

ANNUAL REPORT 2013

Polio Eradication Initiative, Afghanistan



World Health
Organization



Expanded Program on Immunization
Ministry of Public Health, Afghanistan

Foreword:

The Ministry of Public Health is pleased to present the Annual Report of Polio Eradication Initiative Afghanistan for the year 2013. This report narrates the current epidemiological situation, status of Supplementary Immunization Activities, AFP surveillance, Communication, activities implemented in 2013 and plan for 2014.

The primary aim of this publication is to keep all stakeholders informed on the collective achievements, challenges and way forward to achieve the goal of complete cessation of poliovirus circulation in Afghanistan. It is particularly useful for technical and development partners, provincial health directors, provincial EPI management teams, BPHS NGOs engaged at field level implementation.

I would like to express my appreciation to the members of Polio Eradication team at national, provincial, district and field levels in carrying out house to house vaccination campaigns to vaccinate children against this dreadful disease.

We are particularly grateful to CIDA, Rotary International, USAID, JICA, BMGF, AusAID, and Government of UAE for extending financial support to implement activities reflected in this report. We would like to offer special thanks to WHO and UNICEF for providing constant technical support at national, provincial and district level and assisting effective implementation of program activities.

Let us all take this opportunity to reaffirm our commitments and join hands towards achieving the goal of “Polio Free Afghanistan”.

Suraya Dalil, MD. MPH

Minister of Public Health

Government Islamic Republic of Afghanistan

Acknowledgment:

On behalf of Ministry of Public Health, I would like to acknowledge the contribution of National EPI, WHO and UNICEF team in producing this Annual Report on Polio Eradication Initiative Afghanistan for the year 2013.

Ministry of Public Health accords Polio Eradication as a high priority initiative and is fully determined to stop the circulation of poliovirus by end of 2014. I am hopeful that concerted efforts, community engagements and with broad partnership base will further strengthen our efforts to fight against this vaccine preventable disease.

The implementation of activities given in this report would not have been possible without generous technical and financial support of our partners namely, WHO, UNICEF, CIDA, USAID, Rotary International, AusAID, JICA, BMGF and Government of UAE.

I would like to acknowledge and highly appreciate the efforts of our field staff at district level, particularly the vaccination teams providing house to house services even in areas under difficult circumstances. I would also like to thank BPHS implementing NGOs for their constant support at implementation level.

Last but not the least, I would like to acknowledge and pay our highest level of tribute to the field workers who gave their lives in the line of achieving the noble cause of preventing Afghan children from the dreadful disease.

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Director General Preventive Medicine
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Contents

| | |
|---|----|
| EXECUTIVE SUMMARY | 4 |
| 1. Introduction | 9 |
| 1.1: Polio Eradication Service Delivery Structure Afghanistan | 9 |
| 1.2: Roles, Responsibilities and PEI Staff Network:..... | 11 |
| 2. Poliovirus Epidemiology in Afghanistan | 13 |
| 2.1: Geographical and Genetic distribution of Wild Polio Virus Cases | 13 |
| 2.2: General Characteristics of Polio cases in 2013: | 13 |
| 2.3: Genetic Analysis of Poliovirus isolates 2013:..... | 14 |
| 2.4: Population Immunity:..... | 14 |
| 2.5: Polio Compatible Cases: | 16 |
| 2.6: Circulating Vaccine Derived Poliovirus type 2 (cVDPV2): | 16 |
| 2.7: Key Epidemiological gains, challenges and risks by region: | 16 |
| 3. National Emergency Action Plan: Key Program areas and Interventions during 2013 | 19 |
| 3.1: Political Commitment, ownership and oversight: | 20 |
| 3.2: Enhance focus on Low Performing Districts (LPDs):..... | 21 |
| 3.3: Reducing Missed Children:..... | 23 |
| 4. Communication for increased community demand and ownership: | 29 |
| 5. Management and Accountability: | 32 |
| 6. Maintain Sensitive AFP Surveillance System: | 34 |
| 6.1: Characteristics of AFP Cases 2013:..... | 34 |
| 6.2: Environmental Surveillance:..... | 35 |
| 6.3: AFP Surveillance Indicators: | 36 |
| 6.4: Managing AFP Surveillance in Conflict affected areas: | 36 |
| 6.5: Diagnosis of AFP cases..... | 37 |
| 6.6: Gaps in the Surveillance system: | 37 |
| 7. Routine Immunization | 38 |
| 8. Vaccine & Cold Chain Management: | 40 |
| 9. Cross border coordination | 41 |
| 10. Future Plans in 2014 | 42 |

EXECUTIVE SUMMARY

Afghanistan is administratively divided into 7 regions and 34 provinces which are subdivided into 399 districts, the lowest administrative units. Population estimate used for vaccination campaigns for children below 5 years is almost 8.3 million while the population below 15 years of age used for Acute Flaccid Paralysis (AFP) surveillance is almost 17 million. Core Polio Eradication Initiative (PEI) partners, particularly Ministry of Public Health (MoPH), World Health Organization (WHO) and United Nations Children's Fund (UNICEF) function in close coordination with well-defined roles, responsibilities and tasks which are accomplished through network of PEI staff at various levels.

This year (2013) has been quite a busy year for Afghanistan polio program both in qualitative and quantitative terms. As part of Afghanistan's commitment to make focus on both quality and pace of implementation of strategies, the year started with reviewing activity plans and introduce several new initiatives all of which aimed at increasing the quality of the implementation. While doing so the program has taken into account the past failures, lessons learned and leveraged on successes. Afghanistan polio program has seen some achievements in 2013; however, several challenges have also emerged. While the achievements were real and solid, some of the challenges have a potential to jeopardize the objective of stopping the circulation of wild polio virus in Afghanistan by the end of 2014.

Afghanistan reported total of 14 cases in 2013 compared to 37 cases reported in 2012. Geographical distribution of polio cases in 2013 shows that 86% (12/14) were reported from two provinces of Eastern Region (Kunar and Nangarhar) while one case each reported from the Southern and Central Regions. This is a different pattern than 2012 when most cases were reported from Southern region of the country. No Polio cases were reported from Southern region for almost one year preceding November 2013. However, program had a setback with reporting of one case from Nad Ali district of Helmand province of South Region. Isolation of this virus shows that it had maintained a low level of circulation and remained undetected for almost 12 months. This underscored the need for enhanced AFP surveillance sensitivity in difficult and security affected areas.

Aggressive timetable of Supplementary Immunization Activities (SIAs) including Short Interval Additional Doses (SIADs), increased access through negotiation, intensification of communication activities including expansion of the network and increase in female social mobilizers, additional vaccination activities like Permanent Polio Teams (PPTs) and Transit vaccination teams has most probably contributed increasing the population immunity in South as is evidenced by decrease of zero dose AFP cases from 23% to 7% in Helmand and from 19% to 7% in Kandahar. This improved immunity resulted in a remarkable decrease in cases from

Southern region. However, despite the progress in Southern region in 2013, the case reported from Nad Ali, pockets of low immunization coverage, inaccessible areas and low routine EPI coverage continue to pose risk of Poliovirus circulation in South.

New epidemiological challenge emerged in Eastern region in general and in Kunar province in particular where there was evidence of continuation of circulation with occurrence of secondary cases. Additionally, multiple re-infections in Eastern regions were closely linked with the ongoing outbreak in the neighbouring parts of Pakistan. Persistent inaccessibility in parts of Kunar and Nuristan provinces and a decline in quality of campaign in these provinces indicate the probability of establishment of circulation of poliovirus in the region with risk of spill over to other parts of the country.

Afghanistan revised the country's National Emergency Action Plan (NEAP) for Polio Eradication to address the changing epidemiological situation and newly emerging challenges. NEAP was revised through consultative process with all partners and provincial teams in the light of recommendations of Technical Advisory Group (TAG) meeting held in December 2012 and reports of the Independent Monitoring Board (IMB). Main objectives of the NEAP were to interrupt the poliovirus circulation and stop Vaccine Derived Polio Virus (VDPV) circulation in Southern region, stop ongoing outbreak in Eastern region and to prevent establishment of circulation in rest of the country.

To achieve these objectives six priority areas of interventions were identified, which are; revise the list and enhance focus on low performing districts (LPDs), design strategies to reduce the number of missed children, re-focus communication to increase community demand for vaccination, strengthen program management and accountability, maintain sensitive AFP surveillance and increase routine EPI coverage. High level political commitment and ownership and translating it down to sub-national levels with sense of urgency and quality were identified as key principles for successful implementation of various activities for each of the six priority areas.

Of the four objectives of the NEAP, the country program has been able to achieve 2 objectives, 1 was partially achieved and 1 is yet to be achieved. There has been no evidence of polio virus circulation in North, North-East, West, South-East and Central regions of the country. Although, there was a sporadic case reported from Kabul city with onset on November 24, but no secondary cases are reported after an intense series of vaccination campaigns as case response. Circulation of cVDPV was stopped as shown by non-occurrence of any cVDPV cases for the last 9 months. The objective in Southern region is partially achieved as one case of Polio was reported after almost one year. The interruption will be assessed within 4 months following the case from Nad-e Ali, thus in the 1st quarter of 2014. The objective which is yet to be achieved is to stop the outbreak in Eastern region, particularly in Kunar province.

PEI program started the year by relabeling the High Risk Districts (HRDs) as Low Performing Districts (LPDs) as recommended by November 2012 TAG. In addition, a thorough exercise was conducted to revise the list of LPDs, considering both internal and external in identification of LPDs that would be the focus for all key interventions. As a result 11 districts were indicated to be LPDs, all of which were located in the Southern Region. An additional 20 districts appeared as 2nd priority LPDs with a breakdown of 8 in the South, 5 in the East, 4 in the South East and 3 in the West. In June 2013, the list of LPDs was re-visited as per the emerging epidemiological trends to take into account new developments.

Another significant development was to initiate the Lot Quality Assurance Sampling (LQAS) in April 2013, a scientific survey methodology to check the vaccination status of under-5 children within an interval of confidence. LQAS has enabled better understanding of the vaccination coverage of campaigns in various places. In most areas the LQAS methodology indicates much lower coverage compared to the Post Campaign Assessments (PCAs).

The AFP surveillance has received priority throughout the year in terms of strengthening the system and avoiding loopholes. In addition another new intervention was initiated in Kandahar city of the Southern Region to detect any possible of circulation of wild polio virus in the environment. The aim of environmental surveillance was not only to detect the wild virus in the sewage system but also to determine the possible routes of transmission. Most of the AFP surveillance indicators meet the globally set standards at national and sub-national levels except the detection of AFP cases within 7 days in Southern region, which is 74% while rest of the regions have more than 80% cases detected within 7 days.

Polio program has successfully conducted 2 external reviews; one on Vaccine and Cold Chain Management for Polio campaigns and the second one on Communication with the participation of reviewers from various organizations. In addition, an internal review of Permanent Polio Teams (PPTs) was conducted.

The year 2013 has witnessed several key interventions and innovative approaches albeit a hectic schedule of implementation of activities. Amongst them were the start of Re-visit strategy in South, establishment of Presidential Focal Person for Polio's Office and a Polio High Council functioning within, establishment of the Polio Control Rooms at National Level, 2 provinces each in South and East region and in LPDs of the Southern Region.. Efforts to improve monitoring including introduction of LQAS, use of mobile technologies through SMS, and launch of Polio Info system. Initiatives for improving immunity, other than campaigns included expansion of PPTs, additional district focussed campaigns, increase in the number of cross border and transit teams.

Immense efforts were made to gain more access to vaccinate children through local level negotiations facilitated by ICRC in Southern region where there is significant decline in the number of inaccessible children. However, inaccessibility remains a challenge in Kunar and despite various efforts no change in inaccessibility is observed.

PEI Afghanistan has been able to quickly respond to the new epidemiological developments and emerging trends. However, it is yet to tackle the challenging issues in certain areas such as immunity gaps, persistent pockets of inaccessible children in LPDs mostly in security compromised areas, considerable number of missed children due to management related problems, threat to safety and security of polio field workers by both sides to armed conflict, government and anti-government elements (AGEs) alike.

Immunization Communication Network (ICN), set up to support polio eradication program through social mobilization, focuses on increasing demand and ownership and reducing missed children due to refusals and children missed due to being sleeping, sick or newborn (SSN) through evidence based local level communication interventions. The new shift is to promote routine immunization and other health interventions that directly affect eradication efforts including exclusive breast feeding and hygiene practices. The ICN expanded to ensure social mobilizers are placed in all the clusters within the LPDs. Standard operating Procedures (SOPs) that included revised ToRs for all categories of ICN was also developed and rolled out. By the end of 2013, almost 94% of the clusters in LPDs have social mobilizers.

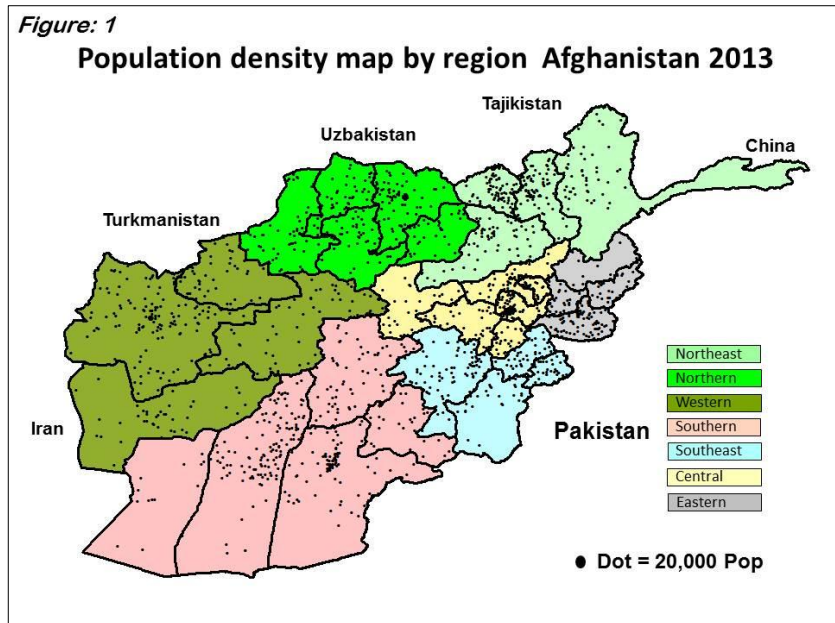
One of the key interventions piloted in 2013 was Direct Disbursement Mechanism (DDM) with the aim to ensure transparency and to avoid any delay in the disbursement of financial entitlements of SIAs service providers. New financial payment mechanisms have been put in place in seven pilot districts. The new mechanism bypasses several layers by directly making the payments to the Cluster Supervisors through a bank transfer for the supervisors and the volunteers that they supervise. Though some challenges were faced during the pilot phase of DDM, corrective measures have since been identified and are being implemented. This method of payment reinforces the segregation of duty and improves the timeliness of the payment of field workers.

In 2014, Afghanistan plans to conduct 4 rounds of National Immunization Days (NIDs) using bOPV and tOPV alternatively in March, April, August and October in 2014. Four rounds of sub-national (SNIDs) will be implemented using bOPV in February, June, July and November. At least four additional vaccination rounds will be conducted in LPDs. Program plans to use mOPV1 in at least one of the round for LPDs. Program plans to enhance focus in Eastern Region during 2014, where risk of continuation of circulation remains high. District focused strategies, review of micro-plans, communication towards demand generation and placing additional HR for the technical support and their trainings will be important activities in 2014. Also in line with

the endgame strategic plan, PEI network will be engaged to strengthen routine EPI by adopting focused and measurable approaches. IPV will be introduced in the routine immunization schedule as a single dose in addition to the 3rd dose of OPV and Penta-3 in the first half of 2015. IPV will also be used during the August NIDs in 2014 in 11 LPDs in 3 provinces in the Southern and Eastern Regions with a target population of 448,665 under 5 children.

1. Introduction

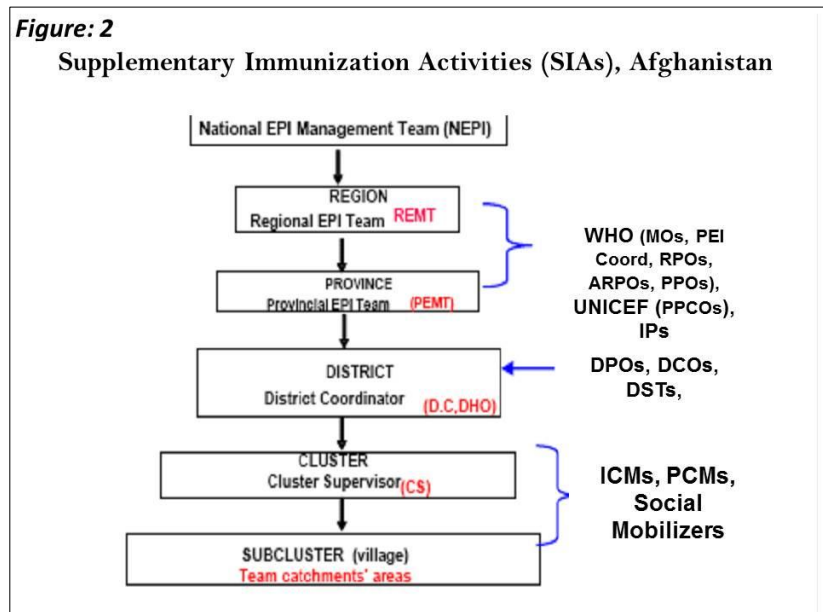
Afghanistan is comprised of 7 regions and 34 administrative provinces (Fig 1) which are subdivided into 399 districts, the lowest administrative units. Although South and West are the largest regions area-wise, Central, Eastern and parts of Western & Northern regions are among the most densely populated areas of the country. Population estimate used for vaccination campaigns for children below 5 years is almost 8.3 million while the population below 15 years of age used for AFP surveillance is almost 17 million in 2013.



Polio Eradication Initiative (PEI) Afghanistan follows structure of the country but for the purpose of operations, monitoring, evaluation and reporting, each district is further divided into smaller and well demarcated sub-district level geographical areas called “Clusters”. Cluster is the smallest operational unit for PEI service delivery within a district.

1.1 Polio Eradication Service Delivery Structure Afghanistan

National, Provincial, District and Sub-district level PEI service delivery structure is designed (Fig 2) with well-defined roles and responsibilities. National and provincial EPI management teams are present at country and provincial levels having representation from EPI, WHO, UNICEF and NGOs.



These teams lead the program at country and provincial level. Country team is mainly

responsible for policy, planning, vaccine procurement and supply while provincial teams responsible for implementation, supervision and monitoring all immunization activities including PEI.

For Supplemental immunization activities (SIAs) which include National Immunization Days (NIDs), Sub-National Immunization Days (SNIDs), case response and Short Interval Additional Doses (SIAD); micro-plans are developed by dividing districts into clusters. Each Cluster is managed by a Cluster Supervisor, supervising 5-6 vaccination teams; each team consists of two members, termed as volunteers. There are 4684 clusters supervisor and almost 52,000 volunteers to approach house to house to administer Oral Polio Vaccine (OPV) to children below 5 years of age, in each vaccination campaign. At district level, there are district coordinators (on average there are 1 coordinator per 5-7 supervisors) and campaign monitors. There are 875 district coordinators and 1,688 monitors to monitor the activities during campaign and assess the coverage after the campaign (*Table 1*). Additional human resource is engaged for polio communication activities in Southern, South-Eastern and Eastern region including 71 district communication officers, 308 cluster communication supervisor and almost 3,600 community mobilizer. In summary, more than 63,800 workers are involved to deliver vaccination services during NIDs

In selected low performing districts (LPDs) of South, South-East and Eastern region, the management and operational system is further strengthened by constituting District EPI Management Teams (DEMTs) in which District Coordinator is supported by District Polio Officers and District Communication Officers.

Routine EPI services are accessible to almost 80% of Afghanistan population through a wide net of >1400 vaccination sites established at district and sub-district levels and are served by almost 3,000 vaccinators.

For AFP Surveillance, there is a country wide network of AFP Focal Points (FP) linked with various health facilities within a district and community-based reporting volunteers. Each district has at least one Focal Point who is usually a Doctor (preferably a paediatrician) in the District Headquarter Hospital and is responsible for AFP case notification, investigation, sample collection and its shipment to provincial office. Each focal point is linked with a network of community-based reporting volunteers (RV) including pharmacists, traditional healers, Shrine keepers, General Practitioners and Mullahs. The RVs are responsible for case notification and their referral to the concerned FP. There are 578 focal points, almost 1100 Active Surveillance sites, over 1500 Zero Reporting sites and over 16,000 community-based reporting volunteers all over the country. WHO supports this country network through 76 Provincial Polio Officers spread in various provinces and districts of the country.

1.2 Roles, Responsibilities and PEI Staff Network:

Core PEI partners, particularly MoPH, WHO and UNICEF function in close coordination with well-defined roles, responsibilities and tasks which are accomplished through network of PEI staff at various levels.

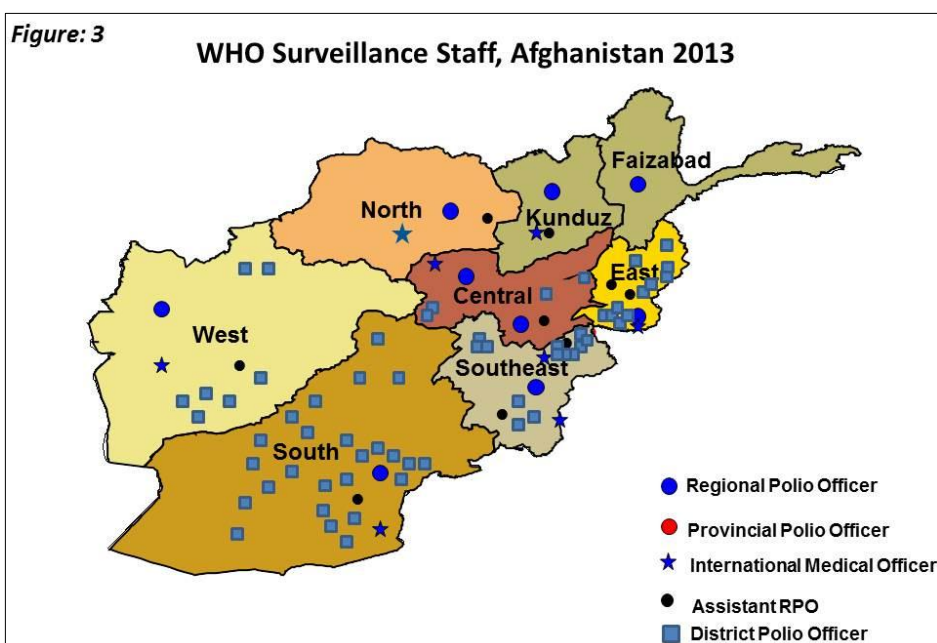
MoPH has stewardship and leading role at national and provincial levels. WHO is responsible

| Table 1: Number of SIAs service providers by region, Afghanistan | | | | | | |
|---|-------------|--------------------------|-------------------|------------------|--------------|---------------|
| Regions | DCs* | CSs** | # of Teams | Volunteer | ICMs^ | PCMs^^ |
| Central | 132 | 860 | 4746 | 9502 | 129 | 176 |
| East | 89 | 474 | 2708 | 5416 | 105 | 83 |
| Northeast | 105 | 487 | 2725 | 5416 | 44 | 74 |
| South | 106 | 789 | 4525 | 9050 | 153 | 195 |
| Southeast | 88 | 393 | 2566 | 5132 | 72 | 88 |
| West | 131 | 664 | 3379 | 6758 | 113 | 120 |
| North | 111 | 558 | 3465 | 6921 | 75 | 92 |
| Badakhshan | 56 | 197 | 886 | 1772 | 34 | 34 |
| West central | 57 | 262 | 1319 | 2626 | 57 | 44 |
| AFG | 875 | 4684 | 26319 | 52593 | 782 | 906 |
| *District Coordinator | | **Cluster Supervisor | | | | |
| ^ Intra Campaign Monitor | | ^^ Post Campaign Monitor | | | | |

for technical assistance, trainings, micro-planning, post campaign assessment surveys, data analysis and report writing. UNICEF supports the communication component of campaign, procurement of vaccines and other logistics. MoPH is also responsible for field implementation of SIAs through their district coordinators and BPHS NGOs.

MoPH has Provincial EPI Manager in each of the 34 provinces whereas NGOs has their provincial EPI supervisors in each province. Provincial Manager EPI is responsible for selection of district Coordinators manage and supervise Cluster Supervisors who in turn responsible for the selection, supervision of the vaccinators (volunteers) to implement the house to house vaccination activities

WHO supports the Ministry of Public Health through a country-wide network International and National staff, of which majority is field based. Each regional team consists of International Medical Officer, Regional Polio Officer (RPO), Assistant Regional Polio Officers (ARPO), Provincial



Polio Officers (PPO) and District Polio Officers (DPOs). RPOs and ARPOs are mainly responsible for supervisory support while PPOs carry out the field activities related to AFP Surveillance and SIAs in their assigned provinces/ districts. WHO PPOs are placed at the provincial level and have their assigned districts to facilitate vaccination and AFP Surveillance activities. DPOs are placed in the Low performing districts to support the SIAs operation. There are 10 Medical Officers, 9 RPOs, 9 ARPOs, 76 PPOs and 39 DPOs distributed in various parts of the country to carry out polio eradication activities (*Fig 3*). In 2013, WHO also recruited Provincial PEI Coordinators in 4 key provinces in South and West (Kandahar, Helmand, Uruzgan and Farah provinces) with the aim to strengthen management and provide technical support in these key provinces.

UNICEF has a team of seven International and four national staff at country level. Also communication officers are deployed in South, East, West and South East regions of Afghanistan, supporting communication/social mobilization activities at the regional, provincial and district levels. As part of the Immunization Communication Network (ICN), 7 Provincial Communication Officers (PCOs) and 39 District Communication Officers (DCOs) are also placed in high risk provinces including Kandahar, Helmand, Uruzgan, Farah, Nangarhar, Laghman and Kunar provinces

2. Poliovirus Epidemiology in Afghanistan

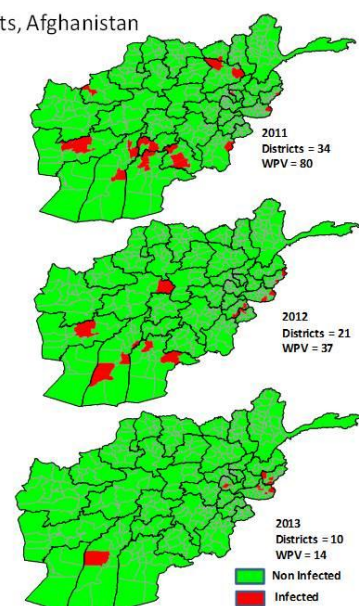
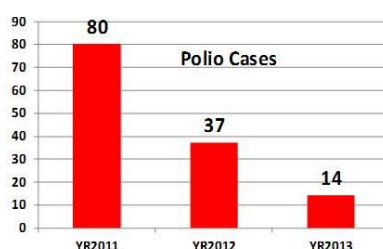
2.1 Geographical and Genetic distribution of Wild Polio Virus Cases

Afghanistan reported total of 14 cases in 2013 compared to 37 cases reported in 2012. Geographical distribution of polio cases in 2013 shows that 86% (12/14) were reported from two provinces of Eastern Region (Kunar and Nangarhar) while one case reported from each of the Southern and Central Regions. This is a different pattern than 2012 when most cases were reported from Southern region of the

Figure: 4

Distribution of Polio cases and infected districts, Afghanistan

| 2011-2013 | | | |
|-------------------------------|-----------|-----------|-----------|
| Number of Polio cases by year | | | |
| REGION | 2011 | 2012 | 2013 |
| CENTRAL | 4 | 2 | 1 |
| EASTERN | 2 | 6 | 12 |
| NORTH EASTERN | 3 | 0 | 0 |
| NORTHERN | 2 | 0 | 0 |
| SOUTH EASTERN | 1 | 5 | 0 |
| SOUTHERN | 62 | 22 | 1 |
| WESTERN | 6 | 2 | 0 |
| Total | 80 | 37 | 14 |



country. All cases were P1 and Afghanistan has not seen any P3 since April 2010. Compared to last year there has been more than 60% decrease in the number of cases while compared to previous year (2011) the reduction has been quite significant at more than 80% (Fig 4)

2.2 General Characteristics of Polio cases in 2013:

Twelve out of 14 confirmed polio cases (86%) were young children of age less than 2 years. Median age of the cases was 18 months with range of 7-48 months. Male and female cases reported in equal proportion. Five cases (36%) did not receive any dose of OPV “zero dose”; neither through SIAs nor through routine. Median number of OPV doses received by the cases is 4 compared to 2 in 2012. It is important to mention that 11 cases (79%) did not receive any OPV dose in routine.

All of the 14 cases had history of fever followed by onset of paralysis. Eleven of the cases sustained residual paralysis on follow up examination after 60 days; one case died while 2 were not found at the time of 60-day follow up visit.

Distribution of Polio cases by month shows that cases are reported after regular interval in Eastern region indicating repeated reinfection and also establishment of circulation, particularly in Kunar. There were 3 cases reported in the first half of 2013 while rest of the 11 cases reported in the second half with predominance in the last quarter of 2013 showing the risk of occurrence of cases in 2014.

2.3 Genetic Analysis of Poliovirus isolates 2013:

Genetic sequencing results of the polioviruses isolated in 2013 in Afghanistan shows that all 12 cases reported from Eastern region belong to R4B sub-cluster and closely matches with the ongoing circulation across the border in Pakistan indicating that most of them were multiple reinfection. However, at least two of the cases were linked the initial cases of Kunar indicating the possibility of establishment of circulation, particularly in Kunar. The only case reported from Kabul belong to R4A sub-cluster which has not been detected in since last many years; again indicating a sporadic case linked with the outbreak in Pakistan.

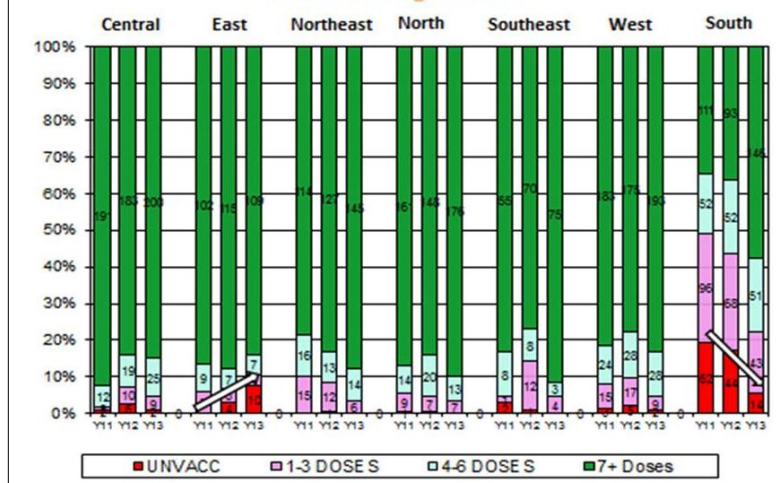
More importantly, genetic analysis of the only case reported from Helmand province of Southern region in 2013, is linked with the cases on 2012 of southern region indicating that the virus managed to keep low level circulation in a localized geographic area and remain undetected for almost one year.

2.3 Population Immunity:

Vaccination status of AFP cases, immunization coverage in SIAs and distribution of Zero Dose AFP cases are used as the proxy for the population immunity in the various regions of the country.

The *proportion of 'zero dose' among all AFP cases* (who did not receive any OPV dose, neither routine nor SIAs) of age less than 60 months was 5.4% nationally in

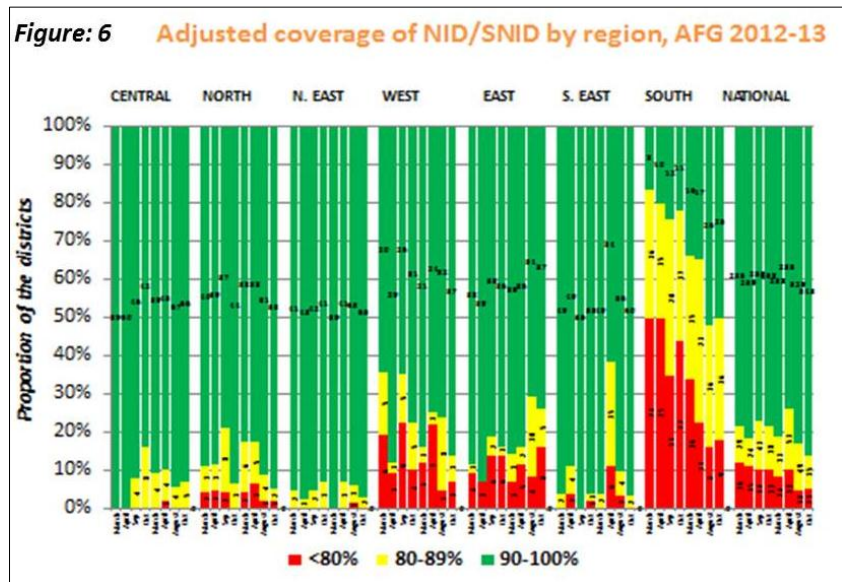
Figure: 5 Vaccination status of all AFP cases <60 Months by region 2011-2013 Afghanistan



2011 and reduced to 4.8% in 2012 and 2.1% in 2013 (*Fig 5*).

Stratifying this age group by region shows that in Southern region, the proportion of zero dose AFP cases was highest and was 19.3% in 2011 and reduced to 17% in 2012 and 5.5% in 2013. In Eastern region, the proportion of zero dose AFP cases was highest and was 1 % in 2011 and increased to 3.1% in 2012 and 7.7% in 2013. Most of the zero dose case in Eastern region are reported from Kunar province where the proportion increased from 10% in 2012 to 28% in 2013. Proportion of Zero Dose AFP cases is showing a declining trend in Southern Region during 2011-2013 but there is an increasing trend cases in Eastern region. Overall vaccination status of AFP cases in rest of the regions shows consistent quality of immunization.

Post-campaign coverage assessment (PCA) analysis in the recent SIA rounds in 2013 shows that Quality of campaign in southern region shows steady improvement while the quality of campaign in Eastern region is on decline. Campaign coverage in Central, Northern and North-East is consistently high quality (*Fig 6*)



Routine EPI OPV doses analysis for the non-polio AFP cases of age 6-23 months who received 3 or more OPV doses through routine EPI was 59% in 2011, 61% in 2012 and 64% in 2013 nationally, but for Southern region this proportion of fully vaccinated children remains very low and reduced from 14% in 2011 to 15% in 2012 and 28% in 2013.

The analysis of these proxy indicators for population immunity indicates improvement in Southern region but routine immunization coverage of lower than 30%, presence of zero dose cases and still 15-20% of districts has SIAs coverage lower than 80%, indicates existence of sub-groups of population where immunization coverage remains low. The reverse trend in all these indicators is observed in Eastern region showing widening of gaps in the population immunity, particularly in Kunar and Nangarhar provinces. This analysis also shows that most of the other regions in the country have maintained high quality of campaign, negligible proportion of Zero Dose cases and higher routine coverage. This coverage level may prevent the establishment of circulation in most of the country

2.4 Polio Compatible Cases:

In addition to the confirmed polio cases, there were 4 AFP cases in 2013 which were labelled as Polio Compatible by National Expert Review Committee (ERC). ERC is an independent and voluntary group of Paediatricians', Neurologist, epidemiologist and microbiologist. ERC meets every month to review and classify all AFP cases that had inadequate specimens and have residual weakness in 60 days follow up. There were 3 cases from the Southern Region; one from Nehri Saraj of Helmand, one from Shahwalikot district of Kandahar and one from Qalat district of Zabul and 1 from Watapur district of Kunar Province in the East. All the polio compatible cases in 2013 were reported from the low performing districts and did not receive any OPV dose and were below 3 years. Reporting of compatible cases also reflects on the gaps in the surveillance in these areas.

2.5 Circulating Vaccine Derived Poliovirus type 2 (cVDPV2):

Afghanistan reported 3 cases of cVDPV2 in 2013. All the three reported from Southern region. Two of the cases were reported from Nad-e Ali District of Helmand in January and February, both of which with multiple doses of OPV, while 1 was from Shahwalikot of Kandahar in March, which was zero dose OPV. No cVDPV2 is reported since March 2013. Compared to last year's 11 cases there has been almost 75% decrease. Isolation of cVDPVs indicates significant gaps in immunity levels in these areas, particularly in Nad Ali district which also reported the only confirmed case of 2013. The rarely seen iVDPV2 (Immunocompromised VDPV) phenomenon was also seen in Afghanistan in 2013 when one case was reported in October from Mazar-I Sharif of Balkh province in the Northern Region. The child was fully immunized both in routine and multiple doses of SIAs but apparently developed some serious illnesses including immune deficiency.

2.6 Key Epidemiological gains, challenges and risks by region:

Southern Region, the only reservoir of poliovirus in the country for a period of over decade did not report polio case for almost a year until a case was confirmed from Nad-e Ali District of Helmand Province. The first and only case from the Southern Region was revealed to be an orphan, which was alarming for the program. The virus of the index case with onset on 11 December 2013 maintained a low level of circulation in and around that block of districts in Helmand and adjacent Kandahar without being detected. The PI virus belonged to Cluster R4B, a common cluster shared with Quetta bloc of Pakistan, which was later isolated from the environmental sampling from the latter as well. Compared to years of 2011 and 2012 during

which 62 and 22 cases were reported respectively, Southern Region has made remarkable progress by having only 1 case reported in 2013, a reduction more than 98% compared to 2011 and 95% compared to 2012.

The questions arose how the Southern Region was able to stay polio free in majority parts of the region. The frequent and numerous mop-up campaigns in SIAD forms in addition to 4 SNIDs and 4 NIDs throughout the year enabled to vaccinate more and more children especially in Low Performing Districts and to reach out and vaccinate more children in security compromised areas. Southern Region has conducted a total of 16 rounds of vaccination campaigns in 2013. The proportion of missed children reduced from 28% in January 2012 to approximately 12% (approximately from 185,000 to 85,000 in actual numbers) by the end of 2013. Districts like Kandahar, Maiwand, Spin Boldak, Nad Ali, Nehri Siraj, and Lashkargah which reported most of the cases during 2011-12 showed improved vaccination coverage in 2013 and achieved almost 90% coverage in most of the campaigns held during 2013. However, districts Shahwalikot and Panjwai never achieved coverage of 90%. Moreover, intense local level negotiations resulted in reduction of inaccessible children from over 20,000 in 2012 to less than 2000 in Helmand and in Kandahar, the inaccessible children reduced from almost 50000 to 10000. Comparing the NIDs coverage between the beginning and end of the year, the proportion of districts with coverage less than 80% decreased from 24% to 9% for the same rounds of NIDs.

Permanent Polio Teams (PPTs) strategy was implemented in 11 of the LPDs in Southern region. This strategy aimed at administering additional doses of OPV to children living in key reservoir areas within the LPDs. PPTs covers 70% target of 11 LPDs. According to the assessment carried out in October 2013, almost 89% children received at least one dose, 81% two doses and 56% received three OPV doses. More than 30,000 children (7%) received OPV for the first time through PPTs. Also the strategy of Transit Vaccination Teams at entry and exit points of the difficult districts in Kandahar and Helmand are vaccinating almost 43000 children per month.

Aggressive timetable of SIAs, SIADs, increased access through negotiation, additional vaccination activities like PPTs and Transit vaccination teams has most probably contributed increasing the population immunity as is evidenced by decrease of zero dose AFP cases from 23% to 7% in Helmand and from 19% to 7% in Kandahar. This improved immunity resulted in this remarkable decrease in cases from Southern region.

It is also important to mention that despite the progress made in Southern region, there are still pockets of inaccessible children, particularly in Shahwalikot, Maiwand and parts of North Helmand. Also, though reduced, but reporting of Zero dose AFP cases indicates persistence of areas of low vaccination coverage. Moreover, the security situation remain very unstable and changes from day to day with the apprehension of going towards worst with the post withdrawal of International Security Forces and transition phase after the country's election continue to pose

the challenge of maintaining the progress. All these challenges continue to pose high risk to completely interrupt Poliovirus transmission in Southern region and this risk is further compounded by very low routine immunization coverage ranging between 10%-30% in various parts of this region.

Eastern Region borders those areas of Pakistan where large and uncontrolled outbreak continues. Out of 14 cases 12 were reported from the Eastern Region; 7 from Kunar and 5 from Nangarhar provinces. Following that very first case there has been multiple re-infections from Pakistan to the Eastern Region. The situation in the East has become more complex when the virus started establishing itself and circulating domestically. Watapur district of Kunar itself reported 4 cases, 2 of which were new infection and the other 2 were linked to the other cases from Narang within the same province and Lalpoora of neighbouring Nangarhar province. Chapadara district of Kunar province reported one case, which appeared to be new infection while 1 case from each of Khas Kunar and Narang districts of Kunar were linked to the earlier cases within the province.

Kunar is one of the worst and complex security affected areas in the country which adversely affected the PEI activities. Inaccessibility due to security in some certain locations especially in Kunar province has been a major constraint in controlling the ongoing outbreak throughout the year. Despite number of efforts the program is yet to make any breakthrough to gain access to vaccinate children. In fact number of inaccessible children increased from 10,000 to 22,000 in Kunar. The significance of the missed children is that the same pockets were being missed over and over again without gaining access over a long period of time. Watapur district of Kunar from where 4 cases were reported in 2013 was only partially accessible and the vaccination coverage never exceeded 40% throughout the campaigns. Chapadara has remained inaccessible thus no PCA has been conducted albeit some campaigns in some selected clusters. The rest of the districts in Kunar and Nangarhar have had coverage at around 90% on average but there still remained some pockets of clusters inaccessible.

In addition to inaccessibility there is evidence of decline in the quality of campaign in the accessible areas as well. The proportion of Zero dose AFP cases increased from 10% in 2012 to 28% in 2013 in Kunar province. Also overcoming management problems in Kunar is among the remaining challenges. Also there is huge population movement between the areas of outbreak in Pakistan and Eastern region in Afghanistan. Considering this population movement and ongoing intense transmission in bordering areas of Pakistan there is high risk of multiple re-infections which can also lead to continued circulation in Kunar due to persistent inaccessibility and decline in quality of campaign. The transmission of virus in Eastern region, if not controlled, poses risk of spill over to other parts of the country.

South-Eastern Region: No cases were reported from the South-Eastern Region in 2013. However given the fact that there were cases confirmed from the Region in 2011 and 2012 plus the ongoing large outbreak in bordering North-South Waziristan the program has closely monitored the situation of having zero cases. The coverage of vaccination campaigns have been at around 90% with the exception of LPD-2 district Jadran from Paktia province which in fact has never been below 70%. The AFP rate was three times more than expected levels, thus missing of a case was unlikely to happen. Furthermore, the cross border movement was not as active as in the Eastern Region resulted in less travellers between Pakistan and Afghanistan through the region. Despite the low level of cross border mobility the cross border permanent transit teams vaccinated 3,237 children per month in 6 functional posts.

Nonetheless, the Region has closely monitored the movement of Nomads between Pakistan and Afghanistan and conducted special campaigns targeting the Nomad population during which 2,069 children of under-5s were vaccinated in one month. Also campaigns were conducted for special population groups such as Banda's, Seasonal migrants and IDPs and as a result 121 Teams in 52 districts vaccinated 33,842 children of under-5 years of age with a result of 96% PCA Finger Mark coverage.

Other Regions: All of the other regions in the country remained polio free until almost end year, including west, which had reported cases in 2011 and 2012. North East and Northern Regions remained polio free in 2 consecutive years without any wild polio virus reported.

The year ended with a case reported from another location that had remained polio free up until then. Sub-District number 15 of the Kabul City/Kabul Province in the Central Region reported a wild case through the contacts of the index case due to inadequacy of the latter. That single case from the Central Region with the Date of Onset on 24 November 2013 which turned out to be a new infection from Pakistan classified as belonging to Cluster R4A brought new challenges to the program in order to make sure that the virus wouldn't establish itself and cause new infections.

The last case of 2013 was another alarming concern to the program due to multiple reasons. First the virus was able to make its way into a densely populated city of Kabul, second Kabul city being the capital there is a heavy daily traffic from and to Kabul across the country. Kabul city has not confirmed any cases since 2002.

3. National Emergency Action Plan: Key Program areas and Interventions during 2013

PEI Afghanistan revised the country's PEI National Emergency Action (NEAP) to cope with changing epidemiological situation and newly emerging challenges. NEAP was revised through

consultative sessions with all partners and provincial teams in the light of recommendations of Technical Advisory Group (December 2012) and reports of Independent Monitoring Board. Main objectives were to interrupt the poliovirus circulation and stop VDPV circulation in Southern region, stop ongoing outbreak in Eastern region and to prevent establishment of circulation in rest of the country.

To achieve these objectives there were six priority areas of interventions were identified which are; revise the list and enhance focus on low performing districts (LPDs), design strategies to reduce number of missed children, directing communication to increase community demand for vaccination, strengthen program management and accountability, maintain sensitive AFP surveillance and increase routine EPI coverage. High level political commitment, ownership and translating it down to sub-national levels with sense of urgency and quality were key to implement various activities for each of the six priority areas.

Out of the four objectives of the NEAP, the country program has been able to achieve 2 objectives, 1 partially achieved and 1 yet to be achieved.

Objectives achieved:

- There has been no evidence of establishment of polio virus circulation in North, North-East, Western, South-Eastern and Central regions of the country. Although, there was a sporadic case reported from Kabul city with onset on November 24, but no secondary cases are reported after intense series of vaccination as case response.
- Circulation of cVDPV was stopped by not having any cVDPV cases reported for 9 months.

Objective partially achieved:

- No poliovirus was isolated from Southern region for more than a year however the case from Nad-e Ali district of Helmand province with the Date of Onset of paralysis on 11 December 2013 jeopardized this achievement. The interruption will be assessed within 4 months following the case from Nad-e Ali, thus in the 1st quarter of 2014.

Objective yet to be achieved:

- The ongoing outbreak in the Eastern Region continued in the 3rd and 4th quarter of 2013.

3.1 Political Commitment, ownership and oversight:

Polio Eradication remains one of the high priorities of Government of Afghanistan. H.E President continued to inaugurate polio vaccination campaigns in 2013 demonstrating highest level of commitment. President also instructed the Provincial Governors to lead the PEI activities.

Advisor to President on Health Affairs is nominated as the PEI Focal Person for the office of President. Meeting of High Polio Council are regular arranged and chaired by the Focal Person with attendance from various line ministries. Four meetings are held in the second half of 2013. Minister of Public Health chair the meetings of Polio Policy Group which is held on alternate months. Governor of Kandahar had two meetings with the District Governors of LPDs.

3.2 Enhance focus on Low Performing Districts (LPDs):

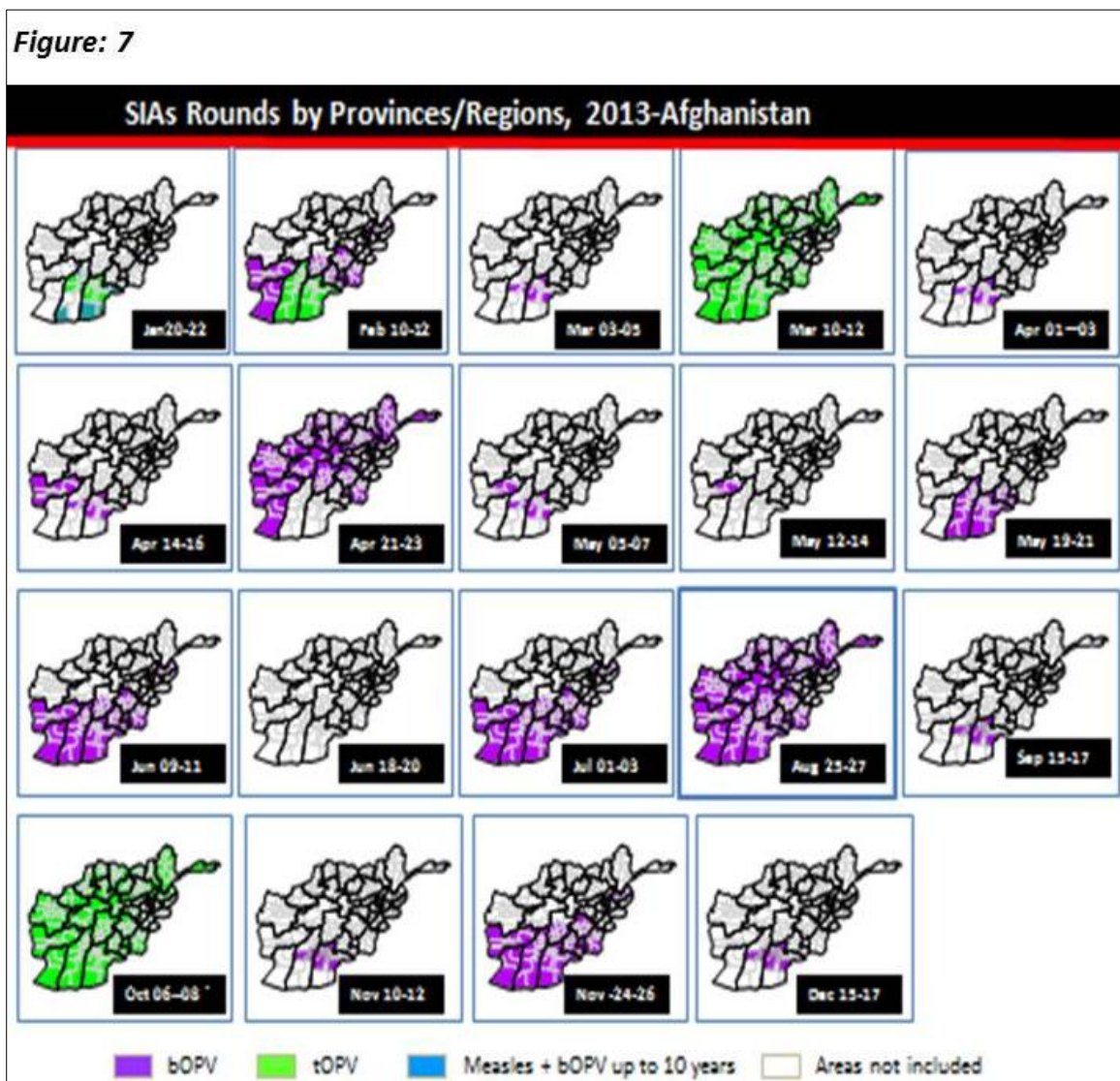
List of LPDs was revised in the beginning of 2013 by using a set of epidemiological criteria such as confirmed wild polio cases, zero-dose AFP, SIAs coverage, average level of awareness and reported inaccessibility. As a result 11 of main reservoir districts (7 in Kandahar and 4 in Helmand) were labelled as first priority LPDs (Table 2) with a total target of almost 670,000 children while 20 districts were in the second priority (8 in the South, 5 in the East, 4 in the South East and 3 in the West) with total target of 451,000. In June 2013 the list of LPDs was revised as per the emerging epidemiological trends to take into account new developments, particularly the outbreak in areas of Pakistan which borders Eastern Region. As a result the number of LPDs in first priority increased from 11 to 30 with breakdown of 9 in the Southern, 21 in the Eastern Regions (Table 2) with a total target population of 898,000 children of less than 5 years.

- An aggressive timetable of vaccination campaigns were scheduled and conducted in the LPDs. The Southern Region LPDs carried out a total of 19 rounds of vaccination campaigns while there were 14 in the Eastern Region LPDs. The choice of vaccine was bOPV but also tOPV was used in selected rounds. The campaigns included 4 rounds of NIDs, 4 rounds of SNIDs and the rest were several passages of SIADs and case response campaigns.
- Permanent Polio Team Strategy (PPTs) covers 70% target of 11 LPDs. According to the assessment carried out in October 2013, almost 89% children received at least one dose, 81% two doses and 56% received three OPV doses. More than 30,000 children (7%) received OPV for the first time.
- Transit Teams at entry and exit points of the difficult districts in Kandahar, Helmand vaccinating almost 43000 children per month. Similar teams are established for security affected districts of Kunar vaccinating almost 4000 children every month.
- In each of the low performing districts in Southern region, District EPI Management Teams (DEMTs) are constituted as part of structural and functional reforms to improve and strengthen SIAs management and service delivery at district and sub-district levels.

- In order to enhance the capacity of provincial and district mid-level SIAs manager formal 5-day training sessions were conducted in the Sothern and Eastern Regions.
- An accountability framework, with tasks to be performed and key monitoring indicators for all relevant personnel was developed is being used but need to be more systematized.
- Special emphasis was given to strengthen service delivery in LPDs and district by district micro plans were revised and updated for most of the clusters in Southern region where previous ratio of District Coordinator to Supervisor has been changed from 1:8 to 1:4. The ratio of Supervisor to Teams has also been adjusted. Also an exercise took place in December 2013 in selected clusters of Nangarhar province in the Eastern Region The exercise is expected to be completed in early 2014 in all LPDs of the Eastern Region.
- Communication has shifted focus from raising awareness to community demand and ownership through community elders, mullahs, teachers in the selected LPDs (details are given in the Communication Section).
- The vaccination coverage in LPDs has shown gradual improvement in most of the districts and achieved coverage of above 80%, particularly in the second half of 2013. However, Shahwalikot, Khakrez, Panjwai districts in Kandahar while Marwara, Watapur, Chapadara and Sarkani districts of Kunar province, which reported most of the cases in 2013, did not show any improvement and continue to have sub-optimal coverage (*Table 2*).

| PROVINCE | New Doode | DISTRICT | LPD Priority jan- april 2013 | LPD Priority > april 2013* | YEAR 2013 | | | | | | | | | | | | | | | |
|-----------|-----------|----------------------|------------------------------|----------------------------|---------------|-----------|---------------------|------------------|-------------------------------|-----------------|-----------------|-------------|---------------|----------------|---------------|----------------|----------------|--------------|-----------------|------|
| | | | | | case resp Jan | SNIDs feb | case resp 3-5 march | NIDs 10-12 march | LPD 31-2 april | LPD 14-16 april | NID 21-23 april | LPD 5-7 may | LPD 19-21 may | SNIDs 9-11 jun | SNIDs 1-3 jul | NIDs 25-27 Aug | LPD 15-17 Sept | NIDs 6-8 oct | SNIDs 24-26 Nov | |
| Kandahar | 3301 | Kandahar/Dand | 1 | 1 | 84.6 | 91.9 | 95.1 | 92.2 | 95.2 | 94.2 | not planned | 84.5 | 94.5 | 90.4 | 89.3 | 91.7 | 91.1 | 90.8 | 93.6 | |
| Kandahar | 3306 | SHAH WALI KOT | 1 | 1 | 83.0 | no access | 80.2 | 83.3 | 72.2 | 80.7 | not planned | 88.9 | 72.6 | 71.3 | 83.8 | 73.7 | 89.7 | 84.3 | 88.9 | |
| Kandahar | 3302 | ARGHANDAB | 1 | 2 | 88.5 | 94.3 | 99.7 | 86.4 | 92.8 | 90.4 | not planned | 88.3 | 84.8 | 91.1 | 76.4 | 79.8 | 93.4 | 88.1 | 87.7 | |
| Kandahar | 3307 | KHAKREZ | 1 | 2 | no access | no access | no access | 26.7 | 37.8 | 87.1 | not planned | 78.4 | 81.7 | 83.0 | 92.5 | 91.0 | 90.7 | 79.6 | 49.9 | |
| Kandahar | 3308 | MAIWAND | 1 | 1 | 78.3 | 88.4 | 83.3 | 88.3 | 89.1 | 85.7 | not planned | 87.9 | 88.3 | 37.5 | 90.7 | 93.6 | 92.3 | 70.2 | 69.6 | |
| Kandahar | 3304 | PANJWAI | 1 | 1 | 84.0 | 88.7 | 95.3 | 46.0 | No PCA | 41.0 | not planned | 0.0 | 0.0 | 59.1 | 67.0 | 88.2 | 88.2 | 88.0 | 90.1 | |
| Kandahar | 3311 | SPIN BOLDAK | 1 | 1 | 87.5 | 91.6 | 91.8 | 91.6 | 95.7 | 94.9 | not planned | 90.5 | 91.1 | 91.8 | 93.5 | 92.1 | 89.9 | 95.6 | 93.0 | |
| Helmand | 3201 | BUST (LashKar Gah) | 1 | 1 | 87.1 | 90.2 | 88.1 | 77.3 | 91.2 | 91.8 | not planned | 96.7 | 91.4 | 94.0 | 83.3 | 90.6 | 91.8 | 91.6 | 93.8 | |
| Helmand | 3202 | NAHR-E SARAJ | 1 | 1 | 81.3 | 85.7 | 84.4 | 88.2 | 88.4 | 88.0 | not planned | 94.3 | 82.9 | 87.9 | 88.4 | 88.9 | 91.1 | 90.1 | 96.3 | |
| Helmand | 3203 | NAD-E ALI | 1 | 1 | 81.6 | 84.2 | 81.7 | 83.3 | 84.1 | 89.2 | not planned | 96.1 | 88.4 | 86.9 | 91.0 | 88.9 | 91.6 | 90.0 | 92.1 | |
| Helmand | 3205 | SARBAN QALA (Sangir) | 1 | 1 | 81.8 RC | 94.7 | 96.1 | 94.4 | 94.1 | 93.2 | not planned | 89.9 | 93.1 | 94.9 | 93.5 | 96.8 | 79.0 | 85.2 | 88.9 | |
| Kunar | 1301 | ASADABAD | 1 | 1 | 77.4 | 77.8 | not planned | 79.3 | not planned | not planned | not planned | 80.2 | not planned | 81.3 | 78.8 | 89.4 | 83.6 | 80.0 | 85.2 | 90.7 |
| Kunar | 1302 | Watapur | | 1 | | | | | Included in Asadabad district | | | | | | | 28.9 | 34.3 | 36.1 | 34.4 | 34.1 |
| Kunar | 1305 | MARAWARA | 2 | 1 | 83.3 | 83.8 | not planned | 87.2 | not planned | not planned | 89.3 | not planned | 81.0 | 80.8 | 87.6 | 80.3 | 89.4 | 84.3 | 88.8 | |
| Kunar | 1306 | Shigal Wa Shelan | | 1 | | | | | Included in Barakhor district | | | | | | | 96.1 | 97.2 | 96.1 | 97.4 | 95.8 |
| Kunar | 1311 | BAR KONAR | 2 | 1 | 89.1 | 90.2 | not planned | 93.3 | not planned | not planned | 89.0 | not planned | 86.2 | 91.6 | 82.2 | 100.0 | 96.5 | 89.2 | 94.3 | |
| Kunar | 1312 | Ghazlabad | | 1 | | | | | Included in Barakhor district | | | | | | | 97.1 | 97.1 | 87.3 | 96.0 | 96.3 |
| Kunar | 1315 | NARAI | 2 | 1 | 84.1 | 91.0 | not planned | 82.2 | not planned | not planned | 97.6 | not planned | 87.8 | 88.5 | 97.3 | 98.4 | 98.1 | 97.6 | 98.7 | |
| Kunar | 1310 | DANGAM | 1 | 1 | 97.9 | 99.6 | not planned | 97.3 | not planned | not planned | 99.4 | not planned | 85.4 | 95.0 | 100.0 | 100.0 | 99.6 | 85.4 | 96.0 | |
| Kunar | 1313 | CHAPADARA | 1 | 1 | no access | no access | not planned | no access | not planned | not planned | not planned | No PCA | not planned | No PCA | No PCA | No PCA | No PCA | No PCA | No PCA | |
| Kunar | 1307 | PECH | 1 | 1 | 99.6 | 97.4 | not planned | 100.0 | not planned | not planned | 99.1 | not planned | 99.2 | 99.1 | 96.0 | 98.3 | 99.2 | 98.2 | 96.3 | |
| Kunar | 1303 | NARANG | 1 | 1 | 97.1 | 100.0 | not planned | 84.9 | not planned | not planned | 88.2 | not planned | 100.0 | 100.0 | 99.4 | 98.9 | 88.2 | 95.6 | 99.7 | |
| Kunar | 1308 | CHAWKAY | 1 | 1 | 100.0 | 91.3 | not planned | 93.0 | not planned | not planned | 92.7 | not planned | 100.0 | 98.9 | 99.7 | 99.7 | 100.0 | 99.6 | 99.3 | |
| Kunar | 1314 | NURGAL | 1 | 1 | 88.3 | 100.0 | not planned | 87.8 | not planned | not planned | 96.1 | not planned | 96.9 | 97.8 | 98.4 | 97.0 | 96.9 | 99.1 | 99.7 | |
| Kunar | 1309 | KHASKUNAR | 1 | 1 | 100.0 | 98.8 | not planned | 99.3 | not planned | not planned | 93.0 | not planned | 94.0 | 91.7 | 96.1 | 96.1 | 96.1 | 100.0 | 98.8 | |
| Kunar | 1304 | SIRKANAY | 1 | 1 | not planned | 82.0 | not planned | 83.2 | not planned | not planned | 77.4 | not planned | 78.0 | 73.9 | 77.9 | 79.3 | 80.3 | 77.7 | 78.3 | |
| Nangarhar | 617 | ACHIN | 2 | 1 | 98.6 | 98.7 | 99.5 | 98.1 | not planned | not planned | 97.8 | not planned | 98.3 | 97.8 | 98.9 | 98.8 | 98.0 | 96.2 | 96.8 | |
| Nangarhar | 621 | NAZYAN | 1 | 1 | 98.8 | 98.4 | 98.8 | 94.4 | not planned | not planned | 97.1 | not planned | 96.1 | 97.1 | 99.9 | 98.4 | 98.0 | 97.1 | 96.0 | |
| Nangarhar | 622 | DOORBABA | 1 | 1 | 98.0 | 98.0 | 98.0 | 97.1 | not planned | not planned | 100.0 | not planned | 100.0 | 97.8 | 98.6 | 87.8 | 97.0 | 98.6 | 97.8 | |
| Nangarhar | 619 | MOMANDRA | 1 | 1 | 96.9 | 98.4 | 98.5 | 98.7 | not planned | not planned | 97.6 | not planned | 97.3 | 99.0 | 99.1 | 97.7 | 96.0 | 92.8 | 93.2 | |
| Nangarhar | 620 | LALPUR | 2 | 1 | 96.7 | 98.4 | 98.4 | 97.1 | not planned | not planned | 99.0 | not planned | 87.4 | 89.0 | 88.8 | 97.6 | 97.6 | 98.4 | 98.3 | |
| Nangarhar | 616 | GHUSTA | 1 | 1 | 100.0 | 98.8 | 98.3 | 99.6 | not planned | not planned | 99.0 | not planned | 97.9 | 99.6 | 91.3 | 95.1 | 96.0 | 94.7 | 96.7 | |

<80% 80 to 85% 86 to 89% >=90%



3.3 Reducing Missed Children:

Based on the post campaign assessment data for the last NIDs of 2013 it is estimated that 6% (almost 474,000) children were missed all over the country. More than 55% of the all missed children were from Southern and Eastern regions of the country. There are two main reasons for children missed in these regions; **First** group is of 10-15% children who were not accessed due to insecurity and **secondly** 85-90% of those missed were in areas where teams had the access indicating issues of campaign quality. .

3.3.1 Increase access to all children in conflict/security affected areas

- Branding the program to promote and maintain program neutrality is one of the strategies which program adapted during 2013 in South and Eastern regions. Program also coordinated and negotiated with various parties of conflict to ensuring safety and security of field staff
- Engaging ICRC in access negotiation at national and provincial levels through regular meetings with Anti Government Elements (AGEs). Regular meetings were held at ICRC Kandahar before each campaign. However, the ICRC influence in Kunar province remains limited.
- Local level access negotiation through local access negotiators from within the communities has also been important component for staff safety and improving access
- Systematic data collection, mapping and listing the reasons for inaccessibility is used to monitor the progress.
- Proportion of inaccessible children has declined in Kandahar, Helmand and LPDs of Southern region significantly but is on rise in Kunar province (Figure 7).

These efforts has been very effective in southern region in reducing the number of inaccessible children where inaccessible children reduced from 52,377 in February 2013 to 10,579 in October 2013, an 80% reduction. However the achievement remained fragile and varied from one round to another. Meanwhile these strategies are yet to make any impact in Kunar and parts of Nuristan province of Eastern region, where number of different groups are operating and are very hardline opinion on allowing the permission for polio vaccination. On average 20,000 children persistently remain inaccessible in Kunar province.

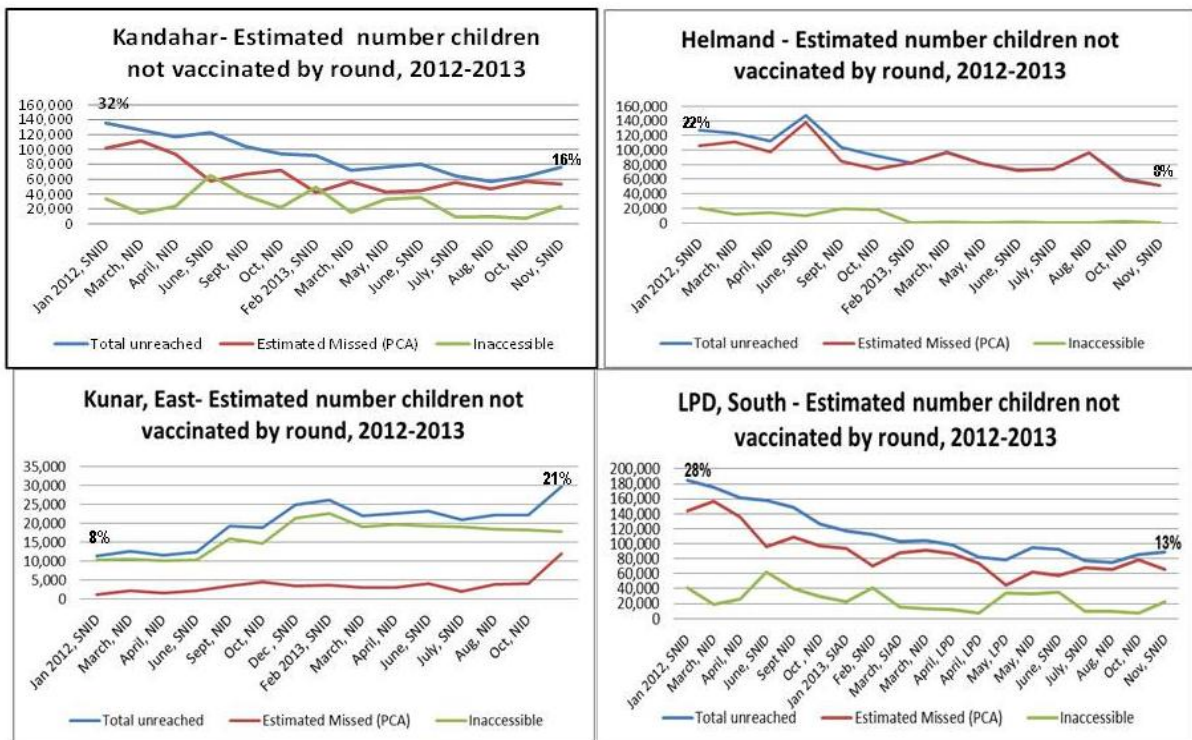
3.3.2 Reduce missed children by improving campaign quality:

Analysis of children missed for specific reasons in a sample of 14400 children who were missed in October NIDs of 2013 shows that almost 60% children were missed because they were not available at the time of teams visit, 25% were missed due to open or silent refusals (newborn, sleep, sick) while 15% were missed because team did not visit their house. Program made number of efforts during 2013 to improve the campaign quality, particularly in Southern and Eastern regions. Children not vaccinated because they were absent or new-born/sleeping indicates towards another challenge of community demand.

- Country-wide efforts were made to update micro-plans, focus on selection of volunteers who are resident of the same areas and lesson plans in the training of volunteer emphasized to ask and vaccinate new-born, sleep and sick children.
- Training on Inter-personal communication (IPC) was conducted and also integrated in the lesson plans to focus on missed children.
- Intense efforts were made in Kandahar and Helmand to analyse district specific issues and micro plans were reviewed cluster by cluster in most of the LPDs. The same exercise is started in Nangarhar province in December 2013 but yet to complete. Revisions of micro-plans aim at ensuring that all the areas are included in the micro plans which will reduce the number of children missed due to no team visit.
- A **National Rapid Response Team (NRRT)** was established at the beginning of the year to conduct detailed case investigation as and when a WPV case is confirmed. After each and every case NRRT visited the field from where the case was reported and undertook detailed epidemiological investigation and also used the global questionnaire for the investigation of missed children.
- In order vaccinate children who are out of house, vaccination teams were deployed to the market places, bus stations, check points and shrines to vaccinate the in-transit children during the campaigns and in between. Analysis of various forms was taken into account while deciding on the locations of the transit teams to be established. In the Southern Region, an average number of 18,147 children were vaccinated per month. In 4 districts of Kandahar 15 teams at 7 vaccination posts and in 2 districts of Helmand 8 teams at 2 vaccination posts have performed vaccinations. Average vaccinated of children per month in the Eastern Region was 4,999 with Kunar province having the highest number of 7 teams at 8 vaccination posts in 4 districts followed by Nangarhar with 2 teams at 2 posts in 1 district and Nuristan with 1 team at 1 post in 1 district.
- **Revisit Strategy:** A new strategy was adapted in southern region by specifying 4th day of campaign to revisit the assigned areas to vaccinate missed children during the three days of campaign, particularly the “not available” children. Simultaneously the incentive of volunteers was increased by US\$1 per day. Training sessions were adapted to include revisit, separate recording of not available children and reporting for the re-visits. Although recoding of absent children still remains low and is up to 3% of the target population but percent of recovered children on 4th days of the campaign increased from 75% to 97%.

- **Special vaccination campaign for Nomads** was conducted in South-East to ensure vaccination of Nomads, most of whom settles in various parts of this region during month of April-August.
- PCA form was revised which included reasons for missed children in more details, including the children not at home during the visits of teams. Analysis of PCA and findings of the Special Investigation for missed children were taken into account while planning for the subsequent campaigns
- The open refusals have never been an issue of major concern in proportional terms within the overall missed children. The overall open refusals have always been around 2-3%. In line with global indicators, Afghanistan PEI has re-categorized the refusals to include the hidden ones such as sick, sleep and new born. The refusals combined make approximately 20-25% of all missed children. In order to reduce number of refusals the work of ICN social mobilizers was further refined with three-days of house to house visit prior to each campaign. The social mobilizers mapped the eligible children in each household through dot marking (Details in Section on Communication). As a result of all these efforts the overall proportion of missed children in the country reduced from 8% in 2012 to 6% in October 2013. This reduction was more significant in Kandahar from 32% to 16%, and in Helmand it reduced from 22% to 8% while analysis of LPDs shows reduction from 28% to 13%. However, the same trend is not seen in Kunar province where overall missed children increased from 8% to 21% indicating that these strategies are not making effect in Kunar (Fig 8).

Figure 8: Estimated children missed by each campaign 2012-13; Trend in three high-risk provinces and LPDs of Southern region of Afghanistan



3.3.3 Ensure Campaign Quality by strengthening monitoring:

During 2013, program implemented 4 NIDs, 4 SNIDs, and 11 additional vaccination rounds in LPDs using short interval additional dose strategy (SIAD). Two rounds small scale rounds were held in Kabul to respond to the solitary case reported in the last quarter of 2013. Bivalent oral polio vaccine (bOPV) was used in all the rounds except the two NIDs (April and October rounds) when trivalent OPV (tOPV) was used. Sub-NIDs were conducted in Southern, South-Eastern, Eastern regions and Farah province of Western region. NIDs were held during the months of March, April, August and October. SNIDs implemented during months of February, June July and November 2013.

In order to assess the campaign quality, estimate coverage and identify gaps to take appropriate measures, country is implementing post campaign assessment (PCA) household coverage survey using Independent monitors. In LPDS, PCA is conducted in 100% of the clusters while in rest of the areas PCA is conducted in 50% of the clusters. In selected districts of all the provinces, out of house finger mark survey is conducted on the 4th day of campaign at public places like market, bazars, bus station, public hospitals and parks. This survey mainly aims at identifying areas where teams have not visited but also give estimated coverage by that district. In 2013, Afghanistan also introduced the Lot Quality Assurance Sampling (LQAS); a technique is used by other countries as well and in the method is select Lots (district or sub-districts) randomly and 60 children are sampled randomly from each of the Lot.

Post Campaign Assessment Survey (PCA) and Out of house Finger mark survey

- In 2013 PCA was contracted out to Kandahar University for the province of Kandahar and most parts of Helmand provinces for quality assurance and efficiency. This model has been replicated in Nangarhar province of the Eastern Region with the Nangarhar University following July SNIDs. Outsourcing of PCA to universities has been in slow pace due to unavailability of capacity and in some certain locations due to reluctance to outsourcing. Regular follow up with the Universities to ensure proper selection of monitor, geographical areas and providing them feedback is an area which needs improvement, particularly in Nangarhar.
- In other regions the PCA continued to be conducted through independent assessors of who have not involved in any stage of the campaigns.
- PCA results (Figure 5) of last SIAs shows that the Central, North, North-East and South-East has maintained quality of campaign in most of the rounds. Southern region is also showing an improving trend with lesser % of districts of having coverage <80% and also Western

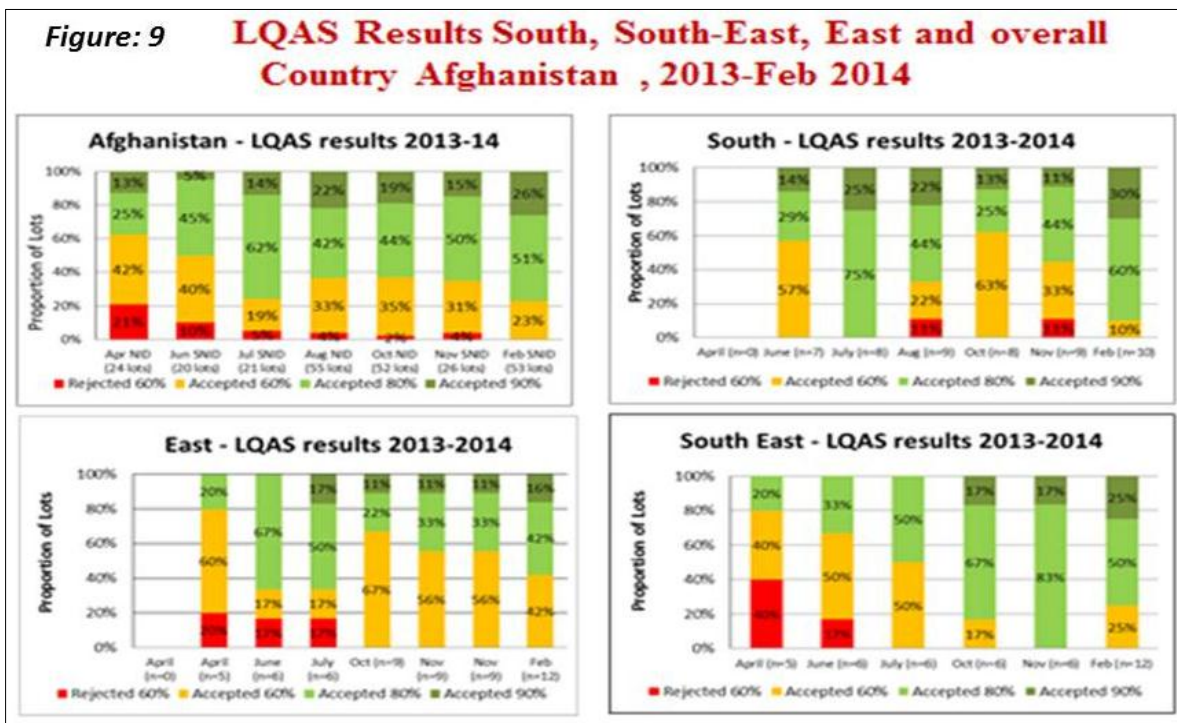
region shows improvement but there is evidence of decline in quality of campaign in Eastern Region.

Lot Quality Assurance Sampling (LQAS):

Afghanistan PEI introduced LQAS methodology in April 2013. LQAS technique is used to determine whether a group of individuals has achieved a standard of performance by looking at sample of the group (LOT). LQAS helps to evaluate performance like OPV coverage and judge whether that performance is acceptable or not. This technique allows classification of Lots (districts or sub-districts) using a decision value (number of unvaccinated in a sample) based on the required vaccination coverage (upper threshold) and a minimum acceptable coverage (lower threshold). LQAS also based on providing real time data and a system is developed in which each surveyor uses specially programmed mobile phones linked to a main server to transmit the data immediately from the field.

- In April 2013, total of 24 LOTs were sampled which gradually increased to 52 LOTs in October NIDs.
- Results of LQAS in last SIAs shows an overall and gradual decline in the proportion of LOTs which at rejected at 80% (lesser LOTs having coverage between 80%-60%). More or less same trend is observed for South and South-East. However, in the Eastern Region the LOTs rejected at 80% varies from 42% to 56% indicating the problem in the quality of campaigns.

Implementing LQAS in Afghanistan has two major challenges; some of the randomly selected areas were seriously affected by the insecurity and have to select alternate areas in those circumstances. Secondly, in security compromised clusters of the LOTs there has been clear limitation of usage of mobile phones. Other than the security concerns in some locations no GSM coverage has been available (Fig 9)



Polio Control Rooms

- Polio Control Rooms (PCRs) have been established at National level and in the LPDs of the Southern Region. 7 Provincial and 19 District PCRs were established and become functional in 2013. Main objectives of PCRs were to assess the preparedness level before the campaign, sharing data and areas which require immediate intervention during the campaign and also report on the actions taken in the post campaign phase.
- PCRs staff received training and started computer based reporting forms for pre-/intra-/post-campaign monitoring and reporting.
- Despite efforts the PCRs have not become fully functional at the expected levels. This was caused by the bottlenecks during the selection of staff which adversely affected to recruit right staff in the right positions and duty stations. In addition the recruitment process has caused unnecessary delay in initiating the PCRs
- Also reporting of PCRs on preparedness levels and actions taken on post campaign phase remains below the desired levels.
- There is a need to carry out a review of PCRs to understand what went right and what wrong and take corrective actions.

4. Communication for increased community demand and ownership:

The Strategic Communication and Advocacy Plan of Action for PEI in Afghanistan 2012-13 guides the communication and social mobilization strategies in the country. The key communications interventions to ensure that high risk populations and the wider community is aware of the dangers of polio and how to prevent it are periodic mass communication campaigns and social mobilization at community and caregiver level to address the communication gaps from all aspects and using various mediums.

The polio communications programme in Afghanistan has steadily being considerably more robust and evidence-based, particularly in the South. The country has shown significant progress in media and Information, Education and Communications (IEC) by rolling out of the national mass media campaign 'Ending Polio is My Responsibility' and establishing a basic set of IEC materials. The campaign awareness in Afghanistan has risen to >90% in the past 18 months – a clear indication that the Media and IEC programme strategies are working.

Immunization Communication Network (ICN) was set up to provide social and community mobilization support to the polio eradication program in the polio endemic provinces and districts of Afghanistan. While the ICN continues to play its awareness creation role during the campaigns till eradication is achieved, there is the need to begin to shift gradually from the

campaign-focused ICN functions to a demand generation and stronger community engagement strategy in the communities of the Low Performing Districts (LPDs), whereby social and behavior changes get gradually introduced in a more systematic and organized way. National level strategy focus on increasing demand and ownership, reduce missed children due to refusals (using global definition for refusals) evidence based local level communication intervention planning. The new shift is also to promote communication on routine immunization and messaging on poor personal hygiene practices. The ICN can gradually begin to use packaged messages that will continue to have polio as major component, but will include routine immunization, hand washing with soap promotion and exclusive breastfeeding to kick-start a behavior change strategy. Important interventions carried out in 2013 include

- The immunization communication network (ICN) expanded to ensure social mobilizers are placed in all the clusters within the LPDs. Standard operating Procedures (SOPs) that included revised ToRs for all categories of ICN. By the end of 2013, almost 94% of the clusters in LPDs have social mobilizers.
- IPC training module was developed and rolled out starting from the Southern Region. Caregivers were informed about the importance of polio vaccination with special emphasis on vaccinating new born and children who are sick. For this purpose training flipbooks were extensively pre-tested and shared with the field functionaries to improve the quality of trainings. Also a training video was prepared.
- All IEC materials included specific message on the importance of vaccinating new borns. These messages were broadcasted through 13 TV Channels and 60 Radio channels before and during NIDs. Also community influencer networks, especially religious leaders were involved in relaying these messages.
- The ICN at provincial and district levels facilitated an average of 7 -10 advocacy meetings with district and provincial governors that contributed to improved coverage and successful implementation of NIDs and SNIDs in all provinces and priority provinces, and SIADs in LPDs during 2013
- Provincial Social Mobilization Groups (PSMGs) were established in all priority provinces (Khost, Paktia in the South East, Kunar in the East, Kandahar in the South, and Farah in the West). These held an average of 4-6 meetings with membership drawn from key line ministries (Religious Affairs, Women's Affairs, Education, Rural Development, Youth and Information)

- The ICN planned and implemented several events and activities to mobilize communities, especially caretakers to create awareness about the importance of OPV and the need to accept OPV for their children under-5 years each time it is offered. Some of the events and activities included Campaign launching by Governors, sports events, quiz competitions among students, polio rallies among schools (over 160,000 students, including an estimated 5,000 female students in SR and ERs), women rallies (e.g. rally for 200 members of women Shuras in Nangarhar)
- Capacity building was a major function of the ICN, especially IPC. Trainings and orientations were conducted for Vaccinators before all polio campaigns, Vaccination Teams Supervisors (over 1000 per campaign), Social Mobilizers (3631), Religious Leaders (over 1,800 in ER, SER and SR), Teachers (over 1,000 teachers in SR and ERs), 250 Midwives in Kunar, 110 doctors and midwives in SR
- Engagement of female ICN staff remains a huge challenge. Southern Region has made some efforts which have started paying off. There are 231 female SMs out of 2658 in 2013 compared to 70 in 2012 out of 1110. There are also 21 female Cluster Supervisors and 1 female DCO in in the Southern Region. Other regions have been encouraged to do more aggressive mobilization for female polio ICN personnel in 2014 using the available women forum and institutions. Female polio front-line workers hold the key to eradicating polio from Afghanistan. Able to speak woman to woman, they have a potential to convince mothers to vaccinate their children. They constitute 12% of Afghanistan's campaign workers. There is however a social and cultural dilemma. On the one hand in conservative communities where polio persists, cultural norms don't allow for male vaccinators to enter into a household or communicate with women but perform at the doorstep, where female volunteers could play an important role in gaining access into the households. On the other hand in the same communities females are not allowed to work unless they are accompanied by a close relative or not permitted to work at all which hamper a huge potential that they could play in polio eradication efforts. Female participation in the field work albeit very essential has not been at the desired levels and remained sub-optimal mainly due to norms and cultural barriers and stereotypes which program ought to seek for extra advocacy to overcome.
- The ICN collects all polio communication data at cluster, district and provincial levels; however data entry and analysis have not been possible due to lack of personnel at this level. Therefore in order to fill the gap data collection tools have been developed for the ICN and PCOs and DCOs were received training on such tools. SR has already been trained. The future plan is that all communication data related to ICN functions as well as pre-, intra- and post-campaign data related to communication will be collected in the standard formats effective first quarter of 2014.

- DCOs facilitated over 3500 Mosque announcements in SR, SER and WR mainly on Fridays before the campaigns
- Communication micro plans though an important and essential element of overall SIAs micro plans have not been adequately developed as supposed to be
- As a result of all these efforts, the awareness level has significantly increased in the LPDs (Fig 10). However the analysis of reasons for children being missed yet to show any significant impact on the proportion of refusals, particularly in South and South-East (Fig 11) and also the correlation between the awareness and coverage rates is not consistent.
- The preparatory work for Harvard Polling has been initiated for regular and timely data collection on KAP and will be conducted in 2014

Figure 10: Campaign awareness levels in 32 LPDs in the last 4 campaigns

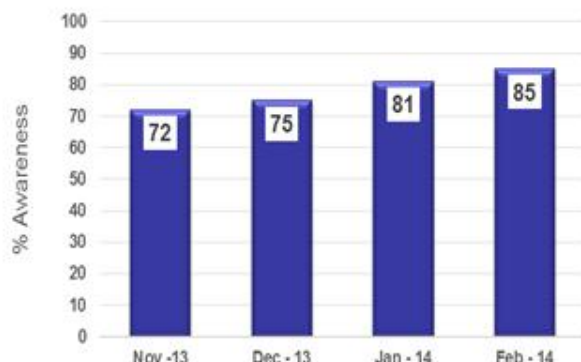
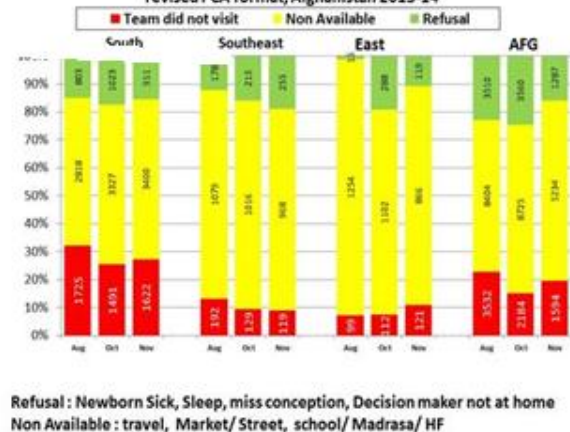


Figure 11: Reason for children being missed by regions based FM with revised PCA format, Afghanistan 2013-14



5. Management and Accountability:

- One of the key interventions piloted in 2013 was **Direct Disbursement Mechanism (DDM)** with aim to ensure transparency and to avoid any delay in the disbursement of financial entitlements of SIAs service providers. New financial payment mechanisms have been put in place in seven pilot districts. The new mechanism by passes several layers by directly having the payments to the Cluster Supervisors through a bank transfer for the Supervisors and the volunteers that they supervise. Though some challenges were faced during the pilot experimenting of DDM, corrective measures were taken at the service provider as well at the

Zonal office levels. This method of payment reinforces the segregation of duty and improves the timeliness of the payment of field workers.

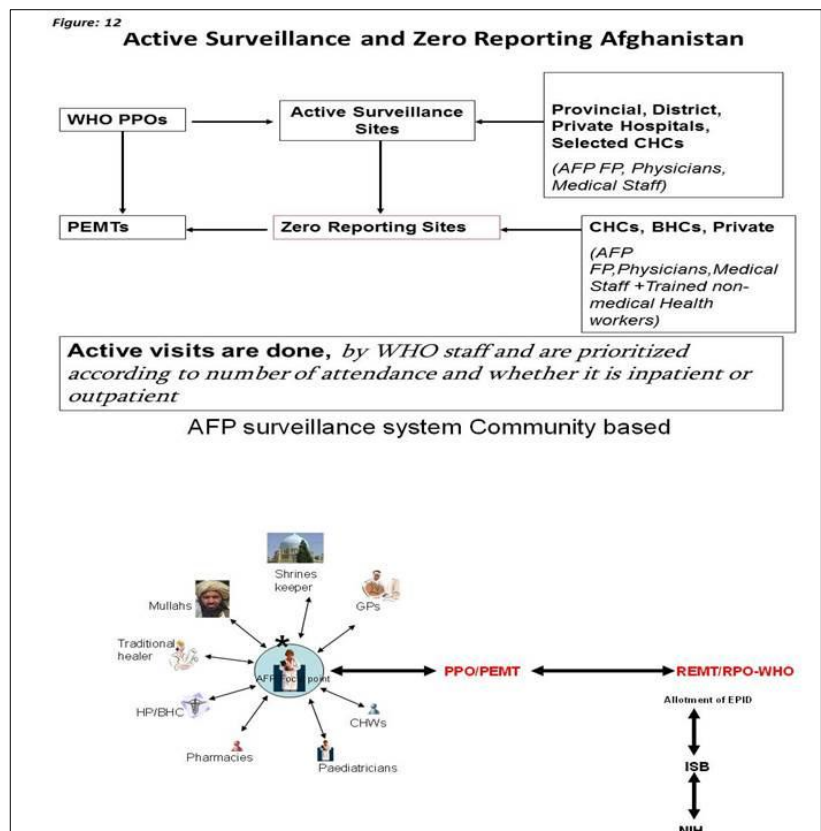
- The existing management capacities of polio field staff have been strengthened through a 5 days Management and Accountabilities training in order to enhance the service delivery. In the Southern Region Provincial and District level polio field workers have received training at the beginning of 2013. In the Eastern Region the same training has been conducted in July 2013 followed by the South Eastern Region in September. A total of 131 staff from the Ministry of Public Health, UNICEF, WHO and NGOs with a breakdown of 63 in the Southern, 33 in the Eastern, 23 in the South Eastern Regions and 12 in Farah province of the Western Region have received training.
- DEMTs have been strengthened in the Southern Region, while new DEMTs have been established in the East to improve structural and functional reforms and to enhance the operations of immunization campaigns. The DEMTs in the East however have been different in terms of structure by just tapping into existing polio staff such as District Coordinators, DPOs and DCOs.
- Field visits were undertaken in the Southern Region in order to perform “assurance activity” such as spot checks (random selection of field teams) to ensure field workers payments is complete and made on time as well as the work is performed according to the micro plan.
- Training on cash disbursement, field staff responsibility, and ethics was provided in Kandahar for the Southern Region finance focal points and District coordinators from Kandahar and Helmand. A roll out of the training to the other regions is underway.
- Use of SMS data as additional assurance activity will be adopted to randomly check and verify whether the payments to the field workers are being processed in timely and transparent manner.
- An accountability framework, with tasks to be performed, key monitoring indicators of performance for all relevant personnel at all provincial and district levels, line supervisors, frequency of appraisal has been developed, however it has not been fully utilized for the intended purpose due to lack of commitment by provincial and district managers.
- Number of actions taken by each level towards campaign personnel due to lack of improvement in performance was partially done and remains a major challenge, particularly in some of the LPDs in the Southern Region to a larger extent and to a lesser in the East.

- A Polio info digital platform that provided data and information on several polio program indicators with facts, figures, maps, and graphics by regional, provincial, district breakdowns, individually or in groups has become fully available in the 2nd half of the year.

6. Maintain Sensitive AFP Surveillance System:

Health care services in Afghanistan are delivered through public and private sectors. Most of the health care services in public sector are provided by NGOs, in accordance to Basic Package of Health Services (BPHS), through Provincial hospitals, Comprehensive Health Centres (CHC) and Basic Health Centres (BHC). Private medical practitioners, Quacks, Faith healers and Shrine keepers are the main service provider in private sector.

AFP surveillance network includes most of the main health care providers and is spread all over the country. Besides this, network also includes community based Reporting Volunteers including pharmacies, teachers, Mullahs and community notables (*Fig 12*). Each district have at least one AFP surveillance Focal Point (FP), who is usually the in-charge of Health facility or a paediatrician and is responsible for case notification, investigation, facilitating specimen collection and shipment process and submission of zero reports. AFP cases detected by health facilities, private practitioners or community based reporting volunteers (pharmacies, faith healers etc.) are referred to concerned focal point in their district. Tertiary care hospitals and Provincial Hospitals usually have more than one focal point. Focal points are also responsible for timely notification of AFP cases to Provincial EPI Team including WHO PPO, who carries out the field visit in the area of residence of reported case for detailed investigation and to ensure that all steps of investigation are carried out by the focal points



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6.1 Characteristics of AFP Cases 2013:

Expected annual number of cases with symptoms of Acute Flaccid Paralysis (AFP) for Afghanistan was at least 380 @ of 2/100000 children below 15 years of age. Total of 1897 AFP cases are reported in 2013 compared to 1,829 AFP cases reported during 2012. Out of total 1,897 AFP cases, there were 14 confirmed, 4 compatibles, 4 were labelled as VDPV2 (3 cVDPV2 and one iVDPV) while 1,875 are discarded as non-polio. The characteristics of AFP cases show that all age groups were reported with range of 1-179 months. Comparison of median age for confirmed cases with non-polio AFP cases shows that the confirm cases were significantly younger with median age of 18 months than the non-polio with 36 months and received considerably lower number of doses (*Median Doses 4*) compared to non-polio AFP cases (*Median Dose 13*)

Analysis by gender reflects that both male and female AFP cases were reported with predominance of male cases (56%) among the non-Polio AFP cases but among the confirmed cases there is equal proportion of male and female (M:F is 50%). Monthly distribution of AFP cases shows regular and more or less uniform reporting with slight predominance in the first quarter of 2013.

Distribution of AFP Cases by reporting source shows that 52% of the cases reported by Paediatrician or Medical Doctor or a nurse indicating that these cases are reported from Hospitals or Health Facilities. Almost 18% are reported from Private Practitioners while 20% of cases reported from the Community-based network of Mullah, Shrine Keeper, Pharmacist and Community Health Workers/Volunteers. Also 10% were reported from other sources like vaccinators, NIDs Volunteers etc.

There were also 25 cases of AFP reported from the Nomads. Most of the Nomads AFP cases reported from Southern, Western, Eastern and South-Eastern Regions. This indicates that the surveillance network is also capturing cases from the various sub-groups of underserved population.

6.2 Environmental Surveillance:

Afghanistan has started environmental surveillance in the second half of 2013. As an initial step Kandahar city of the Southern Region was selected and 3 sites were identified to collect sewage samples. Laboratory results of the 10 samples collected between September and December 2013 from the three different sites shows that no wild virus was isolated so far. As such Kandahar city did not report any wild polio cases in 2013. Although program planned a second phase to roll out the environmental sampling to Helmand of the Southern and Nangarhar of the Eastern Region in the last quarter of 2013, but is delayed and will start in the first quarter of 2014.

6.3 AFP Surveillance Indicators:

Analysis of AFP surveillance indicators at national and regional levels shows the system is achieving the desired level of targets for Non Polio AFP rate, 9 per 100,000 children below 15 years of age and percent of adequate specimens 93% during the year 2013 (*Table 3*). Percent of specimens with Enterovirus (EV) is well above the required level, 21% at country level with above 10% in all regions. Also Sabin like (SL) was isolated from at least 5% of specimens in the country with lowest 3% from Central and Western region and highest 10% from Southern region. Both these indicators show that the technique and process of stool specimen collection and shipment is overall satisfactory.

Overall early case detection rate (Cases detected within 7 days of onset of paralysis) has maintained to 85% in 2013. All regions maintained above 80% cases reported within 7 days of onset except south region with 74% where it was 70% in 2012. This indicates the integrity of community based referral system in most part of the country.

6.4 Managing AFP Surveillance in Conflict affected areas:

Program has undertaken additional steps to manage AFP surveillance in difficult and security affected areas, particularly in Southern, Eastern and South-Eastern regions. At least one District Polio Officer (DPOs) is recruited in all the conflict affected districts in South. Also DPOs are placed in key districts of Kunar, Nangarhar and Nuristan. Training of Newly recruited DPOs and DEMTs is completed on AFP surveillance to visit reporting sites and specimen collection and Transportation.

Table 3: AFP Surveillance Indicators 2013 by Region; Afghanistan

| Regions | Exp @2 | Reported AFP Cases, 2013 | Non Polio AFP Rate | 5 stool ADPC % | Detection within 7 Days | Male:Female | EV% | SL% |
|-----------------|------------|--------------------------|--------------------|----------------|-------------------------|-----------------|-----------|----------|
| Badakhshan | 11 | 11 | 9 | 95 | 81 | 33/29 | 21 | 6 |
| Central | 87 | 79 | 8 | 96 | 89 | 193/153 | 17 | 3 |
| Eastern | 38 | 40 | 10 | 93 | 85 | 95/81 | 23 | 7 |
| North eastern | 43 | 55 | 12 | 96 | 89 | 149/103 | 17 | 4 |
| Northern | 47 | 49 | 10 | 92 | 80 | 156/123 | 23 | 3 |
| South eastern | 41 | 39 | 10 | 94 | 92 | 64/55 | 21 | 8 |
| Southern | 66 | 54 | 7 | 83 | 74 | 195/142 | 24 | 10 |
| Western | 51 | 59 | 11 | 97 | 91 | 179/147 | 19 | 3 |
| National | 384 | 386 | 9 | 93 | 85 | 1064/833 | 21 | 5 |

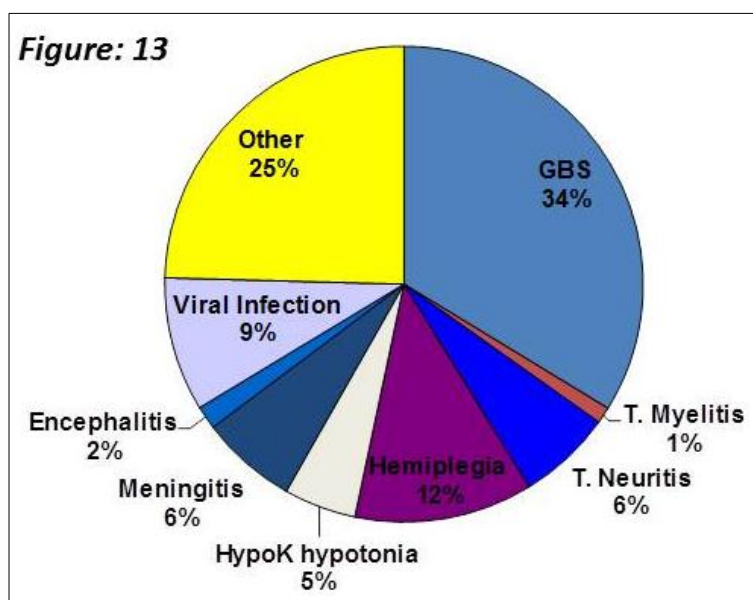
Additionally, the PEI also provides transportation cost to bring the AFP case to a nearby health facility for investigation and specimen collection.

The network of reporting sites and volunteers in these selected districts is revised and expanded. Also training sessions were conducted to focus on search for AFP cases during house to house campaign

As result of these efforts almost 51% of all the AFP cases are reported from the LPDs and most of the LPDs maintained non-polio AFP rate of above 2/100000 children. However in district Shahwalikot, Panjwai, Maiwand and Sangin the stool adequacy rate remains below 80%. In the Eastern Region, all of the LPDs have reported more than expected levels of non-polio AFP. The adequacy either maintained the same levels of 2012 or slightly decreased in some LPDs. Watapur from where 4 wild polio cases were reported in 2013 there were 6 non-polio AFP cases were reported with 91% adequacy. Khas Kunar has the worst adequacy with 67% while there was a 50% reduction in the number of non-polio AFP cases compared to 2012 from 4 to 2.

6.5 Diagnosis of AFP cases

Three most common diagnoses of non-Polio AFP cases during 2013 were: GBS 34%, Traumatic and Transverse Myelitis together constitute 7%, Hemiplegia 12%. Almost 8% had diagnosis of Meningitis/Encephalitis. There were 25% labelled as “other” which includes Cerebral Palsy, septic arthritis, injuries etc. Trend of diagnosis remained almost the same as of previous year when GBS was 35% and others were 25%. Proportion of good AFP cases during 2013 was 41% (GBS 34%, Traumatic neuritis 6% and Transverse myelitis 1%). Same proportion was observed in 2012 as well (*Fig 13*)



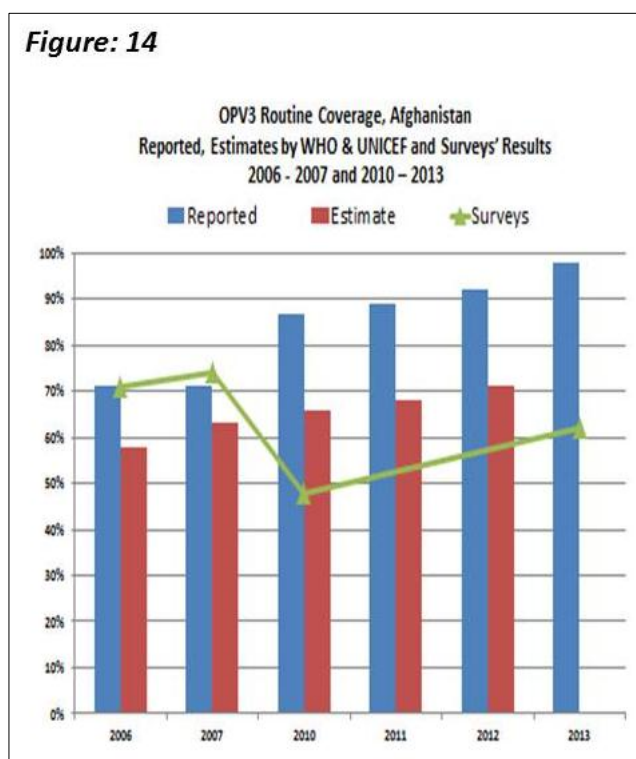
6.6 Gaps in the Surveillance system:

Genetic Analysis of confirmed Polio cases shows that 11 out of 14 cases were picked up by surveillance system timely but three cases (one each from Kabul, Nangarhar and Helmand) were not detected on time indicating gaps in the surveillance system. Similarly analysis of the inadequate cases reported in 2013 also shows that there were AFP cases that went to a health facility but was not reported or reported late. This underscores the need for further orientation of health facility staff including the growing private practitioners/hospitals.

In summary, AFP surveillance in Afghanistan is meeting all the global quality indicators. In September 2010 AFP surveillance was reviewed by an international mission. The mission carried out extensive field and desk reviews and was done in Eastern, Central, Northern, North-Eastern and Western Region including Farah Province. It concluded that overall AFP surveillance system is functioning well meeting the standards and it is very unlikely to miss poliovirus transmission in the reviewed areas.

7. Routine Immunization

- The reported coverage of OPV3 for 2013 is 98% while the recent EPI coverage survey (Unpublished) indicated it to be only 62%. In 2012 the reported coverage was 92% while the estimates by WHO/UNICEF placed it at a lower percentage of 71. This phenomenon of overestimation of the reported coverage as compared to survey results and estimations has been seen over the years (Fig 14)

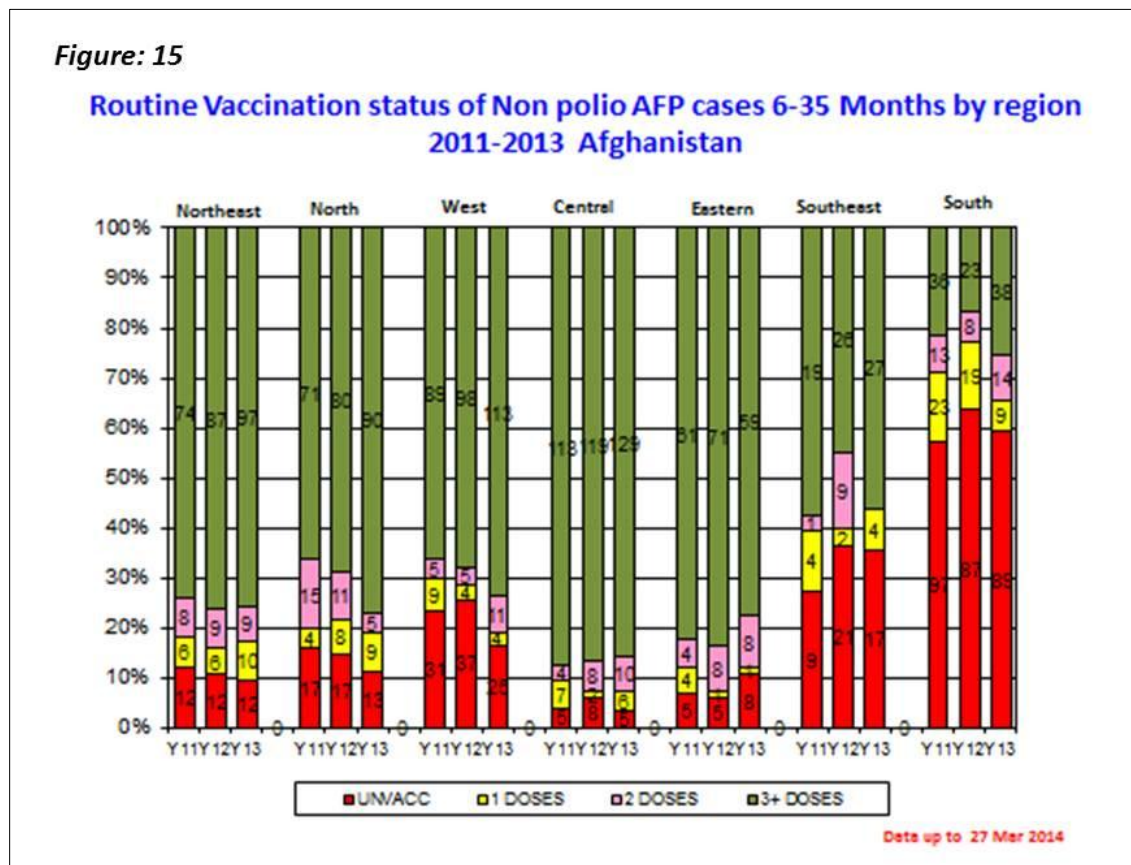


- There are multiple reasons which are contributing to the low immunization coverage. These include inaccessibility and limited capacity of the human resources especially female vaccinators, poor cold chain system, lack of poor logistic support to provide outreach and mobile services, poor data quality, and weak micro-planning, implementation and supervisory mechanism.
- The recent Coverage Evaluation (Report to be published) shows variation from province to province. Most of the provinces having coverage lower than 30% are in the Southern region.
- Despite the success stories of immunization campaigns in Afghanistan such as polio and measles, low routine immunization coverage and high immunization dropout rate

compounded with the lack of defaulter tracing continues to constrain the achievement of the overall EPI objectives in general and polio eradication in particular.

- None of the confirmed polio cases in 2013 has completed full course of routine immunization with OPV. Out of 14 WPV cases 12 was zero dose routine, 1 was 1 dose and only 1 was with 3 doses. Looking at the routine doses of confirmed polio cases one can easily attribute a strong correlation between routine doses and established virus transmission

Usage of AFP surveillance data to strengthen RI in low coverage areas has proven to be beneficial. The analysis of routine immunization status of Non polio AFP cases and comparison over a period of years shows that overall routine immunization is still afar from the required levels in all the regions. The percentage of non-polio AFP cases between 6-35 months who has received at least 3 doses of routine OPV remains below 80% in all regions and the worst is the Southern region with approximately 25% while zero dose routine (*Fig 15*)



- In line with Global Polio Eradication and E Game Strategic Plan, PEI Afghanistan has developed strategies to facilitate routine immunization activities through leveraging successful experiences obtained from polio activities. A strategic planning workshop was held with selected polio regional staff to discuss and identify the ways and means of

providing support to routine EPI. Polio program is aware that the core responsibility remains with the EPI program and by no means this support would and could lead to substitute but strengthen it through practical interventions.

- Amongst all planned activities only a few has been initiated in 2013, which included active surveillance visits that were used to monitor and provide regular feedback on RI fixed and outreach sessions. Even this was partially implemented by having the activity realize but not in a quantifiable way as the initial thinking was at least 30% of out-reach and fixed EPI sessions particularly in non-transmission zones to be monitored.
- Key polio field staff received training on outreach/pulse immunization strategies/activities as part of capacity building of PEI Staff on Routine EPI/RED.
- One of the challenges to improve Routine Immunization service delivery in quality and quantity terms .include proper micro planning and deployment of vaccinators in sufficient numbers are prerequisite for BPHS NGOs in order to ensure that 80% of all outreach vaccination activities are realized in the Low Performing Districts of the Southern, Eastern and South Eastern Regions.
- It is of utmost importance to tap into existing structures and build upon them instead of creating parallel mechanisms. Hence the PEI Communication network ought to be used to increase community demand and ownership for routine immunization.

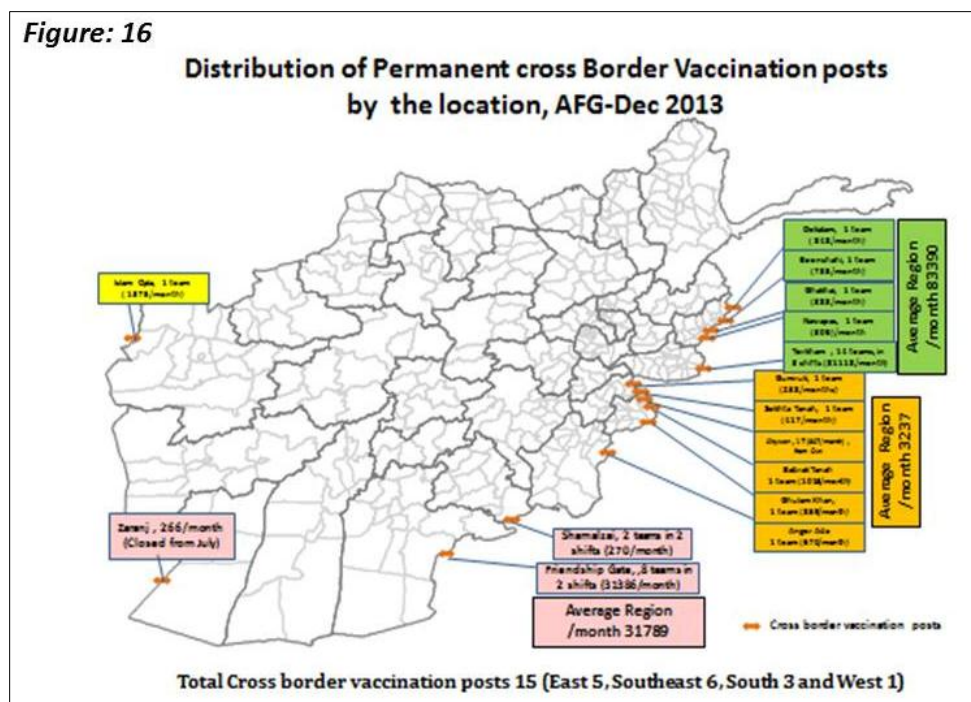
8. Vaccine & Cold Chain Management:

- An external review was conducted and findings were presented and the Vaccine Forecasting for the year-2014 were finalized
- Timely vaccine and non-vaccine supply distribution from National Vaccine Storage to regional offices have been ensured upon arrival of the vaccines in the country and assuring that the cold chain standards are being observed
- An external Vaccine and Cold Chain Management Review was conducted in end August 2013
- As follow up of the review, orientation trainings were conducted on Vaccine and Cold Chain management for District Coordinators, Cluster Supervisors of Jalalabad city ,Cold Chain Technicians and EPI supervisors of Nangarhar (East) and Paktya (South East) provinces
- Rapid OPV stock assessment was conducted after each campaign
- Some selected provinces have started to prepare and send Vaccine Utilization Report immediately after the campaign

- Focal Points for Vaccine Management were assigned at National Level as well as in two other regions
- Vaccine Utilization Report was not received on time from some provinces/regions due to remoteness and geography of some clusters/districts

9. Cross border coordination

- Despite plans and agreements only one meeting was realized in Islamabad during which several decisions were adopted.
- Cross border transit teams has continued to function in border gates around the clock on permanent basis. In 2013 a total number of 1,434,740 children of under-5 vaccinated by cross border teams in Afghanistan a 15% increase compared to previous year.
- The busiest cross border vaccination post was Torkham in which an average of 91,118 under-5 children vaccinated each month by 14 teams working in 3 shifts. The proportion of children vaccinated in the Eastern Region is 70% followed by 27% in the South and 3% in the South East. While the majority of children vaccinated by the Eastern Region cross border teams the change compared to previous year differs from this trend. There has almost no change in the Eastern Region while there has been 72% and 45% increase in the Southern and South Eastern Regions, respectively compared to previous year (2012).



- The schedule of SIAs in both countries was synchronized within range of one week interval.
- Regular cross border meetings were not held between bordering district teams to share the plans before each campaign albeit the consensus by both Afghanistan and Pakistan. According to the decision Peshawar and Jalalabad teams were supposed to meet at Torkham border while Spin Boldak and Killa Abdullah team were to hold their meetings at Friendship Gate.
- The same was valid for having two regional cross-border meetings one in Afghanistan/ Jalalabad city and the second one in Quetta of Pakistan again despite a decision.

10. Security Situation and Implications on PEI

The security situation during 2013 remains as one of the main challenges affecting access to children and quality of vaccination campaigns, particularly in the Low Performing Districts of Kunar, Nangarhar, Kandahar, Helmand, Uruzgan, and Farah provinces. Also in these areas there are pockets of children who are not accessed for vaccination persistently or access varies from round to round, due to various insecurity related reasons (Section 3.3.1). According to the UN Security Level System (SLS) one-quarters of all LPDs assessed to have “Extreme” threat levels while the rest three-quarters are “High” showing the risk to safety and security of the vaccination teams while providing house to house services in these areas. Khost province of South-East and Kunduz province of North-East regions also remain volatile with multiple security incidents in 2013.

One of the program strengths is that it has put in lot of efforts to promote and maintain neutrality of the program and has focused on local level access negotiations in conflict affected areas (Section 3.3.1). All these measures have improved the safety and security of vaccination teams and increased access, particularly in Southern region. However, despite all these efforts, there were incidents in which polio workers gave their lives or injured or abducted and badly tortured. Two of the polio vaccination personnel were killed in Uruzgan province; one was killed in Marja district of Helmand province and three workers passed away when land mine struck them in Sangin district of Helmand. Three of WHO’s Polio Officers and a District Coordinator was taken hostage and were severely beaten by unidentified gunmen in Maiwand district of Kandahar. Investigation of these incidents shows that none of them was intended target for working for Polio eradication, rather were incidents like Land mines, caught in cross firing or firing by Local Police or a collateral damage. The security situation in these areas is very complex and even number of provincial level staff of WHO, UNICEF and MoPH received threat calls from unknown sources.

PEI Afghanistan is delivering the vaccination services under very difficult and threatening circumstances in security affected areas. The insecurity adversely affects quality of campaign, monitoring and supervision of activities, particularly in districts of Kandahar, Helmand and Kunar. Also program management and accountability in these selected districts of Kunar and

Helmand remains challenging. Program has adapted number of approaches to cope and overcome this challenge (Section 3.2 and Section 3.3.1)

11. Future Plans in 2014

1. **SIAs:** Afghanistan plans to conduct 4 rounds of National Immunization Days using bOPV and tOPV alternatively in March, April, August and October in 2014. Four rounds of sub-national (SNIDs) will be implemented using bOPV in February, June, July and November. At least four additional vaccination rounds will be conducted in LPDs. Program plans to use mOPV1 in at least one of the rounds for LPDs.
2. **Case response** vaccination will be implemented as and when required using either mOPV1 or bOPV.
 - **NEAP:** NEAP will continue to pave the way for all PEI activities in Afghanistan. NEAP will be re-visited in June 2014 adjustments/amendments will be made if required according to the epidemiological developments and newly emerging trends. As such, any suggestions/recommendations that will be brought to the fore by IMB, mid-year TAG as well as by any other missions/external reviews/assessments will be taken into account while the NEAP is being reviewed.
 - Program plans to enhance focus in Eastern Region during 2014, which seems to be the part of country where risk of continuation of circulation remains high. District focused strategies, review of micro-plans, communication towards demand generation and placing additional HR for the technical support and their trainings will be important activities in 2014. High level advocacy meetings and focus group discussions are planned to address the issues in Kunar. The Eastern Region specific strategy will also be reviewed during June 2014.
 - Considering that there is improvement in Southern region but pockets of low immunization still persist. With low routine immunization coverage, the risk of poliovirus circulation persists. Additional vaccination rounds in LPDs, strengthen management and negotiation for access through ICRC will be continued
 - Independent AFP Surveillance review is planned in July 2014.
 - Environmental surveillance will be expanded to include Helmand, Nangarhar and Kabul.
 - Mechanism of Direct Disbursement (DDM) will be implemented to ensure transparency and timely disbursement of entitlements. The aim is to implement DDM in at least 40 key districts in the first half of 2014 with gradual expansion to other districts of the country.
 - In order to strengthen monitoring, LQAS will be expanded; contract out the monitoring to independent parties and roles of Polio Control Rooms will be reviewed.

- Strategic communication focus to ensure that caregivers and community leaders have trust in and demand public health services, particularly in inaccessible or security-compromised areas
- Frontline workers, especially in LPDs, are equipped with the IPC skills, support and motivation they need to vaccinate all children.
- Permanent cluster-based Social Mobilizer will be placed in LPDs, particularly in bordering districts to enhance community ownership and demand.
- To monitor impact of communication activities, periodic KAP surveys will be conducted with the support of Harvard University.
- National and Provincial cross-border meetings will be held with Pakistan for policy and enhance coordination at field level activities.
- In line with the endgame strategic plan, PEI network will be engaged to strengthen routine EPI by adapting focused and measurable approaches.
- **IPV:** Afghanistan has planned to introduce IPV both in routine immunization schedule and during one of the vaccination campaigns with a purpose to boost immunity levels in selected LPDs based on epidemiological blocks which will have already received multiple doses of OPVs and to control ongoing outbreak and stop circulation of WPV. IPV will be introduced in the routine immunization schedule as a single dose in addition to the 3rd dose of OPV and Penta-3 in the first half of 2015. IPV will also be used during the August NIDs in 2014 in some selected LPDs in the Southern and Eastern Regions. A total of 11 districts in 3 provinces in the Southern and Eastern Regions with a target population of 448,665 < 5 years old will be included in the LPDs that would administer IPV.