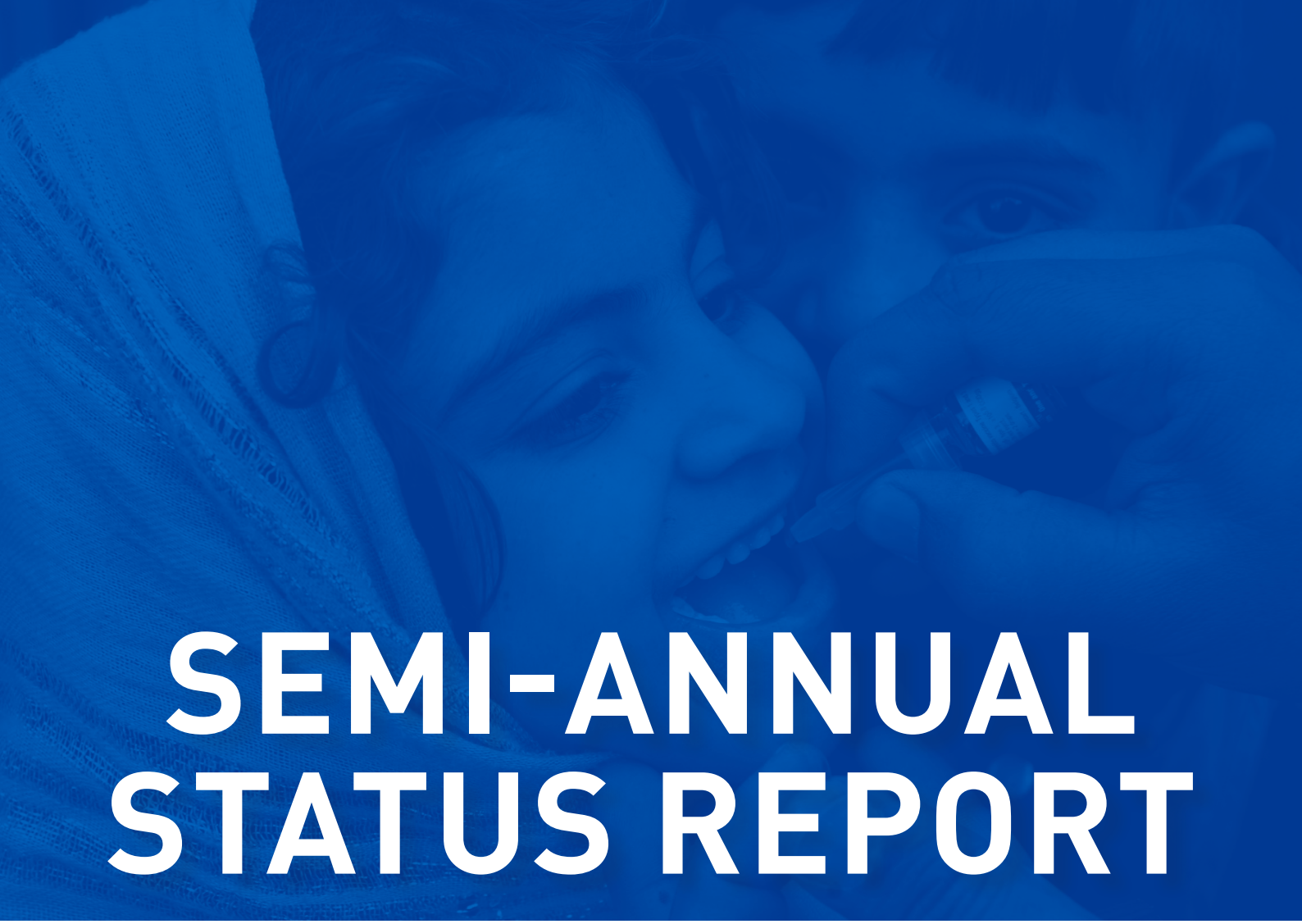

SEMI-ANNUAL STATUS REPORT

JANUARY TO JUNE 2018

PROGRESS AGAINST THE POLIO ERADICATION & ENDGAME STRATEGIC PLAN

POLIO GLOBAL ERADICATION INITIATIVE

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ACRONYMS

AFP	Acute flaccid paralysis
bOPV	Bivalent oral polio vaccine
CCS	Containment Certification Scheme
cVDPV	Circulating vaccine-derived poliovirus
cVDPV1	Circulating vaccine-derived poliovirus type 1
cVDPV2	Circulating vaccine-derived poliovirus type 2
cVDPV3	Circulating vaccine-derived poliovirus type 3
GAPIII	Third edition of the WHO Global Action Plan to minimize poliovirus facility-associated risk after type-specific eradication of wild polioviruses and sequential cessation of oral polio vaccine use
GPEI	Global Polio Eradication Initiative
IPV	Inactivated polio vaccine
OPV	Oral polio vaccine
PCS	Post-Certification Strategy
PEF	Poliovirus-essential facility
tOPV	Trivalent oral polio vaccine
VDPV	Vaccine-derived poliovirus
VDPV2	Vaccine-derived poliovirus type 2
WHO	World Health Organization
WPV	Wild poliovirus
WPV1	Wild poliovirus type 1
WPV2	Wild poliovirus type 2

KEY POINTS

- The eradication of polio has become a "dual emergency":
  1. to eradicate wild polioviruses using oral polio vaccine as rapidly as possible, to prevent global resurgence of this disease; and,
  2. to subsequently and urgently stop using oral polio vaccine, phasing it out as rapidly as possible, to eliminate the long-term risk of vaccine-derived poliovirus.

- Global Polio Eradication Initiative partners are finalizing an extension of the Polio Eradication & Endgame Strategic Plan, beyond 2018, to ensure a lasting polio-free world devoid of wild polioviruses and vaccine-derived polioviruses is reached as quickly as possible. An independent evaluation of tactical approaches will inform the development of this plan, which will be presented to the World Health Assembly in May 2019.
- WHO Member States are intensifying efforts, implementing national emergency action plans, accelerating global containment work and moving forward on transition planning. The finalized Post-Certification Strategy provides a clear road map to ensure that a polio-free world can be sustained in the long term.
- Critical to final success is the ongoing support of the international development community to ensure the mobilization of the necessary financial, technical and personnel resources to secure a lasting polio-free world.
- Thank you to all stakeholders for bringing the world to the threshold of being polio-free. Together, let us achieve something historic: let us ensure that no child will ever again be paralysed by any poliovirus anywhere.

INTRODUCTION

The Global Polio Eradication Initiative (GPEI) Polio Eradication & Endgame Strategic Plan (Endgame Plan) aims to make polio the second-ever human disease to be eradicated from the world. This document includes a detailed narrative for each of the Endgame Plan strategic objectives, broken down by geography where appropriate. The narrative is followed by a series of annexes that contain the monitoring framework indicators for endemic countries, outbreak countries and high-risk countries, and global indicators.

At the time of the GPEI's founding in 1988, polio was endemic in more than 125 countries and paralysed 350 000 children every year. Since then, the GPEI has overseen a 99% reduction in annual cases of polio. Today, only three countries remain endemic to wild poliovirus (WPV) transmission, and the world is closer than ever to being polio-free.

The strategies outlined in the Endgame Plan have bought the world to the brink of polio eradication and have set the groundwork for sustaining a polio-free world in perpetuity. Looking ahead, these strategies will be further evaluated and refined in an extension of the Endgame Plan, which is being developed and will be finalized in early 2019. Crucially, the programme must look not only to sustain progress, but to overcome the challenges posed by the increasing importance of removing the threat of circulating vaccine-derived polioviruses (cVDPVs). While not a new phenomenon, with no more cVDPVs today than in previous years, it is clear that a polio-free world means one in which no child is paralysed by any form of the virus.

This underlines the urgency of eradicating WPVs. A dual emergency must be faced: to eradicate WPV to protect children everywhere; and to do so not only to prevent cases of WPV paralysis and the global re-emergence of polioviruses, but also to phase out the use of the oral polio vaccine (OPV) as swiftly as possible, to prevent future cases of cVDPV.

In the meantime, in the first six months of 2018, work continued with countries to bolster this effort through maintaining and strengthening high vaccination coverage. This protects populations from outbreaks and is the only sure way to eradicate the virus once and for all. After eradication of polio has been certified, the Post-Certification Strategy (PCS) will guide the activities that need to be implemented and the functions that must be sustained to maintain a world free of polio. This work was strengthened by new support from Gavi, the Vaccine Alliance, for inactivated polio vaccine (IPV) in priority countries and continued improvements in the IPV supply situation.

The steps to prepare for a lasting polio-free world must also continue. At the Seventy-first World Health Assembly in May 2018, a resolution was passed calling for strong Member State commitment to accelerate containment. The importance of effective poliovirus containment is perhaps best illustrated by recalling that the last infection due to smallpox virus – the only human pathogen to have been eradicated globally thus far – occurred as a result of an accidental laboratory containment failure. In a limited number of facilities, poliovirus will continue to be retained to serve critical national and international functions, such as the production of polio vaccine or research. It is crucial that this poliovirus material be appropriately contained under strict biosafety and biosecurity handling and storage conditions, to ensure that virus is not released into the environment, either accidentally or intentionally, to again cause outbreaks of the disease in susceptible populations. That is why the resolution on the containment of polioviruses adopted by the World Health Assembly is so important. As the day draws near when WPV transmission is interrupted, planning for the future and securing

this success are essential. Too much has been invested globally to risk jeopardizing a polio-free world by not fully containing polioviruses.

Finally, to achieve success, ensuring that the necessary resources are mobilized for these last, crucial steps is required. Encouragement came from many quarters, including the highly positive outcomes of the June 2018 G7 summit in Canada and ongoing commitment from Rotarians at their 2018 convention. However, in this critical time, funds must be operationalized quickly from numerous sources. With ongoing poliovirus transmission, the Polio Oversight Board is expected to review and endorse a revised budget in September 2018.

Together, let us achieve something historic: let us achieve that no person will ever again know the pain of lifelong polio paralysis.

SECURING A LASTING POLIO-FREE WORLD – A NEW STRATEGY TO ADDRESS A DUAL EMERGENCY

The earliest depiction of a child paralysed by the disease now called polio appeared in hieroglyphics on an ancient Egyptian stele. This disease has existed for millennia, paralysing millions of children all over the world. As recently as 1985, polio was causing lifelong paralysis in over 350 000 children in more than 125 countries.

Since that time, WPV has been reduced by more than 99.99%. So far in 2018, only 13 cases of WPV have been reported, from a handful of districts in Afghanistan and Pakistan. This is the closest the world has ever been to being polio-free. But polio is a highly infectious disease that will not go without a fight. That is the nature of eradication efforts: success is a must or the disease will come roaring back. If the latter occurs, the world will again face 200 000 new cases, every single year. Those are 200 000 children each year who will no longer be able to walk to school, who will be paralysed for life.

Polio eradication – a dual emergency

Recognizing this risk, the World Health Organization declared the effort to eradicate polio a Public Health Emergency of International Concern. But in fact, the eradication of polio has now become a dual emergency. The progress in eradicating WPV has been achieved through large-scale immunization campaigns using the OPV. As the vaccine is administered orally, it can be delivered to children easily no matter where they live. Importantly, it does not just protect individual vaccinated children but also curbs WPV in their communities by preventing person-to-person spread. It is this public health benefit that has eradicated the disease from virtually every country in the world.

But a drawback is associated with OPV. The vaccine is made of live poliovirus that has been genetically weakened so it induces immunity in a vaccinated child and does not cause paralysis. When excreted by the vaccinated child, the vaccine provides immunity to other children in that community, protecting them. As long as the excreted vaccine-virus does not reach susceptible (unvaccinated) children for an extended period of time, it dies out completely.

The problem occurs in areas where vaccination rates are so low that the vaccine-virus continues to circulate. The longer it circulates, the more it genetically changes. On rare occasions, it changes to the extent that it becomes a "strong" virus, able to cause paralysis. This takes a long time – about a year of extended circulation. The child who received the original OPV dose 12 months earlier will remain protected, so the changes are not a side effect of the vaccine but a devastating consequence of low population immunity.

This is causing the dual emergency. While so far in 2018, only 13 cases due to WPV have been reported worldwide, an additional 15 children have been paralysed by outbreaks of these other viruses, the cVDPVs. These outbreaks will continue to occur, as long as the world continues to use OPV.

This risk has always been recognized and is included in the strategy. Once countries eradicate WPV, they already intend to stop using OPV and protect their populations through IPV. Since IPV cannot cause cVDPVs, it is the ideal tool for a post-polio world.

But IPV cannot be used to eradicate WPV. Protecting only the vaccinated child, it does not confer immunity to others and it cannot stop person-to-person spread of the virus. As the evidence has shown repeatedly, only OPV will eradicate polio.

That is precisely the dual emergency the world is now facing. WPV must be eradicated in the remaining few areas as quickly as possible. Every child must be vaccinated with OPV. Then its use must be stopped. That is the only way to achieve zero cases and to keep all children safe from outbreaks of both WPV and vaccine-derived polioviruses (VDPVs).

The new plan to address the dual emergency

The GPEI and its partners are committed to achieving eradication. The Endgame Plan, which concludes at the end of 2018, is being revised and extended. An evaluation of eradication tactics, requested by the Independent Monitoring Board, continued in 2018, and its outcomes will inform the extended Endgame Plan's development. Its effective strategies will be expanded, the identified gaps will be filled, and the approaches with a negligent impact will be abandoned. The new, customized Plan will be finalized in early 2019 for presentation to the World Health Assembly in May.

Throughout January to June 2018, national emergency action plans continued to close gaps in population immunity. Millions of people worldwide, including government officials, community health workers and Rotarians, maintained their work to ensure that every child is vaccinated. The aim of the extended Plan is clear: to eradicate WPV and to stop using OPV as rapidly as possible. That is the only way to keep every child, and the world, polio-free.

OBJECTIVE 1: POLIOVIRUS DETECTION AND INTERRUPTION

Eradicating all poliovirus – a dual emergency

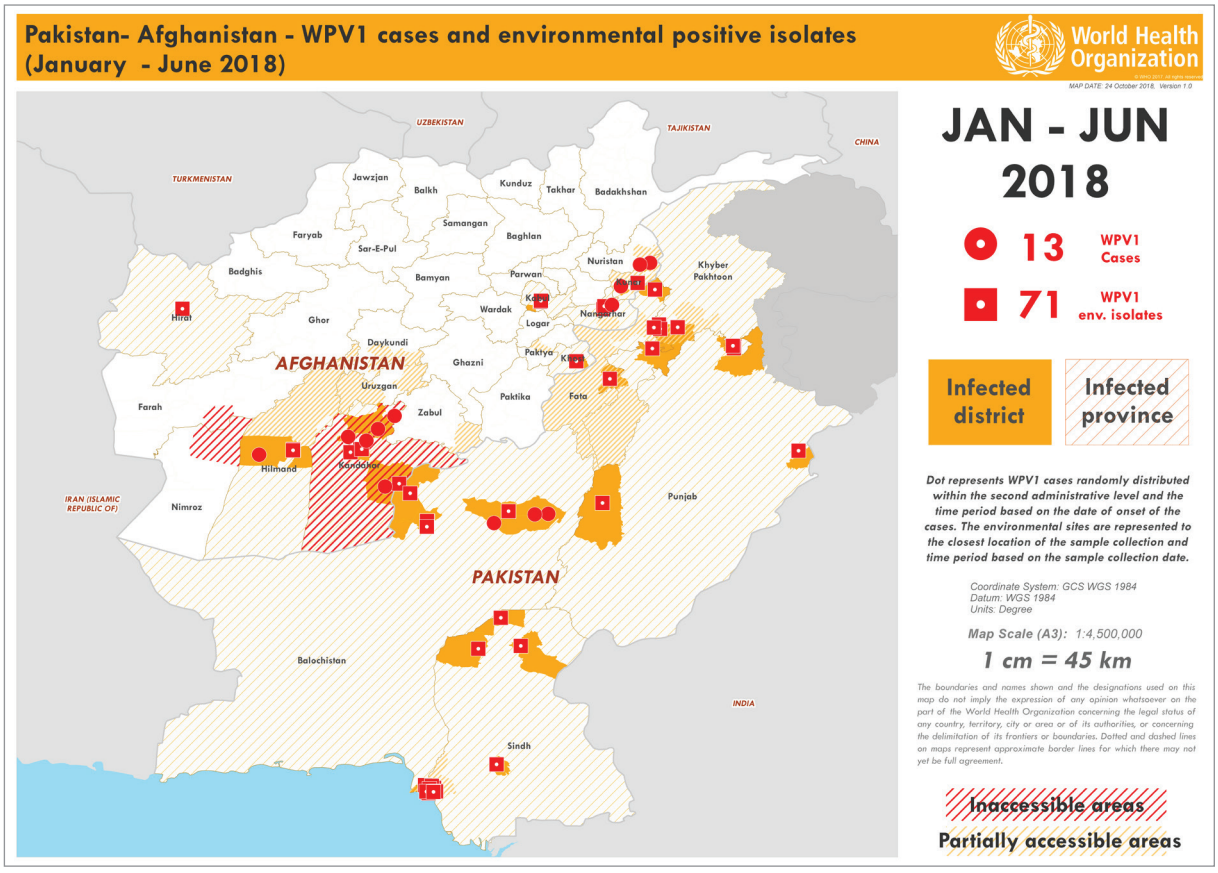
At a glance...

Wild poliovirus eradication in Afghanistan, Pakistan and Nigeria – the three remaining endemic countries – remained the overriding priority.

The Democratic Republic of the Congo is affected by the uncontrolled transmission of three distinct cVDPV2 outbreaks, which continued to expand geographically in the country.

While no case due to cVDPV2 has been reported in the Syrian Arab Republic since September 2017, cVDPV outbreaks were confirmed in the Horn of Africa and Papua New Guinea.

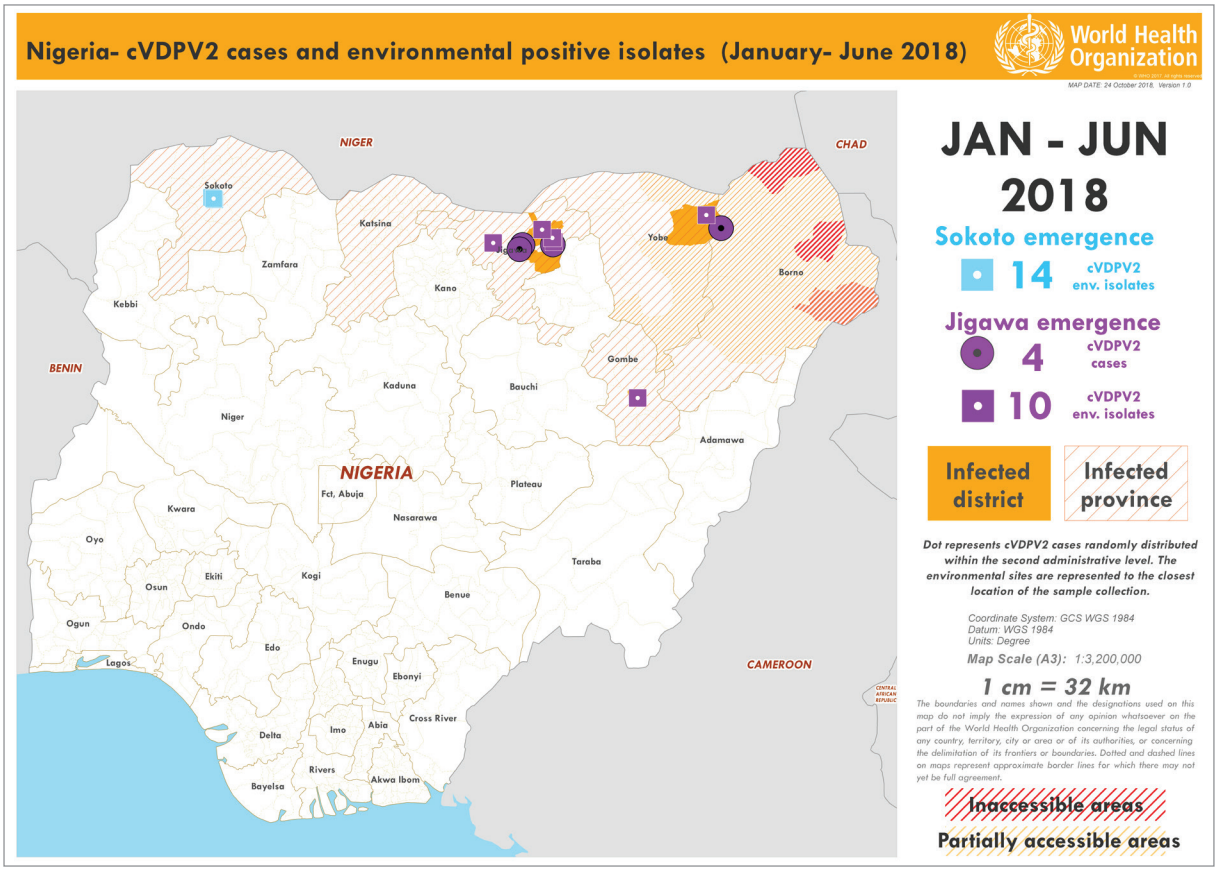
Afghanistan and Pakistan – the final global WPV1 bastion



Afghanistan and Pakistan continued to be treated as a single epidemiological block. In 2018, 4 cases of paralytic poliomyelitis due to wild poliovirus type 1 (WPV1) were reported in Pakistan (to 4 October 2018), compared to 5 for the same period in 2017. In Afghanistan, 15 cases were reported, compared to 6 for the same period in 2017. The two countries continued to demonstrate strong progress, with independent technical advisory groups underscoring the feasibility of rapidly interrupting transmission of the remaining

poliovirus strains. Realizing that goal, however, will depend on reaching all children who have not been vaccinated, and identifying and closing all remaining transmission reservoirs. Environmental surveillance in both countries confirmed the risk of ongoing transmission of the virus to polio-free areas, imported from remaining reservoir areas. Both countries continued to coordinate activities closely, focusing their efforts on clearly identifying missed children, determining why they were missed, and putting in place operational plans to overcome these challenges. In particular, emphasis was placed on reaching high-risk mobile population groups travelling internally within both countries and across the border. Virus transmission was primarily restricted to two cross-border corridors: the first linking eastern Afghanistan with Khyber Pakhtunkhwa and Federally Administered Tribal Areas in Pakistan, and the second linking southern Afghanistan (Kandahar and Helmand) with the Quetta block, Balochistan province in Pakistan, and Karachi (Pakistan). Coordination of the polio eradication programme improved in 2018 at the national, provincial and regional levels, as well as among the bordering districts in the common corridors of transmission. It focused on the vaccination of high-risk mobile populations and those living along the border.

Nigeria and Lake Chad subregion – a regional public health emergency



In Nigeria, no new case of poliomyelitis due to WPV1 was confirmed after the detection of cases in August 2016 from Borno state. However, owing to ongoing surveillance gaps in high-risk and inaccessible areas, this strain's undetected and continued circulation cannot be ruled out.

The Government of Nigeria maintained its aggressive outbreak response, conducted in close coordination with neighbouring countries across the Lake Chad subregion, within the context of the broader humanitarian emergency affecting the region. The lack of access and

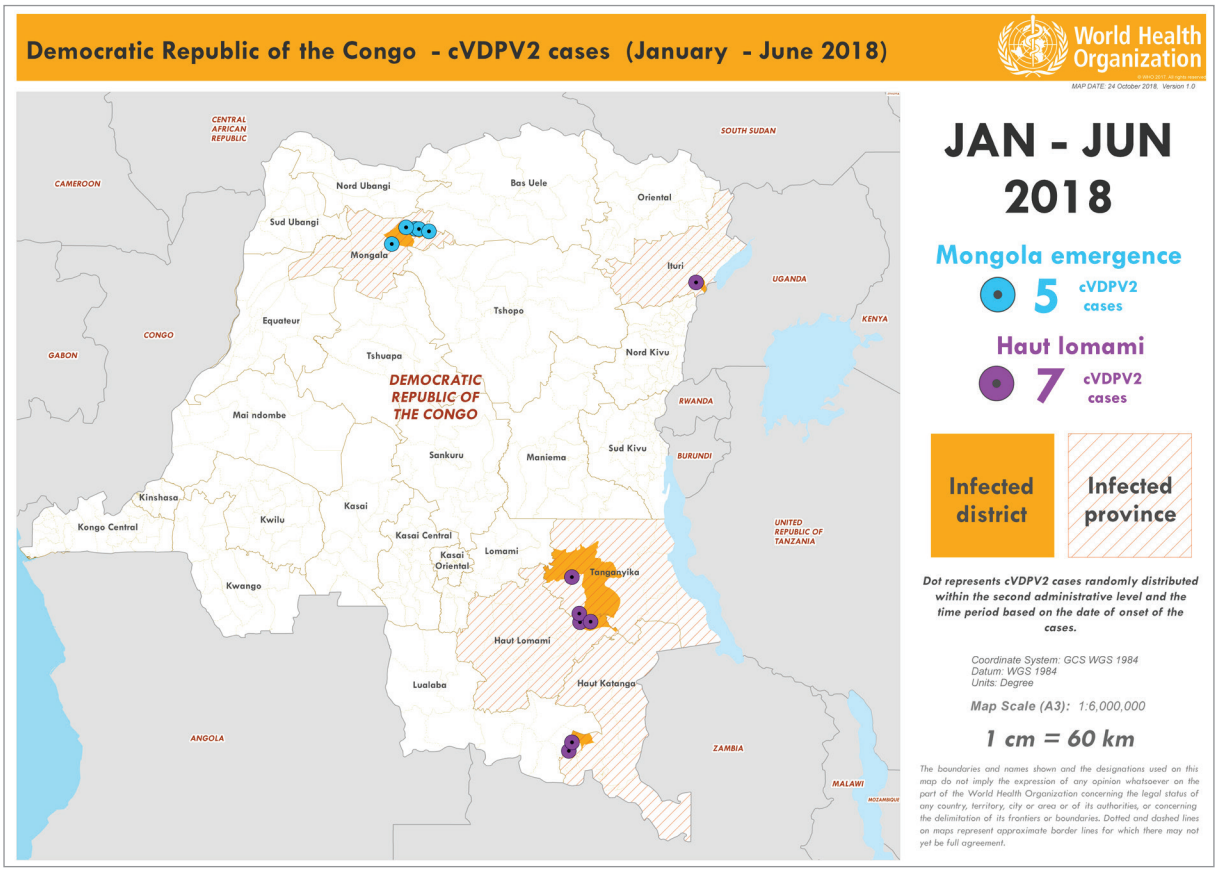
inability to conduct high-quality vaccination and surveillance in many areas of Borno state remained the primary challenges. A key objective continued to be to prevent the outbreak from spreading to other areas of the subregion, and additional measures were implemented to increase surveillance sensitivity and boost immunity levels. They included scaling up environmental surveillance; testing healthy individuals (including adults) as they exited inaccessible areas; establishing permanent vaccination posts to vaccinate children and older age groups at key crossing points to inaccessible areas; and rapidly conducting mop-up immunization campaigns as and when windows of opportunity arose or areas became accessible.

At the same time, emergency efforts continued to tackle two separate circulating vaccine-derived poliovirus type 2 (cVDPV2) outbreaks confirmed in 2018. In Sokoto state, four genetically-related viruses were isolated from four environmental samples collected between 24 April and 9 May 2018; no associated cases of acute flaccid paralysis (AFP) were detected, as the virus was isolated in environmental samples only. Separately, the country was affected by a different outbreak in Jigawa state. One AFP case (with onset of paralysis on 15 April 2018) and three environmental samples (collected between 10 January and 20 March 2018) were detected with this strain. An outbreak response was implemented, using a mix of vaccine formulations, to address both cVDPV2 and the potential continuation of WPV1 circulation. In September 2018, confirmation was received that the Jigawa cVDPV2 outbreak had spread north into neighbouring Niger.

Circulating vaccine-derived poliovirus transmission – the dual emergency

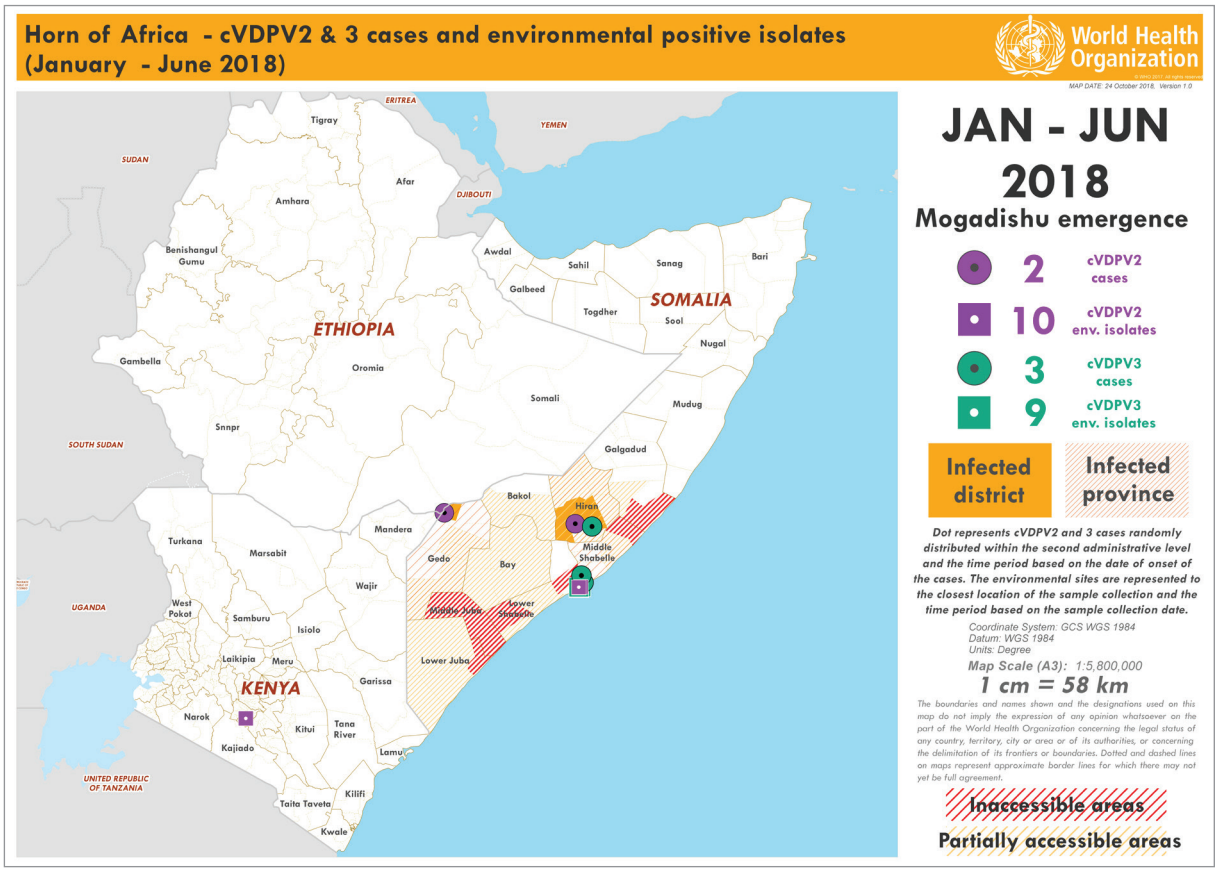
The world is approaching the successful eradication of WPV transmission but, while not a new phenomenon, the significance of cVDPVs continues to increase. Inadequate routine immunization levels coupled with subnational surveillance gaps in high-risk countries in the first half of the year remained the main risk factors for the emergence or ongoing circulation of VDPV. Efforts must be strengthened to address both risk factors. However, the sole and surest way to prevent cVDPVs is to rapidly stop OPV use, which can only occur after the successful eradication of WPVs. As such, WPV eradication in 2018 became a dual emergency: to eradicate it for its own sake and prevent the global re-emergence of such strains, and to eradicate it as urgently as possible to enable the rapid cessation of OPV use, thereby preventing future cVDPV outbreaks. In 2018, outbreaks emerged or continued in the Democratic Republic of the Congo, the Horn of Africa, Nigeria, the Syrian Arab Republic and Papua New Guinea.

Democratic Republic of the Congo – uncontrolled transmission



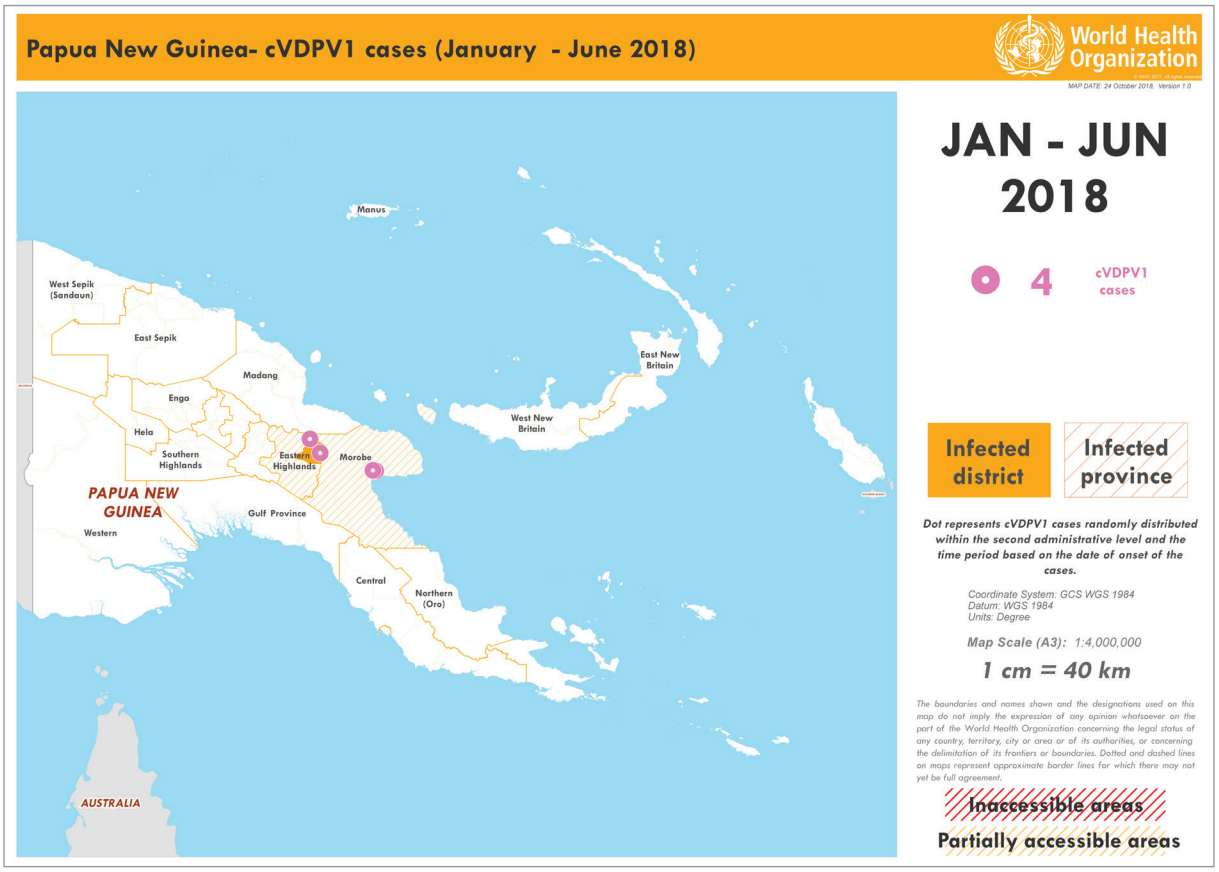
In the Democratic Republic of the Congo, three distinct cVDPV2 outbreaks were detected in AFP cases. A strain initially detected and reported in June 2017 in Haut-Lomami province spread in late 2017 and early 2018 to Tanganyika and Haut-Katanga provinces, respectively. The same virus was confirmed in Ituri province in June 2018, close to the border with Uganda, significantly increasing the risk of the virus spreading internationally. Maniema province was affected by a separate outbreak, with two cases confirmed in 2017; 18 April 2017 was the date of onset of paralysis of the most recent case. No new cases were detected in the first six months of 2018, and there was no evidence that this virus had spread further geographically. The third and most recently detected outbreak was in Mongala province, isolated from an AFP case with onset of paralysis on 26 April 2018, and from two healthy community contacts. The outbreak response conducted to date has not yet stopped these outbreaks or prevented their expansion (both in terms of number of cases and geographic extent). In February 2018, the Government declared these outbreaks to be a national public health emergency, with the aim of addressing operational gaps in the quality of outbreak response. Recognizing the risks associated with these outbreaks, on 26 July 2018, provincial governors adopted the Kinshasa Declaration for the Eradication of Poliomyelitis and the Promotion of Vaccination, and pledged to provide the necessary oversight, accountability and resources needed to urgently improve the quality of outbreak response and stop the circulation of these viruses.

Addressing cVDPV in the Horn of Africa



The Horn of Africa remained affected by both a cVDPV2 and a circulating vaccine-derived poliovirus type 3 (cVDPV3) outbreak. The cVDPV2 was isolated from cases of AFP and environmental samples in Mogadishu, Somalia, and from environmental samples in Nairobi, Kenya. Genetic sequencing of this strain suggests it had been circulating without detection since 2016, underscoring the dangers of subnational surveillance gaps. The cVDPV3 was isolated from AFP cases and environmental samples in Mogadishu. A regional outbreak response for both strains was implemented, in line with internationally-agreed guidelines. Somalia, Kenya and Ethiopia declared the outbreaks to be national public health emergencies.

Papua New Guinea



In Papua New Guinea, a circulating vaccine-derived poliovirus type 1 (cVDPV1) outbreak was confirmed in June 2018; the virus was isolated from an AFP case and two healthy community contacts. The government immediately declared the outbreak as a national public health emergency, and launched a comprehensive emergency outbreak response.

GENDER

Gender roles, relations, norms and inequalities are powerful determinants of health outcomes. To reach every last child and achieve a polio-free world, the GPEI identifies and addresses gender-related barriers to immunization and disease surveillance.

The GPEI recently published a thorough gender analysis to identify and measure gender-related elements in its immunization, communication and disease surveillance activities. The Gender Technical Brief analyses the ways in which the gender of the child, caregiver and frontline worker influences the likelihood that a child is immunized against polio, with a specific focus on gendered determinants of immunization in GPEI's 16 priority countries.

To ensure equal access to vaccinations and the engagement of women, the GPEI regularly monitors four gender-sensitive indicators:

1. Girls and Boys Reached in Vaccination Campaigns

The indicator compared the percentage of girls and boys vaccinated after an immunization campaign, recorded from lot quality assurance sampling and post-campaign monitoring data.

2. Total Doses Received

The total number of doses received was recorded for children aged 6–59 months in acute flaccid paralysis (AFP) case data. The dosage count is an additional measure to assess children's overall participation in vaccination campaigns or routine immunization. Gender comparisons were made for the median number of doses, the percentage of zero doses, and the percentage of three or more doses.

3. Timeliness of Disease Surveillance

The AFP case data included information on the date of onset of paralysis and the date of notification by the caregiver(s). The notification delay was calculated from the difference in days between onset and notification. This measure showed whether the child's gender biased how quickly his or her disease was notified within the surveillance system. Timeliness was assessed by comparing median values and by the percentage of male and female cases notified within three days.

4. Women's Participation in Immunization Activities

The indicator measured the percentage of women and men front-line workers, including all vaccinators and social mobilizers.

Annex 3 includes data on these four indicators for the endemic countries while Annex Y contains data for outbreak and high-risk countries for indicators 2 and 3.

Statistical testing and analysis of the data from the reporting period does not show significant differences in terms of gender for most countries, either for children reached in vaccination campaigns or for surveillance data. In the last reporting period, data from Syria indicated discrepancies in terms of the percentage of 0 and 3+ doses for girls and boys; however, the difference is no longer significant.

According to the gender indicator data, girls and boys are equally reached in vaccination campaigns in Syria. For girls, the percentage of 0 doses is 6%, for boys 3%, and 85% of the girls surveyed had received three or more doses, compared with 88% of boys. Similarly, a gender gap noted in the Central African Republic (CAR) in the previous reporting period is no longer significant. A difference in the timeliness in disease notification was noted in Cote d'Ivoire, with disease notification within 3 days being 52% for girls and only 36% for boys. Of all boys surveyed, 78% had received three or more doses, compared with 95% of girls. As of now, data for Cote d'Ivoire is not indicating a continuous trend. The programme

continues to closely monitor the data for this and other priority countries and investigate significant findings to guide its work.

Polio-endemic countries continue to engage female front-line workers in immunization activities, and women currently constitute 68% of frontline workers, including vaccinators and social mobilizers, in Pakistan, up from 56% in the previous reporting period. In Nigeria, women constitute 99% of all frontline workers. In Afghanistan, currently only 34% of frontline workers in urban areas are women, down from 42% in the last reporting period. The decline can largely be attributed to a decline in female front-line workers in Kabul and Jalalabad due to multiple violent attacks in these areas in recent months. Afghanistan is making efforts to ensure the safety of all front-line workers and increase women's participation to reach the target of having women comprise at least 50% of front-line workers in urban areas. The Afghanistan polio programme has recently introduced a new policy to ensure that at least one woman is included in provincial front-line worker selection committees as a way to increase women's participation.

OBJECTIVE 2: PHASED REMOVAL OF ORAL POLIO VACCINE

At a glance...

OPV cessation is the only manner to eliminate the long-term risks of VDPVs. As part of the dual emergency, OPV use must cease as rapidly as possible following WPV eradication.

To eliminate the long-term risks of VDPVs and vaccine-associated paralytic polio, OPVs continued to be phased out. The first removal phase took place with the switch from trivalent oral polio vaccine (tOPV) to bivalent oral polio vaccine (bOPV) between 17 April and 1 May 2016. Once all remaining foci of WPV transmission have been eradicated and the world is certified as polio-free, all remaining OPV use will be stopped. Until OPV cessation has been completed, Member States are encouraged to minimize the risks and consequences of potential VDPVs by ensuring high routine immunization coverage, conducting surveillance for any cVDPV emergence and maintaining strong outbreak response capacity.

To prepare for the switch to bOPV, all countries had committed to introducing at least one dose of IPV into their routine immunization programmes. Global supply constraints emerged owing to technical difficulties manufacturers had encountered to scale up production, which had resulted in some countries experiencing delays in supply. The supply situation improved in the first half of 2018 such that all countries received supply for their routine immunization programmes. The global supply situation was further improved thanks to Member States increasingly adopting dose-sparing strategies, such as administering intradermal fractional dose IPV, as recommended by the Strategic Advisory Group of Experts on immunization. Several Member States adopted this approach, notably Bangladesh, India, Nepal, Sri Lanka and certain countries across the Region of the Americas, such as Cuba and Ecuador, while others are in the process of doing so.

The GPEI and its partners continued to explore new IPV approaches to ensure an affordable and sustainable supply following certification, including through the use of vaccine manufactured from Sabin strains or non-infectious materials such as virus-like particles.

OBJECTIVE 3: CONTAINMENT AND CERTIFICATION

At a glance…

At the Seventy-first World Health Assembly, a resolution was passed calling for strong Member State commitment to accelerate containment. The importance of effective poliovirus containment is perhaps best illustrated by recalling that the last infection due to smallpox virus – the only human pathogen to have been eradicated globally thus far – occurred as a result of an accidental laboratory containment failure. In a limited number of facilities, poliovirus will continue to be retained to serve critical national and international functions, such as the production of polio vaccine or research. It is crucial that this poliovirus material be appropriately contained under strict biosafety and biosecurity handling and storage conditions, to ensure that virus is not released into the environment, either accidentally or intentionally, to again cause outbreaks of the disease in susceptible populations. That is why the resolution on containment of polioviruses adopted by the World Health Assembly is so important. As the day draws near when WPV transmission is interrupted, planning for the future and securing this success are essential. Too much has been invested globally to risk jeopardizing a polio-free world by not fully containing polioviruses.

Efforts to contain wild poliovirus type 2 (WPV2), implemented progressively in 2016 and 2017, were intensified in 2018, guided by the *WHO Global Action Plan to minimize poliovirus facility-associated risk after type-specific eradication of wild polioviruses and sequential cessation of oral polio vaccine use* (GAPIII).[1] The *Guidance to minimize risks for facilities collecting, handling or storing materials potentially infectious for polioviruses* was published to help facilities assess the risk of potentially infectious poliovirus materials in their possession and to implement appropriate risk-reduction measures consistent with GAPIII. All countries were urged to complete inventories and destroy unneeded poliovirus type 2 materials and begin inventories and the destruction of unneeded type 1 and 3 materials. The Global Commission for the Certification of the Eradication of Poliomyelitis, responsible for global containment oversight, countersigned the first certificate of participation in the Containment Certification Scheme (CCS), confirming the intent of a vaccine manufacturer based in Sweden to be certified against the implementation of GAPIII. Similar engagement steps were expected from the 81 other designated poliovirus-essential facilities (PEFs) based in 29 countries. The Containment Advisory Group, established to address technical issues related to GAPIII, recommended amendments to the published requirements that should be read in conjunction with the core GAP III document. The secretariat continued to support strengthening the technical capacity of the national authorities for containment by training auditors in GAPIII and the CCS.

1 *WHO Global Action Plan to minimize poliovirus facility-associated risk after type-specific eradication of wild polioviruses and sequential cessation of oral polio vaccine use* (GAPIII). Geneva: World Health Organization; 2015 (http://polioeradication.org/wp-content/uploads/2016/09/GAPIII_2014.pdf, accessed 1 March 2018).

In May 2018, all countries and territories that reported they no longer held WPV or vaccine-derived poliovirus type 2 (VDPV2) were updating their inventories following the WHO *Guidance*; 30 reported they intend to retain poliovirus type 2 materials in 99 PEFs. Inventories of materials containing poliovirus type 2 will have to be repeated after interruption of transmission, in all countries that were affected by cVDPV2 outbreaks. Of the 30 countries planning to retain poliovirus type 2 materials, 20 made significant progress in establishing national authorities for containment, and prepared to certify their designated PEFs against the implementation of the containment requirements described in GAPIII.

With poliovirus transmission levels in the first half of 2018 at their lowest point in history and the eradication of polioviruses in the short term a realistic expectation, urgent intensification of containment activities by all parties was recommended. The request to accelerate the implementation of poliovirus containment received strong commitment from all Member States, who endorsed resolution WHA71.16[2] in May 2018, so that the certification of poliovirus eradication can be achieved and sustained.

2 World Health Assembly resolution WHA71.16, Poliomyelitis – containment of polioviruses. Geneva: World Health Organization; 26 May 2018 (http://apps.who.int/gb/ebwha/pdf_files/WHA71/A71_R16-en.pdf, accessed 10 September 2018).

OBJECTIVE 4: TRANSITION PLANNING AND POST-CERTIFICATION STRATEGY

At a glance…

Smallpox is the only human pathogen ever to have been eradicated from the world. The global eradication effort was a huge success, but the infrastructure built at that time to put an end to smallpox was allowed to disintegrate instead of being repurposed to serve other health goals. The lesson learned from that experience is that the polio infrastructure must not be allowed to collapse so that it continues to benefit broader public health and development objectives.

The primary and overriding objective of the GPEI remains the completion of polio eradication. In addition to this aim, the world must plan to repurpose the infrastructure to serve other public health goals, even after polio is eradicated.

This planning entails two aspects:

1. ensuring that the functions needed to sustain a polio-free world are maintained, including high-quality surveillance to detect any polio event or outbreak, the capability to respond to any possible polio outbreak, and the continued vaccination of children against polio –namely, to ensure that once polio is eradicated, it will *remain* eradicated; and
2. ensuring that the relevant components of the polio infrastructure are maintained or repurposed to continue to benefit broader public health and development goals.

1. PCS – sustaining a lasting polio-free world

In a broad consultative process, the GPEI developed a Post-Certification Strategy (PCS),[3] to ensure the functions needed to sustain a polio-free world in the long term. These functions encompass the ongoing ability to conduct:

- surveillance
- outbreak responses
- poliovirus containment
- immunization against the poliovirus.

2. Transition – ensuring the relevant components of the polio infrastructure continue to benefit broader public health goals

Countries are at the centre of transition planning. In the first six months of 2018, the focus remained on 16 priority countries in sub-Saharan Africa, the Middle East and South-East Asia, where the bulk of the polio eradication infrastructure is based.

Using the polio infrastructure to strengthen immunization is particularly important, because:

- of the 19.5 million infants worldwide not immunized through routine services, 60% live in these 16 priority countries;
- almost 90% of deaths from measles globally occur in these countries;
- 10 of these 16 countries are prone to regular outbreaks or complex health emergencies; and

3 WHO, *Polio Post-Certification Strategy: A risk mitigation strategy for a polio-free world*. Geneva: World Health Organization; 2018 (http://polioeradication.org/wp-content/uploads/2018/04/polio-post-certification-strategy-20180424Đ2.pdf, accessed 13 September 2018).

- the risks are thus huge, unless investment in strengthening these countries' immunization systems is maintained.

The solutions will be very country-specific and will depend on how the countries will match the polio infrastructure to their national health priorities. In some countries, national governments will integrate this infrastructure fully into their public health systems; in others, national governments will take over some aspects with continued international development community support until the government is ready to fully take over. In others still, particularly in some of the lowest-resource settings, the infrastructure will need to be integrated into the international development agenda. In certain conflict affected countries, it will be a part of the humanitarian and emergency response agenda. In addition, some elements will gradually be phased out, as they will no longer be needed after eradication.

Global discussions on transition and post-certification

In May 2018, the World Health Assembly endorsed the GPEI's five-year strategic action plan on polio transition,[4] which has three main objectives:

1. sustaining a polio-free world after eradication;
2. strengthening immunization systems, including vaccine-preventable disease surveillance; and
3. strengthening emergency preparedness, detection and outbreak response capacity to fully implement the International Health Regulations.

The plan was developed in close collaboration with country teams in the countries most affected by the transition, under the coordination of the respective regional offices. The plan:

- aims to work hand in hand with existing infrastructure and programmes, such as the Business Case for WHO Immunization Activities on the African Continent, to support immunization system strengthening across Africa; and
- focuses on country ownership to help reinforce immunization systems, including surveillance for vaccine-preventable diseases, emergency preparedness, and the detection and response capacity to support the full implementation of the International Health Regulations.

The integration of essential polio functions into national health systems will be critical to a successful transition. The strategic plan will be a "living document", updated as epidemiology, programme developments and budget finalizations evolve. The plan aims to fully support WHO Member States in implementing their own costed national polio transition plans. A successful transition will require countries to release domestic resources, according to the financing strategy in the national plan. The plan is fully aligned with the countries' own priorities, outlined in their respective national plans.

4 WHO, Polio transition and post-certification: Draft strategic action plan on polio transition. Geneva: World Health Organization; 24 April 2018 (http://apps.who.int/gb/ebwha/pdf_files/WHA71/A71_9-en.pdf, accessed 13 September 2018).

FINANCING THE GLOBAL POLIO ERADICATION INITIATIVE

At a glance...

The international development community's ongoing generous support is critical to rapidly realizing a lasting polio-free world. Donors are urged to operationalize pledges speedily and ensure all necessary financial resources are mobilized to achieve success.

Thanks to the generous continuing support of the international development community, including Member States (especially those where poliovirus remains endemic and those that are donors to the GPEI) as well as multilateral and bilateral organizations, development banks, foundations and Rotary International, the budget for planned activities in 2017 was fully financed. At the Rotary International convention in 2017 in Atlanta, USA, numerous public- and private-sector partners from around the world joined Rotary in announcing historic pledges of new funds, which continued to be operationalized in the first half of 2018. And throughout 2018, leaders of the G7, the Commonwealth and G20 countries at their respective summits are expected to pledge their continued support to the effort. Member States were strongly encouraged to operationalize their pledges and commitments as rapidly as possible, and continued their best efforts to provide flexibility in their allocations to ensure uninterrupted programme operations. In order to ensure transparency and cost-effectiveness, the Global Polio Eradication Initiative continually assesses its financial resource requirements, in the face of evolving programmatic and epidemiological developments. Most recently, the Polio Oversight Board adopted new financial scenarios at its meeting in September 2018.[5] The key to achieving and sustaining a world free of both wild and vaccine-derived polioviruses will be the full and rapid mobilization of these financial requirements.

5 Summary available at www.polioeradication.org/financing/ (accessed 3 October 2018).

AFGHANISTAN

Endemic Country	State/Area	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Afghanistan	Southern (Kandahar, Helmand)	Interrupt transmission	Number of cases	0 case	5	6
		High population immunity	% 0-dose	<10%	0.69%	74.00%
			LQAS (% lots with "High Pass")	>= 90%	N/a	
			% inaccessible	<5%	N/a	
			Number and type of activity	per plan	2 NIDs, 6 SNIDs	2 NIDs, 6 SNIDs
			% children missed due to no visit/child absent (in 11 LPDs)		N/a	
			% children missed due to refusal (in 11 LPDs)		N/a	
		High virus detection	AFP rate	> 2 per 100 000	21.4	15.4
			Stool adequacy	> 80%	88.13	88.68
			Lab receipt to virus isolation result (median)	< 14 days	11	11
		Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	N/a	
	Rest of country	Interrupt transmission	Number of cases	0 case	3	4
		High population immunity	% 0-dose	<10%	0.13%	0.60%
			LQAS (% lots with "High Pass")	>= 90%		
			% inaccessible	<5%	N/a	
			Number and type of activity	per plan	2 NIDs,4 SNIDs	2 NIDs,4 SNIDs
		High virus detection	AFP rate	> 2 per 100 000	17.5	16.9
			Stool adequacy	> 80%	95.94	95.32
			Lab receipt to virus isolation result (median)	< 14 days	12	12
		Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%		
	All of country		Number of polio cases from families refusing OPV	0 case	N/a	
			IPV introduction	intro by 2015	Yes (Sep-15)	

PAKISTAN

Endemic Country	State/Area	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Pakistan	KP (Peshawar, Nowshera, Swabi, Charsaddah, Mardan, Bannu, Tank, Lakki Marwat)	Interrupt transmission	Number of cases (WPV1 only)	0 case	1	0
		High population immunity	% 0-dose	<10%	0.36%	1.02%
			LQAS (% UCs w/ 0-3 missed children; i.e. "Pass")	>= 90%	N/a	
			% inaccessible	<5%	N/a	N/a
			Number and type of activity	per plan	2 NIDs, 5 SNIDs	3 NIDs, 3 SNIDs
			% children missed due to no visit/child absent		N/a	N/a
			% children missed due to refusal		N/a	N/a
		High virus detection	AFP rate	> 2 per 100 000	22.54	17.49
			Stool adequacy	> 80%	83.76	84.91
			Lab receipt to virus isolation result (median)	< 14 days	11	11
		Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	N/a	N/a
	FATA	Interrupt transmission	Number of cases (WPV1 and cVDPV2)	0 case	0	0
		High population immunity	% 0-dose	<10%	0.43%	0.90%
			LQAS (% UCs w/ 0-3 missed children; i.e. "Pass")	>= 90%	N/a	N/a
			% inaccessible	<5%	N/a	N/a
			Number and type of activity	per plan	2 NIDs, 4 SNIDs	3 NIDs, 3 SNIDs
			% children missed due to no visit/child absent		N/a	N/a
			% children missed due to refusal		N/a	N/a
		High virus detection	AFP rate	> 2 per 100 000	41.65	28.23
			Stool adequacy	> 80%	89.33	93.71
			Lab receipt to virus isolation result (median)	< 14 days	11	11
		Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	N/a	N/a

PAKISTAN, continued

Endemic Country	State/Area	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Pakistan	Karachi (SINDH)	Interrupt transmission	Number of cases (WPV1 and cVDPV2)	0 case	2	0
		High population immunity	% 0-dose	<10%	0.38%	0.13%
			LQAS (% UCs w/ 0-3 missed children; i.e. "Pass")	>= 90%	N/a	N/a
			% inaccessible	<5%	N/a	N/a
			Number and type of activity	per plan	2 NIDs, 5 SNIDs	3 NIDs, 2 SNIDs
			% children missed due to no visit/child absent		N/a	N/a
			% children missed due to refusal		N/a	N/a
		High virus detection	AFP rate	> 2 per 100 000	12.95	12.12
			Stool adequacy	> 80%	85.01	87.92
			Lab receipt to virus isolation result (median)	< 14 days	11	11
		Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	N/a	N/a
	Rest of country	Interrupt transmission	Number of cases (WPV1 only)	0 case	2	3
		High population immunity	% 0-dose	<10%	1.26%	0.68%
			LQAS (% UCs w/ 0-3 missed children; i.e. "Pass")	>= 90%	N/a	N/a
			% inaccessible	<5%	N/a	N/a
			Number and type of activity	per plan	2 NIDs, 6 SNIDs	3 NIDs, 3 SNIDs
		high virus detection	AFP rate	> 2 per 100 000	11.72	12.04
			Stool adequacy	> 80%	85.45	87.75
			Lab receipt to virus isolation result (median)	< 14 days	11	11
		Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	0% reduction (2015 vs 2014)	0% reduction (2015 vs 2014)
	All of country		Number of polio cases from families refusing OPV	0 case	N/a	N/a
			IPV introduction	intro by 2015	Yes (Jul-15)	

NIGERIA

Endemic Country	State/Area	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Nigeria	North Central (Kano, Katsina, Jigawa, Kaduna)	Interrupt transmission	Number of cases (WPV1 and cVDPV2)	0 case	0	3
		High population immunity	% 0-dose	<10%	0.46%	0.00%
			LQAS	>= 90%	N/a	N/a
			% inaccessible	<5%	N/a	N/a
			Number and type of activity	per plan	2 SNIDs	6 SNIDs
			% children missed due to no visit/child absent		N/a	N/a
			% children missed due to refusal		N/a	N/a
		High virus detection	AFP rate	> 2 per 100 000	23.55	10.93
			Stool adequacy	> 80%	97.15	97.1
			Lab receipt to virus isolation result (median)	< 14 days	10	9
		Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	N/a	N/a
	Northeast (Borno, Yobe)	Interrupt transmission	Number of cases (WPV1 and cVDPV2)	0 case	0	1
		High population immunity	% 0-dose	<10%	0.66%	3.57%
			LQAS	>= 90%	N/a	N/a
			% inaccessible	<5%	N/a	N/a
			Number and type of activity	per plan	3 SNIDs	3 SNIDs
			% children missed due to no visit/child absent		N/a	N/a
			% children missed due to refusal		N/a	N/a

NIGERIA, continued

Endemic Country	State/Area	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Nigeria	Northeast (Borno, Yobe)	High virus detection	AFP rate	> 2 per 100 000	31.75	21.6
			Stool adequacy	> 80%	93.72	89.62
			Lab receipt to virus isolation result (median)	< 14 days	9	9
		Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	N/a	N/a
	Rest of North (Sokoto, Kebbi, Zamfara)	Interrupt transmission	Number of cases	0 case	0	0
		High population immunity	% 0-dose	<10%	0.84%	0.26%
			LQAS	>= 90%	N/a	N/a
			% inaccessible	<5%	N/a	N/a
			Number and type of activity	per plan	3 SNIDs	5 SNIDs
			% children missed due to no visit/child absent		N/a	N/a
			% children missed due to refusal		N/a	N/a
		High virus detection	AFP rate	> 2 per 100 000	20.66	13.46
			Stool adequacy	> 80%	99.46	97.24
			Lab receipt to virus isolation result (median)	< 14 days	9	10
		Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	N/a	N/a

NIGERIA, continued

Endemic Country	State/Area	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Nigeria	Rest of country	Interrupt transmission	Number of cases (cVDPV2 only)	0 case	0	0
		High population immunity	% 0-dose	<10%	0.20%	0.00%
			LQAS	>= 90%	N/a	N/a
			% inaccessible	<5%	N/a	N/a
			Number and type of activity	per plan	3 SNIDs	5 SNIDs
		High virus detection	AFP rate	> 2 per 100 000	16.59	7.97
			Stool adequacy	> 80%	98.53	96.72
			Lab receipt to virus isolation result (median)	< 14 days	9	10
		Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	14% reduction (2015 vs 2014)	14% reduction (2015 vs 2014)
	All of country		Number of polio cases from families refusing OPV	0 case	N/a	N/a
			IPV introduction	intro by 2015	Yes (Feb-15)	Yes (Feb-15)

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Democratic Republic of the Congo					
	High population immunity	% 0-dose	<10%	3.60%	7.66%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	7 SNIDs	5 SNIDs
	High virus detection	AFP rate (national)	>2	5.60	6.54
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	100%	92%
		Stool adequacy (national)	>=80%	84.77	85.98
		Stool adequacy (sub-national)	>=80% (% of states/provinces meeting indicator)	77%	64%
		Lab receipt to virus isolation result (median)	< 14 days	9	9
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	3% decrease (2015 vs 2014)	3% decrease (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Apr-15)	Yes (Apr-15)
Kenya					
	High population immunity	% 0-dose	<10%	1.63%	5.56%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan		
	High virus detection	AFP rate	>2 (national)	2.90	3.41
		AFP rate	>2 (% of states/provinces meeting indicator)		89%
		stool adequacy	>=80% (national)	84%	88%
		stool adequacy	>=80% (% of states/provinces meeting indicator)		81%
		lab receipt to virus isolation result (median)	< 14 days	N/a	8
		Environmental surveillance	Yes or no	No	Yes
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%		
		IPV introduction	intro by 2015		

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Niger					
	High population immunity	% 0-dose	<10%	0.27%	0.24%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	2 SNIDs	1 NID, 1 SNID
	High virus detection	AFP rate (national)	>2	7.76	8.51
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	86%	85%
		Stool adequacy (national)	>=80%	78.84	90.3
		Stool adequacy (sub-national)	>=80% (% of states/provinces meeting indicator)	28%	71%
		Lab receipt to virus isolation result (median)	< 14 days	9	9
		Environmental surveillance	s	Yes	Yes
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	11% increase (2015 vs 2014)	11% increase (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Jul-15)	Yes (Jul-15)
Papua New Guinea					
	High population immunity	% 0-dose	<10%	25.00%	0.00%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan		
	High virus detection	AFP rate	>2 (national)	0.90	3.00
		AFP rate	>2 (% of states/provinces meeting indicator)	0%	45%
		stool adequacy	>=80% (national)	53.8	21.6
		stool adequacy	>=80% (% of states/provinces meeting indicator)	18%	9%
		lab receipt to virus isolation result (median)	< 14 days		
		Environmental surveillance	Yes or no		
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%		
		IPV introduction	intro by 2015		

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Somalia					7 cVDPVs
	High population immunity	% 0-dose	<10%	14.68%	11.21%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NID, 5 NIDs	1 NID, 3 NIDs
	High virus detection	AFP rate (national)	>2	4.38	4.79
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	100%	100%
		Stool adequacy (national)	>=80%	100	98.28
		Stool adequacy (sub-national)	>=80% (% of states/provinces meeting indicator)	100%	100%
		Lab receipt to virus isolation result (median)	< 14 days	7	7
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	2% increase (2015 vs 2014)	
		IPV introduction	intro by 2015	Yes (Nov-15)	Yes (Nov-15)
Syria					
	High population immunity	% 0-dose	<10%	8.11%	4.35%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NID, 3 SNIDs	1 NID, 3 SNIDs
	High virus detection	AFP rate (national)	>2	4.6	5.8
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	71%	93%
		Stool adequacy (national)	>=80%	79.07	84.66
		Stool adequacy (sub-national)	>=80% (% of states/provinces meeting indicator)	64%	71%
		Lab receipt to virus isolation result (median)	< 7 days	12	12
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	1% increase (2015 vs 2014)	1% increase (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (<2015)	Yes (<2015)

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Angola	High population immunity	% 0-dose	<10%	4.00%	8.04%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	N/a	1 NID
	High virus detection	AFP rate (national)	>2	2.46	2.73
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	89%	94%
		Stool adequacy (national)	>=80%	97.7	94.85
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	94%	100%
		Lab receipt to virus isolation result (median)	< 14 days	10	10
		Environmental surveillance	Yes or No	Yes	Yes
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	2% increase (2015 vs 2014)	2% increase (2015 vs 2014)
		IPV introduction	intro by 2015	N/a	N/a
Benin	High population immunity	% 0-dose	<10%	0.00%	1.69%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NID , 1 SNID	1 NID ,
	High virus detection	AFP rate (national)	>2	4.54	4.51
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	83%	92%
		Stool adequacy (national)	>=80%	97.25	95.41
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	92%	100%
		Lab receipt to virus isolation result (median)	< 14days	8	8
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	17% (2015 vs 2014)	17% (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Aug-15)	Yes (Aug-15)

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Burkina Faso	High population immunity	% 0-dose	<10%	0.00%	1.90%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	N/a	N/a
	High virus detection	AFP rate (national)	>2	3.77	3.82
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	92%	92%
		Stool adequacy (national)	>=80%	91.52	94.05
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	100%	100%
		Lab receipt to virus isolation result (median)	< 14 days	9	8
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	N/a	N/a
		IPV introduction	intro by 2015	N/a	N/a
Cameroon	High population immunity	% 0-dose	<10%	0.34%	2.38%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	2 SNIDs	1 NID 1 SNID
	High virus detection	AFP rate (national)	>2	9.32	8.81
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	100%	100%
		Stool adequacy (national)	>=80%	90.08	89.3
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	90%	100%
		Lab receipt to virus isolation result (median)	< 14 days	10	10
		Environmental surveillance	Yes or No	Yes	Yes
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%		
		IPV introduction	intro by 2015		

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Central African Republic	High population immunity	% 0-dose	<10%	2.38%	0.00%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NID, 1 SNID	2 SNID
	High virus detection	AFP rate (national)	>2	6.8	7.55
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	86%	86%
		Stool adequacy (national)	>=80%	91.3	80.26
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	86%	71%
		Lab receipt to virus isolation result (median)	< 14 days	9	9
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	1% increase (2015 vs 2014)	1% increase (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Sep-15)	Yes (Sep-15)
Chad	High population immunity	% 0-dose	<10%	2.16%	2.64%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NID, 1 SNID	1 NID, 2 SNID
	High virus detection	AFP rate (national)	>2	11.7	11.1
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	67%	86%
		Stool adequacy (national)	>=80%	91.09	96.97
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	92%	86%
		Lab receipt to virus isolation result (median)	< 14 days		
		Environmental surveillance	Yes or No	Yes	Yes
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	17% decrease 2015 vs 2014)	17% decrease (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Aug-15)	Yes (Aug-15)

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Congo	High population immunity	% 0-dose	<10%	20.69%	10.00%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	n/a	n/a
	High virus detection	AFP rate (national)	>2	5.63	7.8
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	91%	100%
		Stool adequacy (national)	>=80%	94.92	97.73
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	100%	100%
		Lab receipt to virus isolation result (median)	< 14 days	9	9
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	50% increase (2015 vs 2014)	50% increase (2015 vs 2014)
		IPV introduction	intro by 2015	N/a	N/a
Côte d'Ivoire	High population immunity	% 0-dose	<10%	2.94%	2.25%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 sNID	1 NID
	High virus detection	AFP rate (national)	>2	2.83	2.83
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	35%	60%
		Stool adequacy (national)	>=80%	91.16	84.46
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	55%	60%
		Lab receipt to virus isolation result (median)	< 14 days	8	8
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	38% decrease (2015 vs 2014)	38% decrease (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Jun-15)	Yes (Jun-15)

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Equatorial Guinea	High population immunity	% 0-dose	<10%	0%	0%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NID	2 NIDs
	High virus detection	AFP rate (national)	>2	2.52	3.32
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	57%	14%
		Stool adequacy (national)	>=80%	50	100
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	25%	14%
		Lab receipt to virus isolation result (median)	< 14 days	9	8
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%		
		IPV introduction	intro by 2015		
Ethiopia	High population immunity	% 0-dose	<10%	1.33%	4.52%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	2 SNIDs	1 SNID
	High virus detection	AFP rate (national)	>2	2.48	2.37
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	72%	82%
		Stool adequacy (national)	>=80%	91.98	92.69
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	100%	100%
		Lab receipt to virus isolation result (median)	< 14 days	9	9
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	62% decrease (2015 vs 2014)	62% decrease (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Dec-15)	Yes (Dec-15)

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Gabon	High population immunity	% 0-dose	<10%	0.00%	9.09%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NID	1 NID
	High virus detection	AFP rate (national)	>2	6.55	5.16
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	80%	70%
		Stool adequacy (national)	>=80%	95.83	100
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	90%	70%
		Lab receipt to virus isolation result (median)	< 14 days	10	8
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	48% decrease (2015 vs 2014)	48% decrease (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Dec-15)	Yes (Dec-15)
Guinea	High population immunity	% 0-dose	<10%	1.49%	2.41%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	2 NIDs	1 NIDs
	High virus detection	AFP rate	>2 (national)	7.17	5.07
		AFP rate	>2 (% of states/provinces meeting indicator)	100%	100%
		stool adequacy	>=80% (national)	95.36	97.1
		stool adequacy	>=80% (% of states/ provinces meeting indicator)	100%	100%
		lab receipt to virus isolation result (median)	< 14 days	9	9
		Environmental surveillance	Yes or no	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	1.6% (2015 vs 2014)	1.6% (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Nov-15)	Yes (Nov-15)

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Iraq	High population immunity	% 0-dose	<10%	0.00%	0.66%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	3 SNIDs	2 SNIDs
	High virus detection	AFP rate (national)	>2	4.64	6.39
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	95%	100%
		Stool adequacy (national)	>=80%	85.36	88.84
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	68%	79%
		Lab receipt to virus isolation result (median)	< 14 days	11	11
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	16% increase (2015 vs 2014)	16% increase (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Jan-16)	Yes (Jan-16)
Lao PDR	High population immunity	% 0-dose	<10%	N/a	N/a
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	N/a	N/a
	High virus detection	AFP rate	>2 (national)	N/a	N/a
		AFP rate	>2 (% of states/provinces meeting indicator)	N/a	N/a
		stool adequacy	>=80% (national)	N/a	N/a
		stool adequacy	>=80% (% of states/ provinces meeting indicator)	N/a	N/a
		lab receipt to virus isolation result (median)	< 14 days	N/a	N/a
		Environmental surveillance	Yes or no	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	8% decrease (2015 vs 2014)	8% decrease (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Oct-15)	Yes (Oct-15)

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Liberia	High population immunity	% 0-dose	<10%	0.00%	0.00%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NIDs	1 NIDs
	High virus detection	AFP rate (national)	>2	1.21	3.71
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	27%	100%
		Stool adequacy (national)	>=80%	91.67	89.19
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	47%	80%
		Lab receipt to virus isolation result (median)	< 14 days	9	8
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	N/a	N/a
		IPV introduction	intro by 2015	N/a	N/a
Madagascar	High population immunity	% 0-dose	<10%	0.00%	1.97%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NID	1 NID, 1SNID
	High virus detection	AFP rate (national)	>2	6.00	6.33
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	100%	100%
		Stool adequacy (national)	>=80%	96.55	94.93
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	100%	86%
		Lab receipt to virus isolation result (median)	< 14 days	9	9
		Environmental surveillance	Yes or No	Yes	Yes
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	15% increase (2015 vs 2014)	15% increase (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (May-15)	Yes (May-15)

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Mali	High population immunity	% 0-dose	<10%	6.56%	1.96%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NID	1 NID
	High virus detection	AFP rate (national)	>2	2.74	2.95
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	78%	100%
		Stool adequacy (national)	>=80%	91.8	84.21
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	89%	78%
		Lab receipt to virus isolation result (median)	< 14 days	8	8
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	29% increase (2015 vs 2014)	29% increase (2015 vs 2014)
		IPV introduction	intro by 2015	N/a	N/a
Myanmar	High population immunity	% 0-dose	<10%	9.46%	0.00%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	2 SNIDs	1 SNIDs
	High virus detection	AFP rate	>2 (national)	3.74	1.80
		AFP rate	>2 (% of states/provinces meeting indicator)	94%	35%
		stool adequacy	>=80% (national)	95%	94%
		stool adequacy	>=80% (% of states/ provinces meeting indicator)	94%	82%
		lab receipt to virus isolation result (median)	< 14 days	N/a	N/a
		Environmental surveillance	Yes or no	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	0.6% decrease (2015 vs 2014)	0.6% decrease (2015 vs 2014)
		IPV introduction	intro by 2015	Yes (Dec-15)	Yes (Dec-15)

Country	Outcome	Indicator	Target	Jul-Dec 2017	Jan-Jun 2018
Sierra Leone	High population immunity	% 0-dose	<10%	0.00%	4.35%
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	1 NIDs	1 NIDs
	High virus detection	AFP rate (national)	>2	2.87	3.69
		AFP rate (sub-national)	>2 (% of states/provinces meeting indicator)	75%	100%
		Stool adequacy (national)	>=80%	78.26	83.05
		Stool adequacy (sub-national)	>=80% (% of states/ provinces meeting indicator)	50%	75%
		Lab receipt to virus isolation result (median)	< 14 days	9	8
		Environmental surveillance	Yes or No	No	No
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	N/a	N/a
		IPV introduction	intro by 2015	N/a	N/a
Ukraine	High population immunity	% 0-dose	<10%	N/a	N/a
		LQAS or IM out-of-house result	>= 90% or <5%	N/a	N/a
		% inaccessible	<5%	N/a	N/a
		Number and type of activity	per plan	N/a	N/a
	High virus detection	AFP rate	>2 (national)	N/a	N/a
		AFP rate	>2 (% of states/provinces meeting indicator)	N/a	N/a
		stool adequacy	>=80% (national)	N/a	N/a
		stool adequacy	>=80% (% of states/ provinces meeting indicator)	N/a	N/a
		lab receipt to virus isolation result (median)	< 14 days	N/a	N/a
		Environmental surveillance	Yes or no	Yes	Yes
	Low risk of reintroduction	RI improvement: % reduction in unimmunized children	>10%	0.6% decrease (2015 vs 2014)	0.6% decrease (2015 vs 2014)
		IPV introduction	intro by 2015	Yes	Yes

Country/Region	Outcome	Indicator	Target	July-December 2017		January-June 2018	
				Female	Male	Female	Male
Afghanistan	Equal reach in immunization campaigns	% F/M vaccinated	ns*	91.9%	92.5%	93.74%	93.27%
	Equal doses received	Median # doses F/M	ns	13	13	13	14
		% F/M 0-dose	ns	0.22%	0.7%	1.24%	0.97%
		% F/M 3+ doses	ns	98.89%	97.55%	98.34%	97.91%
	Equal timeliness of disease notification	Median # days disease notification	ns	3	3	3	3
		% F/M <= 3 days	ns	56.02%	58.49%	56.61%	59.75%
	Women's participation in immunization campaigns	% F/M frontline workers in urban areas	>50%	42.7%	57.3%	33.7%	66.3%
Pakistan	Equal reach in immunization campaigns	% F/M vaccinated	ns	85.5%	85.7%	91.04%	90.90%
	Equal doses received	Median # doses F/M	ns	10	10	10	10
		% F/M 0-dose	ns	1.15%	1.16%	1.16%	1%
		% F/M 3+ doses	ns	98.35%	98.42%	98.54%	98.77%
	Equal timeliness of disease notification	Median # days disease notification	ns	3	3	3	3
		% F/M <= 3 days	ns	51.46%	53.73%	54.37%	55.98%
	Women's participation in immunization campaigns	% F/M frontline workers	>80%	55.8%	44.2%	67.8%	32.2%
Nigeria	Equal reach in immunization campaigns	% F/M vaccinated	ns	96.7%	96.4%	95.1%	94.7%
	Equal doses received	Median # doses F/M	ns	12	12	11	10
		% F/M 0-dose	ns	0.09%	0.2%	0.56%	0.37%
		% F/M 3+ doses	ns	99.44%	99%	97.9%	97.86%
	Equal timeliness of disease notification	Median # days disease notification	ns	5	5	5	5
		% F/M <= 3 days	ns	38.23%	37.44%	33.32%	35.99%
	Women's participation in immunization campaigns	% F/M frontline workers	>80%	NA	NA	98.9%	1.1%

* Target of *ns* refers to achieving a non-significant result in terms of gender differences.
** Where there were less than 10 observations, data has not been tested for statistical significance.

Country/Region	Outcome	Indicator	Target	July-December 2017		January - June 2018	
				Female	Male	Female	Male
Angola	Equal doses received	Median # doses F/M	ns	3	3	4	3
		% F/M 0-dose	ns	4.88	3.51	5.56	10.34
		% F/M 3+ doses	ns	73.17	82.46	64.81	72.41
	Equal timeliness of disease notification	Median # days disease notification	ns	3	5	4	4
		% F/M <= 3 days	ns	47.44	32.63	40.20	39.78
Benin	Equal doses received	Median # doses F/M	ns	4	4	5	4
		% F/M 0-dose	ns	0	0	3.7	0
		% F/M 3+ doses	ns	96	92.59	92.59	96.88
	Equal timeliness of disease notification	Median # days disease notification	ns	6	7	6	7
		% F/M <= 3 days	ns	25.49	25.42	32	28.81
Burkina Faso	Equal doses received	Median # doses F/M	ns	6	6	5	5
		% F/M 0-dose	ns	0	0	1.79	2.04
		% F/M 3+ doses	ns	98.11	94.92	91.07	95.92
	Equal timeliness of disease notification	Median # days disease notification	ns	3	3	3	4
		% F/M <= 3 days	ns	50.7	59.57	63.41	43.02
Cameroon	Equal doses received	Median # doses F/M	ns	6	6	8	8
		% F/M 0-dose	ns	3.08	1.21	6.11	1.25
		% F/M 3+ doses	ns	95.38	90.3	87.79	94.38
	Equal timeliness of disease notification	Median # days disease notification	ns	4	4	4	4
		% F/M <= 3 days	ns	41.67	40.41	44.34	45.85
Central African Republic	Equal doses received	Median # doses F/M	ns	4	5	4	4
		% F/M 0-dose	ns	5.26	0	0	0
		% F/M 3+ doses	ns	73.68	95.65	93.75	100
	Equal timeliness of disease notification	Median # days disease notification	ns	6	5	6	4
		% F/M <= 3 days	ns	23.53	38.46	40.54	33.33
Chad	Equal doses received	Median # doses F/M	ns	5	5	6	6
		% F/M 0-dose	ns	2.72	1.54	2.38	3.52
		% F/M 3+ doses	ns	89.12	94.62	90.48	90.85
	Equal timeliness of disease notification	Median # days disease notification	ns	5	5	5	5
		% F/M <= 3 days	ns	32.18	30.69	30.94	29.86

Country/Region	Outcome	Indicator	Target	July-December 2017		January -June 2018	
Congo	Equal doses received	Median # doses F/M	ns	4	3	3	3
		% F/M 0-dose	ns	33.33	11.76	11.76	8.57
		% F/M 3+ doses	ns	66.67	64.71	82.35	80
	Equal timeliness of disease notification	Median # days disease notification	ns	4	2	3	3
		% F/M <= 3 days	ns	46.67	71.88	61.29	53.33
Cote d'Ivoire	Equal doses received	Median # doses F/M	ns	3	3	4	3
		% F/M 0-dose	ns	4.76	1.67	2.5	2.04
		% F/M 3+ doses	ns	76.19	76.67	95	77.55
	Equal timeliness of disease notification	Median # days disease notification	ns	6	3	4	5
		% F/M <= 3 days	ns	32.79	54.02	52.24	36.05
Democratic Republic of Congo	Equal doses received	Median # doses F/M	ns	4	4	4	4
		% F/M 0-dose	ns	4.5	3.2	8.46	7.64
		% F/M 3+ doses	ns	79.8	81.6	75.13	72.81
	Equal timeliness of disease notification	Median # days disease notification	ns	5	5	6	5
		% F/M <= 3 days	ns	34.5	34.16	30.14	29.07
Equatorial Guinea	Equal doses received	Median # doses F/M	ns	4	3	4	7
		% F/M 0-dose	ns	0	0	0	0
		% F/M 3+ doses	ns	66.67	66.67	100	100
	Equal timeliness of disease notification	Median # days disease notification	ns	41	7	3	2
		% F/M <= 3 days	ns	33.33	0	75	75
Ethiopia	Equal doses received	Median # doses F/M	ns	4	4	3	3
		% F/M 0-dose	ns	1.83	1.71	5.94	4.07
		% F/M 3+ doses	ns	82.57	87.18	81.19	82.11
	Equal timeliness of disease notification	Median # days disease notification	ns	4	4	4	4
		% F/M <= 3 days	ns	38.17	45.64	41.44	47.35
Gabon	Equal doses received	Median # doses F/M	ns	4	2	4	3
		% F/M 0-dose	ns	0	0	0	11.1
		% F/M 3+ doses	ns	83.33	60	100	77.78
	Equal timeliness of disease notification	Median # days disease notification	ns	4	5	8	3
		% F/M <= 3 days	ns	46.15	41.67	41.44	47.35

Country/Region	Outcome	Indicator	Target	July-December 2017		January -June 2018	
Guinea	Equal doses received	Median # doses F/M	ns	4	4	3	4
		% F/M 0-dose	ns	4.35	0	0	4.35
		% F/M 3+ doses	ns	78.26	77.27	78.38	69.57
	Equal timeliness of disease notification	Median # days disease notification	ns	5	4	4	4
		% F/M <= 3 days	ns	37.14	44.35	45.31	40.54
Iraq	Equal doses received	Median # doses F/M	ns	7	7	7	7
		% F/M 0-dose	ns	0	0	0.76	0.59
		% F/M 3+ doses	ns	98.8	94.12	95.45	94.71
	Equal timeliness of disease notification	Median # days disease notification	ns	2	3	3	2
		% F/M <= 3 days	ns	60.28	55.41	58.82	65.77
Lao People's Democratic Republic	Equal doses received	Median # doses F/M	ns	3	3	3	3
		% F/M 0-dose	ns	0	50	50	75
		% F/M 3+ doses	ns	33.33	50	50	25
	Equal timeliness of disease notification	Median # days disease notification	ns	5	6	4	5
		% F/M <= 3 days	ns	30.77	30.77	33.33	40
Liberia	Equal doses received	Median # doses F/M	ns	3	2	3	3
		% F/M 0-dose	ns	0	0	0	0
		% F/M 3+ doses	ns	83.33	0	61.54	73.33
	Equal timeliness of disease notification	Median # days disease notification	ns	7	10	6	7
		% F/M <= 3 days	ns	20	33.33	37.5	14.29
Madagascar	Equal doses received	Median # doses F/M	ns	5	5	6	6
		% F/M 0-dose	ns	0	0	1.2	1.8
		% F/M 3+ doses	ns	94.85	96.81	97.59	90.99
	Equal timeliness of disease notification	Median # days disease notification	ns	3	3	3	3
		% F/M <= 3 days	ns	58.02	56.69	63	86
Mali	Equal doses received	Median # doses F/M	ns	4	3	3	4
		% F/M 0-dose	ns	10.71	3.03	9.52	2.94
		% F/M 3+ doses	ns	89.29	75.76	80.95	88.24
	Equal timeliness of disease notification	Median # days disease notification	ns	7	5	6	5
		% F/M <= 3 days	ns	21.57	34.78	32.79	35.53

Country/Region	Outcome	Indicator	Target	July-December 2017		January -June 2018	
Myanmar	Equal doses received	Median # doses F/M	ns	3	3	3	3
		% F/M 0-dose	ns	12.12	5.13	0	0
		% F/M 3+ doses	ns	78.79	92.31	95	88
	Equal timeliness of disease notification	Median # days disease notification	ns	4	3	3	3
		% F/M <= 3 days	ns	48.48	56.44	21	32
Niger	Equal doses received	Median # doses F/M	ns	9	9	9	10
		% F/M 0-dose	ns	0.6	0	0	0.46
		% F/M 3+ doses	ns	97.62	96.43	93.5	96.3
	Equal timeliness of disease notification	Median # days disease notification	ns	8	8	7	6
		% F/M <= 3 days	ns	18.82	20.25	24.42	25
Sierra Leone	Equal doses received	Median # doses F/M	ns	3	3	3	3
		% F/M 0-dose	ns	0	0	0	8.33
		% F/M 3+ doses	ns	85.71	88.89	95.65	87.5
	Equal timeliness of disease notification	Median # days disease notification	ns	7	3	3	4
		% F/M <= 3 days	ns	26.09	63.16	53.57	34.38
Somalia	Equal doses received	Median # doses F/M	ns	7	7	7	7
		% F/M 0-dose	ns	12.24	16.67	13.64	9.09
		% F/M 3+ doses	ns	79.59	71.67	84.85	78.18
	Equal timeliness of disease notification	Median # days disease notification	ns	3	2	3	2
		% F/M <= 3 days	ns	59.72	62.03	70	59.76
Syria	Equal doses received	Median # doses F/M	ns	2	6	9	10
		% F/M 0-dose	ns	26.98	14.93	6.06	3.39
		% F/M 3+ doses	ns	31.75	71.64	84.85	88.14
	Equal timeliness of disease notification	Median # days disease notification	ns	3	2	3	3
		% F/M <= 3 days	ns	43.62	52.5	53.62	53.33
Ukraine	Equal doses received	Median # doses F/M	ns	4	5	5	4
		% F/M 0-dose	ns	29.41	28.57	8.33	13.04
		% F/M 3+ doses	ns	52.94	64.29	66.67	65.22
	Equal timeliness of disease notification	Median # days disease notification	ns	2	4	2	1
		% F/M <= 3 days	ns	77.78	50	70.59	78.43

Country/Region	Outcome	Indicator	Target	July-December 2017		January - June 2018	
AMRO	Equal doses received	Median # doses F/M	ns	4	4	4	4
		% F/M 0-dose	ns	0	3.51	1.14	0
		% F/M 3+ doses	ns	77.65	78.95	81.82	85.25
	Equal timeliness of disease notification	Median # days disease notification	ns	5	5	5	5
		% F/M <= 3 days	ns	24.53	25	24.37	22.85
AFRO	Equal doses received	Median # doses F/M	ns	7	7	5	6
		% F/M 0-dose	ns	1.3	0.94	2.4	2.3
		% F/M 3+ doses	ns	93.75	93.75	91.06	90.48
	Equal timeliness of disease notification	Median # days disease notification	ns	4	4	5	4
		% F/M <= 3 days	ns	40.03	41	39.2	39.9
EMRO	Equal doses received	Median # doses F/M	ns	10	10	10	10
		% F/M 0-dose	ns	2	1.48	1.41	1.31
		% F/M 3+ doses	ns	95.93	96.97	97.63	97.43
	Equal timeliness of disease notification	Median # days disease notification	ns	3	3	3	3
		% F/M <= 3 days	ns	55.6	57.68	57.03	59.42
EURO	Equal doses received	Median # doses F/M	ns	5	5	4	5
		% F/M 0-dose	ns	6.38	2.86	3.51	2.51
		% F/M 3+ doses	ns	82.98	88.1	85.96	87.44
	Equal timeliness of disease notification	Median # days disease notification	ns	4	3	5	5
		% F/M <= 3 days	ns	45.87	51.8	40.86	49.49
SEARO	Equal doses received	Median # doses F/M	ns	14	14	14	13
		% F/M 0-dose	ns	1.01	1.01	0.48	0.61
		% F/M 3+ doses	ns	97.92	97.81	98.49	98.5
	Equal timeliness of disease notification	Median # days disease notification	ns	3	3	3	3
		% F/M <= 3 days	ns	51.31	55.01	51.77	52.39
WPRO	Equal doses received	Median # doses F/M	ns	3	3	3	3
		% F/M 0-dose	ns	2.2	1.8	2.09	1.66
		% F/M 3+ doses	ns	93.86	93.26	93.55	95.01
	Equal timeliness of disease notification	Median # days disease notification	ns	2	2	3	3
		% F/M <= 3 days	ns	63.68	64.1	55.58	56.79

Annex 4 – Analysis of cost per child by region, July-December 2017 vs January-June 2018

Operational cost (US$) per child (excl OPV costs) (to reach and vaccinate 1 child with 1 dose)	Jul–Dec 2017	Jan–June 2018
Global	0.36	0.36
Regional Office for Africa	0.38	0.39
Regional Office for the Eastern Mediterranean	0.33	0.32
Regional Office for South-East Asia	0.10	0.10
Regional Office for Europe	0.30	0.30
Regional Office for the Western Pacific	0.27	0.27

Annex 5 – Global Monitoring

Outcome	Indicator	Target	Jul-Dec 2017
All	**Financing:** 12-month cash gap		Fully financed.
	Financing: Strategy funding gap		Fully financed.
	Staffing: Vacant approved posts	<10%	N/a
High population immunity	**Vaccine supply:** Planned SIAs cancelled due to vaccine shortage		No planned SIAs cancelled due to vaccine shortage
Low risk of virus reintroduction	Number of OPV-only using countries		All countries committed to IPV introduction ahead of the switch from trivalent OPV to bivalent OPV in April 2016. However due to a global IPV supply constraint, some low risk countries have experience delays in receiving IPV supply or have not been resupplied, if they had introduced earlier. By end of 2017, all countries have been informed and allocated supply for their RI programmes. By end of June 2018, 119 out of 126 countries have introduced IPV. Four of the remaining countries will introduce during the period July-August. The aim was to complete all introductions in 2018, but currently one country has communicated its plan to introduce in 2019
	Plan in place to support routine immunization strengthening in 10 priority countries		Strengthening routine immunization through PEI network is one of the important components of the National Emergency Action Plans (NEAPs) of the three endemic countries. PEI-EPI synergy teams established at EOCs of each endemic country. Main aim is to support supervision and monitoring of EPI fixed sites and outreach sessions in close collaboration with EPI programmes. Analysis of quarterly monitoring data for 2017 submitted by PEI staff shows that on average, 500 EPI fixed sites and outreach sessions are being monitored per month by Afghanistan PEI team. Similarly, 3000 outreach sessions and 5000 EPI facilities are monitored per month by Pakistan and Nigeria PEI teams. According to NEAPs for 2018, these countries will maintain this current level of PEI support to strengthen routine immunization. Additionally, India, Chad, Ethiopia and tje Democratic Republic of Congo also have developed annual immunization plans that leverage polio assets to improve broader immunization goals.
	Reduction in the international spread of polio		Declared PHEIC remains in place
	Containment and Certification	Per GAPIII	• *Guidance to minimize risks for facilities collecting, handling or storing materials potentially infectious for polioviruses* was published in April 2018, following endorsement by the Containment Advisory Group (CAG). Workshops are planned where necessary for facilitating its timely implementation. • In May 2018, WHO Member States adopted WHA Resolution 71.16 on poliovirus containment which urges international commitment towards ensuring containment requirements are rapidly and fully implemented worldwide. The Resolution includes recommended actions for all Member States and WHO's Director-General, and actions specifically for Member States planning to retain poliovirus for critical functions, in poliovirus-essential facilities (PEFs). Formal deadlines for the appointment of national authorities for containment (NACs) and the processing of facility applications for participation in the GAPIII Containment Certification Scheme (GAPIII-CCS) have been established.

Outcome	Indicator	Target	Jul-Dec 2017
			• In April 2018, SAGE issued recommendations for the alignment of GAPIII and SAGE immunization recommendations, for countries hosting PEFs. A Weekly Epidemiological Record (WER) on this topic was published in June 2018. • The Global Commission for the Certification of Eradication of Poliomyelitis (GCC) remains the oversight body for containment certification. The Containment Advisory Group (CAG) continues to serve as the advisory body to WHO's Director-General on technical issues related to the implementation of GAPIII. • The first GAPIII-CCS Certificate of Participation has been granted (Sweden). More submissions are expected shortly. • The draft revision of 'WHO Guidelines for the safe production and quality control of poliomyelitis vaccine' is available at http://www.who.int/biologicals/en. This third draft has been prepared based on the comments from the first round of public consultations and the outcomes of an working group meeting in May 2018.
Transition and post-certification strategy	Consultations inputs into plans		• Post-certification strategy and five-year strategic action plan on polio transition developed and presented to World Health Assembly in May 2018, available at www.polioeradication.org.

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