Report from the Twentieth Meeting of the Global Commission for Certification of Poliomyelitis Eradication

Geneva, Switzerland, 17 – 18 October 2019
Members of the Global Commission for Certification of Poliomyelitis Eradication after the signing of the certificate of WPV3 eradication

*Left to Right:* Dr Nobuhiko Okabe, Dr Arlene King, Professor David Salisbury, Professor Rose Leke, Professor Yagoub Al-Mazrou, Professor Mahmudur Rahman
Abbreviations

Containment

CAG Containment Advisory Group
CC Certificate of Containment
CCS Containment Certification Scheme to support GAPIII
CP Certificate of Participation
CWG Containment Working Group
ICC Interim Certificate of Containment
GAPIII Global Action Plan for Poliovirus Containment
NAC National Authority for Containment
PEF Poliovirus-Essential Facility

Certification

GCC Global Commission for Certification of Poliomyelitis Eradication
NCC National Certification Committee
RCC Regional Commission for Certification of Poliomyelitis Eradication

Viruses and vaccines

IPV Inactivated poliomyelitis vaccine
OPV Oral poliomyelitis vaccine
bOPV Bivalent oral poliomyelitis vaccine containing Sabin type 1 and 3
mOPV2 Monovalent oral poliomyelitis vaccine Sabin type 2
nOPV Novel oral poliomyelitis vaccine
PV Poliovirus (PV1 is PV type 1 etc)
VDPV Vaccine-derived poliovirus
aVDPV Ambiguous vaccine-derived poliovirus
cVDPV Circulating vaccine-derived poliovirus
iVDPV Immunodeficiency-associated vaccine-derived poliovirus
WPV Wild poliovirus
- WPV1 Wild poliovirus type 1
- WPV2 Wild poliovirus type 2
- WPV3 Wild poliovirus type 3

Others

AFP Acute Flaccid Paralysis
CDC Centers for Disease Control (United States of America)
ES Environmental surveillance
GPEI Global Polio Eradication Initiative
IDP Internally Displaced Persons
IMB Independent Monitoring Board
PEESP Polio Eradication and Endgame Strategic Plan 2013–2018
SAGE Strategic Advisory Group of Experts on immunization
TAG Technical Advisory Group
ToR Terms of Reference
WHO World Health Organization
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Foreword

Yesterday was World Polio Day, a global awareness-raising day on the need to complete the job of polio eradication, and here at the World Health Organization (WHO) headquarters, it was my great honour to make a truly phenomenal announcement: that wild poliovirus type 3 has been certified as globally eradicated by the Global Commission for the Certification of Poliomyelitis Eradication. This is the second of the three types of wild poliovirus to have been globally eradicated. Only wild poliovirus type 1 remains in circulation, in just two countries worldwide. Africa has not detected any wild poliovirus of any type since September 2016, and the entire African Region is eligible to be certified free of all wild poliovirus next June.

Global wild poliovirus type 3 eradication is a tremendous achievement and is an important milestone on the road to eradicate all poliovirus strains. This shows us that the tactics are working, as individual family lines of the virus are being successfully knocked out. But the job is not finished until ALL strains of poliovirus are fully eradicated – and stay eradicated. We must achieve final success or face the consequences of renewed global resurgence of this ancient scourge. We must eradicate the remaining strains of WPV1 and also address the increasing circulating vaccine derived poliovirus outbreaks, in particular in Africa.

And here too we are making strong inroads. New strategies are helping us reach the most vulnerable populations, particularly in the remaining reservoir areas. New tools, including a brand-new vaccine, are being developed, to ensure the long-term risk of vaccine-derived polioviruses can be comprehensively addressed. But these tools and tactics only work if they are fully funded, and fully implemented.

And so today, on the day after this tremendous announcement, I really have two messages for you.

• The first is a simple and whole-hearted ‘thank you’. Thank you for making a world free of wild poliovirus type 3 a reality. Thank you to all countries, to all donors, to all stakeholders, partners, advisory and oversight groups, policy makers, Rotarians. Most importantly, thank you to all communities, to all parents. To all frontline health workers. They are the real heroes of this achievement.

• And my second message is: please do not stop now. The Reaching the Last Mile Forum, hosted in the United Arab Emirates this November by His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of the Emirate of Abu Dhabi, will provide an opportunity for many of our stakeholders to recommit their efforts to a polio-free world. I urge all of you to stay committed and redouble determination in this final push to the finish line.

Together, the partners of the Global Polio Eradication Initiative (GPEI) - WHO, Rotary International, the US Centers for Disease Control and Prevention, UNICEF, the Bill & Melinda Gates Foundation and Gavi, the Vaccine Alliance - stand ready to support this global effort. But it will take collective and global collaboration, from all public- and private-sector stakeholders, to ensure every last child is reached and protected from all polioviruses. Together, let us achieve history: let us ensure that no child anywhere will ever again by paralysed by any poliovirus.

Thank you.

Dr Tedros Ghebreyesus
Chair, GPEI Polio Oversight Board
Director-General, WHO
25 October 2019
Introduction

The 20th meeting of the Global Commission for Certification of Poliomyelitis Eradication (GCC) took place in Geneva, Switzerland, on 17–18 October 2019, chaired by Professor David Salisbury.

Commission Members are chairs of their respective Regional Commissions for Certification of Poliomyelitis Eradication (RCC):
Professor David Salisbury - WHO European Region,
Professor Yagoub Al-Mazrou - WHO Eastern Mediterranean Region,
Dr Arlene King - WHO Region of the Americas, and Chair, GCC Containment Working Group,
Professor Rose Leke - WHO African Region,
Dr Nobuhiko Okabe - WHO Western Pacific Region,
Professor Mahmudur Rahman - WHO South-East Asian Region.

Aim and Objectives

The aim of the meeting was to ensure global certification of poliovirus eradication takes place in a timely manner with credible and transparent processes.

Specific objectives were:
• To review regional responses to the DG WHO memo to Regional Directors regarding the GCC recommendation to proceed to certify the eradication of WPV3, and conclude whether WPV3 has been eradicated;
• To review the current epidemiology of WPV1 and the progress and barriers toward its eradication;
• To review the current situation regarding outbreaks of cVDPV, and its impacts on global certification;
• To review implementation of the global polio surveillance action plan, especially in conflict affected and inaccessible areas, and
• To be updated on the country and regional implementation of containment, and certification of containment in facilities retaining relevant polioviruses and host countries and review implications of WPV3 eradication certification on poliovirus.

The agenda and list of participants are included in appendix 1 and 2 respectively.
1: Review of Global Progress

WPV epidemiology
Paralytic cases caused by wild polio virus type 1 have increased from 33 cases in 2018 to 90 as at 17 October 2019. All cases have occurred in Afghanistan and Pakistan.

Afghanistan
In Afghanistan, a ban on house-to-house vaccination has severely affected the ability of the program to reach children. This has resulted in large cohorts of unvaccinated children; this situation could result in a major outbreak. There are challenges in accessing all children in highly mobile populations also.

Pakistan
In Pakistan, the program has been off-track, facing political disruption and increased community resistance. The wild virus is being detected in many parts of the country through both environmental and AFP surveillance: there have been 72 cases in 2019 compared to 12 for the same period in 2018.

African Region
Sustained progress has been made, and it is now three years since the last WPV1 was detected in Nigeria in September 2016. Furthermore, 32 countries detected their last WPV cases more than 10 years ago, and for another 15 countries, their last WPV cases were detected between three to nine years ago. Since the last positive WPV1 from community sampling (27 September 2016) until 14 September 2019, over 219 000 stool samples have been processed in polio laboratories, and none have tested WPV positive. Since the last positive WPV from environmental samples (5 May 2014) until 14 September 2019, over 17 000 faecal samples have been processed in polio laboratories and no WPV have been isolated. In September 2016, there were almost 600 000 children inaccessible to immunization campaigns in Borno state and estimates are that about 34 000 under 5 children remain inaccessible as at September 2019.

cVDPV
Several cVDPV2 outbreaks have occurred mostly on the African continent but now also in the Philippines, China and Pakistan (see below).

IPV supply
IPV supplies are now sufficient for one dose for routine immunization and progress is being made to catch-up missed cohorts.

Certification
The African Regional Certification Commission will convene in March / April 2020 to review the completed certification documentation of three countries: South Sudan, Cameroon, and the Central African Republic (CAR), while Nigeria will present a situation update. The following meeting proposed for June 2020 will focus solely on Nigeria, with a potential declaration that the WHO African Region has been certified polio free at that time if the documents from Nigeria are also accepted as evidence that WPV transmission has been interrupted.
Containment
There has been a further small decrease in the number of proposed poliovirus essential facilities (PEFs); as of September 2019 there were 26 countries planning to retain poliovirus type 2 materials in 78 facilities.

African cVDPV2 outbreaks

Of the 153 cVDPV2 cases and environment samples reported in 2018–2019, 140 (91%) occurred in four countries: Nigeria, Democratic Republic of Congo (DR Congo), Angola and the Central African Republic (CAR). cVDPV2 emergence and ongoing spread has favoured areas where tOPV was not used sufficiently for SIAs and routine immunization prior to OPV2 withdrawal in 2016. This may explain why areas in Nigeria, Angola and CAR with low population immunity to type 2 were particularly vulnerable to multiple emergences (regardless of source). No such emergences have been observed in other countries bordering Nigeria or DR Congo.

Stopping spread of cVDPV2s and reducing risk of emergence of new outbreaks requires responses that will substantively boost population immunity to type 2. In the DR Congo, there has been spread of cVDPV2 to areas with proximity to previous mOPV2 use and multiple new emergences after mOPV2 use, and in Angola there has been cVDPV2 emerging in areas far from mOPV2 use and rapid development of cVDPV2 after mOPV2 use.

Since 2018, the cVDPV2 outbreaks caused by the emergence first detected in Jigawa, Nigeria (virus ‘NIE-JIS-1’) have spread in-country to 13 northern and southern states in Nigeria, and internationally to five countries: Niger, Benin, Cameroon, Ghana and Chad. Risk factors for spread include nomadic population movements, the existence of major commercial routes, and presence of insecurity and internally displaced persons and refugee camps.

Lessons learnt include:
• mOPV2 use has stopped the pre-switch cVDPV2 outbreaks,
• mOPV2 has stopped most of the post-switch outbreaks,
• seeding of new cVDPV2 in areas where mOPV2 has been used has been limited,
• new emergence of cVDPV2s has particularly occurred in areas adjacent to where mOPV2 has been used,
• there has been new emergence and long range cVDPV2 transmission,
• there have been rapidly mutated cVDPV2s after mOPV2 use compared to earlier observations of progressive mutations,
• in Nigeria, in areas where IPV has been used after rounds of mOPV2 (Sokoto, Borno, Jigawa etc.), it has had a beneficial effect,
• regular population movements (particularly nomadic, mining, commercial routes) should play a bigger role in defining the geographical scope of the responses,
• Population immunity of adjacent areas to outbreak areas should be considered when defining the scope of the responses,
• Locally known risks should be incorporated in the scope of the rounds.
Modelling by Kid Risk Inc suggests that there can be very high confidence (exceeding 99%) that WPV3 is no longer circulating in its last known reservoir of Borno-Yobe in Nigeria, and there can be increasing confidence that WPV1 is no longer circulating in Borno-Yobe (preliminary results). However, uncertainty about surveillance quality leads to possibility of missed WPV1 cases after 2016. On the other hand, the fact that the population is not totally isolated helps to ensure potential detection of polio viruses in the under-vaccinated populations in Borno.

Other Issues

Regarding Pakistan / Afghanistan, modelling by Kid Risk Inc suggests a very high confidence (exceeding 99%) that WPV3 is no longer circulating. In the absence of WPV3, with low immunization coverage and preferential use of mOPV1 for some SIAs, emergence of cVDPV3 could become a future issue. High-quality polio surveillance needs to be sustained after apparent interruption of transmission, particularly in areas with under-vaccinated subpopulations.

The GCC received a report on the recent Cessation Risk Task Team meeting, where it was concluded that the epidemiology of cVDPV2s observed during the last several months was markedly different than anything seen previously, especially numerous independent emergences of cVDPV2 in areas not included in an mOPV2 response. These emergences are likely due to transmission of Sabin 2 virus beyond the outbreak response area, and this observation represents a large increase in risk of mOPV2 use separate from other factors such as SIA quality.

The GCC also noted the recommendations from the SAGE:
• Acceleration of clinical development and prioritization of assessment under WHO’s EUL procedure for nOPV2; and supporting maintaining status of polio as PHEIC;
• Use of one-drop mOPV2 strategy when mOPV2 supply reaches critical levels for cVDPV2 outbreak control.

Update on poliovirus surveillance in endemic and high-risk countries

To identify priority countries for urgent GPEI support, the GPEI (through its Surveillance Task Team) undertakes a country prioritization using a data-driven annual deep-dive process. Endemic and outbreak countries are automatically considered priority countries for support. The prioritization is reviewed every six months.

In Afghanistan - Pakistan, the NPAFP rate has increased in last five years while stool adequacy has remained steady; at sub-national level, AFP surveillance quality indicators are mostly good. In Nigeria and Lake Chad basin countries, AFP surveillance quality has been enhanced in the last three years. A significant strategy has been the engagement of 1,224 community informants from inaccessible areas who now report 88% of the AFP cases reported in Borno.

Regarding cVDPV2, there have been few ‘orphan viruses’ found, indicating surveillance has been mostly timely in new geographies.

The footprint or coverage of environmental surveillance (ES) has expanded during 2016–2018, both in the number of countries with ES and the number of sites per country, with a commensurate increase in laboratory capacity to meet demand. In the African Region in 2019 there are 320 sites in 182 districts in 26 countries compared to 147 sites in 70 districts in 11 countries in 2016. In the Eastern Mediterranean Region,
there are 166 sites in 83 districts in nine countries compared to 127 sites in 43 districts in five countries in 2016.

Quality indicators are being used to monitor and review effectiveness of ES. There is a program of regular assessment of site performance to identify areas of concern. Country-level low enterovirus isolation rates, defined as fewer than half of the sites in the country isolating EV, leads to an investigation of the sites and responses are applied as applicable or alternatively consideration of closure of poor performing sites.

All three endemic countries (Afghanistan, Pakistan and Nigeria) have sensitive surveillance systems capable of detecting WPV and VDPV circulation. In Nigeria and other Lake Chad basin countries, access for surveillance continues to improve giving high confidence to the programme as African Regional certification approaches.

Most new cVDPV emergences have been detected in a timely manner; however, on at least four occasions, ongoing circulation was detected late. In the Philippines, type 2 detection with linkages potentially to iVDPV2 highlights the risks associated with prolonged shedding by persons with immunodeficiency. Environmental surveillance has contributed to early identification of events and outbreaks in countries in at least three regions.

Conclusions on Progress toward Eradication

The GCC noted that it was now over three years since the last WPV1 was detected in Africa, and that this meant that Africa now was eligible for regional certification.

The GCC expressed its support for the proposed timetable for country visits and verification activities in the lead-up to African Regional certification and commended the Region for this progress toward a very significant achievement.

The GCC is very concerned by the significant reversal of progress in WPV1 eradication in Afghanistan and particularly Pakistan and noted that this means global certification continues to be pushed further back to 2023 at the earliest. The GCC noted that there has been no transmission in EMR outside of the Afghanistan – Pakistan epidemiological block since 2014.

The GCC expressed its grave concern that the current epidemiology of cVDPV2 and the risks associated with mOPV2 use and other programmatic limitations make early control of the situation unlikely.
Recommendations on Progress toward Eradication

Recommendation 1.1

The GCC recommended that if Africa is certified in 2020, the achievement will significantly bolster the case for forging ahead with eradication in the remaining reservoirs, and that communication at the time should include the global implications of this achievement.

Recommendation 1.2

In view of the unanticipated, growing interval gap between cessation of WPV1 transmission in Afghanistan and Pakistan and the rest of the world, and the high standard of surveillance in the two countries, the GCC recommended that the GPEI review the evidence for the requirement of three years without WPV1 detection in those countries, and explore options and pre-conditions for shortening this period, including potential financial and programmatic costs and benefits.

Recommendation 1.3

Noting the evolving and unique epidemiology of cVDPV2 in Africa and elsewhere, the GCC recommended that the GPEI review the epidemiology and possible criteria for determining when cVDPV2 transmission could be considered as having become established, as this affects the criteria for validating the absence of cVDPV2. The GCC recommended that the secretariat provide options for future work in this area, noting that the epidemiology is still evolving.

Recommendation 1.4

The GCC recommended that based on some of the lessons being learnt from cVDPV2, future meetings of the GCC should include updates on VDPV1 and VDPV3 as well, to monitor any signals of changing epidemiology.
2: Global WPV3 Certification

In February 2019, the GCC reviewed updated data on WPV3. Since the last WPV3 case in the world was detected, data obtained from each WHO Region indicates that over one million tests have been performed on AFP case and environmental specimens, with no WPV3 detected, but WPV1 has been detected in three regions, and cVDPV detected in all six regions. This absence of WPV3 viruses in a system capable of detecting other polioviruses is strongly supportive that WPV3 has been truly eradicated.

The GCC had agreed that the RDs of AFR and EMR be asked to submit requests to their respective RCCs to confirm from their Member States that the last WPV3 in each country had been reported more than six years ago. The GCC determined that it would review these data along with the regional certification reports of the other four certified regions before concluding that WPV3 had been eradicated.

SUMMARY OF FINDINGS

WHO Region of the Americas

The Region of the Americas was declared polio free in 1994. Since then, apart from detection of WPV1 in sewage in Sao Paolo Brazil in 2014, no other WPV has been detected since certification. The last WPV3 detected in the Region was in Canada in 1993 (importation) in asymptomatic persons, while the last endemic WPV3 case was detected in Mexico in 1990. In the Region of the Americas, the Regional Certification Commission was disbanded and only reconvened in 2015. In light of this, the RCC undertook a detailed review of WPV3 data writing to the Regional Director on 16 May 2019, stating that:

‘Based on the detailed review of each country’s annual report and the information from PAHO/WHO’s polio database, the Regional Certification Commission (RCC) certifies that the Americas has been free of WPV3 for almost 29 years.’

WHO Western Pacific Region

The Western Pacific Region was declared polio-free in 2000; subsequently WPV1 transmission was detected in China in 2011 and imported WPV1 cases were detected in Singapore in 2006 and in Australia in 2007. No other WPV detections have occurred since certification. The last WPV3 was detected in Papua New Guinea in 1994.

The 24th meeting of the Western Pacific RCCPE held in Manila, Philippines 14–16 November 2018 concluded that the Region remains free of wild poliovirus:

‘After thorough discussion and deliberation, the RCC concluded that the Region remains free of indigenous wild polioviruses (WPVs) and thus retains its status as polio-free.’
WHO European Region

The European Region was declared polio-free in 2002. WPV1 transmission was detected in Central Asia and Russia in 2010, and in Israel in 2013–2014. There have been no other WPV detections since certification. The last WPV3 was detected in Turkey in 1998.

The 33rd meeting of the European RCCPE held in Copenhagen, Denmark 28–29 May 2019 concluded the Region remains free of wild poliovirus:

‘The 33rd meeting of the European RCCPE, held on 28–29 May 2019, reviewed annual updates submitted by the Member States of the WHO European Region on the status of the national polio eradication programme in 2018. The RCC concluded, based on available evidence, that there was no wild poliovirus (WPV) or circulating vaccine-derived poliovirus transmission in the WHO European Region in 2018.’

WHO South East Asian Region

The South East Asia Region was declared polio free in 2014 and there have been no WPV detections since certification. The last WPV3 was detected in India in 2010.

The most recent published RCC report was from the 11th meeting of the South East Asia RCCPE held in Paro, Bhutan 28–29 May 2018 which concluded that the Region remains free of wild poliovirus. This was again confirmed at the 12th RCCPE meeting in Dhaka, Bangladesh on 17–19 September 2019.

http://www.searo.who.int/immunization/highlights/11th-rccpe/en/

WHO Eastern Mediterranean Region - Results of the member state consultation

The Regional Director wrote to Ministries of Health in Member States on 1 May 2019 seeking confirmation that no WPV3 had been detected in the last six years. Twenty out of 22 Member States confirmed that there had been no WPV3 detected since 2012. Two member states have not responded, Djibouti and Morocco; however neither country has ever reported WPV3. The responses have been verified by the Regional Office with other documents including Basic and Final certification documents, Annual Certification updates and Annex II of PIM Guidance.

As a result of this verification, it may be concluded that there has been no detection of WPV3 since the last AFP case in Pakistan, with date of onset 18 April 2012 and the last environmental sample collected from Karachi on 7 October 2010. The number of specimens that have tested NEGATIVE for WPV3 from stool specimens is 282 464 and from environmental samples was 9151.

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WHO African Region - Results of the Member State Consultation

The Regional Director wrote to Ministries of Health in Member States in September 2019 seeking confirmation that no WPV3 had been detected in the last six years. All 47 Member States have confirmed that there has been no WPV3 detected since 2012. The responses have been verified by the Regional Office with other documents including Basic and Final certification documents, Annual Certification updates and Annex II of PIM Guidance.

As a result of this verification, it may be concluded that there has been no detection of WPV3 since the last AFP case in Yobe, Nigeria with onset of paralysis on 10 November 2012, and the last environmental WPV3 isolate in Africa in Lagos, Nigeria, collected on 11 November 2012. The number of specimens that have tested NEGATIVE for WPV3 from stool specimens is over 376,000 and from environmental samples has been over 16,000.

Conclusion on WPV3 Certification

Based on the certification processes described above and the reviews of data at previous meetings, particularly laboratory data, and the high confidence based on transmission modelling, the Global Certification Commission for Polio Eradication unanimously concluded that indigenous wild poliovirus type 3 has been eradicated worldwide.

Recommendation on WPV3 Certification

Recommendation 2.1

The GCC recommended that the WHO Director-General declare the eradication of WPV3 worldwide on World Polio Day 2019 and that the program communicate this achievement to motivate program workers, donors and partners. The GCC noted that this achievement has not been easily gained, and in some areas of the world has been at high cost to front line workers, parents, families and communities.
3: Containment

Impact of mOPV2 use on containment in Africa

The GPEI is currently managing many outbreaks of cVDPV2 in sub-Saharan Africa and the risk of re-established transmission of poliovirus type 2. In 2019, there has also been detection of cVDPV2 outbreaks in Asia (China, Pakistan, the Philippines). Since 2016, there have been 330 million doses of monovalent OPV2 (mOPV2) used to respond to these cVDPV2 outbreaks. The limited supply of the mOPV2 vaccine, the only currently available tool to control these outbreaks, presents a serious concern.

The use of mOPV2 and ongoing supply requirements present challenges to the implementation of PV2 containment. In October 2017, the GCC urged countries affected by ongoing transmission of cVDPV2 to repeat their inventories and destroy, transfer or contain PV2 materials after any outbreak was declared closed. Action on OPV2/Sabin2 poliovirus containment may be temporarily suspended in areas where a decision by WHO has been made to use mOPV2 to respond to emerging or re-emerging WPV2/cVDPV2 transmission. Manufacturing challenges include managing the right level of containment, minimizing the risk of polio being released into the community whilst maintaining supply in a timely manner and rationalizing the investment and operational costs.

Report from the CMG

The Third Meeting of the National Authorities for Containment (NACs) was held on 14 October 2019 to facilitate discussions on the progress of establishing containment and challenges that have arisen so far. There were representatives from 20 NACs and three other countries were in attendance. The main priorities established from this meeting comprised: communicating clearly, particularly regarding vaccine production and containment; mitigating anxieties about entry into the Certification Containment Scheme (CCS); moving forward with developing the NAC’s capacity to audit PEFs; and enabling a platform for NAC-to-NAC communication.

CAG and update on GAP III implementation

The Containment Advisory Group (CAG) makes recommendations on technical issues related to the implementation of the Global Action Plan to minimize poliovirus facility associated risk after the type-specific eradication of wild polioviruses and sequential cessation of oral polio vaccine use (GAPIII).

Most of CAG’s deliberations have been based on submissions that are received from containment stakeholders including facilities, NACs, containment coordinators and research groups. Importantly, the ‘Guidance to minimize risks for facilities collecting, handling or storing materials potentially infectious for polioviruses (PIM Guidance)’ was commissioned by CAG and adopted in November 2017. Currently guidance is being developed on acceptable alternative containment solutions in the period before full eradication.
Update on Vaccine Supply

After several years of shortages, IPV supply is improving to an extent that in 2019 all 126 countries which had used only OPV in 2013 have introduced at least one dose of IPV into the routine immunization schedule. In addition, catch-up vaccination has started for the estimated 42 million children who were missed since April 2016 due to supply constraints. The demand for IPV for 2020–2023 is projected to continue to increase, assuming a gradual introduction of a second dose of IPV into routine immunization schedules as supplies become available prior to the cessation of OPV use.

There is a need to secure large volumes of mOPV2 immediately to be able to respond to cVDPV2 outbreaks or events, with high-quality campaigns needed to interrupt transmission. It is essential to secure and fill all available mOPV2 bulk supplies including those which are not yet under UNICEF contracts for the stockpile.

Containment Working Group update on certification of PEFs

As at September 2019, 26 countries were planning to retain poliovirus type 2 (PV2) materials in 78 PEFs. Twenty-four of these countries have established NACs. The deadline for certificates of participation (CP) applications for facilities retaining PV2 is December 2019. All, regardless of when they have been submitted, will expire on April 2021. To date, there have been 14 CP applications submitted to GCC via NACs and 10 have been endorsed.

Public Health Management of Facility-Based Exposure to Live Polioviruses

- Guidance in managing exposed persons for countries hosting facilities that maintain live polioviruses

The GCC previously agreed to endorse the document as ‘interim guidance’ following which it would be published as a draft for consultation with a view to final approval in 2019. The public consultation period commenced 18 February 2019 with the posting of the document on the polio eradication web site and finished 30 September 2019. There had been 465 page-views, and 170 document downloads. Written comments were received from NCC Australia, Bbio Netherlands, Khoula Hospital in Muscat, NPL Iraq, and the NACs of Denmark and Sweden. Most of the comments were clarifying statements or editorial with no major objections to the key concepts in the guidance.
Conclusions on PV Containment

GCC noted that certification of WPV3 eradication may impact the containment of polioviruses - the scale of the impact will be dependent on the number of facilities that retain PV3.

GCC noted the challenges inherent in the implementation of the Containment Certification Scheme.

The GCC concluded that substantial progress on Phase I had been reported by the Regions and HQ in implementing previous GCC recommendations. However, GCC noted some pending issues that should be addressed in a reasonable timeframe.

Containment Recommendations

Recommendation 3.1
The GCC continues to recommend that countries affected by ongoing transmission of cVDPV2 repeat their inventories and destroy, transfer or contain PV2 materials after the outbreak is declared closed.

Recommendation 3.2
The GCC strongly recommends that all ICC and/or CC must be in effect by 30 April 2021 as all approved CPs for PEFs that plan to retain PV2 and that are proceeding to obtain an ICC and/or CC will expire on this date.

Recommendation 3.3
Impact of WPV3 certification on containment requires further review in order to develop feasible and appropriate timelines for WPV3 containment. The GCC recommends countries with facilities planning to retain WPV3 to enter the CCS, as soon as possible.

Recommendation 3.4
The GCC endorsed the guidance document ‘Public Health Management of Facility-Based Exposure to Live Polioviruses’, noting that it will need to be updated as the situation evolves regarding eradication.
### Annex 1: Agenda

**Global Commission for the Certification of Poliomyelitis Eradication 20th Meeting**  
17 - 18 October 2019  
Venue: Starling Hotel WHO / OMS HQ

#### Session 1: Review of Global Progress, with a focus on Africa  
Thursday 17th October

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<td>Welcome remarks</td>
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<td>Objectives of the meeting</td>
<td>D. Salisbury</td>
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<td>Global update</td>
<td>M. Zaffran</td>
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<td>11.00</td>
<td>cVDPV2 outbreaks in Africa - lessons learnt and way forward</td>
<td>P. Mkanda</td>
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<td>11.30</td>
<td>Plans for African Certification</td>
<td>R. Leke</td>
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<td>Updated transmission modeling of the last WPV reservoirs</td>
<td>K. Thompson</td>
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#### Session 2: WPV3 Certification  

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<td>15.00</td>
<td>Regional updates</td>
<td>RCC chairs</td>
</tr>
<tr>
<td>15.30</td>
<td>Communication plan</td>
<td>O. Rosenbauer</td>
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<tr>
<td>16.00</td>
<td>Signing ceremony</td>
<td>RCC chairs</td>
</tr>
<tr>
<td>16.30</td>
<td>Discussion, including possible recommendations from day 1</td>
<td>all</td>
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<tr>
<td>17.00</td>
<td>Finish</td>
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#### Session 3: Progress toward WPV1 certification of eradication  
Friday 18th October

<table>
<thead>
<tr>
<th>Time</th>
<th>Item</th>
<th>Speaker/Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30</td>
<td>Review draft recommendations</td>
<td>all</td>
</tr>
<tr>
<td>09.00</td>
<td>Update on Vaccine supply</td>
<td>A. Ottosen</td>
</tr>
<tr>
<td>09.20</td>
<td>Update on AFP and ES surveillance in endemic and high-risk countries</td>
<td>J. Ahmed</td>
</tr>
<tr>
<td>09.40</td>
<td>update on Pakistan and Afghanistan</td>
<td>A. Quddus</td>
</tr>
<tr>
<td>09.50</td>
<td>discussion</td>
<td>all</td>
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#### Session 4: Containment  

<table>
<thead>
<tr>
<th>Time</th>
<th>Item</th>
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<tbody>
<tr>
<td>10.00</td>
<td>Impact of mOPV2 use on containment in Africa</td>
<td>D. Moffett</td>
</tr>
<tr>
<td>10.15</td>
<td>Report from the CMG</td>
<td>J. Partridge</td>
</tr>
<tr>
<td>10.30</td>
<td>Coffee break</td>
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<tr>
<td>10.50</td>
<td>Containment Working Group update on certification of PEFs</td>
<td>A. King</td>
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<tr>
<td>11.10</td>
<td>NAC survey</td>
<td>D. Moffett</td>
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<tr>
<td>11.30</td>
<td>Final guidance on facility related containment breaches</td>
<td>G. Tallis</td>
</tr>
<tr>
<td>11.45</td>
<td>CAG and update on GAP III implementation</td>
<td>H. Singh</td>
</tr>
<tr>
<td>12.00</td>
<td>Finalization of Recommendations</td>
<td>all</td>
</tr>
<tr>
<td>12.55</td>
<td>Wrap-up and next meeting</td>
<td>D. Salisbury</td>
</tr>
<tr>
<td>13.00</td>
<td>Lunch</td>
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</tr>
<tr>
<td>14.00</td>
<td>Finish</td>
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</tbody>
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Annex 2: List of Participants

GCC MEMBERS
1 Professor David SALISBURY
2 Professor Mahmudur RAHMAN
3 Dr Arlene KING
4 Professor Rose LEKE
5 Professor Yagob AL-MAZROU
6 Dr Nobuhiko OKABE

TECHNICAL ADVISERS
7 Dr Jeff Partridge, BMGF
8 Dr Kimberly THOMPSON, Kid Risk
9 Ms Ann Ottosen, Unicef

WHO REGIONAL OFFICES
10 Dr Pascal MKANDA, AFRO
11 Dr Koffi Isidore KOUADIO, AFRO
12 Dr Hieronyma GUMEDE MOELETSI, AFRO
13 Dr Humayun ASGHAR, EMRO
14 Dr Ashraf Wahdan, EMRO
15 Dr Patrick O’CONNOR, EURO
16 Dr Shahin HUSEYNOV, EURO
17 Dr Sigrun ROESEL, SEARO
18 Dr Gloria REY-BENITO, AMRO
19 Dr Tigran AVAGYAN, WPRO

WHO SECRETARIAT / HQ
20 Mr Michel ZAFFRAN
21 Dr Roland SUTTER
22 Dr Arshad QUDDUS
23 Dr Graham TALLIS
24 Dr Jamal AHMED
25 Dr Ousmane DIOP
26 Dr Zainul KHAN
27 Ms Claire Chauvin
28 Dr Daphne MOFFETT
29 Dr Liliane BOUALAM
30 Dr Harpal SINGH
31 Dr Nicoletta Previsani
32 Mr Oliver ROSENBAUER
33 Mrs Achouak MAJDOUL
34 Dr Grace MACKLIN

OBSERVER
35 Mr Paul Huntly
Report from the Seventeenth Meeting of the GCC, Geneva, Switzerland, 26-27 February 2018