for poliovirus detection. It is taking action to sustain high population immunity against polio and has developed emergency preparedness plans to respond to any wild poliovirus detection.

Surveillance for AFP in the region continues to operate at a high level of efficiency, with more than 95% of the AFP cases investigated within 48 hours of notification. The overall surveillance indicators, including laboratory performance indicators, surpass the global targets for certification standard surveillance. Regular surveillance reviews continue to be conducted in countries of the region on a rotational basis to identify gaps and recommend solutions to fill these gaps. Environmental surveillance for poliovirus detection is currently conducted in six states of India and at one site in Indonesia, with plans to expand to Bangladesh, Indonesia, Myanmar and Nepal during 2015–16.

As a part of the risk mitigation measures, polio supplementary immunization activities continue to be conducted in high risk countries/areas in 2015 and are planned for early 2016 to build immunity against polio. Risk analysis to identify subnational high risk areas/populations and plans to improve immunity in these areas are important components of the risk mitigation strategy. Other risk mitigation efforts such as vaccination of children along the international borders of multiple countries and mandatory vaccination of travellers in India coming from or visiting countries recently affected with polio have been in place for the past few years. Addressing complacency in polio eradication efforts following the polio-free certification of the region is one of the major challenges that the programme will have to overcome in the coming years.

The region is on track for implementing all activities pertaining to the polio endgame strategic plan. Four of the eleven countries in the region have already introduced the inactivated polio vaccine in their routine immunization programme, while the remaining countries have firm plans for introduction. The process of label change to allow bOPV use in routine immunization is being actively pursued and it is proposed that “national switch plans from tOPV to bOPV” be developed by September 2015. It is also proposed that the process of verification of the elimination of wild poliovirus type 2 be completed and plans for the containment of all type 2 polioviruses in accordance with GAPII (WHO global action plan to minimize poliovirus facility-associated risk) requirements are put in place before the next meeting of the South-East Asia Regional Commission in September 2015.
5. POLIOVIRUS CONTAINMENT GLOBAL ACTION PLAN III  
Dr Nicoletta Previsani, WHO Regional Office for the Eastern Mediterranean

In 2014 the strategic approach and plan for fully aligning the containment of polioviruses with the major milestones and timelines of the Polio Eradication and Endgame Strategic Plan 2013–2018 was finalized and endorsed by the SAGE.

Member States have been requested to update and finalize their inventories of facilities holding wild and Sabin polioviruses, and are alerted about the impending requirements to contain all type 2 polioviruses, including preparations for destruction or containment of all type 2 wild poliovirus and vaccine-derived strains by the end of 2015, and type 2 OPV/Sabin within three months of OPV2 withdrawal, as described in 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).

Phase I of the revised GAPIII is expected to be completed by the end of 2015. At the same time, candidate essential poliovirus facilities are expected to be certified through national oversight bodies so that handling and storage of type 2 wild poliovirus can continue in 2016 in Phase II. The number of such facilities, which carry out diagnostic, research and vaccine production activities, is expected to be kept to a minimum worldwide.

GAPIII implementation activities to support countries are being proposed, including Phase I workshops for National Polio Containment Coordinators, and Phase II training courses for candidate essential facilities, and National Regulatory Authorities responsible for containment and facility certification of GAPIII implementation.

The World Health Assembly will be requested to endorse the steps leading to the withdrawal of tOPV, including containment of type 2 poliovirus, in May 2015. Countries will then be expected to complete the new Phase I and prepare for Phase II within the required timelines, as described in GAPIII (available for download from the post-eradication policy documents webpage of the global polio eradication initiative).

6. LESSONS LEARNT FROM OUTBREAKS

6.1 Iraq
Dr Muhee Kadhim Wannas, Chairman, National Certification Committee, Iraq

Iraq has been polio-free since January 2000. However, the critical and dramatic changes experienced since 2003 have affected all aspects of life in the country, including the health system. Wild poliovirus was isolated from a child aged 6 months with date of onset of paralysis 10 February 2014. Genomic sequencing showed that the isolated virus was closely related to isolates from the Syrian Arab Republic. Another wild poliovirus was isolated from a child aged 3 years with date of onset 7 April 2014. The genomic sequencing of that virus showed it was related to first wild poliovirus isolate. Both cases were from Baghdad-Resafa squatters, and both children were unvaccinated against poliomyelitis.
The main reason was the importation of wild poliovirus from neighbouring Syrian Arab Republic with the massive influx of Syrian refugees, low routine immunization of targeted age groups, suboptimal polio supplementary immunization activities together with military operation and internally displaced persons.

The Ministry of Health together with national and international partners took extensive action, including conducting six national immunization days and eight subnational immunization days together with improvement of surveillance and, to a lesser extent, of routine immunization. These efforts succeeded in stopping wild poliovirus transmission: more than one year has passed since the last wild poliovirus isolate.

The National Certification Committee cannot be confident that wild poliovirus transmission has completely stopped, particularly as there are 3 governorates as well as a number of districts in other governorates which are divested completely from supervision and, to lesser extent, from training and monitoring.

6.2 Somalia

Dr Abraham Mulugeta Debessay, WHO Somalia

Somalia interrupted endogenous wild poliovirus transmission in 2002. After remaining polio-free for 3 years, the country faced a wild poliovirus 1 importation in 2005 from Nigeria, resulting in a huge outbreak as a result of which 228 young children were paralysed. This wild poliovirus transmission was interrupted in 2007, and Somalia remained wild poliovirus-free for 6 years, though it had a cVDPV2 outbreak from 2008 until January 2013, resulting in a total of 22 cases.

In May 2013, Somalia was again exposed to wild poliovirus 1 importation from Nigeria, causing an explosive outbreak that started in Mogadishu and spread to surrounding areas of south-central Somalia.

The main reasons for the outbreak were:

- very low routine immunization coverage for 2 decades (range 5–50%, average ~30%);
- a ban on immunizations since 2009 leading to progressive limited access for between 250 000 and one million children aged under 5 years;
- reduced number of polio supplementary immunization activities after the outbreak was interrupted in 2007, with only 2 national immunization day campaigns conducted per year during 2009–2013 and including OPV with Child Health Days/measles campaigns;
- the necessity of using tOPV from 2009–2013 due to the continued cVDPV2 transmission;
- continued persistent insecurity/conflict;
- large mobile and hard-to-reach populations that led to lower levels of protection against wild poliovirus;
- a weak health care system resulting in only 30% of the population having access to health care.
The polio partners’ response was rapid and intensive with supplementary immunization activities (national immunization days and subnational immunization days); targeting different age groups (under 10 years); use of bOPV; establishing “transit point vaccination teams” between the accessible and inaccessible areas of the country to limit wild poliovirus spread to populations in the inaccessible areas; efforts aimed at improving OPV acceptance by intensive high-level advocacy and continued social mobilization activities; enhanced campaign monitoring (independent monitoring with lot quality assurance sampling/mobile phones) together with efforts to improve AFP surveillance by enhanced active case detection and reporting; AFP contacts sampling (which initiated sampling among healthy children); and village polio volunteers.

The key lessons learnt include the need to reduce risk by closing immunity gaps with continued adequate supplementary immunization activities, using the “short interval additional dose” strategy in newly-accessible areas, strengthening routine immunization, effective and speedy outbreak response plans.

In conclusion, there has been an overall improvement in population immunity due to intensive supplementary immunization activities and improved quality, but gaps remain in inaccessible and hard-to-reach populations. There is still a huge risk of outbreaks from importations if the programme does not continue with an adequate number of supplementary immunization activities and rapid improvements in routine immunization.

### 6.3 Syrian Arab Republic

Professor Ahmed Dashash, Chairman, National Certification Committee, Syrian Arab Republic

The Syrian Arab Republic remained polio-free until October 2013, when wild poliovirus was confirmed in Deir ez-Zor and an outbreak started. This resulted in 35 cases in 2013; the date of onset of the last case was 21 January 2014.

Reasons behind the outbreak included the disruption of services due to the destruction of public health care units, a shortage of health care workers and significant population displacement along with a deterioration in environmental sanitation.

Supplementary immunization activities were organized, two in 2013, nine in 2014 and three so far in 2015. Coverage rates reached over 90%. Surveillance for AFP was strengthened through the printing and distribution of brochures, posters, and guidelines and conducting a large number of seminars and training courses. The non-polio AFP rate reached 4/100 000 and the adequacy of stool samples 84%.

These efforts in response to the outbreak were coordinated through the National Coordination Committee. Several partners were engaged from within the country such as the Youth Union, the Ministry of Education and the General Union of Women as well as external partners such as WHO and UNICEF.
The following were lessons learnt from the outbreak.

- Political visibility and support were very helpful in mobilizing the people.
- Media support created community demand for polio vaccination.
- Partnership with WHO and UNICEF ensured proper planning and meeting demands.
- The use of independent monitoring gave a reasonable idea about the proportion of missing children.

6.4 Discussion

Future activities include the mapping of high risk areas where there is low routine immunization performance and developing special strategies to close the gaps. The training of new vaccinators and refresher courses for the old vaccinators are also part of these plans.

The RCC was very pleased with the achievements in successfully controlling the two multicountry outbreaks in the Middle East (Iraq and Syrian Arab Republic) and the Horn of Africa (Ethiopia, Kenya and Somalia). It is hoped that efforts in these countries will be maintained to guard against any re-emergence in these troubled areas. The lessons learnt from these successes would be useful in achieving success in the remaining endemic countries and those at high risk of importation.

7. DISCUSSION OF THE REPORTS

7.1 Annual updates: Bahrain, Islamic Republic of Iran, Kuwait, Libya, Qatar, Oman, Palestine, Saudi Arabia and the United Arab Emirates

The RCC commended the national certification committees and the national programmes in Bahrain, the Islamic Republic of Iran, Kuwait, Libya, Qatar, Oman, Palestine, Saudi Arabia and the United Arab Emirates for their comprehensive reports and for the efforts to ensure completeness and accuracy of the data in the annual updates. These reports together with the presentations gave the RCC confidence that these countries continued to be polio-free during 2014. However, some comments were made on each of the reports; these will be relayed to the respective chairs through letters from the RCC chair.

The RCC decided to provisionally accept these reports. Formal acceptance will be made upon receipt of the amended reports taking into consideration the RCC’s comments.

7.2 Annual update: Egypt

The RCC welcomed the new chairman of the National Certification Committee and acknowledged his presentation. There were several items in the report that needed careful revision in order to convince the Commission that Egypt remained polio-free during 2014. These items along with the other comments will be relayed to the chair of the national committee in a letter from the RCC chair.

The RCC, therefore, decided to withhold accepting the report until a revised version is received responding to all the comments.
7.3 Annual update: Jordan

The RCC acknowledged the annual update and the presentation made by the National Certification Committee. It acknowledged the major challenges facing Jordan in keeping up with ensuring vaccination of the continued influx of refugee children. The RCC noted the continued need for vigilance of the national polio eradication programme to maintain the polio-free status of Jordan.

There were several items that needed to be completed in the report. These will be relayed to the chair of the national committee in a letter from the RCC chair.

The RCC, therefore, decided to withhold formal acceptance of the report until a revised version is prepared taking the comments into consideration.

7.4 Annual update: Lebanon

The RCC acknowledged the very comprehensive and frank presentation made by the chair of the National Certification Committee reflecting continued improvement in most of the elements of the national polio eradication programme. It was possible for Lebanon to maintain its polio-free status despite the serious risks of importation due to the influx of large numbers of refugees from a previously infected neighbour.

The RCC feels that despite improvements in surveillance; there remain gaps in certain areas which need to be addressed to minimize the risks of not being able to discover importations early. It agrees with the conclusions and recommendations made by the National Certification Committee to the national authorities to address the present gaps in the system.

The RCC, while concurring with the assessment that Lebanon was polio-free in 2014, expressed great concern in regard to the remaining identified gaps in surveillance. There were a few additional comments on the report.

The RCC decided to provisionally accept the report and relay its comments to the chair of the national committee. Formal acceptance of the report will be made upon receipt of the amended report taking into consideration the comments of the Commission.

The RCC calls on WHO in the Eastern Mediterranean Region to continue to support Lebanon in further improving the national polio eradication programme and in coping with the additional burden created by the refugees.

7.5 Annual update: Morocco

The report submitted does not give the RCC the feeling that the National Certification Committee is undertaking its expected duties seriously and is not critically reviewing the data submitted by the national programme or ensuring its completeness.

The recently appointed Minister of Health is committed to improving the situation in order to help the Region achieve polio eradication. This commitment should first be used to
improve the performance of the national programme by at least responding to the need for training of various levels of health workers, which has been postponed for 2 years because of lack of funds. The cooperation of WHO in this regard is also recommended.

The submitted report needs significant amendments. The RCC decided, therefore, to withhold acceptance of the report until a revised version addressing all RCC comments is received.

A detailed letter with the comments of the RCC will be relayed to the chair of the national committee.

7.6 Annual update: Tunisia

The RCC noted that despite the prevailing difficulties in the country, the polio eradication efforts continued and there were improvements in several surveillance indicators. However, there were also few indicators which showed the reverse. The RCC noted that, although the overall routine immunization coverage was high, it is of concern that in large urban areas the reported rates are very low. The reason given is that the reported figure does not include immunization through private practice. The immunization coverage rate has to be assessed by a survey to be sure that there are no immunity gaps in such large populations.

The RCC made some comments on the report, which will be relayed to the National Certification Committee. It has decided to provisionally accept the report and to request an amended report taking into consideration RCC comments in order to formally accept the report.

7.7 Annual update: Yemen

The RCC received the annual update for 2014 from Yemen in a timely manner. The prevailing security situation did not allow the participation of the National Certification Committee in the meeting, therefore the report was reviewed and discussed in the absence of the representative from Yemen. The RCC acknowledge that the national authorities were able to maintain the polio-free status during 2014 and the National Certification Committee had produced a comprehensive report.

The RCC agreed to provisionally accept the report and asked WHO to communicate with the National Certification Committee when this become possible and convey the comments made by the RCC and request a revised report taking into account RCC comments for formal acceptance.

The RCC expressed great concern about the likely deleterious impacts of the present circumstances in Yemen on the achievements made in maintaining a polio-free status for more than nine years.

The RCC is equally concerned about the potential risks to Saudi Arabia and Oman should there be an importation of the poliovirus in Yemen at a time when the healthcare services would not be able to cope and prevent local spread, and hence expose the two neighbouring countries to the risk of importation.
7.8 Djibouti

The RCC reiterated its deep concern about Djibouti, which continues to be at very high risk of wild poliovirus spread following importation. The RCC has not received an annual update for 2 consecutive years.

The RCC acknowledged the support being extended by WHO to help the Ministry of Health in strengthening national polio eradication efforts and calls on the WHO Secretariat to ensure that Djibouti resumes submitting annual reports to avoid jeopardizing regional certification efforts.

7.9 Final national documentation for regional certification of Sudan

The RCC acknowledged the very comprehensive, well-prepared, final national documentation submitted by the National Certification Committee of Sudan.

The RCC was also pleased to note the contributions of the polio eradication programme in meeting some of the health needs of Sudan and the national plan to utilize the infrastructure of polio eradication in support of other public health programmes.

The RCC, therefore, accepted the document and decided that starting from 2015 the National Certification Committee in Sudan will be requested to submit annual updates.

8. OTHER MATTERS

It was noted that in addition to Oman, which regularly tests their national preparedness and response plan to respond to wild poliovirus importation in a field simulation exercise, Bahrain did the same last year. The RCC calls on all the countries to conduct simulation exercises to ensure their applicability and assess national capabilities to implement their plans in the light of lessons learnt.

The WHO European Region is accumulating experience of national and subregional simulation exercises and this has proved very valuable. The RCC recommends that the WHO Eastern Mediterranean Region collaborates with the European Region to see how these experiences can be profitably transferred. Technical support to Member States to conduct simulation exercises should be provided by WHO.

The RCC recommend that national expert groups should meet twice a year or more, as needed. Cases referred should not only be those with inadequate stools but also 5–10% of the cases discarded by the programme; these should be regularly selected over the year and should represent various localities reporting AFP cases.

The RCC reiterated its request to the WHO Secretariat to arrange to screen National Certification Committee reports for missing information and request them to be amended before forwarding for review. This will help RCC members to focus their assessments of the country reports.
The RCC asked that its members be provided with a copy of the last year’s annual update. They also requested the WHO Secretariat to revise the format of the annual update and:

- add to the items on the AFP rate comments on areas with exceptionally high AFP rates (more than double the national rate);
- add an item on risk assessment;
- enlarge the item on vaccine-derived polioviruses;
- delete the items on completeness and timeliness of both routine reports and reports on active surveillance visits.

The next meeting of the Eastern Mediterranean RCC will be held during the period 4–6 April 2016 in either Dubai or Amman.
Annex 1

PROGRAMME

Sunday, 19 April 2015

08:00–08:30  Registration
08:30–09:00  Opening session
            Introductory remarks  Dr Y Al Mazrou, EM/RCC
            Chairman
            Message from the Regional Director
            Welcoming remarks  Dr A Assa’edi, WHO/Oman
            HE Minister of Health, Oman
            Adoption of agenda

09:00–09:15  Regional overview
            Global update of polio eradication outcomes/
            recommendations  Mr C Maher, WHO/EMRO
            Dr R Tangermann, WHO/HQ

09:35–10:15  Implementation status of the 28th RCC
            meeting recommendations  Dr H Asghar, WHO/EMRO

10:15–10:30  Interregion coordination
            EUR  Professor D Salisbury,
            EUR/RCC
            Dr S Bahl, WHO/SEARO

10:30–11:00  Discussion
11:00–11:45  Lessons learnt from outbreaks
            Iraq  Dr M Wannas, NCC Iraq
            Dr A Mulugeta, WHO/Somalia
            Somalia
            Syrian Arab Republic  Professor A Dashash, NCC
            Syrian Arab Republic

11:45–12:15  Discussion
12:15–14:00  Annual update reports: Oman and Bahrain
14:00–16:30  Annual update reports: Egypt, Islamic
            Republic of Iran and Jordan
16:30–17:00  Private meeting Eastern Mediterranean
            Region RCC

Monday, 20 April 2015

08:30–09:00  Poliovirus containment Global Action Plan III
            (country perspectives and expectations from
            National Certification Committees)  Dr N Previsani, WHO/HQ

09:00–11:00  Annual update reports: Kuwait, Lebanon and
            Libya
11:00–14:30  Annual update reports: Morocco, Palestine,
            Qatar and Saudi Arabia
14:30–16:30  Annual update reports: Tunisia, United Arab
            Emirates, Yemen
16:30–17:15  Private meeting Eastern Mediterranean
            Region RCC
**Tuesday, 21 April 2015**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>08:30–09:00</td>
<td>National Certification Committee brief on roles and responsibilities</td>
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<td>09:00–10:30</td>
<td>Final national documentation for regional certification of Sudan</td>
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<td>10:30–11:30</td>
<td>Annual progress report Afghanistan</td>
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<tr>
<td>11:30–12:30</td>
<td>Annual progress report Pakistan</td>
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<tr>
<td>12:30–14:30</td>
<td>Private meeting Eastern Mediterranean Region RCC</td>
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<tr>
<td>14:30–15:30</td>
<td>Closing session and concluding remarks</td>
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*Dr H Asghar, WHO/EMRO*
Annex 2

LIST OF PARTICIPANTS

Members of the Regional Certification Commission

Dr Yagob Y Al Mazrou EMR RCC Chairman
Secretary General, Council of Health Services
Riyadh

Dr Mohamed H Wahdan
Former Special Adviser to the Regional Director
WHO Regional Office for the Eastern Mediterranean
Alexandria

Professor David Salisbury
Former Director of Immunisation
Department of Health
London

Dr Magda Rakha
Deputy Chairman for Technical Affairs
Vacsera
Holding Company for Biological Products & Vaccines
Cairo

Professor Gaafar Ibnauf Suliman
Chairman, Paediatrics and Child Health Council
Sudan General Medical Council
Khartoum

Professor Tariq Iqbal Bhutta
Professor of Paediatrics and Former Principal
Nishtar Medical College
Lahore

Dr Bijan Sadrizadeh
Senior Health Adviser to the President
Iranian Academy of Medical Sciences
Tehran

Dr Supamit Chunsuttiwat
Chairman, South-East Asia Regional Certification Commission (SEARCCPE)
Senior Specialist in Preventive Medicine
Department of Disease Control
Ministry of Public Health
Nonthaburi
Country representatives

AFGHANISTAN
Dr Gholam Aram
Chairperson, National Certification Committee
Hirat

BAHRAIN
Dr Maryam Ebrahim Al Hajeri
Chairperson, National Certification Committee
Manama

EGYPT
Dr Ibrahim Barakat
Chairman, National Certification Committee
Cairo

ISLAMIC REPUBLIC OF IRAN
Dr Abdollah Karimi
Chairman, National Certification Committee
Tehran

Dr Sussan Mahmoudi
Polio Eradication Focal Point
Ministry of Health and Medical Education
Tehran

IRAQ
Dr Muhee Kadhim Wannas
Chairman, National Certification Committee
Baghdad

Dr Nabil Abbas Ibrahim
EPI Manager
Ministry of Health
Baghdad
JORDAN
Professor Najwa Khuri-Bulos
Chairperson, National Certification Committee
Amman
Dr Mohamed Ratib Surour
EPI Manager
Ministry of Health
Amman

KUWAIT
Dr Fayka Al-Raqam
Chairperson, National Certification Committee
Kuwait
Dr Mussab Al-Saleh
Head of EPI Programme
Ministry of Health
Kuwait

LEBANON
Dr Ghassan Issa
Chairman, National Certification Committee
Beirut

LIBYA
Dr Majdi Kara
Chairman, National Certification Committee
Tripoli

MOROCCO
Professor Fatima Zahra Ouadghiri
Member, National Certification Committee
Rabat
Dr Malika El Hamdaoui
Official at the Service of Epidemiological Surveillance
Directorate of Epidemiology and Diseases Control
Ministry of Health
Rabat

OMAN
Dr Seif Salem Al-Abri
Chairman, National Certification Committee
Muscat
Dr Idris Al-Obaidani  
Head, Department of Communicable Disease Surveillance and Control  
Ministry of Health  
Muscat

PAKISTAN  
Professor Tahir Masood Ahmad  
Chairman, National Certification Committee  
Lahore

PALESTINE  
Dr Mowafak Amer  
Chairman, National Certification Committee  
West Bank

Dr Diaa Hjaija  
EPI Manager  
Ministry of Health  
West Bank

Mr Jehad Ahmed  
EPI Manager  
Ministry of Health  
Gaza

QATAR  
Dr Mohd Ahmed M Sh Janahi  
Chairman, National Certification Committee  
Doha

Dr Hamad Eid Al-Romaihi  
Head, Surveillance and Outbreak Section  
Supreme Council of Health  
Doha

SAUDI ARABIA  
Professor Ghazi Jamjoom  
Chairman, National Certification Committee  
Jeddah

Dr Aisha Al Shamaary  
EPI Manager  
Ministry of Health  
Riyadh
SUDAN
Professor Abdelghaffar Ali Adam
Member, National Certification Committee
Khartoum
Dr Elsadig Mahgoob
Representative of EPI
Federal Ministry of Health
Khartoum

SYRIAN ARAB REPUBLIC
Professor Ahmed Deeb Dashash
Chairman, National Certification Committee
Syrian Medical Syndicate
Damascus
Dr Ahmad Abboud
Director Primary Health Care
Ministry of Health
Damascus

TUNISIA
Dr Essia Ben Farahat Hmida
Member, Central Team of EPI
Ministry of Health
Tunis

UNITED ARAB EMIRATES
Professor Yousef Abdulrazzaq
Chairman, National Certification Committee
United Arab Emirates University
Al-Ain
Dr Laila Hussein Aljasmy
EPI Manager
Ministry of Health
Dubai

Facilitator
Mr Salem Al Mahrouqi
Surveillance Team Member
Department of Communicable Disease
Ministry of Health Oman
Muscat
Other organizations

**ROTARY International**
Dr Abdul Rauf Rohaila  
Chair, Eastern Mediterranean Regional PolioPlus Committee  
Islamabad

**WHO offices**

**Headquarters**
Dr Rudolf Tangermann  
Medical Officer, Surveillance, Monitoring and Information  
Geneva

Dr Nicoletta Previsani  
Technical Officer, Surveillance, Monitoring and Information  
Geneva

**Regional Office for South-East Asia**
Dr Sunil Bahl  
Medical Officer, Polio Eradication  
IVD/FGL/SEARO  
New Delhi

**WHO Secretariat**

Mr Christopher Maher, Manager, Polio Eradication Programme and Emergency Support, WHO/EMRO
Dr Humayun Asghar, Regional Adviser, Public Health Laboratories and Regional Certification Focal Point, WHO/EMRO
Dr Mehmet Akif Saatcioglu, Team Leader/Polio, WHO Office Afghanistan
Dr Ali Ahmed Zahed, Surveillance Officer, WHO Office Afghanistan
Dr Tahir Abbass Malik, National Federal Surveillance Officer, WHO Office Pakistan
Dr Abraham Mulugeta Debessay, Team Leader/Polio, WHO Office Somalia
Mrs Rasha Naguib, Programme Associate, Polio Eradication Programme, WHO/EMRO
Mrs Ghada Taher, Team Assistant, Polio Eradication Programme, WHO/EMRO
Mr Mohamed Abdelmohsen, IT Assistant, WHO/EMRO