Annual Report 2016 Polio Eradication Initiative Afghanistan

Expanded Programme on Immunization
Ministry of Public Health of the Islamic Republic of Afghanistan

unicef
د ماشومانو لپاره سره یو شئ
برای اطفال متحد شوید

World Health Organization

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Foreword

2016 was one of the most critical years for polio eradication efforts in Afghanistan and the programme made significant progress in restricting virus circulation into limited geographical areas. The virus is more cornered than ever before.

Afghanistan's Polio programme continued to enjoy exceptional support of the highest leadership of the country and key line ministries. During 2016, His Excellency the President of Afghanistan convened two meetings of the National Steering Committee with participation of Cabinet Members and Governors of 34 provinces. Moreover, all line ministries, provincial governors and district governors have been providing their full support to polio eradication efforts.

Since their establishment in late 2015, National and Regional Emergency Operation Centres (EOC) play the core role of ensuring strong programme management and oversight. Within the EOCs all partners are working as one team, under one roof, in close collaboration to implement the National Emergency Action Plan (NEAP). The NEAP continues to serve as the guiding strategic document outlining interventions required to stop poliovirus transmission by ensuring that vaccination services reach each and every child irrespective of where they live.

I am pleased to see that the team has been meticulously exploring the root causes of the problems and then working hard to identify the best possible solution tailored to the local context. Getting real-time and reliable information from the field is key to drive programme performance. I am encouraged by the level of attention the team is paying for validation and triangulation of different sources of data which is yielding results. Alongside this, the programme made exceptional progress in a short period of time in ensuring the effective and efficient use of data at national and provincial levels.

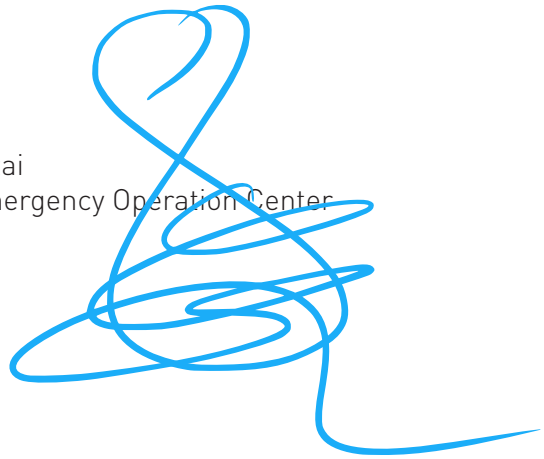
Though all transmission of wild polioviruses reported during 2015 has been stopped, the repeated introduction of new viruses across the common corridor underscores the importance of cross-border coordination and tracking of population movement. During 2016, the programme worked hard to strengthen coordination with Pakistan, with more regular communication and information sharing about populations on the move between the two countries. This became particularly important in mid-2016 with a sudden surge in Afghan returnees to which the programme responded rapidly. Considering the important role of high risk mobile populations in sustaining transmission of poliovirus, the programme will continue to further strengthen coordination with Pakistan for joint mapping and tracking of these particular population groups.

We are mindful of the fragile security situation which affects access to children in parts of the country. This challenge results in a significant number of children missed during campaign activities. Moreover, as we get closer to eradication, refusal by caregivers is also emerging as a challenge to the programme. Therefore, we will continue to maintain programme neutrality, work closely with communities and engage religious leaders and the medical community to jointly address these challenges. Moreover, the risk of transmission in southern region of the country is still high, which will require the greatest attention and close oversight of the national team.

Our vision is to intensify efforts to ensure stopping poliovirus transmission by the end of 2017. In order to achieve this target, greater focus will be placed on identified high risk areas in the south, east and southeast; tracking of high risk mobile populations in close coordination with the Pakistan team, UNHCR and IOM; implementation of the accountability framework at all levels; and enhancing community engagement to increase demand for vaccination.

In our fight against polio, I would like to appreciate and recognize the efforts of tens of thousands of frontline workers who put their lives at risk to protect our children and future generations. We must pay special tribute to those who lost their lives in the past year – they are the real heroes of the programme and we will strive to ensure an end of polio in their honour.

The Government of Afghanistan is grateful for the support of the international community in our collective fight against polio. The Ministry of Public Health appreciates the intensified and more rigorous support of the international community for implementation of the NEAP 2016-2017, without this, we would have been unable to be in the situation in which are today. Working together with our partners, WHO, UNICEF, BMGF, Rotary, and CDC, I am confident that we will soon deliver on our promise of a polio-free world.



Dr. Maiwand Ahmadzai
Director National Emergency Operation Center

Contents

Acronyms

AFP	Acute flaccid paralysis
BPHS	Basic package of health services
CBT	Cross-border team
cVDPV	Circulating vaccine-derived poliovirus
DDM	Direct disbursement mechanism
EOC	Emergency Operations Centre
EPI	Expanded Programme on Immunization
FLW	Front-line worker
HR	High-risk
ICM	Intra-campaign monitor/monitoring
ICN	Immunization communication network
IEC	Information, education and communication
IOM	International Organization for Migration
IPV	Inactivated polio vaccine
LQAS	Lot quality assurance sampling
MoPH	Ministry of Public Health
NEAP	National Emergency Action Plan
NID	National Immunization Day
OPV	Oral polio vaccine
PCM	Post-campaign monitoring
PEI	Polio Eradication Initiative
PPT	Permanent polio team
PTT	Permanent transit team
SIA	Supplementary immunization activity
SIAD	Short interval additional dose
SNID	Subnational Immunization Day
TAG	Technical Advisory Group
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
VDPV	Vaccine-derived poliovirus
VHR	Very high-risk
WHO	World Health Organization
WPV	Wild poliovirus
WPV1	Wild poliovirus type 1

Executive Summary

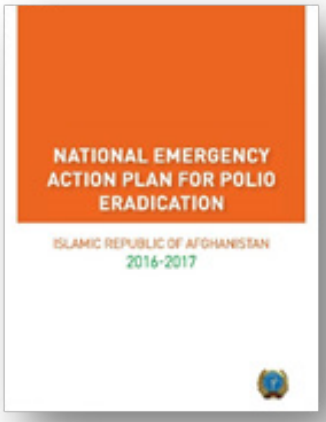
Afghanistan remains one of the three polio-endemic countries in the world, together with Pakistan and Nigeria. Afghanistan and Pakistan form one common epidemiological block for poliovirus transmission and common reservoirs span the national borders involving both geographic areas and demographic groups that sustain transmission of the virus.

In 2016 Afghanistan reported 13 wild poliovirus (WPV1) cases from four districts compared to 20 cases from 16 districts in 2015. The transmission was limited to small geographical areas in Eastern and Southeastern regions as well as the northern part of Southern Region. Eleven cases originated from two outbreaks whereas two cases represented persisting low-level endemic transmission. As evidenced by geographical and temporal limitation of the transmission in 2016, improved population immunity prevented both establishment and further spread of transmission as experienced in previous years. Continued improvement in population immunity is further evidenced through Sabin-like virus isolation and improved vaccination status in non-polio acute flaccid paralysis (AFP) cases. No orphan WPV1 was detected during 2016 and no case was classified as compatible polio.

During 2016 no circulating vaccine-derived poliovirus type 2 (cVDPV2) cases were reported, however one VDPV2 classified as ambiguous VDPV2 was isolated. One AFP case with Sabin-like type 2 poliovirus was detected in Kandahar and the subsequent extensive search conducted for post-switch use of trivalent oral polio vaccine (tOPV) resulted in finding of one single partially used tOPV vial in a health facility nearby the residence of the child.

During 2016 all samples from the 15 operational environmental surveillance (ES) sample collection sites remained negative for WPV and VDPV2 for 11 months, the longest ever period without detection of WPV since the start of ES sampling in Afghanistan, showing a reduced virus load in the country. In December 2016 however, two samples collected, one each in Helmand Province in the south and Nangarhar Province in the east, tested positive for WPV1. As per genetic sequencing both were independent lineages from across the common reservoir.

The National Emergency Action Plan for Polio Eradication (NEAP) continues to guide all polio eradication activities and in 2016 the Afghanistan national polio eradication programme made significant progress through a consistent and well-tracked implementation of the NEAP resulting in reduction in geographical spread of poliovirus. In June 2016 the implementation of the NEAP 2015-2016 was reviewed and NEAP 2016-2017 developed. An accountability framework was established and embedded in the NEAP 2016-2017 and the NEAP translated into detailed work plans across task teams with clear deliverables at each level.



An extensive risk categorization was undertaken in late 2015 and five provinces were identified having a higher risk of sustaining poliovirus transmission. Further disaggregated district-level analysis identified 47 districts at very high risk for poliovirus transmission and at high risk were further 49 districts. During 2016 programme focused its interventions and initiatives in these high risk areas.

Afghanistan's national polio eradication programme enjoys strong support from the country's highest political leadership and H.E. the President of the Islamic Republic of Afghanistan maintains direct oversight of polio eradication efforts. In addition, a number of national level bodies continue to govern and oversee the implementation of the NEAP. The Polio Steering Committee is the highest forum used by the national leadership to support the polio programme whereas the Polio High Council has participation of the Minister of Public Health, line ministries and departments,

the polio team and representatives of donor and partner agencies. The Ministry of Public Health (MoPH), in strong partnership with UNICEF, WHO and other partners, plays the lead role in polio eradication efforts in the country with the overall responsibility to coordinate and communicate with all partners.

Emergency Operations Centres (EOC) were established at the national level and in three regions in late 2015 to intensify, guide and coordinate the efforts of all partners for NEAP implementation. The EOCs were fully operationalized during 2016 and the operation of Afghanistan's polio eradication programme is managed by the EOCs. In addition, the EOCs have been instrumental in improving and strengthening coordination within the common poliovirus reservoir of Afghanistan and Pakistan. While the regional EOCs have some autonomous decision-making power, their main role is to coordinate and execute the strategies set at the national level.

Afghanistan continues to maintain a highly sensitive surveillance system, with key indicators surpassing global targets in all regions. Provincial level indicators are closely followed up to ensure that national and regional figures do not mask provinces with poor performance. Non-polio AFP rate surpassed the global target in all the provinces and adequate stool rate in 33 out of 34 provinces. In 2016 the surveillance network continued to expand with strategic inclusion of new zero reporting and active surveillance sites, additional AFP focal points and reporting volunteers. The existing 14 environmental surveillance sample collection sites were reviewed for their appropriateness and new areas assessed for possible further expansion. All existing sites were found to remain appropriate and relevant and three additional sites were identified. The frequency of sample collection is monthly except in Kandahar and Helmand provinces where it was increased to fortnightly. An external surveillance review conducted in in June 2016, with the main objective to ascertain the quality and sensitivity of AFP surveillance, concluded that *"Circulation of WPV/cVDPV is unlikely to be missed in Afghanistan".*

Any new transmission detected in 2016, polio case or positive ES sample, was responded to with a detailed case and epidemiological investigation as well as three response campaigns after the date of onset. In view of the emergence of cVDPV2 within the common reservoir areas of Pakistan, preparedness was established to respond to any VDPV2 transmission within 14 days of notification. During 2016 Afghanistan implemented an intensive schedule of large scale supplementary immunization activities (SIA) including four National and four Subnational Immunization Days (NID, SNID) alongside two SIAs targeting high-risk districts and several smaller scale response campaigns and short-interval additional dose campaigns. Campaigns using both inactivated polio vaccine (IPV) and oral polio vaccine (OPV) were conducted in 34 high-risk districts.

A number of new initiatives were put in place during 2016 that included the roll-out of a new front-line worker (FLW) training curriculum; microplan field validation and revision; a modified revisit strategy; development of district profiles and district-specific plans; in-depth investigation for reasons for failed lots in lot quality assurance sampling (LQAS); and strategic use of IPV. An immunization communication network (ICN) was established consisting of full-time social mobilizers to ensure sustained programme communication efforts and follow-up of missed children in between the campaigns. The programme focused the implementation of these initiatives in the 47 very high-risk districts and there is a significant improvement in SIA quality over the year.

A range of vaccination activities complement the scheduled NIDs and SNIDs to ensure that children on the move or inaccessible for normal campaign activities are reached during and in-between polio campaigns. These complementary vaccination activities include special vaccination teams operational at border crossings and at strategic locations for children on the move, and specific strategies are in place for the nomadic populations. In 2016 efforts were made to improve the quality of these activities and to continuously adapt their scale and scope according to prevailing programmatic needs. Mid 2016 the country experienced an unprecedented influx of Afghan returnees from Pakistan and Iran and, in close collaboration with UNHCR and IOM, vaccination sites providing OPV and IPV were rapidly established at

the zero points and at UNHCR and IOM reception sites. In compliance with International Health Regulations regarding the international spread of poliovirus, international travellers are offered polio vaccination at international airports. The eleventh meeting of the Emergency Committee under the IHR, convened in November 2016, classified Afghanistan, based on the risk stratification, in the category of 'states infected with wild poliovirus or *cVDPVs* but not currently exporting'.

Even though the security situation continued to deteriorate during 2016, polio eradication remains a neutral programme. However, whereas surveillance activities are being implemented across the country without major restrictions, access to vaccinate children through house-to-house mass campaigns remains a challenge in some areas and in others there are limitations in programme oversight and management. The number of inaccessible children varies from campaign to campaign and the accessibility is tracked at cluster level and over the rounds. Areas that become inaccessible due to active conflict are covered as soon as active fighting is over and areas inaccessible for more than 2 SIAs are treated as high-risk areas. For areas accessible with limitations, i.e. where campaigns can be conducted but oversight and programme management is limited due to insecurity and/or interference, the programme introduced strategies such as remote monitoring and engagement of a neutral third party to monitor the programme's reach.

Polio eradication efforts are bolstered by a communications approach emphasizing different media platforms. The approaches are in line with the NEAP and are articulated and developed by the EOC Strategy Working Group, the Media Task Team, the Advocacy Task Team and the Communications Task Team. The core aim of communications outputs is to sustain strong demand for polio vaccination and these are explicitly aimed at residents of the 47 high-risk districts. This is achieved by direct communications with residents as well as interacting with an array of leaders and influencers. It is also achieved by supporting the work of vaccinators and the ICN as well as inserting polio-related themes into popular radio and TV channels. These interventions are informed by data from a Knowledge, Attitudes and Practices (KAP) study carried out in 2015. The main elements of communications outreach include 1) using a combination of paid and earned media, particularly through radio programming, to educate and mobilize community participation, 2) promoting awareness through the door-to-door distribution of IEC materials, 3) using influencers to help spread messages, and, 4) a vigorous grassroots outreach through the ICN.

Ensuring adequate vaccines on a timely basis supported by effective cold chain management continued to be a focus in 2016 and no campaigns were delayed due to shortages of vaccines. Vaccine management training was conducted in all regions for cold chain technicians, Expanded Programme on Immunization (EPI) supervisors, provincial polio communication officers and provincial polio officers and vaccine utilization reports (VURs) are being generated and monitored closely on a weekly and monthly basis to reduce vaccine wastage rates.

In April 2016 the programme successfully conducted a tOPV – bOPV switch as part of the Global Polio Eradication Endgame Strategy. The switch involved balanced forecasting and monitoring of stock levels of tOPV and bOPV, synchronized withdrawal of all tOPV from all levels of health care in the country on the global set date, and destruction of all tOPV.

The available data on routine immunization from different coverage surveys and sources vary greatly, but it is evident that reaching every child with routine immunization services remains a major challenge in Afghanistan. There is an increased political commitment and focus on routine immunization and the comprehensive multi-year plan (cMYP) for immunization 2015-2019 was updated during 2016. Continued emphasis is on reducing the number of un- and under-immunized children in the prioritized very high-

risk districts by regularly engaging the polio infrastructure. These efforts to strengthen routine immunization will sustain the gains achieved by SIAs.

The way forward for 2017 focuses on full and well-tracked implementation of the NEAP 2016-2017, review of the NEAP implementation status in mid-year and development of a new NEAP guided by recommendations of the Technical Advisory Group. The risk categorization will be amended as per evolving epidemiology and comprehensive revision conducted in December 2017. Engagement of political leadership, including line ministries, will continue to be strengthened. A new EOC will be established in Southeastern Region and regional structures in the regions without EOCs will be strengthened. The accountability framework will be fully implemented and coordination within the common epidemiological block further intensified.

The SIA schedule for 2017 includes 4 NIDs and 6 SNIDs to be synchronized with Pakistan; however calendar and scope may change as per the evolving epidemiology. IPV+OPV SIAs will be implemented as per the NEAP. To further enhance campaign quality, household based microplan revision will be completed and GIS used for identification of changes and peri-urban microplanning. Refusal will be addressed through focussed interventions and persistently missed children identified using disaggregated data analysis and tracking over the rounds. Field investigation of all failed lots will continue and remote monitoring will be expanded. Cluster and village level mapping of accessibility will continue and dialogue at various levels will be sustained for access compromised areas. Programme neutrality will be maintained.

During 2017 special emphasis will be put on high-risk mobile populations that include people moving long distances within the common reservoir areas, straddling populations at border areas, nomads and returnees. Joint mapping and planning will be conducted with the Pakistan programme.

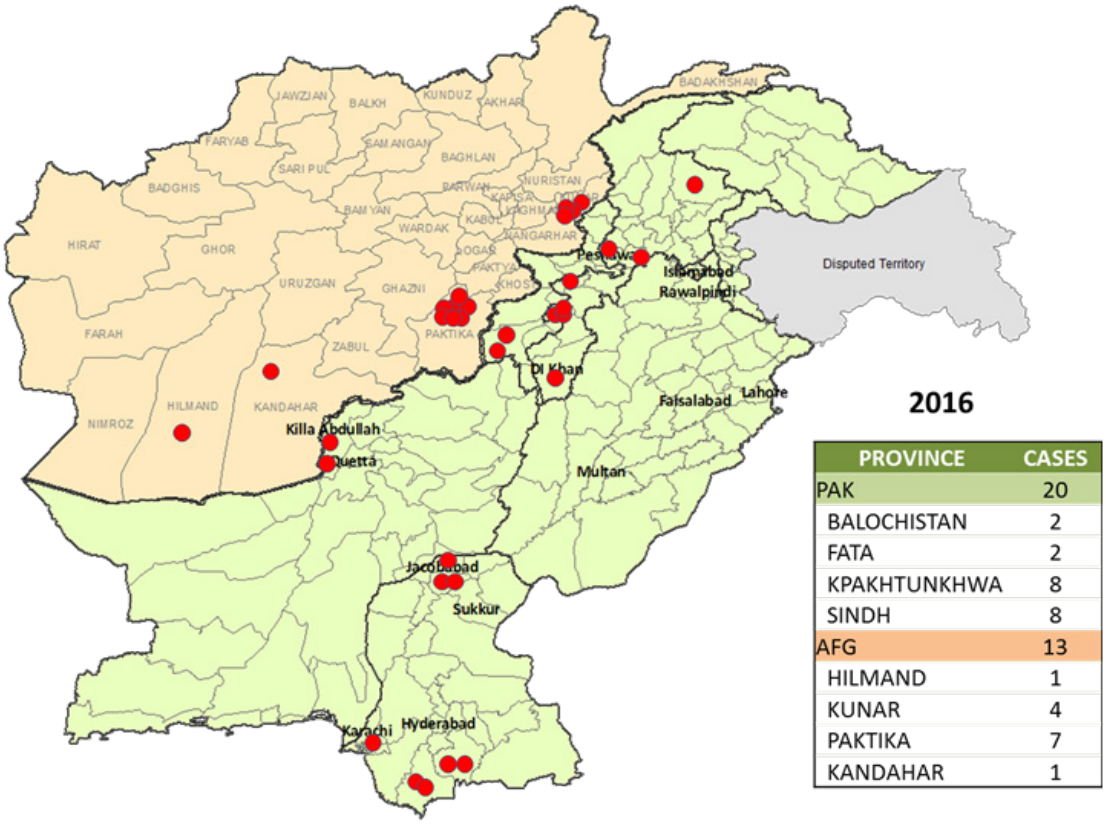
Media approaches will be further tailored for each region based on their specific context and different approaches/strategies will be explored as alternatives to full-time social mobilisers in challenging areas. ICN will be further strengthened through continued capacity building and to enhance understanding of reasons for missed children in specific areas further qualitative analysis will be conducted.

Surveillance reporting network will continue being expanded to include newly opening/identified health facilities and environmental surveillance established in all regions. Healthy children sampling strategy will be fully implemented from silent districts and sero-prevalence surveys will be conducted as per the existing plan.

SOP of Polio Eradication Initiative's support to EPI will be fully implemented with special focus on planning of routine immunization sessions and monitoring of fixed and outreach sessions. Polio workers will spend 20% of their time on routine immunization and ICN will promote routine immunization, mobilize families and implement newborn and defaulters tracking.

1 Context

Afghanistan remains one of the three polio-endemic countries in the world together with Pakistan and Nigeria. Due to geographic proximity and close ethnic, tribal, and economic ties resulting in extensive population movement across the border, Afghanistan and Pakistan form one common epidemiological block for poliovirus transmission (Figure 1). Epidemiological and genetic evidence demonstrate that common reservoirs of poliovirus transmission span the national borders between Afghanistan and Pakistan involving both geographic areas and demographic groups that sustain the transmission of the virus.



PROVINCE	CASES
PAK	20
BALOCHISTAN	2
FATA	2
KPAKHTUNKHWA	8
SINDH	8
AFG	13
HILMAND	1
KUNAR	4
PAKTIKA	7
KANDAHAR	1

Figure 1: Afghanistan-Pakistan common epidemiological block for poliovirus transmission

The National Emergency Action Plan for Polio Eradication (NEAP) continues to serve as a guiding document for all polio eradication activities. In 2016 the Afghanistan polio eradication programme made significant progress through a consistent and well-tracked implementation of the NEAP resulting in a significant reduction in geographical spread of poliovirus (Figure 2). During the NEAP 2015-2016, national and regional Emergency Operations Centres (EOC) were established and in January 2016 the meeting of the Technical Advisory Group (TAG) acknowledged significant improvement in programme oversight, management and coordination through the EOCs established in late 2015. The EOCs have greatly strengthened the partnership between government, United Nations agencies and other polio partners.

In June 2016 the implementation of the NEAP 2015-2016 was reviewed and NEAP 2016-2017 developed based on lessons learned and recommendations of the Technical Advisory Group (TAG). The main focus of the NEAP 2016-2017 is to consolidate and strengthen the new initiatives from the first half of 2016 that had started yielding results. During the July 2016 TAG meeting, global experts endorsed the NEAP 2016-2017 and reiterated the programme to continue consolidating on the key interventions and fully implement the NEAP.

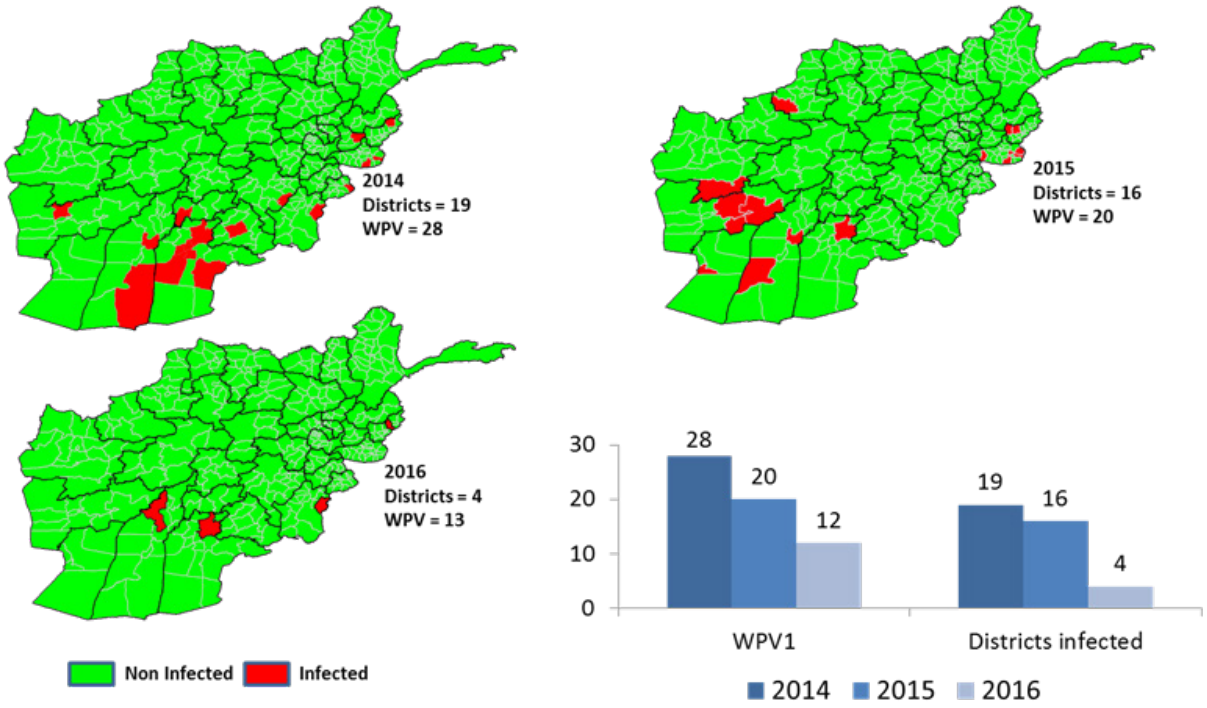


Figure 2: Reduction of geographic spread of poliovirus, 2014-2016

1.1 High-risk Areas and Population Groups

Acknowledging that certain geographical areas and population groups are more vulnerable to polio transmission and have played a vital role in sustaining the transmission over time, the Afghanistan polio eradication programme continued to focus its attention and resources on identified high-risk areas and population groups.

An extensive risk categorization was undertaken in late 2015 and five provinces (i.e. Kandahar, Helmand, Kunar, Nangarhar, and Farah) were identified having a higher risk of sustaining poliovirus transmission based on poliovirus epidemiology and other factors, including access to implement SIAs, population immunity, and the presence of refugees and internally displaced persons.

Further disaggregated district-level analysis showed that certain districts have an increased risk of polio transmission; identified at very high risk were 47 districts that have been responsible for over 84% of cases over the past seven years and at high risk were further 49 districts (Figure 3). During 2016, a strong programme focus was in those 47 very high-risk (VHR) districts and 49 high-risk (HR) districts including 1) inclusion in all National and Subnational Immunization Days (NID, SNID); 2) intensified human resource for improving quality of activities; and 3) close oversight and monitoring of activities by national level.

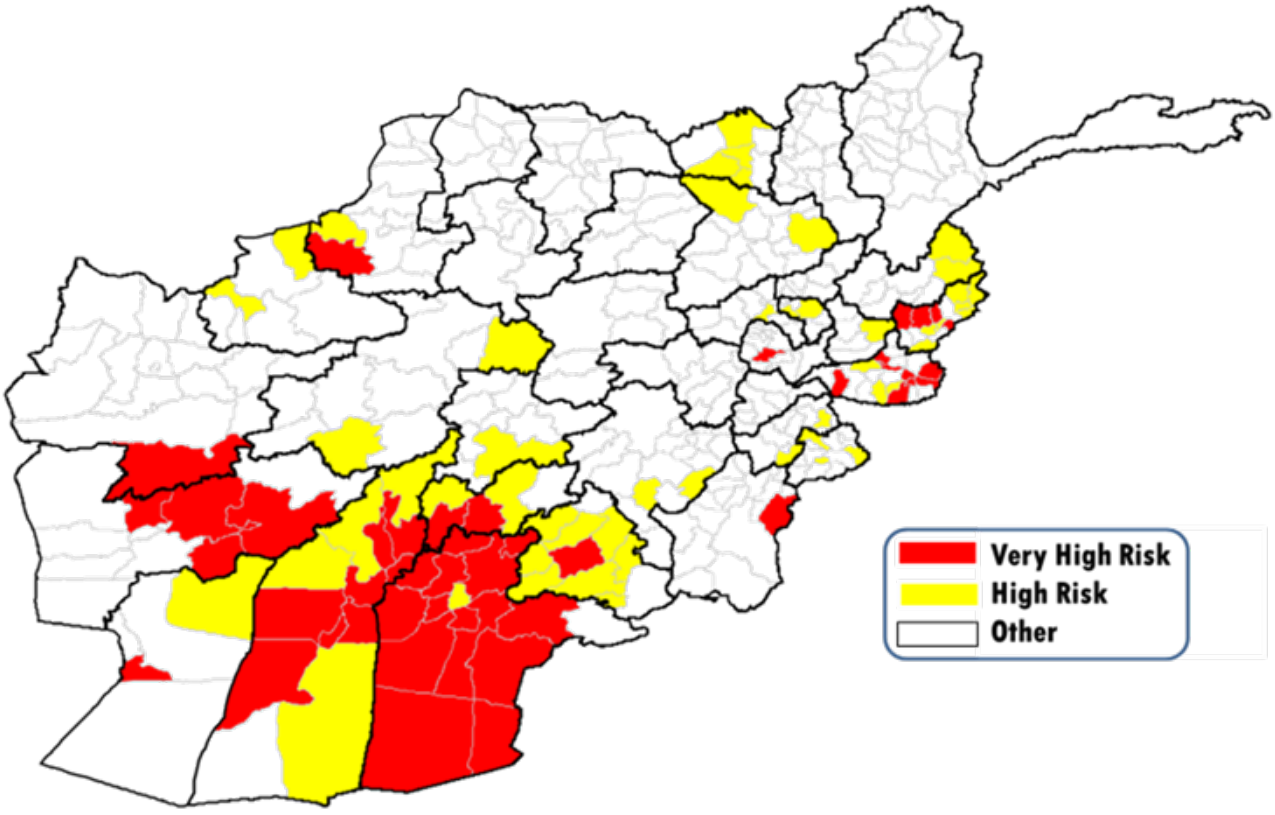


Figure 3: Map of very high-risk and high-risk districts, 2016

The transmission detected during 2016 illustrates the importance of population movement for poliovirus transmission in the common reservoir and that pockets of unreached children, however small, remain at risk. Hence, the populations identified to be at a higher risk for poliovirus transmission includedchildren on the move as well as children residing in areas inaccessible for vaccination campaigns.

1.2 Access Situation

Afghanistan remains a country in conflict but health services, including immunization and polio eradication, continue being perceived as neutral. However, whereas surveillance activities are being implemented across the country without major restrictions, access to vaccinate children through house-to-house mass campaigns remains a challenge.A number of children continue to miss vaccination during SIAs due to inability of vaccination teams to reach children in security/access-compromised areas. In addition there are areas whereit is possible to implement campaigns, but with limitations in programme oversight and management.

During 2016 four categories were designated to describe the access status of all 399 districts:

Category 1 – Fully accessible: These districts are fully accessible for all components of Polio Eradication programme implementation.

Category 2 – Partially accessible: While vaccination campaigns are conducted in some parts of these districts, other areas are not accessible for campaign implementation.

Category 3 – Accessible with limitations: The implementation of vaccination campaigns is possible in these districts. However, the movement of non-resident supervisors and monitors is not without risk; there are limitations and restrictions on effective implementation and monitoring of the performance of all phases of SIA implementation – including front-line worker(FLW)selection, training, supervision, and monitoring of campaign activities.

Category 4 – Inaccessible: These districts are totally inaccessible for vaccination campaign implementation.

The cause of Category 2 and 4 inaccessibility is mainly active fighting nearby or local authorities' "bans" on immunization campaigns. In Category 3 districts, obtaining accurate and objective information on the quality of campaigns remains one of the most critical challenges. During 2016 the number of inaccessible children, as well as the area and type of inaccessibility, varied greatly from campaign to campaign, owing to the dynamic security situation on the ground (Figure 4).

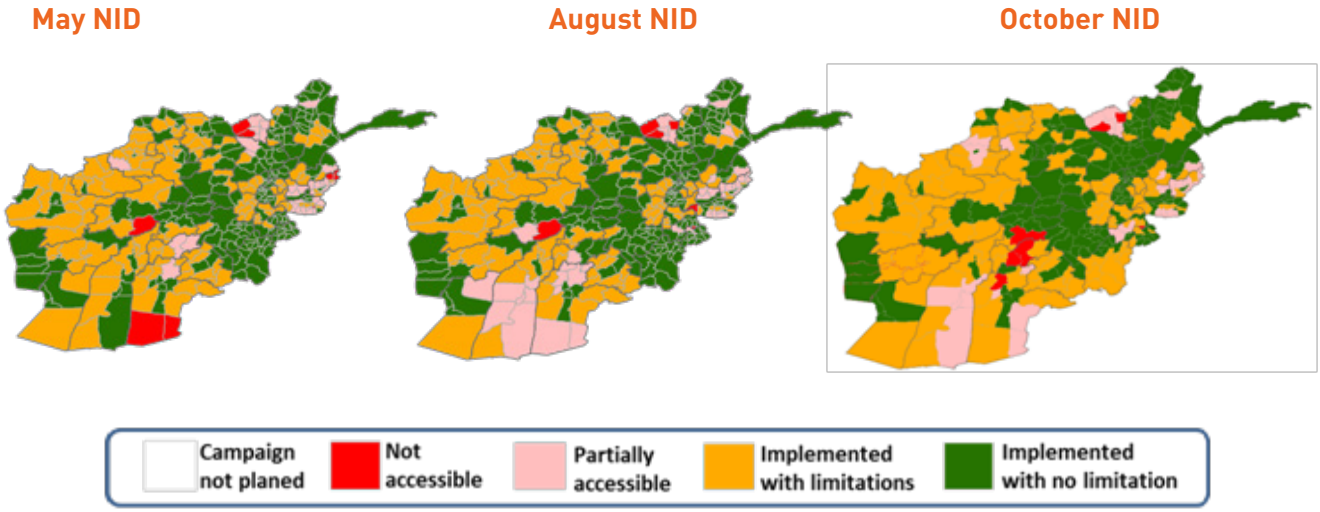


Figure 4: Access for NIDs, May-October 2016

2 Oversight,Coordination and Programme Management

2.1 Governance

There is a strong political commitment at the highest level of the government of Afghanistan led by H.E. President, H.E. CEO and H.E. Health Minister and a strong partnership between the government, UNICEF, WHO and other partners at national and regional levels continues with support of all donor partners.

A significant focus of the NEAP 2015-2016 was to improve programme management and operational implementation. An overall governance framework for the national Polio Eradication Initiative (PEI) in Afghanistan was established to encourage evidence-based decision-making, improved situational awareness, early problem detection and a coordinated response by both government and partners. The updated NEAP 2016-2017 strongly emphasized the importance of PEI governance in Afghanistan, with clearly defined roles and responsibilities, supported by a defined accountability framework.

2.2 Leadership and Coordination

At the national level, Afghanistan's national polio eradication programme enjoys strong support from the country's highest political leadership and H.E. the President of the Islamic Republic of Afghanistan maintains direct oversight of polio eradication efforts. In addition, a number of national level bodies continue to govern and oversee the implementation of the NEAP.

The Polio Steering Committee, the highest forum used by the national leadership to support the polio programme, is chaired by the President of the Islamic Republic of Afghanistan, and its members are the Chief Executive of the Islamic Republic of Afghanistan and cabinet members.

The Polio High Council is chaired by the Presidential Focal Point for Polio Eradication, with the participation of the Minister of Public Health, line ministries and departments, the polio team and representatives of donor and partner agencies. The Presidential Focal Point for Polio Eradication represents the presidential office and provides required day-to-day support through line ministries and governors, and regularly updates the President on the programme's progress.

The Ministry of Public Health (MoPH) plays the lead role in polio eradication efforts in the country, with the overall responsibility to coordinate and communicate with all partners. The MoPH ensures the effective leadership and coordination of the bodies established to manage and oversee the national polio eradication programme. The Minister of Public Health has a Senior Adviser acting as Focal Point for PEI, who directly oversees the day-to-day management of the programme on behalf of the Minister of Public Health. The Polio Focal Point ensures that all MoPH departments provide full support to the programme.
Kunar.

The provincial and district governors' engagement in the polio programme was strengthened, particularly in the high-risk provinces of Southern, Eastern and Western regions. During the second half of 2016, the provincial and district polio task forces were made fully functional in the five priority provinces and the 47 VHR districts. The terms of reference for provincial and district task forces were revised and operationalized and multisectoral meetings chaired by the provincial governors are being held before each campaign round in Kandahar, Helmand, Nangarhar and Kunar.

2.3 National Emergency Operations Centre's

EOCs were established at the national level and in three regions in late 2015 to intensify, guide and coordinate the efforts of all partners for NEAP implementation under one roof. The EOCs were fully operationalized during 2016 and the daily operation of Afghanistan's polio eradication programme is managed by the EOCs. The national EOC has a direct reporting and commanding relationship with the regional EOCs, Regional Expanded Programme on Immunization (EPI) Management Teams and Provincial EPI Management Teams. BPHS NGOs are members of these structures.

The national EOC has overall responsibility for the stewardship of the national polio eradication programme (Figure 5). It defines the strategies, identifies the high-risk areas, develops the tools needed, evaluates the programme and tracks the performance of districts. It ensures that all the strategies developed at the national level are shared with the provinces and undergo consultation before finalization. While the regional EOCs have some autonomous decision-making power, their main role is to coordinate and execute the strategies set at the national level.

In addition to coordination within the Afghanistan PEI, the EOCs have also been instrumental in improving and strengthening coordination within the common poliovirus reservoir of Afghanistan and Pakistan at national as well as sub-national levels.

Figure 5: Governance and coordination framework

2.4 Accountability Framework

The accountability framework, established in 2016, outlines how the polio programme and everyone that is part of the programme are being held accountable. The accountability framework was embedded in the NEAP 2016-2017 and the NEAP translated into detailed work plans across task teams with clear deliverables at each level. All activities outlined in the NEAP are closely monitored by the National EOC through a common tracking tool.

The objectives of the Afghanistan accountability framework are to establish a

- systematic process of monitoring individual and team performance, evaluation and feedback;
- series of tools, including dashboards for the monitoring of performance against NEAP priorities;
- process for evaluating the progress of the NEAP on a quarterly basis; and
- a mechanism for rewarding good performance as well as sanctioning poor performance following an investigation process.

3 Epidemiology

Wild poliovirus

In 2016 Afghanistan reported 13 wild poliovirus (WPV1) cases from four districts compared to 20 cases from 16 districts in 2015. The transmission was limited to small geographical areas in the Eastern and Southeastern regions as well as the northern part of Southern Region. Eleven cases originated from two outbreaks whereas two cases represented persisting low-level endemic transmission. By the end of 2016 however, both the persisting continued low-level local circulation in Southern Region and the outbreaks in Eastern and Southeastern regions seem to have ceased.

Out of the total 13 cases reported, seven were from Bermel District of Paktika Province in Southeastern Region and four from Shigal Wa Sheltan District of Kunar Province from Eastern Region. Both districts, in addition to sharing borders with Pakistan, have populations with strong cultural, economic and tribal ties across the border resulting in frequent informal population movements. The transmission in Bermel was genetically linked to South Waziristan and the transmission in Shigal to Khyber (Figure 6). All the cases originated from severely access compromised areas, in Bermel District from within a displaced population group from Waziristan and in Shigal from an area inaccessible for vaccination for the past four years. The two outbreaks were each restricted within areas of a few square kilometres and temporally limited to durations of less than five months. As evidenced by geographical and temporal limitation of the outbreaks in 2016, improved population immunity surrounding the inaccessible areas prevented both establishment and further spread of transmission as experienced in previous years.

The other two cases of 2016, with onset in January and April, were detected in the northern part of Southern Region, one each from Nawzad District of Helmand Province and Shahwalikot District of Kandahar Province, both linked to 2015 transmission in their respective areas and therefore representing low-level endemic circulation which was persisting in the south. (Figure 7)

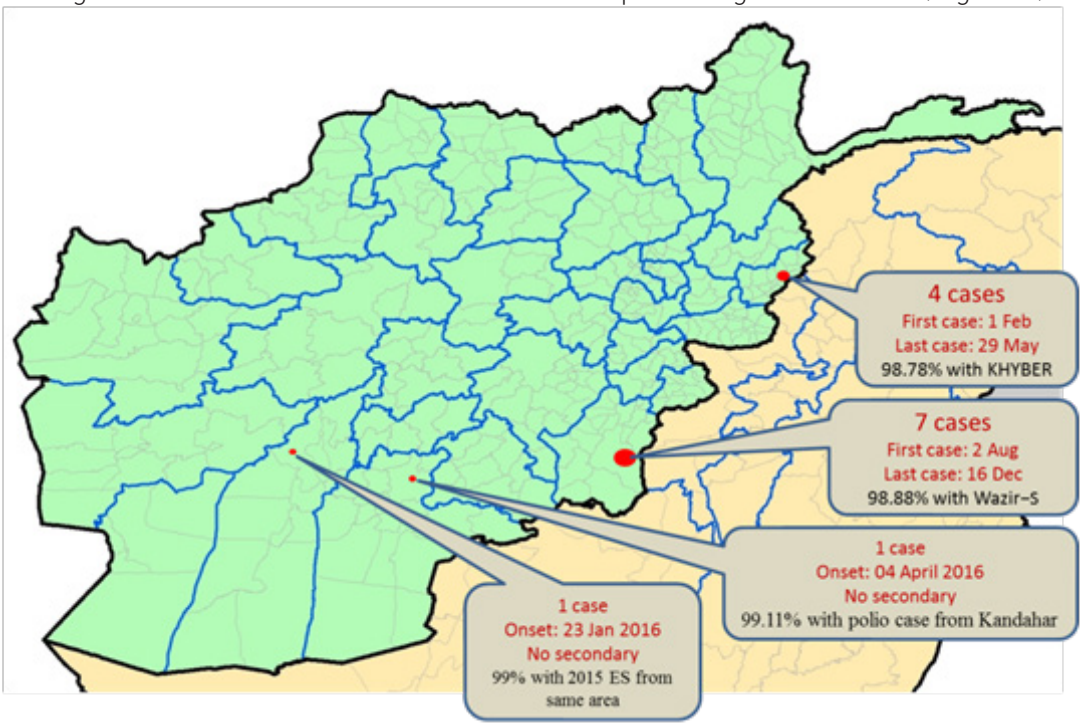


Figure 6: Poliovirus transmission, 2016

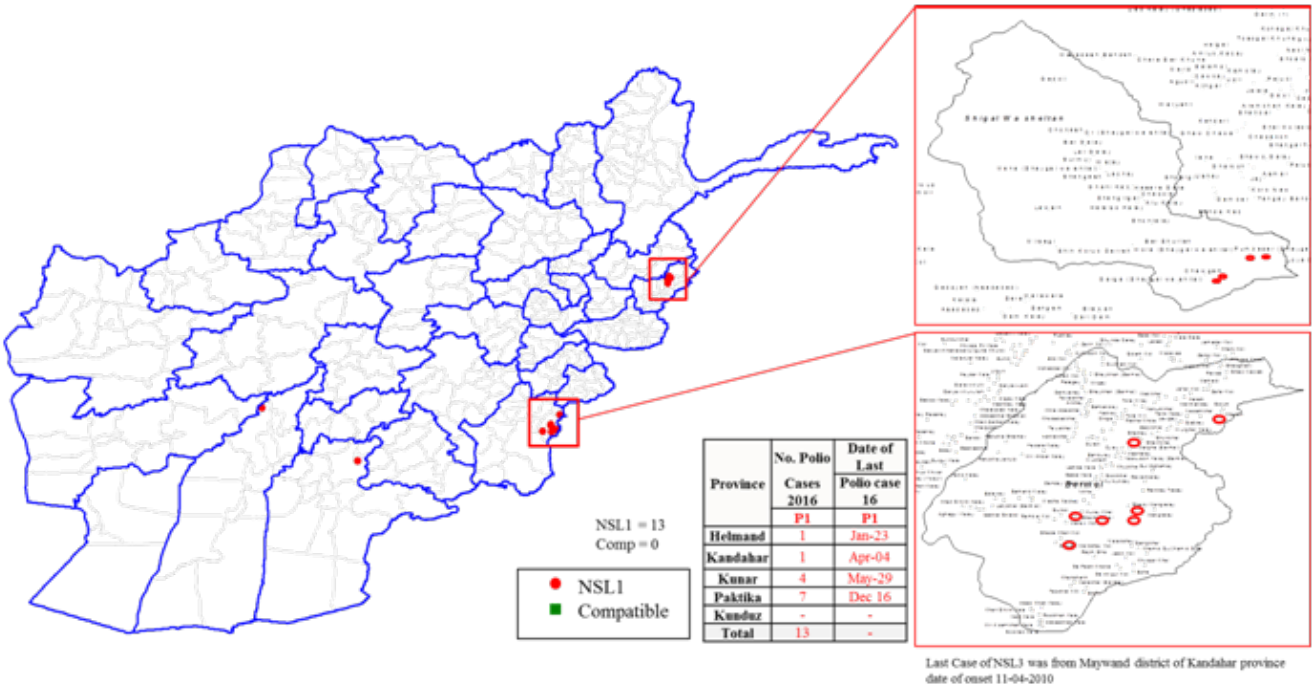


Figure 7: Confirmed polio cases, 2016

All the confirmed cases of 2016 belonged to cluster R4C5C and sub-clusters C1 (Bermel), C3 (Nawzad and Shahwalikot) and C5 (Shigal). The age characteristics of the confirmed polio cases during 2016 show that 62% were 24 months or less of age compared to 50% during 2015.The median age was 24 months (ranging from 12-86 months) compared to 26 months in 2015 (with a range of 7-179 months). The male to female ratio was 10:3 amongst the confirmed cases. All 13 cases were zero-dose for routine oral polio vaccination (OPV) among which seven cases (58%) were zero-dose both for routine and SIAs.

No orphan WPV1 was detected during 2016 as compared to one orphan detected in 2015. The number of compatible polio cases was 3 in 2015 whereas in 2016 no case was classified as compatible polio.

Vaccine-derived poliovirus

No circulating vaccine-derived poliovirus type 2 (cVDPV2) cases were reported in the country during 2016, the last one being from Shahwalikot district in Kandahar province in March 2013. However, a VDPV2 was isolated from one acute flaccid paralysis (AFP) case from Bermel District of Paktika Province with onset of paralysis in September 2016. In absence of evidence for neither circulation nor known immunodeficiency, the case was classified as an ambiguous VDPV2.

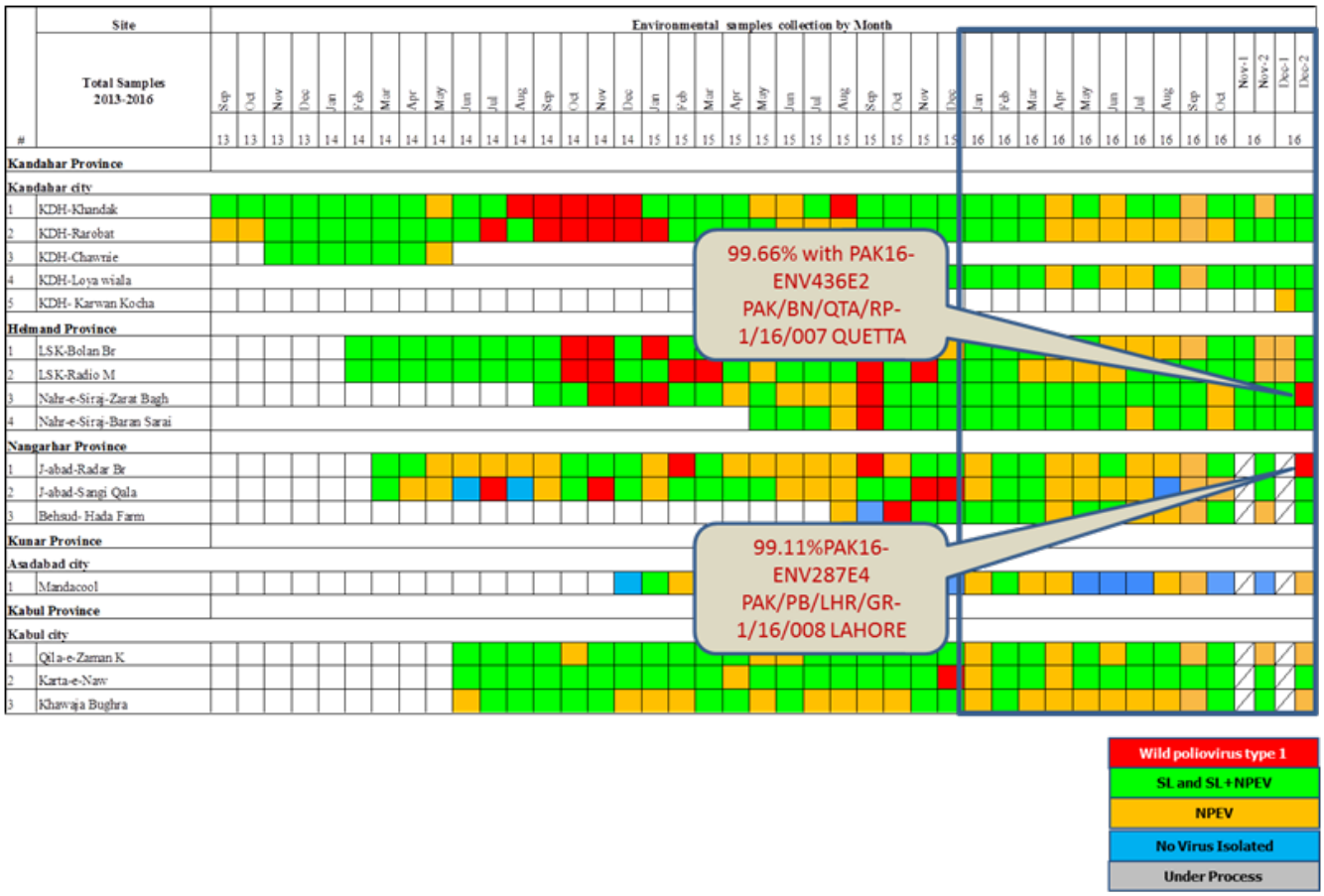
Sabin-like poliovirus

Also in September 2016 one AFP case with Sabin-like type 2 poliovirus was detected in Kandahar. An extensive search conducted for post-switch use of tOPV resulted in finding of one single partially used tOPV vial in a health facility near the residence of the child.

Poliovirus in the environment

During 2016 all samples from the 15 operational environmental surveillance (ES) sample collection sites remained negative for WPV and VDPV2 for 11 months, the last WPV1 positive sample having been from Jalalabad in December 2015. This was the longest ever period without detection of WPV since the start of ES sampling in Afghanistan showing a reduced virus load in the country. In December 2016 however, two samples collected, one each from Nahr-e-Saraj District of Helmand Province in the south and Jalalabad District of Nangarhar Province in the east, tested positive for WPV1. As per genetic sequencing both were independent lineages from across the common reservoir (Table 1).

Table 1: Environmental surveillance results, 2013-2016



4 Surveillance

A sensitive surveillance system remains the cornerstone of polio eradication efforts guiding all other aspects of the programme. Afghanistan continues to maintain a highly sensitive surveillance system, with key indicators surpassing global targets in all regions. The polio programme continues to conduct surveillance activities at all levels across the country through designated field staff. In 2016 the surveillance network continued to expand with strategic inclusion of new zero reporting and active surveillance sites, additional AFP focal points (Figure 8) and reporting volunteers (Figure 9) as well as new environmental surveillance sites.

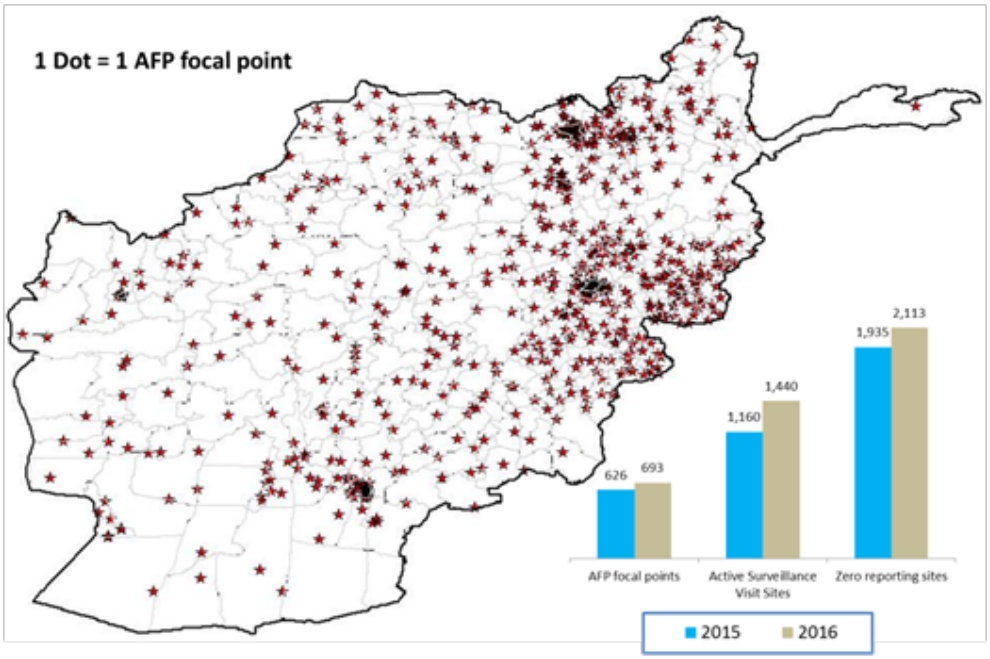


Figure 8: Surveillance network expansion, 2015-2016

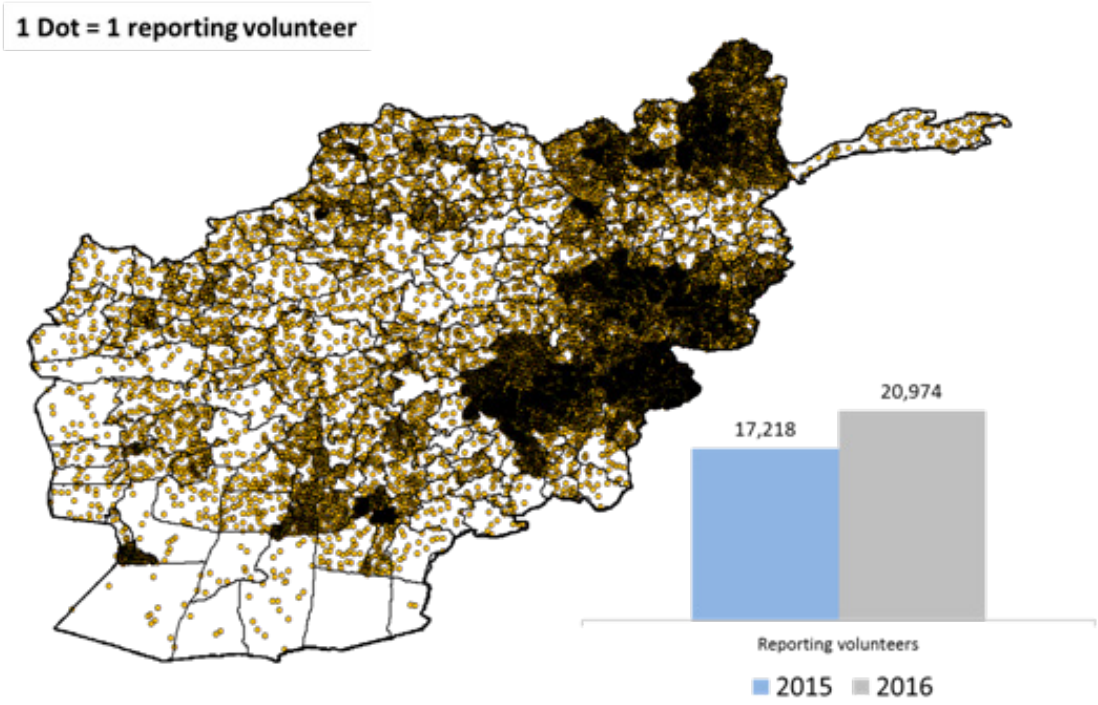


Figure 9: Community based reporting volunteers, 2015-2016

Afghanistan continues to utilize the services of the Regional Reference Laboratory in Islamabad. Despite occasional border closures, Afghanistan and Pakistan programmes were able to ensure uninterrupted stool sample shipment to RRL by, when necessary, implementing the stool sample shipment contingency plan established in 2016.

AFP surveillance

The wide network of over 20,000 AFP reporting volunteers and close to 700 focal points includes traditional healers, shrine keepers and pharmacists as well as health care providers in health facilities, including tertiary level health care institutions, major governmental health centres, private sector, and physical rehabilitation centres.

At the national and regional levels Afghanistan continues meeting the global targets across the key surveillance indicators (Figure 10). During 2016 the country reported a total of 2,901 AFP cases and had a non-polio AFP rate of 14 and an adequate stool rate of 92%. At regional level the non-polio AFP rate ranged between 10 and 20 and the adequate stool rate from 86% to 98%. AFP case detection within seven days was 86% at national level and between 77% and 94% in the regions.

The national level non-polio enterovirus (NPEV) rate was 21% and 18-24% at regional level. Sabin-like isolation was 8% at the national level and ranged from 5% in Badakhshan and Western Region to 10-13% in Eastern, Southeastern and Southern regions, corresponding geographically with the high-risk provinces and districts conducting monthly vaccination campaigns. These two indicators give confidence on the reverse cold chain at collection, storage and shipment levels.

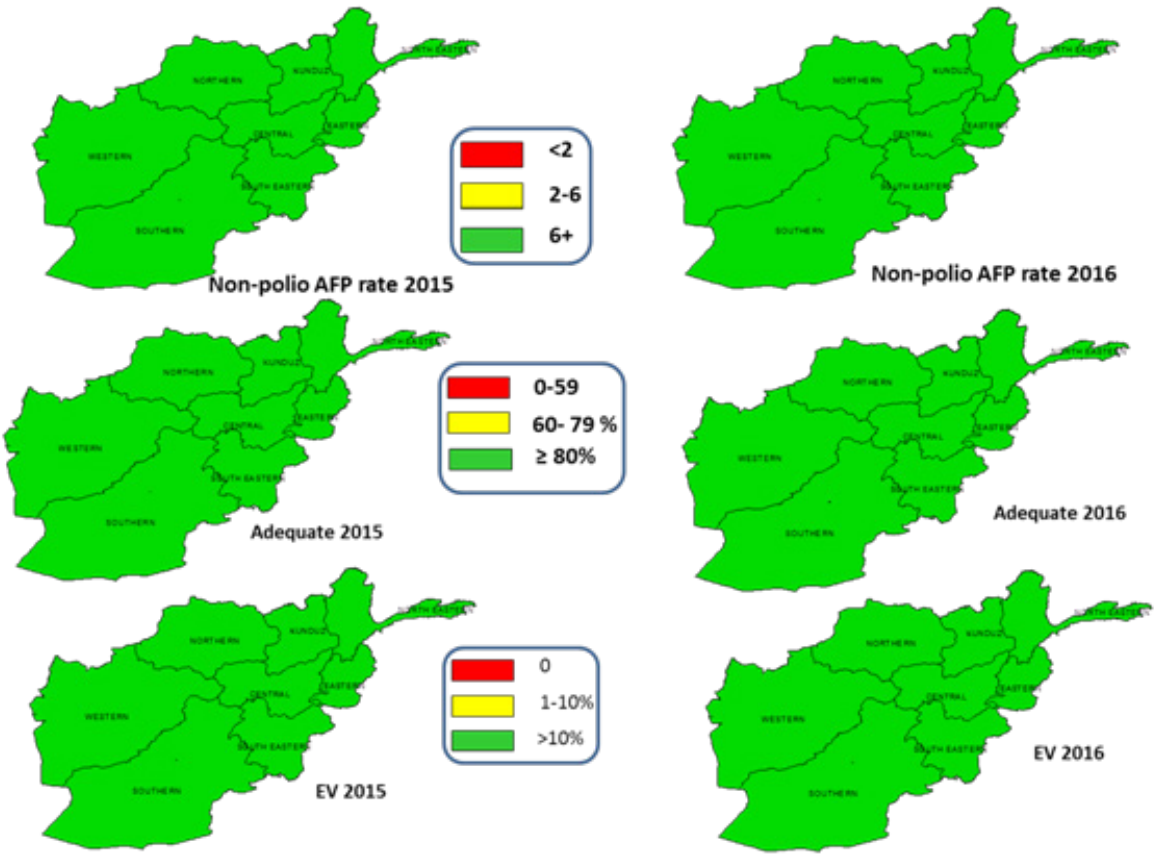


Figure 10: Key surveillance indicators by region, 2015-2016

Provincial level surveillance indicators are closely followed up to ensure that national and regional figures do not mask provinces with poor performance. In 2016 non-polio AFP rate was above 6 in all provinces and adequate stool rate was over 80% in 33 out of 34 provinces (Nuristan 76%). 2016 saw improvement in adequate stool rate in Nimroz and Kandahar provinces, increasing from 69% to 86% and 79% to 85% respectively, both provinces meeting the global target. In addition NPEV isolation improved in Nimroz Province from 7% to 17% in 2016. (Figure 11)

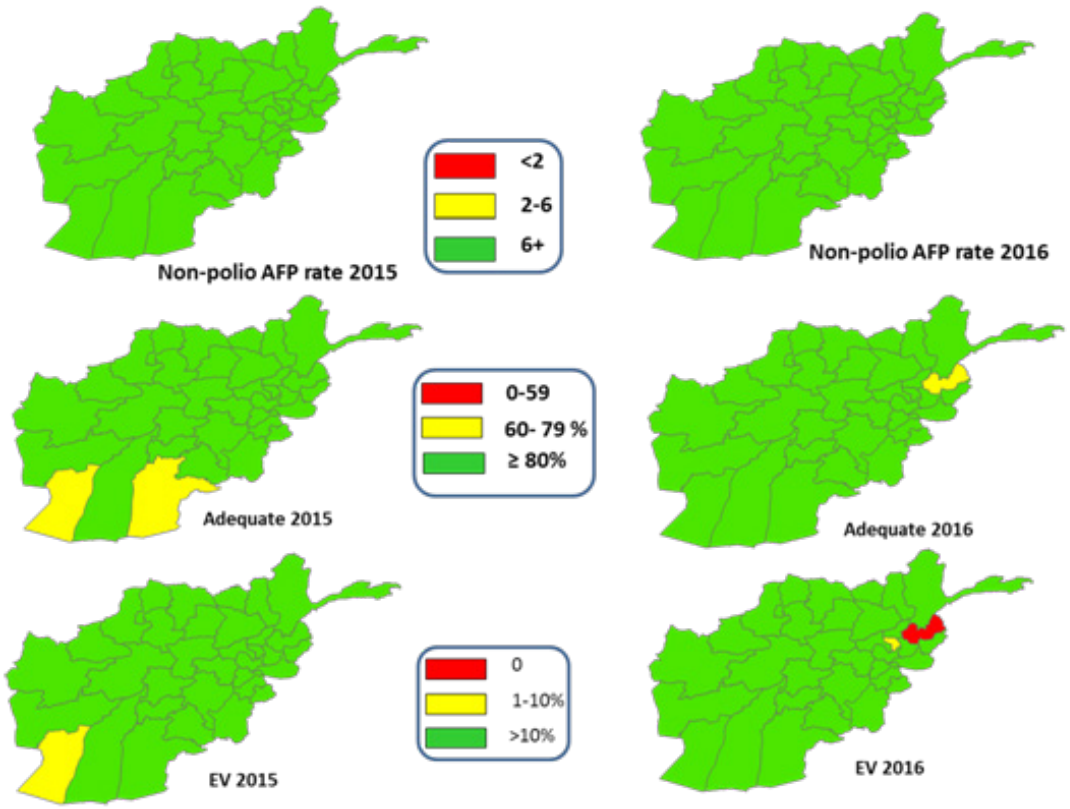


Figure 11: Key surveillance indicators by province, 2015-2016

A total of 40 AFP cases were reported among the nomads in 2016 in Afghanistan and the cases were reported from across the country along the nomadic movement routes (Figure 12). None of the nomadic cases were confirmed WPV positive.

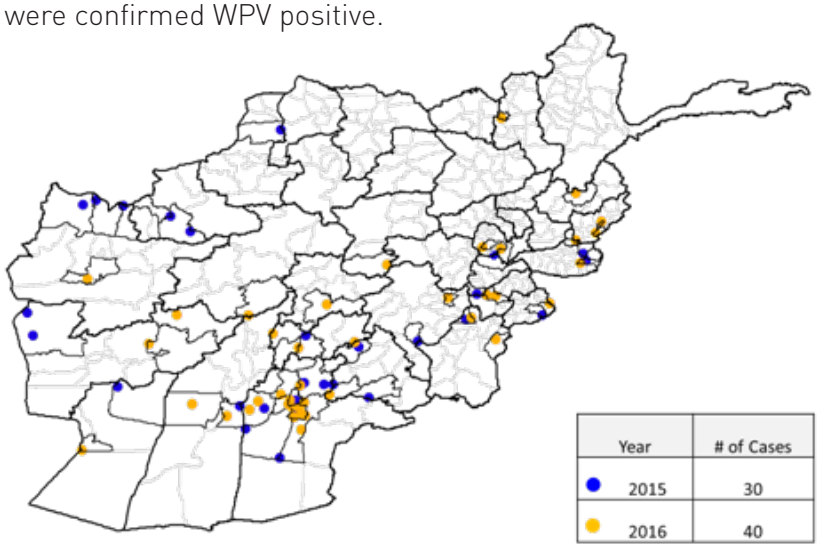


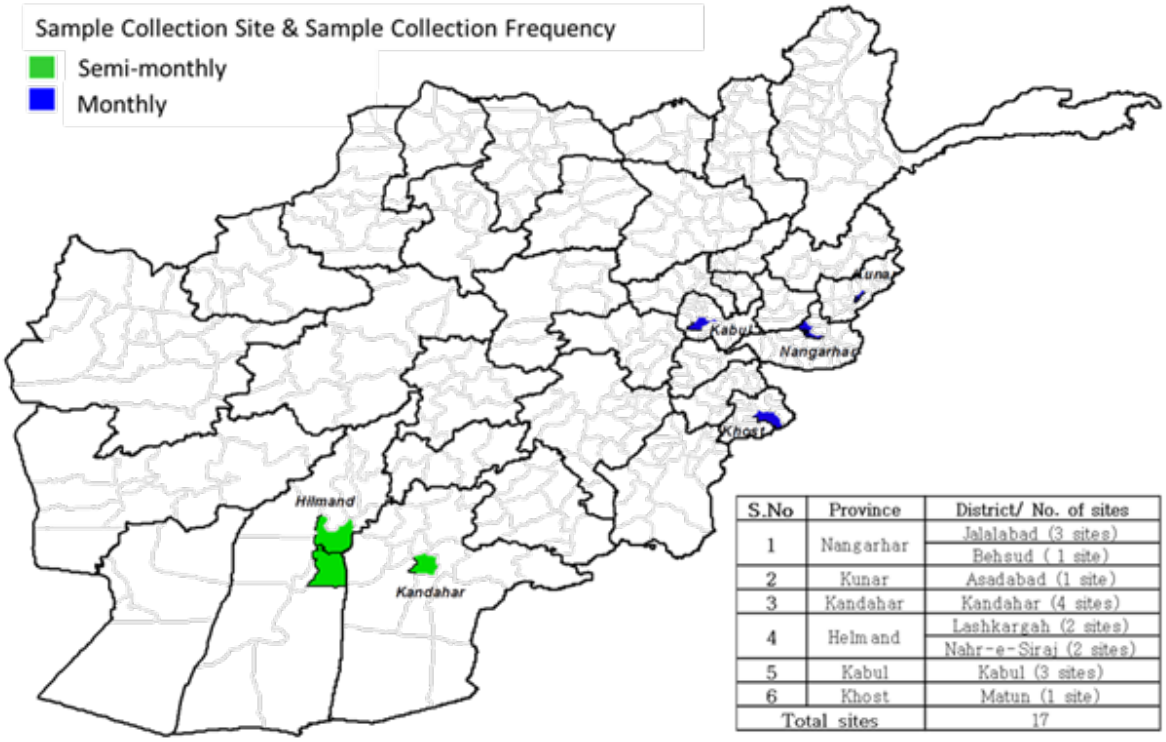
Figure 12: AFP cases reported among nomads, 2015-2016

Environmental surveillance

Environmental surveillance was established in Afghanistan in 2013 to supplement the AFP surveillance with the aim to detect the wild or circulating vaccine-derived virus in the sewage system and determine possible routes of transmission. The process of sample collection initially started from three sites in Kandahar Province but soon after expanded to Helmand, Nangarhar, Kunar, and Kabul provinces.

During 2016 the existing 14 sample collection sites (7 in South, 4 East and 3 Central Region/ Kabul City), were reviewed for their appropriateness and new areas assessed for possible further expansion. All existing sites were found to remain appropriate and relevant, and the procedures consistent with the guidelines and standard operating procedures for environmental surveillance. Furthermore, three additional sites were identified, one each in Kandahar, Nangarhar, and Khost provinces. The new Kandahar site was operationalized in December 2016 whereas the sample collection at the new sites in Nangarhar and Khost provinces commenced in January 2017. (Figure 13)

The frequency of sample collection is monthly. However, as a response to the ongoing transmission in Quetta Block of Pakistan, the frequency of sample collection in Kandahar and Helmand provinces was increased from monthly to fortnightly from November 2016 onwards.



S.No	Province	District/ No. of sites
1	Nangarhar	Jalalabad (3 sites)
		Behsud (1 site)
2	Kunar	Asadabad (1 site)
3	Kandahar	Kandahar (4 sites)
4	Helmand	Lashkargah (2 sites)
		Nahr-e-Siraj (2 sites)
5	Kabul	Kabul (3 sites)
6	Khost	Matun (1 site)
Total sites		17

Figure 13: Environmental sample collection sites by province, January 2017

Surveillance review

An external surveillance review was conducted in Afghanistan in June 2016. The main objective of this review was to ascertain if the quality and sensitivity of AFP surveillance in Afghanistan continues to be sufficiently sensitive to assure the timely detection of and response to any circulating wild or vaccine-derived poliovirus. The 2016 external surveillance review concluded that *"Circulation of WPV/cVDPV is unlikely to be missed in Afghanistan".*

5 Outbreak Response

Following confirmation of WPV/VDPV2 events, Regional Rapid Response teams conduct detailed case and epidemiological investigations. As required, these investigations are further supported through engagement of the National Rapid Response Team. The rapid response teams consist of representatives from the MoPH, WHO, UNICEF, the Centers for Disease Control and Prevention, and the Bill & Melinda Gates Foundation with expertise in epidemiological investigations and the management of outbreak response activities.

Any new transmission detected in 2016, polio case or positive ES sample, was responded to with a detailed case and epidemiological investigation as well as three SIAs after the date of onset. If the area was at high-risk and had not conducted IPV+OPV SIAs in 2015/2016, one of the three campaigns was conducted with IPV. National-level monitors were deployed to support and monitor pre-, intra- and post-campaign phases of all response SIAs.

In addition to the proven ability to respond rapidly to emerging WPV transmission and in view of the emergence of cVDPV2 within the common reservoir areas of Pakistan, preparedness to respond to any VDPV2 transmission within 14 days of notification was also established.

6 Population Immunity

Continued improvement in population immunity is evidenced by temporal and geographic limitation of the 2016 outbreaks. Further indirect evidence of vaccine reach is provided by Sabin-like virus isolation from non-polio AFP cases (Figure 14). The percentage of Sabin-like virus isolation from non-polio AFP cases from Helmand, Kandahar, Farah, Nangarhar, Paktika and Kunar provinces is higher than the national average showing improved vaccine reach to these high-risk provinces where an intensive schedule of SIAs has been implemented. In concordance the Sabin-like virus isolation is also significantly higher in VHR districts as compared to HR districts and the rest of the country. In addition, there is evidence of improved vaccination status in non-polio AFP cases, particularly in Helmand, Farah and Nangarhar provinces (Figure 15, Figure 16).

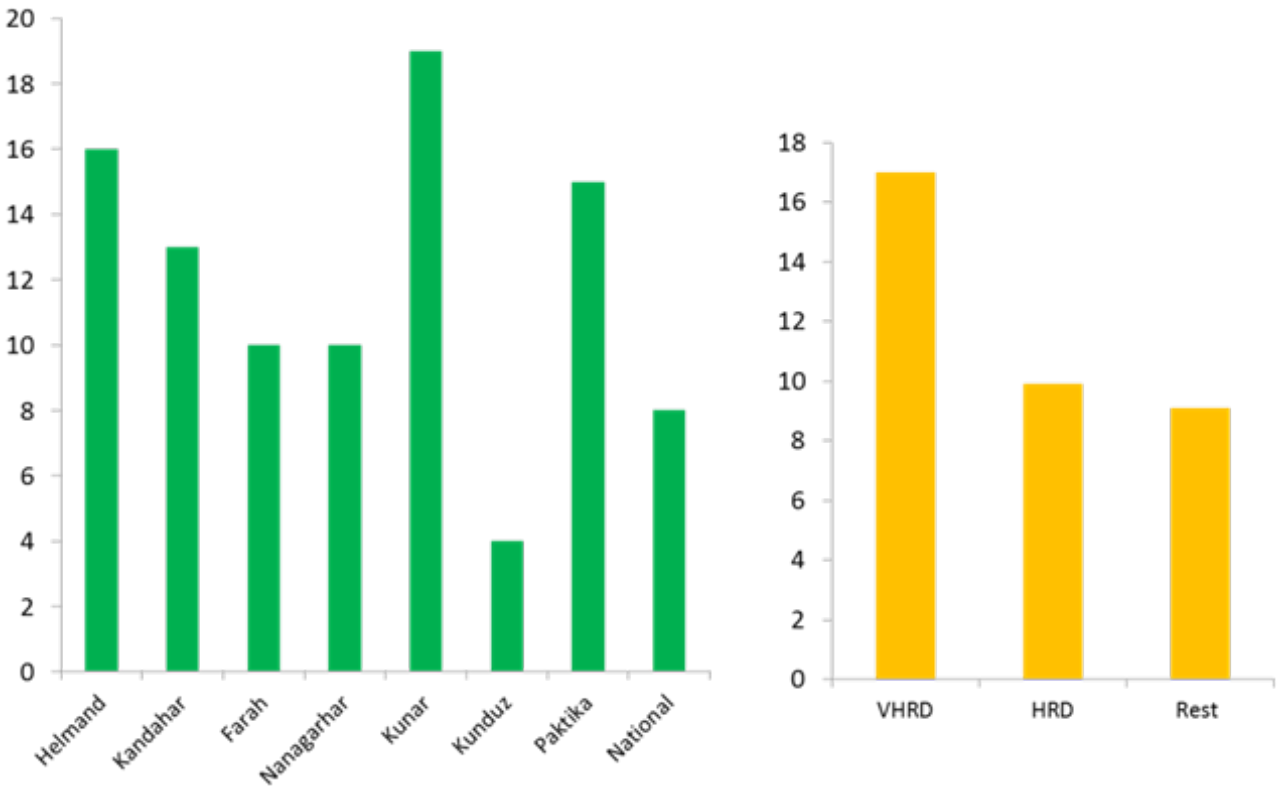


Figure 14: Sabin-like poliovirus isolation in AFP cases

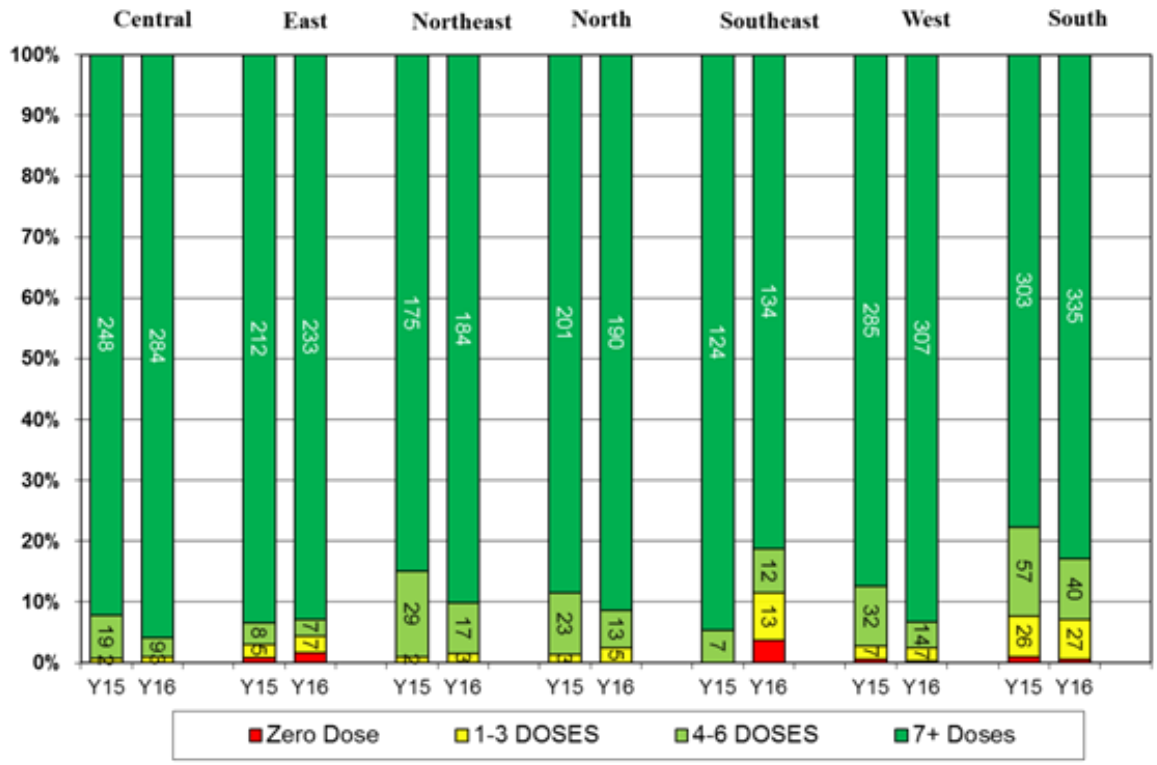


Figure 15: Vaccination status of Non-Polio AFP cases 6-59 months by region, 2015-2016

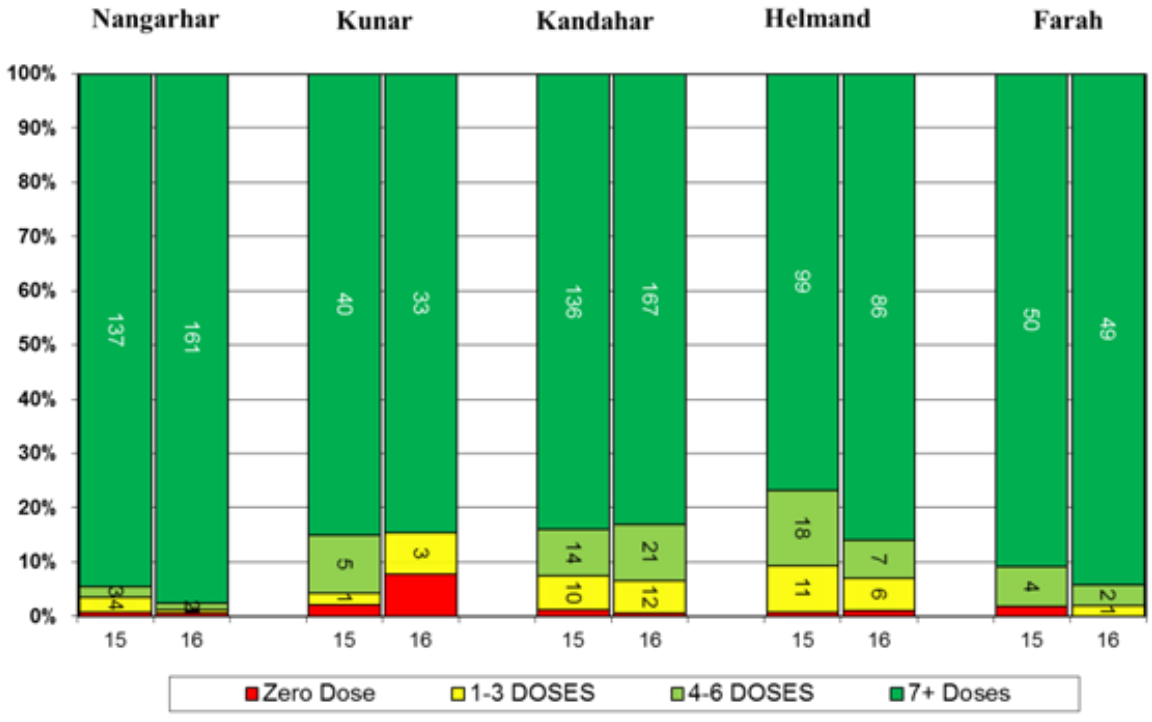


Figure 16: Vaccination status of Non-Polio AFP cases 6-59 Months in high-risk provinces 2015-2016

7 Supplementary Immunization Activities

During 2016 Afghanistan implemented an intensive schedule of large scale SIAs including four NIDs and four SNIDs targeting over 9.5 million children; SNIDs targeting over 5.6 million children <5 years of age) (Figure 17: Geographic scale of NIDs and SNIDs in 2016. alongside with two SIAs targeting high-risk districts and several smaller scale response campaigns and short interval additional dose campaigns (SIAD).

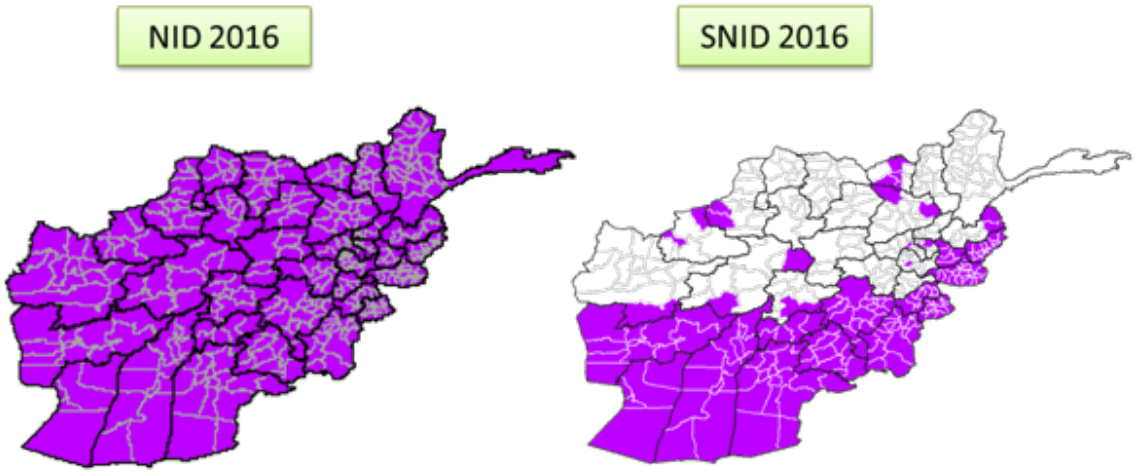


Figure 17: Geographic scale of NIDs and SNIDs in 2016.

Campaigns using both inactivated polio vaccine (IPV) and OPV were also planned for high-risk areas. In addition a contingency plan was prepared to be able to cover any newly accessible area after inaccessibility of more than six months and/or three missed vaccination opportunities. The programme also considered using IPV if any new transmission would be detected in a high-risk area with security challenges. During 2016 IPV+OPV SIAs were conducted in 34 high-risk districts reaching a total of 943,122 children (Figure 18).

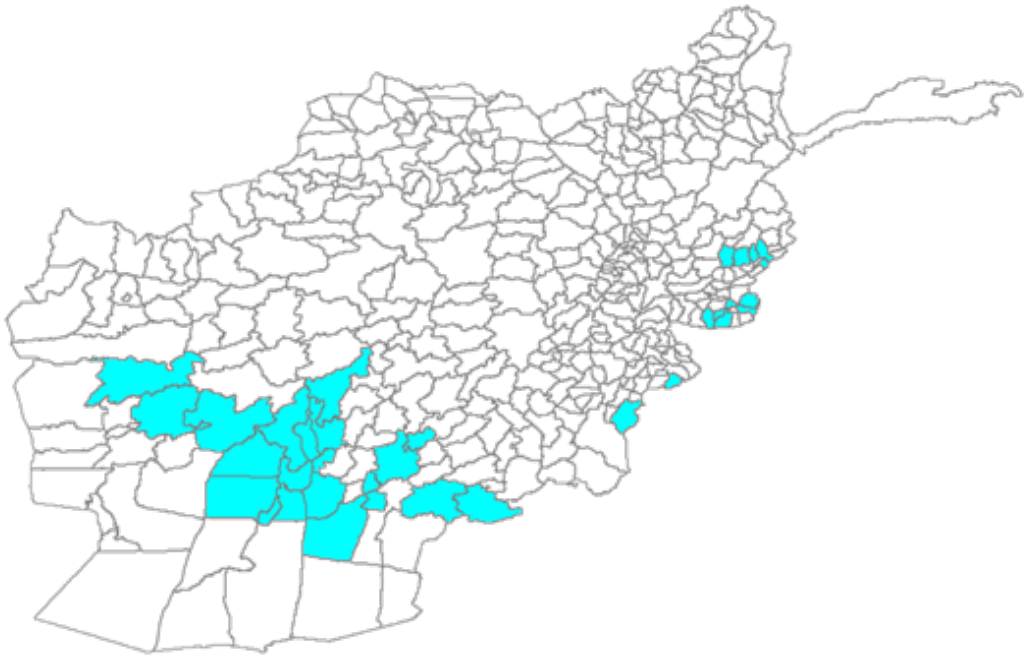


Figure 18: Districts which conducted IPV+OPV campaigns during 2016

Efforts to improve the quality of SIAs

A number of new initiatives were put in place during 2016 to improve the quality of SIAs. These included the roll-out of a new FLW training curriculum; microplan field validation and revision; a modified revisit strategy; development of district profiles and district-specific plans; in-depth investigation to understand the reasons for failed lots in lot quality assurance sampling (LQAS); and strategic use of IPV. An immunization communication network (ICN) was established consisting of full-time social mobilizers to ensure sustained programme communication efforts and follow-up of missed children in between the campaigns.

The programme focused the implementation of these initiatives in the 47 very high-risk districts which lead to a significant improvement in SIA quality over the year. The proportion of failed LQAS lots at national level decreased from 26% in February 2016 to 8% in December 2016 (Figure 19) and the data shows similar a trend in the high-risk provinces (Figure 20). There is also a reduction in the proportion of missed children in post-campaign monitoring (PCM) data, particularly in Kandahar from 13% in February 2016 to 9% in December 2016, in Nangarhar from 5% to 4% and in Kunar from 5% to 3% (Figure 21, Figure 22). The programme continued to identify clusters of chronically missed children and refusals, and to ensure that communication and operational plans are aligned to address local issues at cluster level.

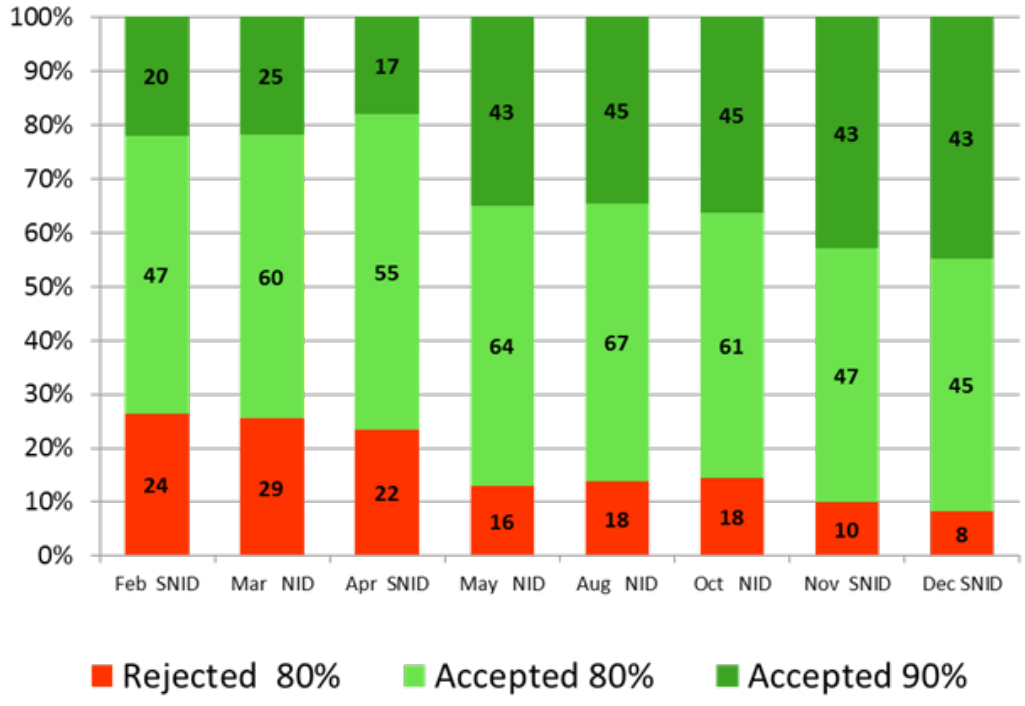


Figure 19: LQAS results, August 2015 – December 2016

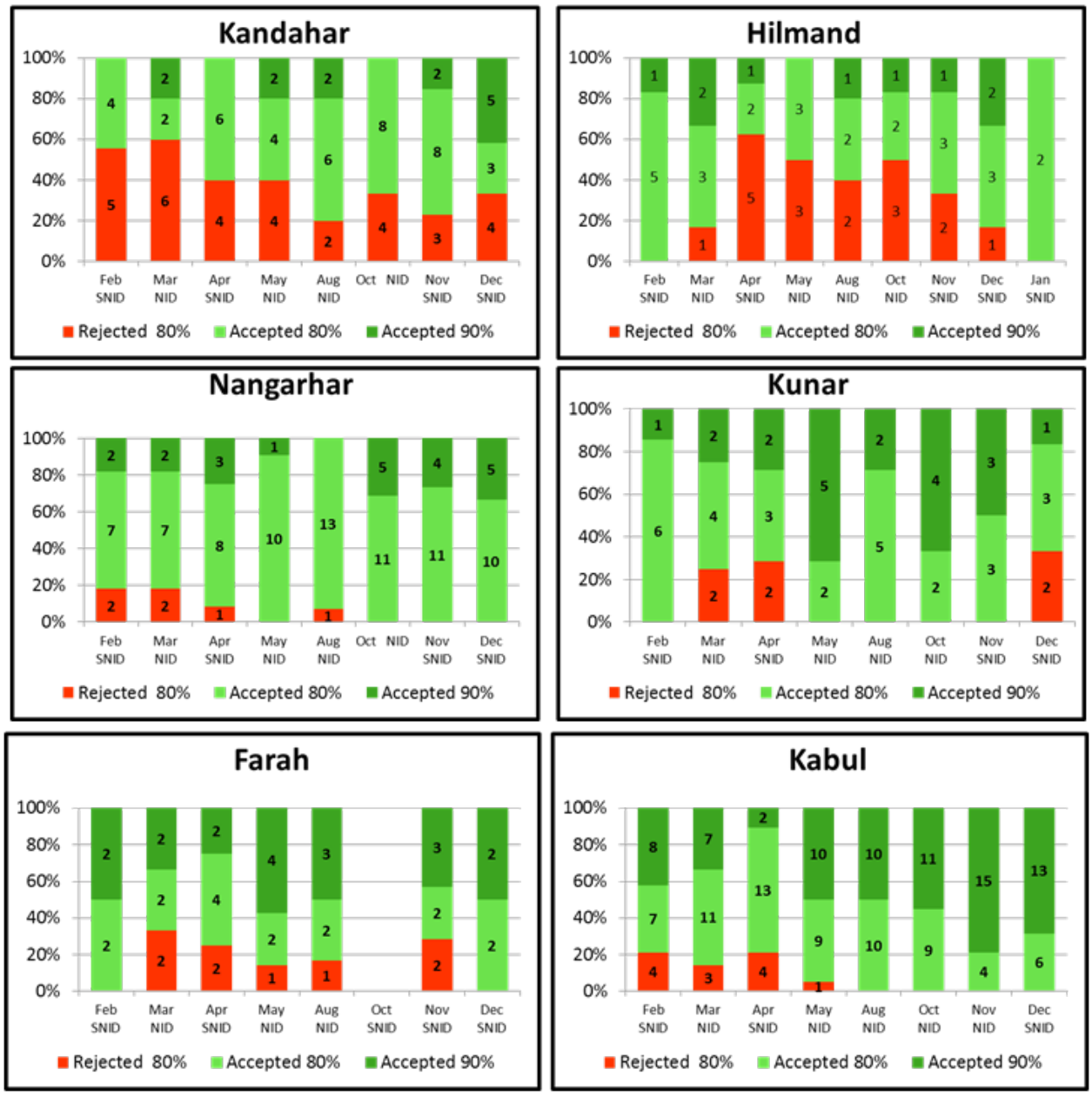


Figure 20: LQAS in high-risk provinces, February - December 2016

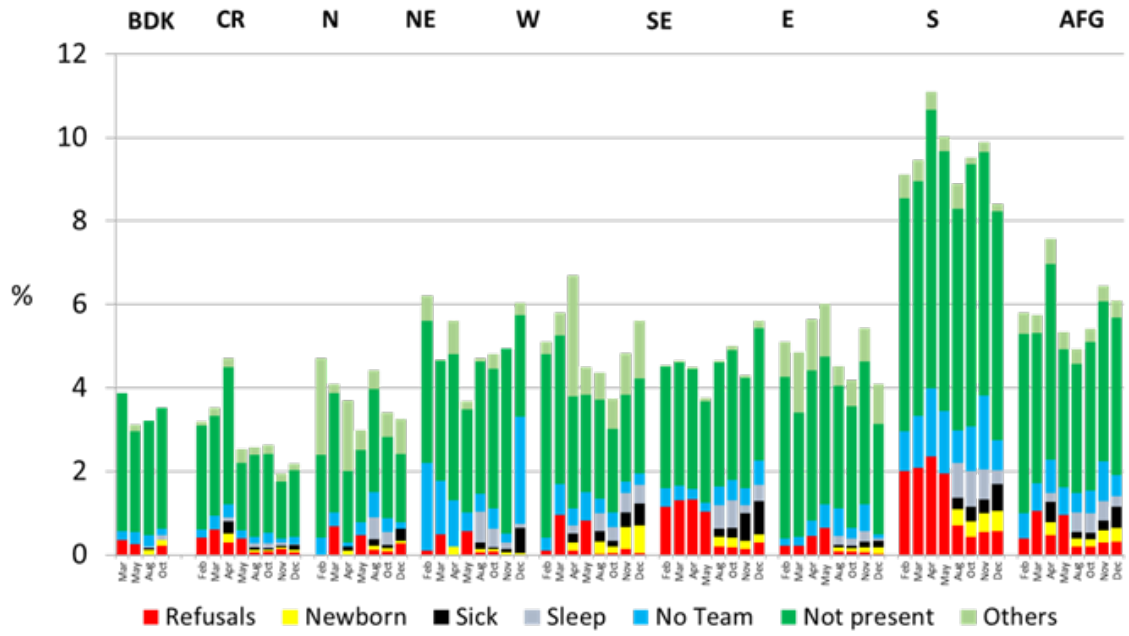


Figure 21: Proportion of missed children by reason by region in 2016

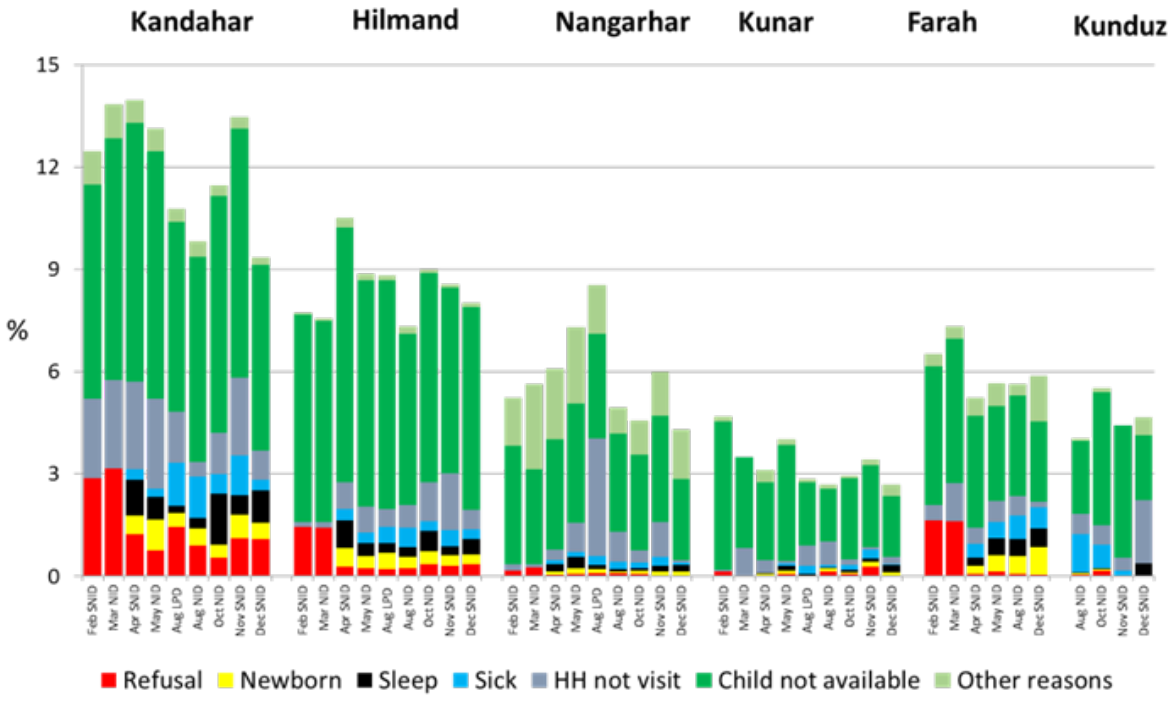


Figure 22: Proportion of missed children by reason in high-risk provinces in 2016 (Source: PCM data)

8 Key Strategies for Reducing Missed Children

8.1 Key Initiatives

District profiles and district-specific plans

District profiling of the 47 VHR districts was introduced with detailed information related to SIAs and surveillance, with district specific issues/challenges, and a plan of action. The district profiles are updated after each campaign and used as a guiding tool to improve the quality of subsequent SIAs. All district profiles are reviewed at national level and feedback shared with the regional teams.

Front-line worker selection, training and motivation

FLWs and their supervisors are the key polio field staff delivering polio immunization services to the communities. Poor team performance often manifests itself as recordings of "child absent" and "household not visited" during campaigns. During 2016 efforts were made on improving team performance by ensuring FLWs are carefully selected and equipped with the appropriate skills, information.

In the first half of 2016, the FLW training curriculum was revised based on the results of a training needs assessment undertaken in 2015. All FLWs across the national polio eradication programme were trained in this new curriculum founded on adult learning principles. Particular attention was also paid to improve the selection process of FLWs who should be selected from within the communities based on merit. The programme reinforced efforts to engage female FLWs and is tracking it over the rounds. The countrywide proportion of female vaccinators remains low at 12% however in the urban areas the proportion of female FLWs has reached 45%.

To improve the quality of training in VHR districts, the sessions are monitored from the provincial and regional levels with feedback to the national level where training attendance and quality is tracked. In line with the accountability framework the performance of vaccinators and supervisors is being tracked over subsequent campaigns, particularly in the VHR districts.

FLW rates were revised and harmonized during the second quarter of 2016 and tracking mechanism to monitor timely payment of FLWs established. Currently, the programme uses two financial transaction methods. One is the direct disbursement mechanism (DDM), which makes payments available directly to target beneficiaries using the banking system or mobile phone technology (M-Paisa). The other is cash distribution following a cash transfer to the local polio partners' joint account. To increase transparency the programme started the process of phase-wise DDM expansion. A strict "zero-tolerance" policy was adopted related to any misappropriation of payments and PEI resources.

Microplan validation and revision

Microplans of all the districts are being updated repeatedly ahead of each campaign to include any new settlements. In addition to this regular pre-campaign microplan revision, in 2016 a thorough field validation with use of geographic information system maps and subsequent revision of microplans was conducted in the 41 VHR districts with strong guidance and support from the national level. This process helped in finding previously unreached villages and children as well as in rationalizing workloads of vaccination teams, supervisors and district coordinators.

Revised revisit strategy

In early 2016 the national polio eradication programme modified and expanded the revisit strategy, whereby vaccination teams revisit households where one or more children were missed from vaccination during the first team visit. Key changes in the revised revisit strategy included strengthening the team revisit during campaign days through improved planning, closer monitoring and supervision, and increasing the time gap between the first visit and the revisit during campaigns. After three days of campaign, a planning day and a subsequent fifth-day revisit was introduced across the country. The campaign schedule was amended for NIDs and SNIDs to begin on Mondays to ensure the post-campaign revisit day falls on a Friday, therefore maximizing the number of children and caregivers present at home.

Intensified supportive supervision

Supervision of all campaign phases was intensified by systematically engaging national-, regional- and provincial-level programme staff, including EOC members, for supervision in the field – particularly in the five high-risk provinces and 47 VHR districts.

National- and regional-level staff from different agencies were identified and trained in supportive supervision, the use of standardized tools and programme oversight. These monitors are deployed to oversee and take corrective action during the pre-campaign phase and for the entire duration of the campaign with daily feedback to regional and national EOCs. A final debrief at the national level was integrated into the post-campaign review meetings.

The quality of supervision by front-line supervisors (cluster supervisors) was enhanced by rationalizing the workload (ratio 5:1) and providing them with intensive training on supportive supervision techniques.

Enhanced monitoring

It is very important to systematically monitor all phases of every campaign (pre-, intra- and post-campaign) and to take corrective action to improve the quality of SIAs in the ongoing and subsequent campaigns. The established systems of intra-campaign monitoring (ICM) and of PCM (i.e. PCM surveys, LQAS surveys

and "out-of-house" surveys) were further expanded and strengthened through PCM/LQAS validation, triangulation of data, and engagement of NEOC focal persons.

The number of intra-campaign monitors (ICM) in the 47 VHR districts was increased to one per five cluster supervisors and ICM data was collected in real-time using Interactive Voice Response technology.

During PCM, 100% of the clusters (supervisory areas) in VHR districts were surveyed and a sampling of 50% of clusters in other districts. A system of monitoring the monitors was established to ensure quality. A total of 5% of monitors are cross-checked and 5% of forms submitted validated in the field for correctness.

LQAS was expanded to all VHR districts where feasible and security permits. To ensure high-quality LQAS, 10% of surveyors are cross-checked and 10% of completed forms are validated in the field for correctness. Detailed field investigation was introduced of all lots failed in LQAS and the team areas where more than three children were missed among the 10 houses surveyed by a PCM. Engagement of a neutral third party and remote monitoring using telephonic surveys was established for access-compromised areas to assess coverage and triangulate information from various sources.

To further understand the reasons for missed children, disaggregated information on "children missed due to refusals" was introduced to differentiate between hard-core refusals and children missed due to being "new born, sick or sleeping". The programme also collected additional information on chronically missed children, particularly refusals.

Campaign coordination and review meetings

Campaign coordination and review meetings are required at all levels during the pre-campaign phase to ensure good preparedness, during the campaign to take concurrent corrective action and after the campaign to review the lessons learned to improve the quality of subsequent campaigns.

Pre-campaign preparedness was monitored on a daily basis by the national EOC, using the pre-campaign dashboard, and the state of readiness assessed 10, seven, three and one day(s) prior to every campaign. If any district was found to be inadequately prepared by three days before implementation, the national EOC postponed the campaign and provided necessary support to ensure full preparedness.

8.2 Complementary Vaccination Activities

A range of vaccination activities are implemented to complement the scheduled NID/SNIDs to ensure that children on the move are reached during and in-between polio campaigns. Complementary vaccination activities include special vaccination teams operational at border crossings and at strategic locations for returnees and for children on the move. Specific strategies are also in place for the nomadic populations moving within the country and across the common reservoirs. In 2016 efforts were made to improve the quality of these activities and to continuously adapt their scale and scope according to prevailing programmatic needs.

Cross-border teams

Teams placed on a permanent basis at official border crossings vaccinate all children <10 years of age crossing on either side of the border. Through close collaboration between the national and regional EOCs of Pakistan and Afghanistan, target age-group, finger-marking and social mobilization messages were harmonized across the border. On the Afghan side of the border a total of 49 cross-border vaccination teams (CBT) were operational at 18 cross-border points, and during 2016 they vaccinated 1,058,737 children <10 years of age with OPV (Figure 23).

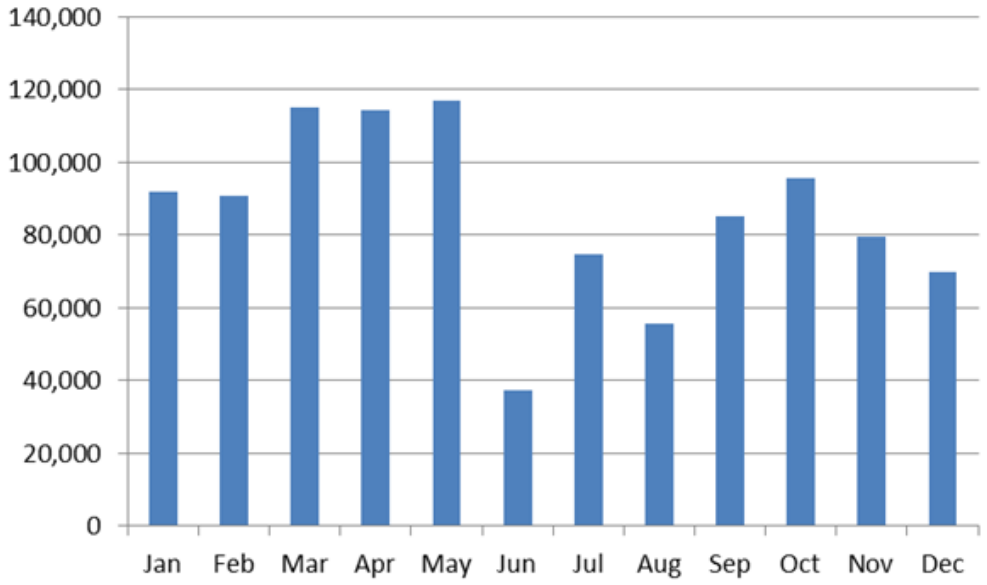


Figure 23: Children vaccinated by the CBTs by month in 2016.

Vaccination at UNHCR/IOM sites

In mid-2016 the country experienced an unprecedented influx of Afghan refugees and undocumented returnees from Pakistan and Iran. In close collaboration with UNHCR and IOM at national and regional levels vaccination sites were rapidly established at the zero points and at UNHCR and IOM reception sites, providing OPV and IPV for children <10 years and 4-59 months respectively. By the end of December 122,789 children were vaccinated with OPV and 32,405 with IPV through these sites (Figure 24). In addition to vaccination, information on final settlement destination of returnees was collected and shared with regions to ensure the inclusion of returnees in microplans and planned campaign activities.

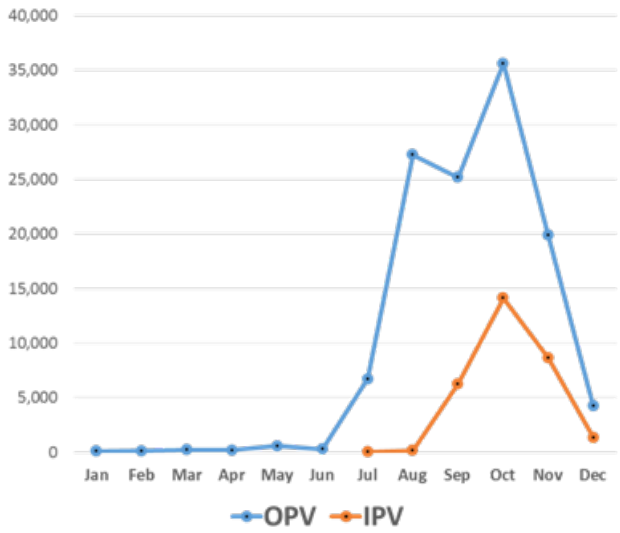


Figure 24: Number of children vaccinated with OPV and IPV at UNHCR/IOM sites by month in 2016

Permanent transit teams

In December 2016, 294 permanent transit teams (PTT) were operational across the country in strategically selected locations such as informal border crossing points, busy transport hubs, major market places, health facilities and hospitals, at entry/exit points of inaccessible areas and inside areas inaccessible for house-to-house vaccination campaigns (Figure 25). The number and location of PTTs was continuously assessed during the year and revised to respond adequately to the prevailing situation on the ground and the evolving accessibility situation. During 2016 the PTTs vaccinated 10,233,935 children (Figure 26) and the successful prevention of secondary cases and possible establishment of transmission in Kunduz province can be attributed to the 66 PTTs placed around and inside the inaccessible areas of the province after house-to-house vaccination campaigns were banned.

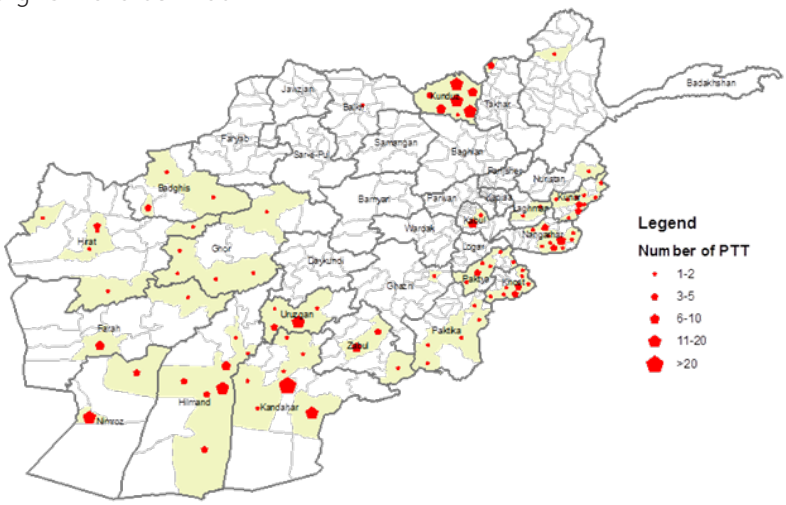


Figure 25: PTTs concentrated in conflict prone and inaccessible areas

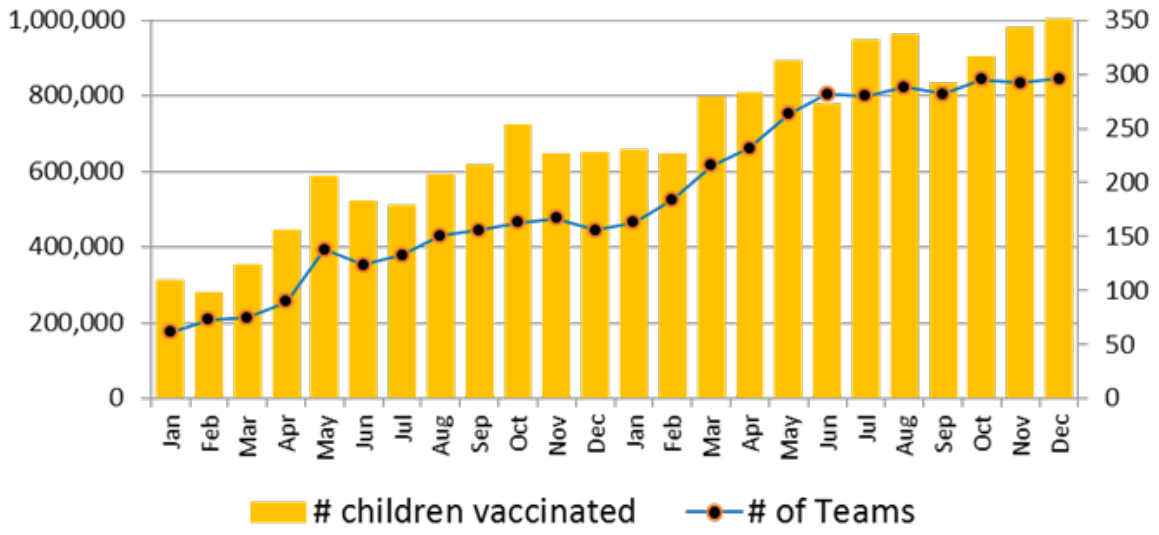


Figure 26: Number of children vaccinated and number or teams operational by month, 2015-2016

Special strategies for nomadic populations

Special strategies are in place across the country targeting in-country nomadic groups as well as nomads who enter Afghanistan from Pakistan and move widely in the country before returning to Pakistan. Their routes, seasonality and places of settlements are known and the dates of special campaigns targeting the children of nomadic groups are adjusted accordingly (Southeastern Region), nomadic specific PTTs are deployed along the major movement routes (Southern and Western region), and nomadic settlements are included in SIA microplans across the country.

Permanent polio teams

In some selected access compromised areas permanent polio teams (PPT) have been providing low profile OPV vaccination to target age children on a continuous basis in their assigned catchment area, over and above planned house-to-house vaccination during SIAs. During 2016, 71,715 children were vaccinated through PPTs. With changes in access dynamics this strategy is being increasingly replaced by PTTs and normal campaign activities.

Polio Plus

When no access is gained through dialogue, as feasible, polio plus services are established through existing health facilities or health camps to pull people to access polio vaccination alongside with other services. IPV+OPV are administered from nearby health facilities to boost the immunity of communities inaccessible for mass vaccination. During 2016 these strategies were used particularly in the Eastern Region.

Immunization response to recommendations of International Health Regulations Emergency Committee

In compliance with International Health Regulations (IHR) regarding the international spread of poliovirus, 118,799 international travellers were vaccinated against polio in 2016. The eleventh meeting of the Emergency Committee under the IHR was convened on 11 November 2016 and Afghanistan, based on the risk stratification, was classified in the category of *'states infected with wild poliovirus or cVDPVs but not currently exporting'.*

9 Access

Being a country in conflict, security measures and access limitations are integral part of the day-to-day operations across Afghanistan. The security situation in Afghanistan continued to deteriorate in 2016 and was particularly dire in north-eastern, southern and western parts of the country. There is no opposition to polio eradication programme in general however there are serious apprehensions in some parts of the country towards large-scale house-to-house vaccination activities or monitoring of the same by non-locals.

Access for surveillance

Surveillance activities have not been significantly affected by the ongoing conflict and the programme continues to enjoy the benefits of a sensitive surveillance system across the country (Figure 27). Active surveillance visits to health facilities can be conducted without major restrictions and the extensive reach of the AFP surveillance system can be attributed to the wide network of AFP focal points and reporting volunteers who are locals living within their own communities (Figure 28).

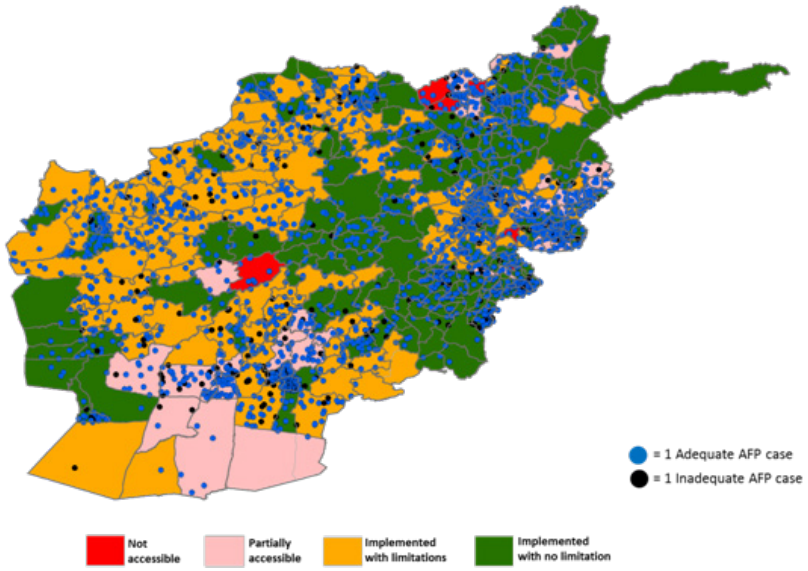


Figure 27: AFP cases of 2016 overlaid with access of October NIDs.

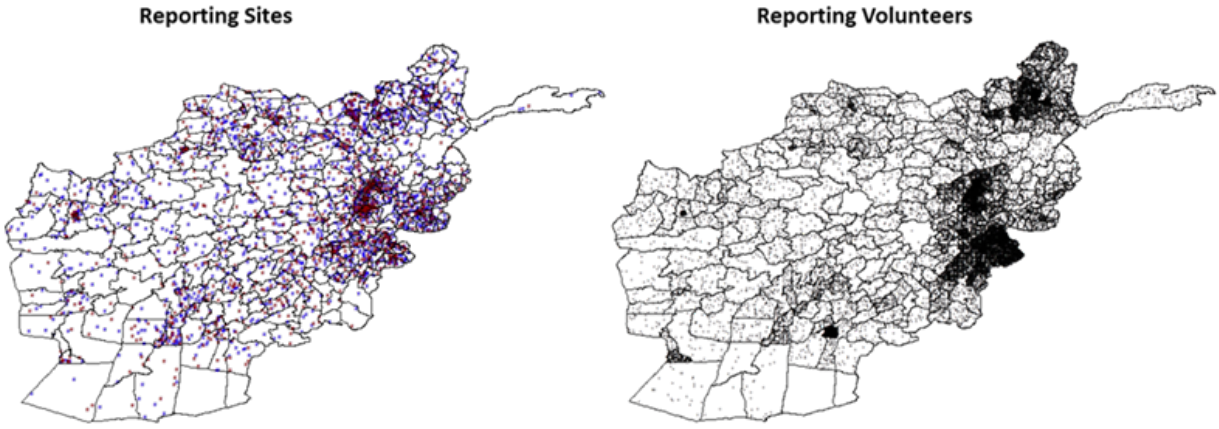


Figure 28: Geographic distribution of reporting sites and reporting volunteers

Where supervision or access to sensitization was compromised, innovative solutions were implemented e.g. telephonic checks and remote sensitization. In addition, surveillance indicators were continuously analysed across the different access categories for vaccination campaigns and found to be comparable (Figure 29). It is noteworthy that all 13 cases of 2016 originated from access compromised areas and the surveillance system was able to detect them in a timely manner.

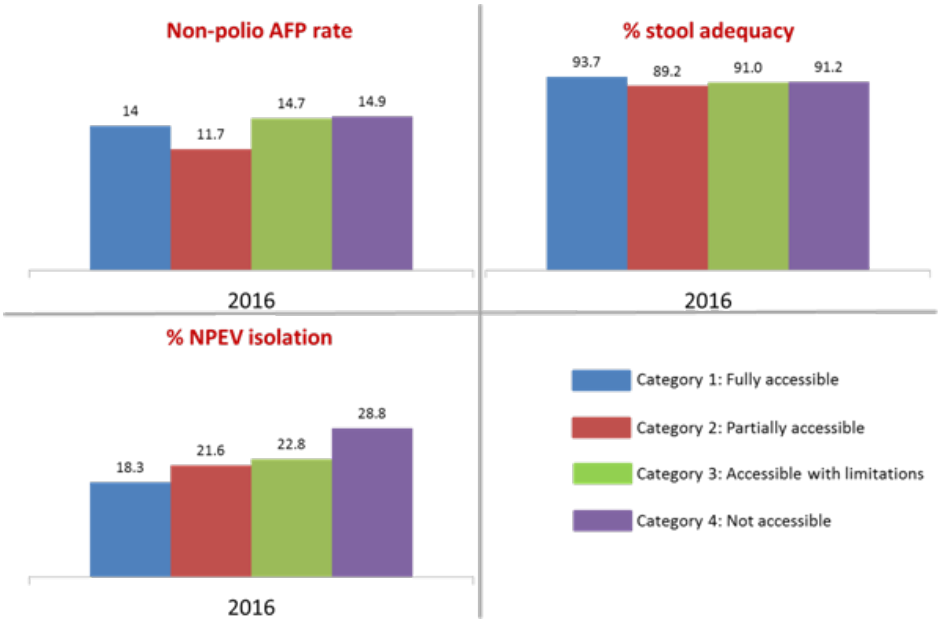


Figure 29: Surveillance indicators against access categories for vaccination campaigns, 2016

Access for vaccination

Access to children for vaccination remains a major challenge in stopping the poliovirus transmission. The Afghanistan polio eradication programme continued to work towards its aim to vaccinate all children regardless of where they live by maintaining programme neutrality, continued dialogue at different levels, conducting catch-up campaigns in newly accessible areas, establishing permanent vaccination points around inaccessible areas and by implementing PolioPlus initiatives (Figure 30).

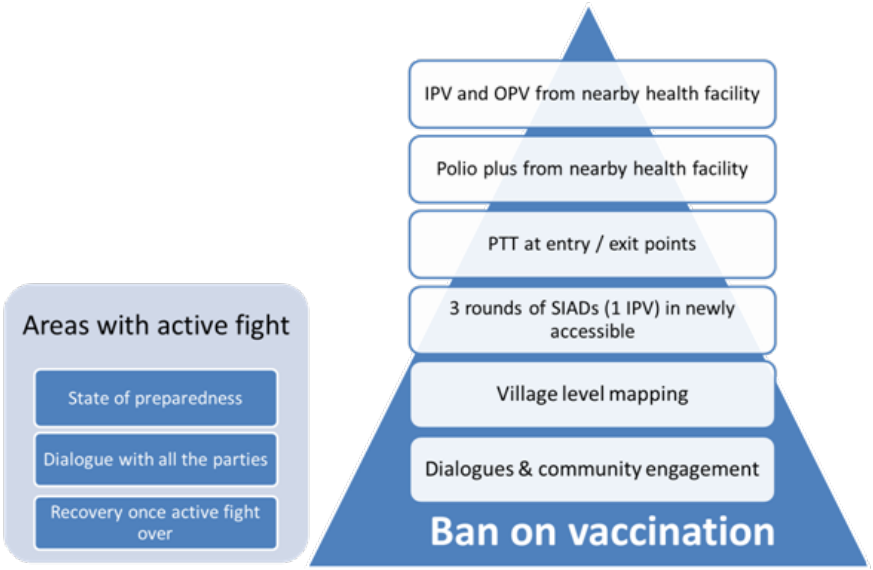


Figure 30: Addressing inaccessibility due to active fighting and campaign bans

The number of inaccessible children varied from campaign to campaign; over the past year access remained constantly poor in the Northeastern Region due to a ban on vaccination campaign in Kunduz Province since August 2015. Eastern Region also experienced a worsening of access situation around mid-year, however due to sustained dialogue with relevant authorities at all levels, access in the east improved towards the end of the year to a record low since August 2015. (Table 2)

Table 2: Children missed due to inaccessibility by region, August 2015 – December 2016

Region	Aug NID	Oct NID	Nov NID	Jan LPDs	Feb SNID	Mar NID	Apr SNID	May NID	Aug SNID	Aug NID	Oct NID	Nov SNID	Dec SNID
East	51,327	106,913	57,232	41,744	22,938	25,869	30555	131,781	73,355	71,085	23,204	24,213	17,488
North	18,880	0	22,756	0	0	0	0	3,376	0	0	6,206	0	0
NE	6,386	0	173,818	65,584	97,998	146,810	106,281	165,333	101,434	197,192	176,377	105,539	105,024
South	17,830	15,563	51,105	12,335	7,079	11,684	56,662	22,811	49,403	28,798	141,142	120,597	18,192
SE	830	1,793	2,020	0	380	0	380	400	1,215	12,101	46,808	13,827	12,651
West	672	0	0	0	0	0	0	0	132,806	38,260	0	0	749
Central	0	0	0	0	0	0	0	0	0	70	0	75	75
Total	95,925	124,268	306,931	119,663	128,395	184,363	193,878	323,701	358,213	347,507	393,735	264,251	154,178

Accessibility is further tracked at cluster level and over the rounds. Areas that become inaccessible due to active conflict are covered as soon as active fighting is over and areas inaccessible for >2 SIAs are treated as high-risk areas and covered through three passages of SIADs including, where applicable, expanded age group for OPV and one round of IPV+OPV.

For areas accessible with limitations, i.e. where campaigns can be conducted but oversight and programme management is limited due to insecurity and/or interference, the programme introduced strategies such as remote monitoring (Figure 31) and engagement of a neutral third party to monitor the programme's reach to maintain and further improve campaign quality.

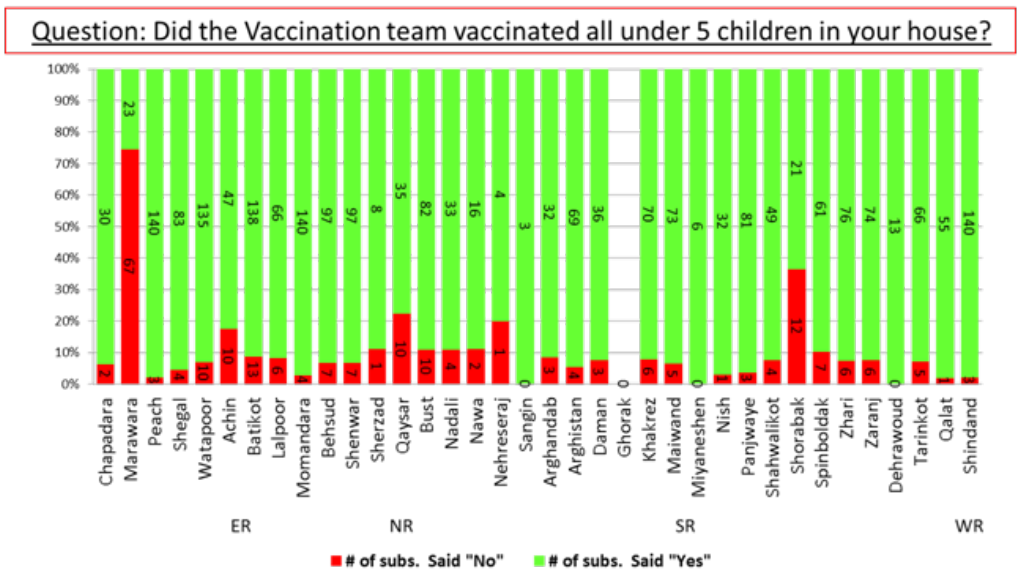


Figure 31: Example of a standard remote monitoring question and responses across selected high-risk districts

10 Communication

Polio eradication efforts are bolstered by a communications approach emphasizing different media platforms to reach different sectors of Afghan society. The approaches are in line with the NEAP and are articulated and developed by the EOC Strategy Working Group, the Media Task Team, the Advocacy Task Team and the Communications Task Team. These groups, whose members are drawn from throughout the Afghanistan Polio Partnership, meet regularly to design interventions and assess their impact.

The core aim of communications outputs is to sustain strong demand among Afghans for polio vaccination. These communications outputs are explicitly aimed at residents of the 47 high-risk districts. This is achieved by direct communications with these residents as well as interacting with an array of leaders and influencers who are in a position to shape norms and behaviors. It is also achieved by supporting the work of vaccinators and the ICN network as well as inserting polio-related themes into popular radio and TV channels. These interventions are informed by data from a Knowledge, Attitudes and Practices (KAP) study carried out in 2015.

Sustaining strong support for vaccination is made easier by making caregivers aware of the risk of polio and to make families understand the efficiency and safety of OPV vaccinations. Communications interventions focused on making caregivers aware of vaccination campaigns and in general stimulating greater demand for life-saving vaccinations.

The main elements of communications outreach include 1) using a combination of paid and earned media, particularly through radio programming, to educate and mobilize community participation, 2) promoting awareness through the door-to-door distribution of IEC materials, 3) using influencers to help spread messages, and, 4) a vigorous grassroots outreach through an ICN.

10.1 Mass Media

Paid TV and radio advertisements have long been a staple of the Afghanistan PEI. They remain important insofar as they signal to communities the arrival of another campaign. They are also important for building knowledge about polio and for inferring that the program has widespread popular support. In 2016 this was achieved through different ads using different spokespeople sharing very similar messages. Numerous ads featured prominent mullahs endorsing polio vaccination. Others used nationally popular athletes.

Along with TV and radio, mobile phone voice messages sent to residents of high-risk districts have sometimes also been part of the paid media mix. In November 2016 Afghanistan's EOC launched a Facebook page called "Polio-Free Afghanistan". The site has hosted numerous messages, videos and photos about polio and has seen rapid growth in followers. The site is viewed by over 120,000 people each week with the largest audience being in and around Kandahar.

Alongside these efforts has been a drive to increase knowledge about polio and children's health and build widespread popular support for vaccination and the important role played by front-line health workers. Towards that end, the programme created contracts to produce media content with PACT Communications and BBC Media Action, and cooperates closely with the Voice of America Afghan Service.

The agreement with the Voice of America has led to more frequent and more comprehensive polio-related news coverage in Afghanistan. Rather than news bulletins ahead of vaccination campaigns, VOA, whose listenership is said to reach about 20% of Afghan radio listeners, has produced 20-30 minutes of content per week on polio-related themes. Sometimes they cover issues in more depth, including numerous reports from Bermal district following the discovery of polio transmission. In 2016 VOA added several other reporters and it now has ten producers, editors and reporters in high-risk areas generating stories.

A partnership with PACT Communications has led to storylines about polio being inserted into a popular daily Pashto-language radio soap opera. These polio-centric episodes have been enhanced through specially produced reports on issues relating to polio, such as routine immunization, handwashing and public health. The Polio Eradication Programme has also contracted BBC Media Action to produce a number of media products, including a weekly 30-minute Pashto-language radio show, radio debates centered on polio, and storylines about polio woven into the popular and long running soap opera "New Home, New Life".

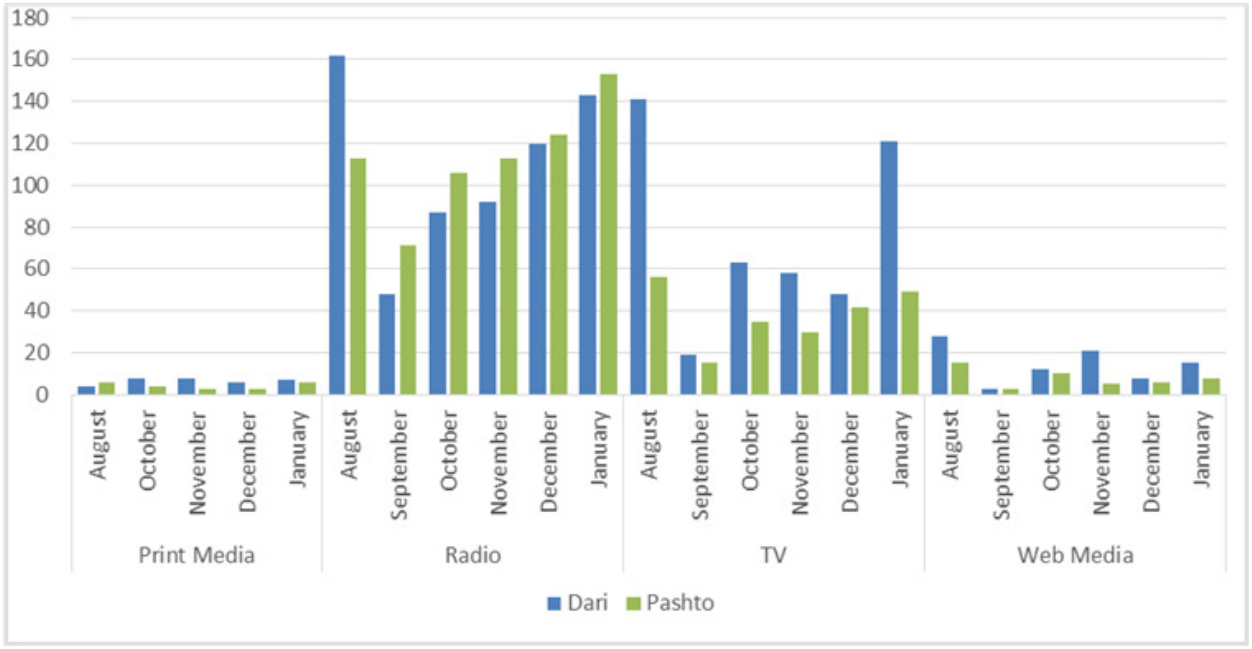


Figure 32: Frequency of "Earned" Media reporting polio

The aim of all these interventions is to move from sound bite advocacy to 1) increasing awareness about polio; 2) raising the level of information about the vaccinations; 3) making polio more salient, thereby sensitizing the audience to on-the-ground efforts by vaccinators and social mobilizers; 4) reinforcing existing acceptance of polio vaccination initiatives.

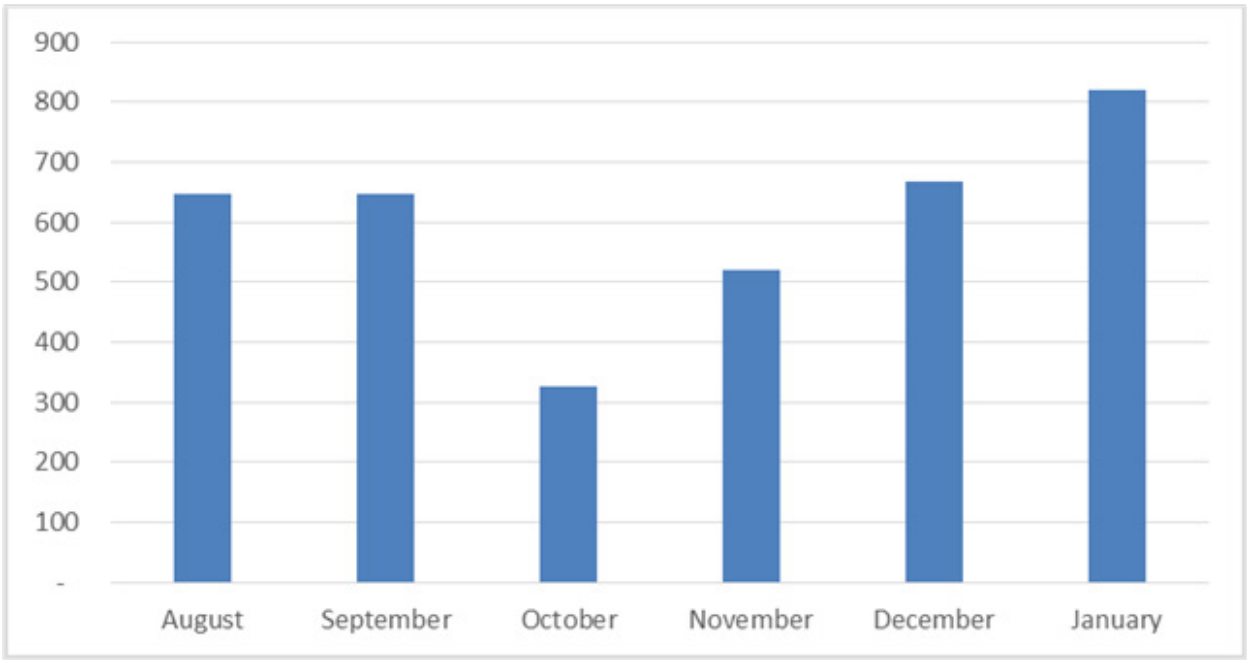


Figure 33: Radio - Earned Media on Polio - Duration (minutes)

Regular outreach with Afghan media has also led to a sharp increase in the coverage about polio. Monthly meetings are held with reporters working in high-risk districts. Whereas in January 2015 around 20 polio stories aired per month on Afghan radio and TV, by January 2017 the average was closer to about 350 per month. This number is likely much higher but media monitoring is done for about 18 TV and radio stations, whereas trainings have been offered to media staff at over 100 channels. Through such outreach, the country's effort to eradicate polio has become an important and recurring news meme.

10.2 New Partnerships

2016 was a year for expanding the Afghanistan polio partnership beyond the usual members to create a national programme with a broader range of stakeholders. One new partnership has been with the Art Lords, a Kabul-based NGO that creates large scale wall murals. Most of these very popular murals have been in central Kabul but the polio partnership has exported them to the main cities of high-risk districts. Longer lasting and more visually appealing than banners and posters, the murals emphasize the centrality of polio eradication efforts to these communities.

A partnership with the Afghan Cricket Board continued through 2016 and at the two-week national tournament in August 2016 polio eradication was one of the main sponsors. Each game began with the co-captains vaccinating a child and key messages were passed on by the sports announcers. Cricket is particularly popular in Pashto-speaking communities and the team's recent successes in international tournaments have generated non-partisan national pride. In turn, the players have become hero-figures to many Afghans. The polio programme has tapped into this goodwill and enrolled the team to turn parts of matches into advocacy events and use popular players for media events. Leading players have also taken part in numerous media events, such as interviews and TV spots.

In late 2016 efforts began to create a partnership with a popular Afghan circus who offered to create shows centered on educating audiences about polio eradication. In 2017 about a hundred performances are scheduled to occur in small and large communities in high-risk districts.

10.3 Social Mobilization

The Afghanistan NEAP 2016 – 2017 recognized the need for intensive efforts to scale up household and community engagement approaches in the prioritized very high-risk districts to reduce missed children and build demand for overall immunization. The absence of children remains the major reason for missing children nationwide and across all priority provinces according to PCM data. Therefore, addressing the unsupportive social context resulting in refusals and children not being available during campaigns, and in particular in the Southern region of Afghanistan, was the number one priority for social mobilization in 2016.

The PEI programme continued to use the ICN to spearhead social mobilization and household and community engagement through the 7000+ members of the ICN. In 2016, the engagement of these workers was shifted from campaign days only to work in between campaigns to maintain a constant conversation with the community that feeds back into making the programme even more effective. With the time extension, the social mobilization and community engagement teams have taken on additional roles including contributing into microplanning exercises, registering by house all children under 5 years of age, tracking and immunizing missed children and negotiating with refusals in between campaigns, and undertaking broader health 'polio plus' activities especially promotion of routine immunization, sanitation and hygiene promotion, and nutrition.

By December 2016, the ICN had a total of 22 provincial communication officers, 116 district communication officers, 728 cluster communication supervisors, and 5129 social mobilizers operating in 50 prioritized districts (43 out of the 50 districts are VHR districts). Out of the 5129 social mobilizers, almost 30% were female, in contrast to an average of about 10% in previous years. Despite being culturally unacceptable in most of Afghanistan, the deployment of females helps the programme as women are allowed to enter households, thereby reducing the potential to miss children.

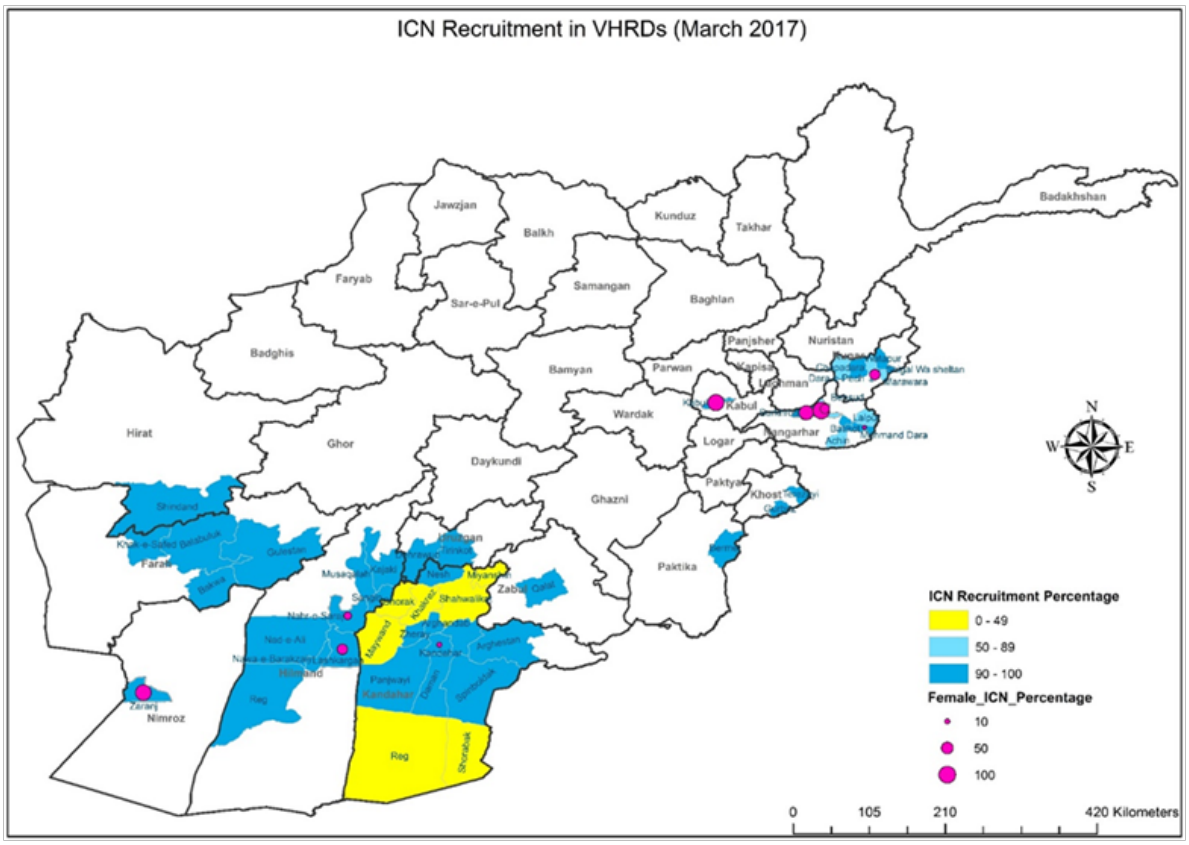


Figure 34: Geographic spread of ICN in 2016 focused on VHR districts

An accountability and monitoring mechanism for managing performance was established where performance of all ICN personnel from SM to PCO is monitored through both an internal system and a third party monitor. Monitoring tasks are defined and included in the TOR and performance assessment of relevant ICN supervisors, particularly at district and provincial levels (PCO, DCO). A number of monitoring and reporting checklists were developed and reporting tools were made available with the use of smartphones and Open Data Kit application. A third party was also engaged to conduct additional independent monitoring and reporting. Real-time monitoring data and feedback from monitoring was now made available to ICN teams at different level to identify weakness in capacity and performance, put forward corrective actions and track the progress in performance enhancement.

To ensure fulfilment of the expanded role of community engagement workers, the training curriculum of the workers was revised to integrate new roles, intensive interpersonal communication skills, and broader health areas which the teams are engaged in. By December 2016, the three-day and two-day

training packages on integrated health (for supervisors and social mobilizers respectively) had been rolled to 98% of all ICN workers. In addition to the integrated health training, all social mobilization teams were also trained based on a joint training curriculum for vaccinators and social mobilizers before every campaign.

According to PCM data, campaign awareness levels were higher in all ICN districts in 2016 compared to non-ICN districts. 43 out of the 50 districts with ICN presence are VHR districts. The figure below shows the levels of campaign awareness in ICN and non-ICN districts in 2016.

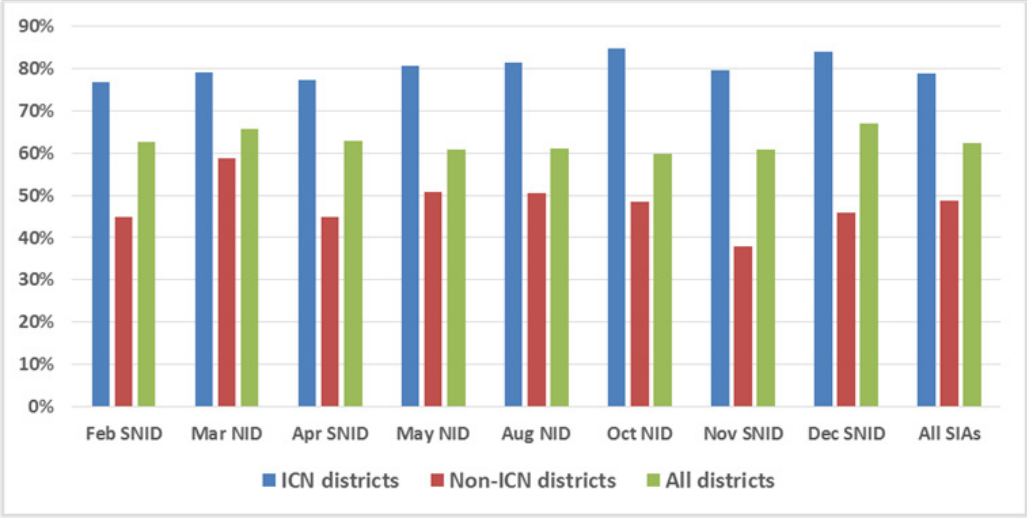


Figure 35: Awareness of campaign in NID/SNIDs of 2016 (source: PCM data, WHO).

Social mobilizers played a key role in informing caregivers about polio in VHR districts in 2016. Additionally, other information sources of polio information facilitated by the social mobilization teams, such as the distribution and placement of IEC materials, and engagement with community elders and mullahs featured highly in the contribution to polio knowledge levels among caregivers in VHR districts in 2016. The figure below shows the levels of household awareness and the key sources of polio information in VHR districts in 2016, highlighting the significant contribution of social mobilization teams.

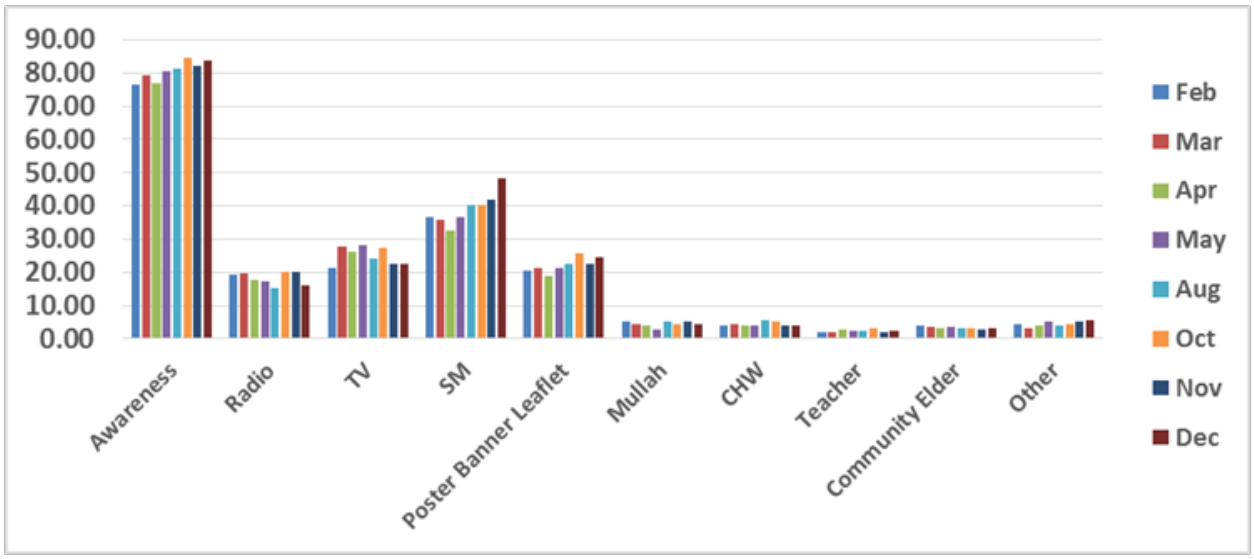


Figure 36: Levels of household awareness and key source of information on campaign for NIDs and SNIDs in 2016 (source: PCM data, WHO)

As part of the expanded role of social mobilization teams is to track and immunize missed children and negotiate with refusals in between campaigns, all social mobilizers started vaccinating missed children in between campaigns. In the areas where the approach was undertaken, on average 70% of children missed during the campaign for different reasons were vaccinated by the social mobilizers after the campaign, as highlighted in the figure below.

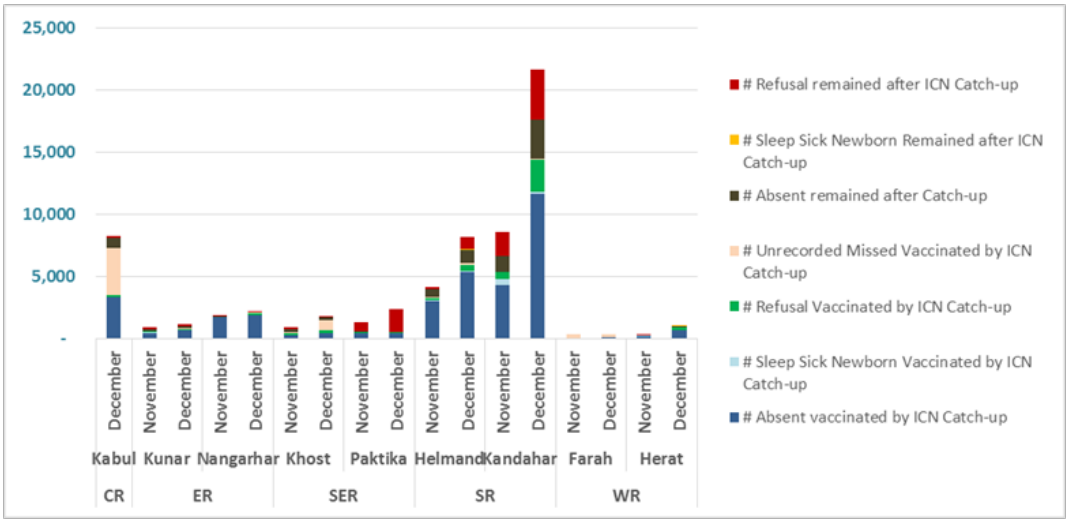


Figure 37: Catch-up of missed children by mobilizers in between campaigns, November and December 2016

11 Cold Chain and Vaccine Management

Ensuring adequate vaccines on a timely basis supported by effective cold chain management continued to be a focus in 2016 and no campaigns were delayed due to shortages of vaccines. The priority continued to be improving the vaccine and cold chain system to facilitate high quality campaigns.

A total of 94.7 million doses of OPV were procured in 2016 to conduct four NIDs, five SNIDs and 10 case response campaigns with a focus on the 47 VHR districts. This represents a significant increase from 2015, when 83 million doses were obtained and used in 25 polio campaigns. An additional 12.7 million doses of OPV were used for vaccination of eligible children by CBTs, PPTs and PTTs in 2016. A total of 1.72 million doses of IPV were also procured on time, along with corresponding quantity of AD syringes and safety boxes. No campaigns were delayed due to shortages or stock outs of vaccines.

OPV was successfully distributed for 9.5 million children under 5 years of age throughout the country during each of the four rounds of NIDs. Furthermore, OPV was successfully provided to over 5.6 million children during each of the multiple SNIDs conducted in VHR districts. There were no stock-outs or shortages of vaccines and no campaigns were delayed due to lack of OPV. In addition IPV was provided for IPV+OPV SIAs conducted in selected 34 very high-risk districts (in phases), reaching a total of 943,122 children.

The programme was able to successfully conduct the tOPV – bOPV switch in April 2016, which is part of the Global Polio Eradication Endgame Strategy. The switch involved the synchronized withdrawal of all tOPV from all levels of health care in the country, including health facilities, district, provincial and regional levels and destroying them. UNICEF provided technical and logistics support in terms of balanced forecasting and monitoring stock levels of tOPV and bOPV, retrieval of tOPV on the global set date of 18 April 2016 and destruction of all tOPV.

Vaccine management training was conducted in all regions for cold chain technicians, EPI supervisors, provincial polio communication officers and provincial polio officers. Vaccine utilization reports (VURs) have been generated and monitored closely on a weekly and monthly basis to reduce vaccine wastage rates at the provincial and regional level.

12 Routine Immunization

The available data on routine immunization from different coverage surveys and sources vary greatly, but it is evident that reaching every child with routine immunization services remains a major challenge in Afghanistan.

The 2015 Afghanistan Demographic and Health Survey (2015 AfDHS) was implemented by the Central Statistics Organization and the MoPH from 15 June 2015 to 23 February 2016. As per the 2015 AfDHS, 56 percent of children aged 12-23 months have a vaccination card that was seen by the interviewer. According to a vaccination card or the mother's report, 46 percent of children have received all basic vaccinations. 74 percent of children have received BCG, 73 percent the first dose of pentavalent, and 85 percent have received polio 1. However, the third dose of pentavalent and polio 3 are received only by 58 percent and 65 percent of children, respectively. Coverage of vaccination against measles was 60 percent for the first dose. 13 percent of children in Afghanistan have not received any vaccinations (Figure 41).

Basic vaccination coverage does not differ by the sex of the child but varies by urban-rural residence and improves with mother's education and wealth. Large differences are observed at the provincial level; the percentage of children with full vaccination coverage ranges from a high of 75 percent in Paktika to a low of less than 1 percent in Nuristan and polio 3 coverage ranges from 89.5% in Badakhshan to 7.3% in Nuristan (Figure 42). It is noteworthy, however, that the numbers of cases at the provincial level are small, resulting in large standard errors surrounding these values.

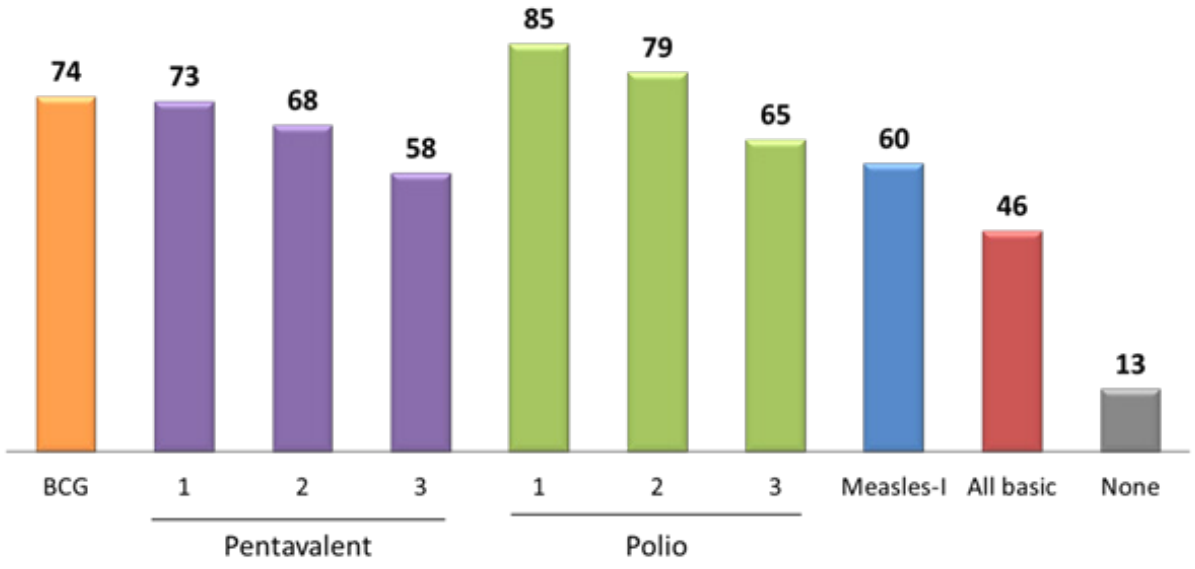


Figure 38: Childhood vaccinations, AfDHS 2015

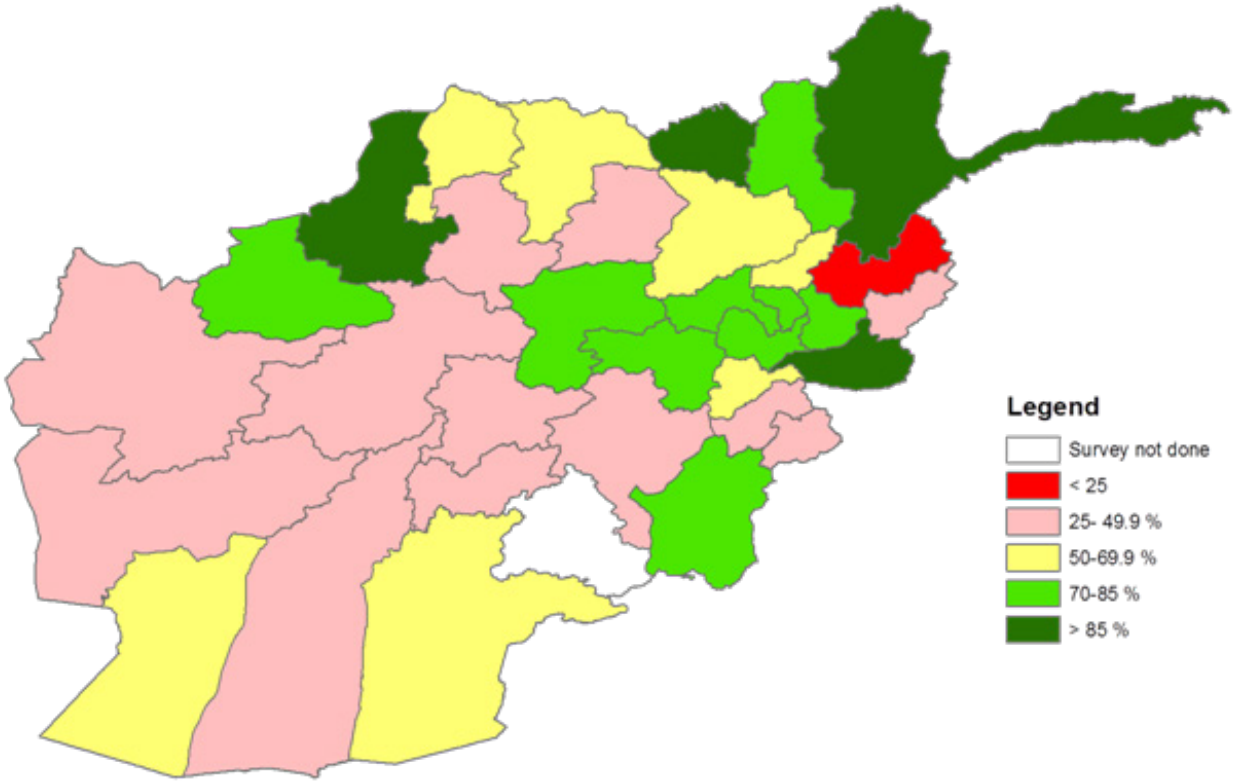


Figure 39: OPV3 coverage by province, AfDHS 2015

There is an increased political commitment and focus on routine immunization. The comprehensive multi-year plan (cMYP) for immunization 2015-2019 was updated during 2016, the Annual Plan of Action (POA) is available at national level and the 2010 guidelines on microplanning will be updated in 2017. Technical, material, and financial support is available from partners, in particularly UNICEF, WHO and GAVI. A focal person for social mobilization and communication is available at national level, IEC materials are prepared for RI, and engagement of community and religious leaders is taking place. Vaccine procurement with GAVI resources and through UNICEF procurement services is adequate and vaccine management system and temperature monitoring in place.

Following the nationwide introduction of IPV in the routine immunization programme as a single dose at 14 weeks of age in September 2015, the switch from tOPV to bOPV was completed in April 2016 and tOPV is no longer in use in Afghanistan.

Efforts to strengthen routine immunization will sustain the gains achieved by regular SIAs through to certification. It is important to highlight that the prioritized VHR districts for polio also report low RI coverage and have high numbers of unimmunized or under-immunized children. Continued emphasis in 2016 has been on reducing the number of un- and under-immunized children in the prioritized VHR districts by regularly engaging the polio infrastructure and undertaking operations and mobilization efforts.

The terms of reference of all polio field staff were reviewed in 2016 to ensure that up to 20% of their time is earmarked for RI activity support, in particular for monitoring fixed and outreach sessions and training health workers.

13 Coordination in the Common Reservoir

Epidemiological data of polio cases and genetic analysis of isolated viruses show sharing of poliovirus circulation among distant areas indicating sustained transmission of the virus from one area to another through people on the move. The geographic proximity and strong economic, cultural and tribal ties across the border with Pakistan result in frequent formal and informal population movements. In addition, various nomadic tribes continue to move widely with their livestock along traditional routes. Furthermore, the current geopolitical situation continues to result in repatriation of people between the two countries as well as internal displacement. Hence, Afghanistan and Pakistan form one common reservoir for poliovirus circulation and coordination between the national polio eradication programmes of the two countries is essential for stopping transmission.

During 2016 the coordination was strengthened through identification of cross-border focal points within the National EOCs and regular face-to-face meetings and video/teleconferences (V/TCs) calls at national and sub-national levels.

The key areas of coordination included

- synchronization of SIA dates and communication of any changes in the dates;
- mapping of border villages on both sides to ensure no communities are missed;
- streamlined cross-notification of AFP cases to ensure timely communication and the sharing of detailed information on WPV case investigations;
- harmonized communication interventions at the cross-border transit points and regular sharing of media/communication plans to ensure consistent messaging;
- timely information sharing on high-risk population movements, including nomads, displaced populations, and returnees;
- ensuring returnee refugee populations will be vaccinated at entry points with OPV and IPV; and
- minimizing the interruption of stool sample shipment from Afghanistan to the regional reference laboratory (RRL) in Islamabad during the closure of Torkham border.

14 Way Forward

Access for vaccination

- Full implementation of the NEAP 2016-2017 with close monitoring of progress through EOCs using the activity tracker dashboard.
- Review of NEAP implementation in mid-May and plan for the way forward.
- Risk categorization with
  - inclusion of Nawzad District of Helmand Province and Sheegal of Kunar Province in VHR districts;
  - inclusion of all districts of Kunduz Province and Gurbuz, Gyan and Spera districts of Southeastern Region in HR districts;
  - inclusion of Paktika and Kunduz in the list of high risk provinces; and
  - revision of risk categorization in December 2017.

Oversight, coordination and management

- Continued engagement of political leadership at all levels and further engagement of line ministries.
- Establishment ofan EOC in the Southeastern Region and strengthen regional structures in the regions without EOCs.
- Continued efforts to ensure BPHS NGOs are accountable for their involvement in the programme and for improving routine EPI coverage.
- Continued Afghanistan-Pakistan coordination at national and subnational levels including regular VCs and face-to-face meetings.

SIA schedule for 2017

- 4 NIDs and 6 SNIDs synchronized with Pakistan SIA calendar as feasible
- Calendar may change as per evolving epidemiology

IPV SIA plan for 2017

- Complete IPV+OPV SIAs as per NEAP 2016-2017

Reason	Province	District	NEAP	Target pop	IPV
High risk	Farah	Khak-e-Safed	No	9,830	11,796
High risk	Helmand	Deh-e-Shu, Garmsher, Reg	No	52,025	62,430
High risk	Kunar	Ghaziabad, Sarkani	No	10,686	12,823
High risk	Faryab	Qaysar	yes	43,783	52,540
High risk	Helmand	Lashkargah, Musaqalah, Nad-e-Ali	yes	191,313	229,576
High risk	Kabul	Kabul	yes	74,000	88,800
High risk	Nangarhar	Behsud, Jalalabad	yes	164,283	197,140
High risk	Nimroz	Zaranj	yes	46,976	56,371
High risk	Uruzgan	Dehrawud, Tirinkot	yes	71,871	86,245
High risk	Zabul	Qalat	yes	27,579	33,095
Inaccess	Kunar	Watapur, Marawara, Dara-e-Pech, Chapadara, Nari	yes	17,814	21,377
Inaccess	Kunduz	Kunduz, Emamsaheb, Qala-e-Zal, Chardarah, Aliabad, Khanabad, Dasht-e-Archi	yes	152,336	182,803
Inaccess	Nangarhar	Pachieragam, Kot, Achin	yes	11,867	14,240
Inaccess	Nuristan	Kamdesh	yes	590	708

Enhancing campaign quality

- Microplan revision
  - Complete household based microplan revision across the country
  - Use of GIS for identification of changes as well as for peri-urban microplanning in view of returnees
- Full implementation of the new SOP of FLW selection and training
- Further strengthen revisit strategy by revision of tally sheet and use of data to identify gaps
- Addressing issue of refusals by using focussed interventions
- Deployment of national level monitors for campaign preparation and implementation phase
- Vaccination of persistently missed children identified using disaggregated data analysis and tracking over the rounds
- Monitoring
  - Continue detailed field investigation of all failed lots
  - Continue implementation of new PCM/LQAS validation SOP
  - Expand remote monitoring in areas with monitoring challenges and HR districts
- Fully implement evidence based accountability framework
- Replace Monitoring and Accountability structure with National EOC focal points
- Focus on VHR districts
  - Continue to focus all strategies on VHR districts
  - Strengthen district profiles and specific action plans
- Streamline and strengthen use of ICM and administrative data from across the country for corrective action

High-risk mobile population

- Four categories
  - Long distance movement within reservoir areas
  - Straddling population at border areas
  - Nomads
  - Returnees
- Interventions
  - Information gathering
  - Joint mapping and planning with Pakistan team
  - PTTs and CBTs at strategic locations; to be modified as per changing scenario
  - Specific strategies for each category
- Movement within reservoir areas
  - Areas with high population movement to be identified and focused on
  - Emphasis on guest children (vaccinators, SMs, Supervisors and monitors)
- Straddling population at border areas
  - Mapping of areas and relations on other side of the border
  - Inclusion in high-risk area for increased focus
- Nomads
  - Routes, seasonality identified
  - Continue strategies: Nomad specific campaigns, nomad specific PTTs, inclusion in SNID/NID
- Returnees
  - Vaccination at the border and at UNHCR/IOM sites
  - IPV (under 5) and OPV (under 10)
  - Identification of settlement and inclusion in microplan

Access challenged areas

- Maintaining programme neutrality
- Areas inaccessible for vaccination
    - Dialogue at different levels through neutral and credible mediators
    - Cluster and village level mapping of accessibility
    - Deployment of PTTs at entry and exit routes of inaccessible areas
    - Three rounds of SIAs, including one round of IPV+OPV in newly opened areas
    - Scaling up polio plus initiatives in and around inaccessible areas
    - Ongoing community engagement
- Areas with active fight: Recovery once active fight is over

Response to new polio case

- Detailed epidemiological investigation by Regional and National Rapid Response Teams
- Vaccination plan
    - Three SIAs covering at least 500,000 children
    - First campaign within 2 weeks targeting <10 years
    - Second campaign targeting <10 years
    - Third campaign with IPV+OPV (in areas with no IPV in the past two years)
- Support from national and regional level in case response campaigns
- Any type 2 virus will be responded as per global SOP

Communication

- To further tailor media approaches for each region based on their specific context
- To maintain media engagement so that polio remains a priority
- To explore different approaches/strategies as alternatives to full-time social mobilisers in challenging areas
- Further strengthening of the ICN network through continued capacity building
- Further qualitative analysis to enhance understanding of reasons for missed children in specific areas

Surveillance

- Regular performance review based on access for corrective interventions
- Continue expanding the reporting network to include newly opening/identified health facilities
- Expanding ES to Mazar, Herat and Kunduz
- Establish alternate modes of stool shipment in case of border closure
- Fully implement healthy children sampling strategy in silent districts

Sero-prevalence surveys

- First study
  - Hospital based in Mirwais Hospital of Kandahar
  - Planned to start first week of May
  - 420 serum samples
  - Two age groups (6-11 Months, 36-48 Months)
- Expansion
  - Nine Health facilities to assess 13 provinces
  - Regional/provincial hospitals in Paktika, Paktia, Nangarhar, Kunduz, Khost, Herat, Balkh, Ghazni and Indira Gandhi Hospital in Kabul
  - Both studies to be implemented by Agha Khan University

Strengthening routine immunization

- Fully implement new SOP of PEI support to EPI with special focus on
  - Planning of routine immunization sessions
  - Monitoring of fixed and outreach sessions
- Polio workers to spend 20% of their time on routine immunization
- Social mobilization
  - ICN will promote routine immunization and mobilize families
  - Newborn and defaulters tracking