



صحت محافظ



National Emergency Operations Centre
Islamabad, Pakistan

National Emergency Action Plan for Polio Eradication 2016–2017





National Emergency Action Plan for Polio Eradication 2016–2017

The National Emergency Action Plan (NEAP) 2016 -2017 has been developed jointly by the Ministry of National Health Services, Regulations and Coordination, the National, Provincial and FATA Emergency Operations Centres (EOCs), as well as the implementing partners. The document has duly incorporated the recommendations from the Technical Advisory Group (TAG) with the goal to interrupt the Wild Poliovirus transmission by the end of 2016 and sustain the interruption through the refinement of existing strategies and by building on the successful innovative approaches implemented during the last low transmission season.

NEAP 2016-2017 was submitted by the Prime Minister's Focal Person for Polio Eradication, for the endorsement of the Minister of National Health Services, Regulations and Coordination and the approval of the Honourable Prime Minister of Pakistan on 19th July 2016 for implementation in all districts and areas of the country.

The information presented in the document is based on the most recent and best available data at the time of publication. The EOC may update and, where necessary, modify the analysis and data in order to ensure the most current and accurate perspective is available to all.

MESSAGE FROM THE MINISTER



Hon. Saira Afzal Tarar

Minister of State for National
Health Services, Regulations and
Coordination

At this time last year, after a year in which we saw one of the largest outbreaks of polio in Pakistan's recent memory, the country rededicated itself to becoming polio-free by May 2016. The task ahead of us then, as it is now, was enormous. The programme worked hard on building the infrastructure that can sustain gains in performance and moved fast on the implementation of the National Emergency Action Plan (NEAP) for 2015 - 2016.

Today, I am proud of the distance this programme has travelled over the past eighteen months. Driven by an unprecedented commitment across political parties and federal and provincial governments, in the last one year, using more than 220,000, well-motivated, well-trained Frontline Workers, we implemented 9 national and sub-national polio campaigns and multiple outbreak response rounds. We reached and vaccinated more than 280 million children. We know the efforts made at all levels of government to improve our performance, starting with the overhaul of programme management and accountability systems and structures, have proven to be successful. We have seen a variety of change – transformational, incremental and stop-start. In no area of the programme have gains not been made and in no instance have gains been made which have not been sustained.

At the start of 2015, inaccessibility was a problem for the programme. Today, inaccessible children have been reduced to negligible levels. Taking it as a national mission, our law enforcement agencies ensured a safe and secure environment for our vaccination teams. We are grateful to our police officers some of whom have given their lives for this cause. Thankfully, all our vaccinators have remained safe this year. It is a measure of the commitment and resolve of this country that campaigns resumed within hours of any incident.

Underpinning all of our programmatic activity has been sustained Government commitment and oversight at every level. The Prime Minister's continued direct oversight and active involvement through the National Task Force and the Prime Minister's Focus Group allowed the programme to heighten oversight and accountability everywhere. The involvement of Chief Secretaries in the Prime Minister's Focus Group has been extremely helpful as has their increasing leadership role at the Provincial level. Our other key oversight bodies are functioning well with strong leadership from senior Government Officials as well as the provincial Ministers.

As Minister, I am very proud of this turnaround and rapid progress but recognise that polio interruption and eradication is a zero sum game and we are not yet at zero. We realize with full honesty that despite our vigorous efforts on all fronts, we have not met the May 2016 timeline that we had set for ourselves to end polio in the country. However, we have made substantial progress and we know what we must do to get the job done. Our core strategy for the next 12 months elaborated in the NEAP remains the same: rooting out the virus in the reservoirs, detecting and reacting aggressively to outbreaks and maintaining population immunity levels elsewhere in the country.

With transmission still ongoing in pockets of the country, any laxity on our part can give the virus a new lease of life. The main substantive issue facing us today is whether or not we have identified all the remaining gaps and drawn all the relevant lessons. When we strip away all the different elements involved to reach our goal, it boils down to a question of sustaining the will to stay the course. Time and time again, our nation has been able to overcome obstacles and achieve glory. Making Pakistan polio-free will be a testament to the capacity of our people to deliver on the promises they make to themselves. I sincerely thank our global partners for their unwavering support. Their commitment to the global efforts to end polio in Pakistan and across the globe is a beacon of hope for humanity. With the full implementation of the priorities outlined in this NEAP, we will jointly tackle the remaining gaps and continue the process of building a solid foundation for a strong public health system in Pakistan.

CONTENTS

Abbreviations	1
Foreword	3
Executive Summary	5
Background	8
Overall Polio Situation	8
- Current Epidemiology	8
NEAP 2015 - 2016: Progress and Challenges	10
Lessons Learned	15
The National Emergency Action Plan 2016 - 2017	17
Goal	17
Strategic Approach	17
Guiding Principles	17
Specific Deliverables and Targets	18
- Key Programme Deliverables	18
- District Risk Categorization	19
Quarterly Milestones	21
Priorities by Area of Work 2016 - 2017	24
Programme Operations	25
Supplementary Immunization Activities (SIAs)	25
- Community-Based Vaccination	25
- Mobile Team Vaccination	26
- Complementary Strategies	27
- Combined bOPV/IPV SIA	28
- High-Risk and Mobile Populations	28
- Health Camps	29
Routine Immunization Service Delivery	30
Communications & Community Engagement	30
- "Sehat Muhafiz": Enabling successful vaccination at the doorstep	31
- Targeted Community Engagement	32
- Dynamic Norm-Focused Mass Media	32
Polio Rehabilitation Initiative for Children Paralyzed by Polio	33
Access & Security	33
- Access	33
- Security	34
Coordination with Afghanistan	35
Vaccine management system	36
- Vaccine Management	36

Risk Assessment and Decision Support	37
Surveillance	37
- A surveillance system for eradication	37
- Acute Flaccid Paralysis Surveillance	38
- Environmental Surveillance	39
- Post-Switch Poliovirus Type 2 Surveillance	39
Laboratory Services	40
Containment	40
Monitoring and Evaluation	41
Information Management System	42
Rapid Response Unit	43
Innovation and Operational Research	45
Management, Oversight and Accountability	46
Essential Management and Oversight Structures	48
Programme Oversight	49
Programme Management	50
- Role, Structure, and Functions of Emergency Operations Centres (EOCs)	50
- District Management Structures	52
- Tehsil and Union Council Management Structures	53
Work Planning, Implementation and Evaluation	54
Accountability and Performance Management	55
Financial Planning, Resource Mobilisation and Payments	56
Engagement with International Polio Oversight Bodies	57
Annexes	58
Annex I – Key Performance Indicators	58
- Programme Operations	58
- Risk Assessment and Decision Support	59
- Management, Oversight, and Accountability	60
Annex 2 – 2016 - 2017 Supplementary Immunisations Calendar	61
Annex 3 – Essential Committees for Polio Eradication	62
- National Level	62
- Provincial and Divisional Level	65
- District, Tehsil and Union Council Level	67
Annex 4: Union Council-Level Score Card	70
Annex 5: District-Level Score Card	71
Annex 6: Provincial-Level Score Card	72

ABBREVIATIONS

AFP	Acute Flaccid Paralysis
AC	Assistant Deputy Commissioner
AIC	Area in-Charge
AOW	Area of Work
APCR	Agency Polio Control Room
BMGF	The Bill and Melinda Gates Foundation
bOPV	bivalent Oral Poliovirus Vaccine
CBV	Community-Based Vaccination
CCPV	Continuous Community-Protected Vaccination
CDC	The Centers for Disease Control and Prevention
DC	Deputy Commissioner
DDM	Direct Disbursement Mechanism
DHO	District Health Officer
DPCR	District Polio Control Room
DPEC	District Polio Eradication Committee
EOC	Polio Emergency Operations Centre
EPI	Expanded Programme on Immunisation
ERC	Expert Review Committee
FATA	Federally Administered Tribal Areas
FLW	Frontline Worker
FRR	Financial Resource Requirements
GPEI	Global Polio Eradication Initiative
HRMP	High-Risk Mobile Population
IDIMS	Integrated Disease Information Management System
IMB	International Monitoring Board
IPV	Inactivated Polio Vaccine
KP	Khyber Pakhtunkhwa
KPI	Key Performance Indicator
LQAS	Lot Quality Assurance Sampling
MTAP	Mobile Team Action Plan
NEAP	National Emergency Action Plan
NID	National Immunisation Days
NIH	National Institute of Health
NTF	National Task Force
NPAFP	Non-Polio Acute Flaccid Paralysis
NPMT	National Polio Management Team
N-STOP	National Stop Transmission of Polio
ODK	Open Data Kit

OPV	Oral Polio Vaccine
PA	Political Agent
PC1	Planning Commission Form 1
PCM	Post-Campaign Monitoring
PEI	Polio Eradication Initiative
PMFP	Prime Minister’s Focal Person
POB	Polio Oversight Board
PRI	Polio Rehabilitation Initiative
PTFs	Provincial Task Forces
PTPs	Permanent Transit Points
RRU	Rapid Response Unit
SETT	Surveillance for Eradication Task Team
SIA	Supplementary Immunisation Activities
SNID	Sub-National Immunisation Days
TAG	Technical Advisory Group
TPEC	Tehsil Polio Eradication Committee
TPM	Third Party Monitoring
TORs	Terms of Reference
tOPV	trivalent Oral Polio Vaccine
UC	Union Council
UCCO	Union Council Communication Officer
UCMO	Union Council Medical Officer
UCPO	Union Council Polio Officer
UNICEF	United Nations Children’s Fund
UPAP	United Arab Emirates Pakistan Assistance Programme
UPEC	Union Council Polio Eradication Committee
USAID	United States Agency for International Development
VDPV	Vaccine-Derived Polio Virus
vLMIS	Vaccine Logistics Management System
WHO	World Health Organization
WPV	Wild Poliovirus

FOREWORD



Ayesha Raza Farooq

The Prime Minister's Focal
Person on Polio Eradication

We are close to entering the final stages of what will be a major milestone in global health: the interruption of polio in Pakistan.

The ambitious outcomes outlined in this **National Emergency Action Plan for 2016 - 2017** build upon the progress we've made in the past year. Many of the core activities from the previous NEAP will be familiar, as it is the belief of the programme that what we are doing is working.

Between July 2015 and June 2016, the programme made steady progress through a series of well-planned, high-quality Supplementary Immunisation Activities (SIAs). What made these SIAs uniquely successful in narrowing the immunity gap was a host of factors: The SIAs themselves were characterised by a single-phased approach with greatly expanded real-time monitoring. They embraced innovations such as community-based vaccination for high-risk areas that represent our most critical challenges and mobile vaccination for families and children in transit. In the process we also took on a new paradigm by shifting from coverage at all costs to a "no missed children" imperative, which progressively reduced the number of missed children in each SIA round through persistent follow-up of all children recorded as unvaccinated.

Last year's successes in SIAs were also bolstered on two distinct and distinctly challenging fronts. A new communications strategy was very effective in building community acceptance and demand for vaccination. Unlike previous strategies which presented the risks and dangers of polio, the "*Sehat Muhafiz*" (Guardians of Health) strategy positioned our brave frontline workers as the true heroes of polio eradication, working tirelessly on behalf of and within their communities to rid Pakistan and the world of the scourge of polio. Additionally, access and security around the polio programme continued to improve throughout the year. We owe a great debt to our security forces who have worked so diligently—and sometimes given the ultimate sacrifice to ensure that our staff can work in a safe environment.

Driving all of our risk management activities has been stronger management support, planning, and coordination through our Emergency Operations Centre (EOC) network at National and Provincial levels as well as in FATA. The EOCs have provided an essential platform for Government staff and Global Polio Eradication Initiative (GPEI) partners to come together as "one team under one roof," guided by the National Polio Management Team (NPMT). Through their roll-out of the Accountability and Performance Management Framework, individual and team accountability has increased. Our key oversight bodies are also functioning well with strong leadership from senior Government Officials and Ministers. Divisional Task Forces have emerged as crucial for oversight in key areas such as Karachi, Sukkur, Larkana, Peshawar, and Islamabad—and more will be done in the coming year to exploit this important layer of Government in targeted areas. Underpinning all of our programmatic activity has been sustained Government commitment and oversight at every level.

We have become a programme driven by high-quality data and comprehensive and real-time risk assessment. Our data gathering is increasingly electronic, making data analysis more rapid and our capability to interpret and react to the data more professional.

However, there are major risks in getting to "zero polio." The poliovirus is still present in some districts. More worryingly, we continued to detect wild poliovirus (WPV) circulation in areas that have been flagged as having gaps in oversight, accountability, programme performance, and surveillance.

If we are to reach our goal of interrupting virus transmission by the end of 2016, we will need to exert more. We must both maintain and increase quality in everything we do.

As such, our new National Emergency Action Plan (NEAP) 2016 - 2017 is focused on addressing low performance in all areas showing gaps, particularly in districts and Union Councils that are

characterized by poor microplanning, poor team selection, poor training, and lack of adequate consistent supervision. We also face challenges in routine immunisation services. This reality puts tremendous pressure on the quality of our SIAs, as children are not being systematically identified and vaccinated in critical zones where the virus is active.

All of these issues will now be dealt with head-on as we implement NEAP 2016 - 2017.

To help us achieve our goal of stopping transmission, we must now make significant and urgent progress in routine immunisation service delivery especially in areas with endemic WPV circulation.

We must work relentlessly to strengthen our surveillance system. We have responded vigorously to all detected polio cases by conducting multiple large-scale case response rounds. Now, as we approach zero polio cases, we must know that “zero polio cases” is actually zero transmission. In this NEAP, we have decided to aggressively improve surveillance sensitivity. In particular, the programme will increase investment in its AFP surveillance and expand or, when necessary, redeploy the environmental surveillance network. Overall, we plan to transform from a surveillance system for a polio programme to a “surveillance system for eradication.”

Over the course of the next year, we also must expand community-based vaccination (CBV) in core reservoir districts and significantly improve the capabilities, capacities, and commitment of Union Councils that are continuing to implement the mobile team strategy, especially in Tier 1, Tier 2 and Tier 3 districts. We must ensure that the extensive data collated from mapping high-risk mobile populations is used to incorporate these groups into comprehensive, optimal microplans.

I am confident that we can address all of the challenges that impact our programme operations—and that we will work to ensure that every child is vaccinated and none are missed. The greatest proportion of under-immunised children is now amongst children younger than 6 months. In order to decrease risk even further, we will work hand-in-hand with our routine immunisation colleagues to improve service delivery in all Union Councils implementing the CBV strategy.

Our plans are ambitious in the face of a strong foe, and we are poised for the fight. From our brave frontline workers in the field who continue to inspire us, to the leadership at the highest level: the entire programme remains committed to achieving our collective goal of polio eradication.

We thank all of our partners for their technical, financial, and political support as we approach a significant milestone in global health.

EXECUTIVE SUMMARY

Pakistan and Afghanistan remain the last nations in the world known to have wild poliovirus (WPV). In the past year, Pakistan took giant strides towards closing the immunity gap and interrupting transmission. This can be seen by a number of different indicators.

First, the number of confirmed wild poliovirus (WPV) cases in Pakistan has declined by 82%: from the 306 confirmed cases seen during the outbreak of 2014 to 54 cases in 2015, and it continues to decline in 2016 (Figure 1). With only 13 confirmed cases reported as of June 2016, this year represents a 59% decline in case count compared to a similar period in 2015 (Figure 2).

Second, the country observed a decrease in the proportion of environmental specimens confirmed for WPV: from 35% in 2014 to 20% in 2015, and now that proportion stands at 10% in the first half of 2016.

Third, Pakistan saw a reduction of circulating genetic clusters—from 16 in 2014 to eight in 2015—indicating reduced genetic diversity. Deeper analysis of genetic variations of viruses has shown that, for the first time ever, WPV1 genetic diversity fell during the 2015 high season. In previous years it had risen, sometimes sharply, as the high season progressed. Now, as of June 2016, only three clusters were identified.

Fourth, the proportion of non-polio acute flaccid paralysis (NPAFP) cases in children between 6 months and five years of age who reported as 'zero'-OPV dose has declined from 24% in 2014, to 4% in 2015, and now 2% as of June 2016.

This progress was achieved through dogged pursuit of a one-month, one-bOPV campaign strategy throughout the low season. At the heart of Pakistan's vaccination efforts was a dedicated and uncompromising focus on improved microplanning and aggressive same-day follow-up of recorded missed children. Improving the performance of frontline workers (FLWs) was a cornerstone of last year's performance improvement plan, with noticeable impact to morale and motivation. Over the course of the low season, the programme reduced the proportion of "no teams" among recorded missed children in third-party post-campaign monitoring: from a peak of 52% in the November NID, to 18% in the May NID. This can be partly attributed to the diligent effort of many to improve the timeliness of payments to FLWs: over the course of the low season, 81% of districts paid their FLWs within one month of the start of the campaign.

The major paradigm shifts in the 2015 - 2016 NEAP from "coverage" to "**no missed children**" has driven programme operations with very encouraging results. The proportion of recorded missed children remaining unvaccinated at the end of each campaign was between 3% and 4% throughout 2016, decreasing from approximately 7% over a similar period last year (Figure 3). Except for the October SNID and May NID, the quality of the campaigns at the national level (as measured by third-party independent monitoring) has remained above the NEAP target of >90% (Figure 4). However, performance varied from province to province: Punjab met the NEAP target in all nine campaigns, Khyber Pakhtunkhwa and FATA in eight of nine campaigns, Sindh in seven of nine campaigns, and Balochistan in four of nine campaigns (Figure 4).

Additionally, in the high-risk Union Councils (UCs) of the most important districts, the implementation of a **Community-Based Vaccination (CBV) strategy** has provided the programme with an edge when it comes to delivering high-quality vaccinations in areas of most concern. As of the end of May 2016, there were 10,995 Community Health Workers vaccinating children in 472 Union Councils. The result has been an increase in the overall quality of campaigns to levels that were unprecedented in these Union Councils. This is evident in the

trend of performance improvement observed in lot quality assurance sampling (LQAS) results from high-risk UCs (Figures 5 and 6).

In our efforts to use every tool available to nudge up immunity levels and stop persistent transmission in the core reservoirs, the programme carried out an aggressive combined bOPV/IPV campaign. Over the course of the low season, 1.2 million children between 4 months and 23 months received IPV vaccines, with 1.7 million children under 5 years of age receiving bOPV at the same time. Almost all IPV vaccines delivered to Pakistan for SIAs and routine immunisation have been—and are being—used. As measured by LQAS, the proportion of Union Councils in the core reservoirs obtaining an estimated coverage of 80% or more reached 100% in Khyber agency, 85% in Peshawar, 70% in Quetta Block and 51% in Karachi.

The programme has recognised the importance of reaching and vaccinating children in transit during SIAs, as well as reaching and vaccinating children in highly mobile migratory, nomadic or internally displaced populations. From January to April 2016, a total of 9.4 million children were vaccinated at Permanent Transit Points (PTPs). The proportion of 'zero'-OPV dose children vaccinated in April and May was 0.8%.

The programme has made tremendous progress in ensuring careful monitoring of performance. Tools used for **pre-campaign, intra-campaign, and post-campaign monitoring (PCM)** have been standardized. Post campaign LQAS monitoring has expanded with the number of UCs assessed each round, which increased from 265 in January 2015 to 536 in January 2016. Equally important, pre- and intra-campaign monitoring has been expanded with the provision of real-time data to provinces and districts so course correction can be taken even before the completion of the campaign in question.

Underpinning all programmatic activity has been **sustained Government commitment and oversight** at every level. The Prime Minister's continued direct oversight and active involvement through the National Task Force (NTF) and the Prime Minister's Focus Group (PMFG) allowed the programme to heighten oversight and encourage accountability everywhere. Key oversight bodies are functioning well with strong leadership from senior Government Officials and Ministers. Divisional Task Forces have emerged as crucial for oversight in key areas. Through the implementation of an **Accountability and Performance Management Framework**, the Government and its partners have ensured that "accountability at all levels" becomes a guiding principle throughout the programme. This has resulted in the rewarding of good performance and, where necessary, the active removal of underperforming senior governmental or partnership staff from positions of authority.

Yet despite these efforts, the virus remains in a few areas—specifically, the core reservoirs that have sustained the infection for many years and periodically reseed the virus across the country.

In this National Emergency Action Plan (NEAP) for 2016 - 2017, the main objective is **to stop transmission in the core reservoirs and maintain or increase population immunity against polio in the rest of the country**. To achieve this, the programme has set up a multi-pronged strategy with a well-developed work plan to ensure all children are vaccinated and any circulating virus is detected quickly and responded to immediately.

In the NEAP 2016 - 2017, the programme will:

- Conduct 5 NIDs and 4 SNIDs with remaining unvaccinated children <2% of recorded missed children that are not socially and geographically clustered, reaching 95% coverage by third-party post-campaign monitoring (PCM) and achieving a lot quality assurance sampling (LQAS) pass rate of $\geq 90\%$

- Implement a combined bOPV/IPV campaign in Tier 1 districts and as many Tier 2 districts as possible, depending on IPV vaccine availability
- Expand community-based vaccination (CBV) to 100% of Union Councils in Khyber, Peshawar, Quetta, Killa Abdullah, and Pishin, and $\geq 60\%$ of the target population in Karachi
- Focus on improving the quality of campaigns in Union Councils using mobile team strategy in Tier 1, Tier 2, and Tier 3 districts, with the aim of achieving and surpassing all key performance indicators
- Improve routine immunisation service delivery in Union Councils benefitting from CBV, as measured by an IPV-1 coverage rate for infants raised to $\geq 80\%$. This too will be subject to adequate vaccine availability
- Boost surveillance sensitivity by shifting the focus of the surveillance system from measuring “targets achieved” to monitoring, reporting on, and minimizing “AFP cases unreported” and “missed transmission.” Through this recalibrated strategy, the programme will improve the capacity and reach of its surveillance system and effectively transform from a polio programme to a “surveillance system for eradication”

The goal is simple and ambitious: stop polio transmission in Pakistan by the end of 2016.

The next opportunity to make progress on that goal arrives on the 25 July 2016, when the first campaign of the new NEAP will be held.

BACKGROUND

OVERALL POLIO SITUATION

Current Epidemiology

The world is closer than it has ever been to eradicating poliomyelitis forever. Two years ago in 2014, nine countries accounted for the 359 confirmed wild poliovirus (WPV) cases reported. Last year, only two countries—Afghanistan (19 cases) and Pakistan (54 cases)—reported confirmed WPV cases (Figures 1 and 2).

Pakistan has now entered the final stages of polio eradication. As of June 2016, 13 confirmed cases were reported, a reduction of 59% when compared to the same period last year. Figure 2 shows the spatial distribution of cases in 2015 and 2016. Of the 13 total confirmed cases reported, four were associated with local transmission in core reservoir districts, and nine cases were associated with probable importations from Karachi (5), Quetta block (1), and Greater Nangarhar of Eastern Afghanistan (3). Local transmission following importation was re-established in South Khyber Pakhtunkhwa (1 case in Hangu, 2 cases in Bannu, and 1 case in DI Khan), FATA (1 case in South Waziristan), and North Sindh (2 cases in Shikarpur). As of the end of May 2016, 15 environmental surveillance samples that had been collected in 2016 were positive for WPV. From these samples, 34 viruses were isolated. Of these 34 viruses, the majority (25, or 74%) were associated with endemic transmission in the Khyber-Peshawar corridor, 11 (44%); Karachi, 10 (40%); Quetta block, 3 (12%); and North Sindh, 1 (4%). The remaining nine viruses isolated from environmental samples were associated with probable importations: six were linked to chains of transmission in Pakistan (3 from Karachi, 2 from the Khyber-Peshawar corridor, and 1 from the Quetta block), and three from transmissions in Afghanistan (2 from Greater Nangarhar and 1 from Greater Kandahar).

These numbers are promising. The reduction in cases, the clear targeting of the core reservoirs, the careful mapping of routes of importation, and the isolation of the virus' chains of transmission to fewer and fewer geographic sites—these all collectively point to successes over the past year and they gesture toward a blueprint for eradication.

And there are more signs of hope. Between 2014 and 2015, Pakistan saw a reduction of circulating genetic clusters from 16 to eight, indicating reduced genetic diversity. Deeper analysis of genetic variations of viruses has shown that for the first time ever, WPV1 genetic diversity fell during the 2015 high season. This achievement is all the more evident when compared with previous years, when WPV1 genetic diversity had only risen, sometimes drastically, as the high season progressed. As of May 2016, only three clusters were identified.

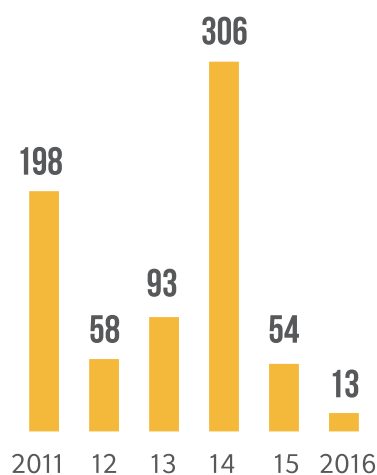
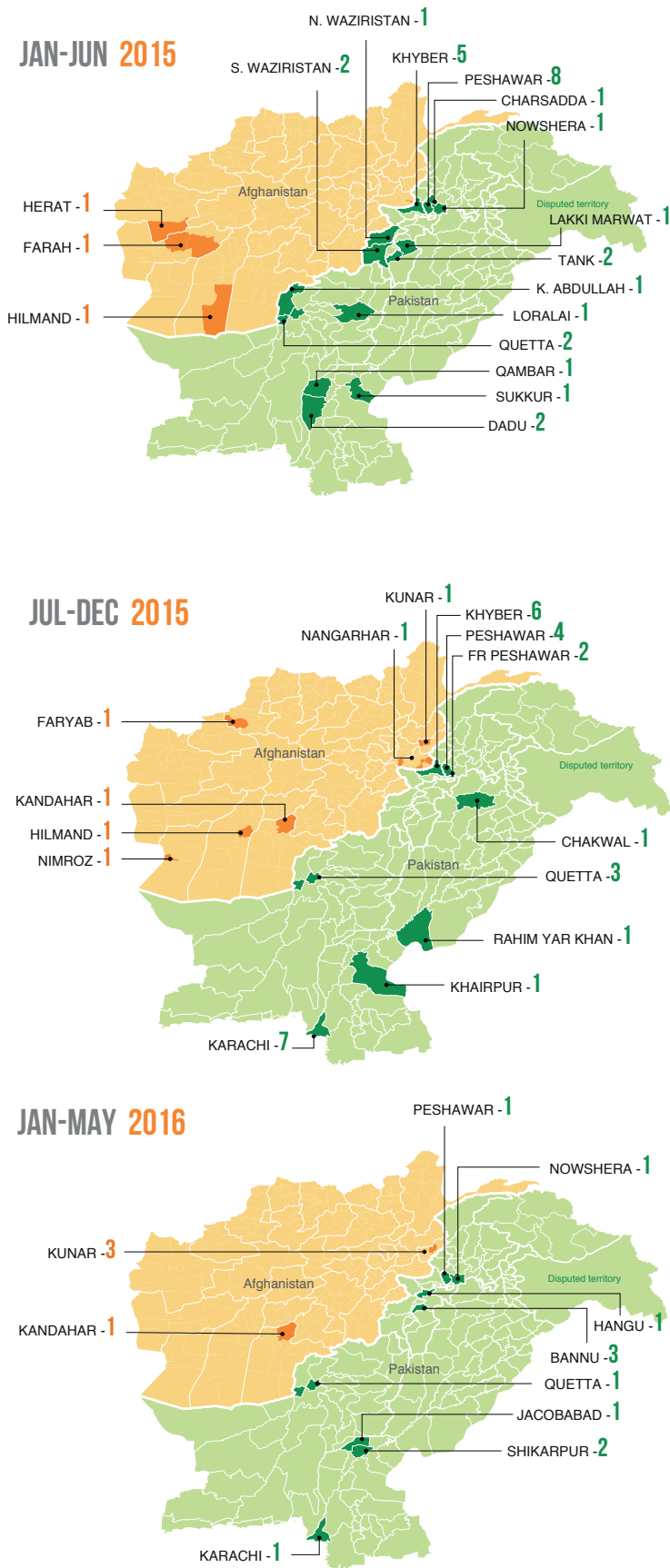


Figure 1– Confirmed polio cases reported in Pakistan, 2011 – 2016



As eradication efforts have become more sensitive in surveillance techniques, they have also sharpened an understanding of the risk of infection among targeted populations. Data from countrywide acute flaccid paralysis (AFP) surveillance indicates the risk of polio is highest for children younger than two years old. While the overall proportion of children under-two among reported non-polio AFP (NPAFP) cases was 29%, the proportion with confirmed WPV was 68%. Countrywide, the proportion of ‘zero’-OPV doses among NPAFP cases decreased from 5% in 2014 to 2.3% in 2015 and 1% as of June 2016. In Tier 1 districts, that proportion decreased from 9% in 2014 to 2% in 2015 and less than 1% in 2016. This narrowing margin suggests that eradication efforts have begun to close the immunity gap and interrupt the transmission of polio in Pakistan.

While the overall trajectory is positive, all evidence available at the moment suggests there is more ground to cover. The main obstacle to interrupting transmission now is endemic transmission in the three core reservoirs of Karachi, the Khyber-Peshawar Corridor, and the Quetta block. Uninterrupted circulation in parts of Central Pakistan, gathered in the North Sindh divisions of Larkana and Sukkur, also present a challenge to the programme. With detection of the virus from the Greater Nangarhar and Greater Kandahar areas of Afghanistan and in sewage samples in Faisalabad, Rawalpindi, Peshawar, and Killa Abdullah, poliovirus circulation across the Afghanistan-Pakistan epidemiological block will continue to drive risk for both countries.

Shutting down these core engines of transmission is at the heart of the National Emergency Action Plan (NEAP) 2016 - 2017.

Figure 2– Map of Pakistan and neighbouring Afghanistan showing the case distribution of wild polioviruses in 2015 and 2016. The data for 2016 is as of May 2016.

NEAP 2015 - 2016: PROGRESS AND CHALLENGES

The Pakistan Polio Eradication Initiative (PEI) has made steady and systematic progress over the last year towards the interruption of poliovirus transmission in Pakistan.

The paradigm shift in the organising, overarching goal of NEAP 2015 - 2016—from “coverage” to “no missed children”—has driven programme operations with very encouraging results. The proportion of children recorded as “missed” during campaigns and remaining unvaccinated after each campaign has declined to approx. 4% in the 2016 low season (Figure 3). This has been achieved through dedicated focus on improved microplanning, aggressive same-day follow up of recorded missed children, and the systematic extraction, analysis, and feedback of key data on missed children. In the highest risk areas, ongoing micro-census with stringent validation has helped in identifying critical areas as part of microplanning. In addition, the expansion of independent pre- and intra-campaign monitoring has resulted in more feedback on campaign performance and gaps in coverage that can now be addressed in real time.

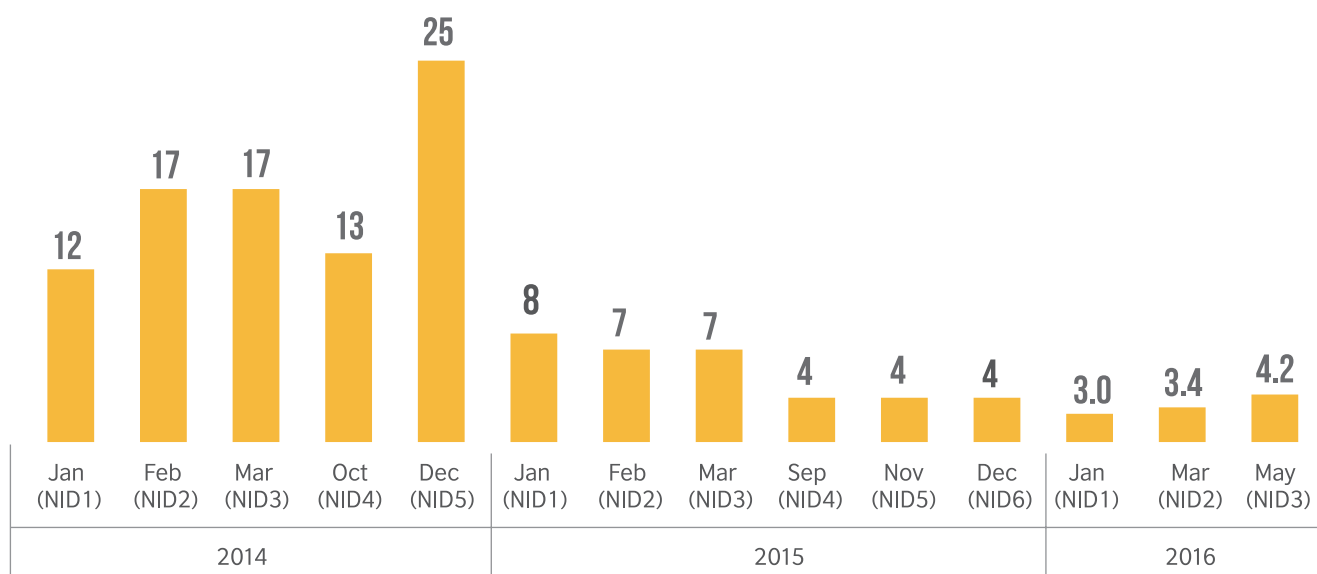


Figure 3 – Proportion of recorded missed children remaining unvaccinated at the end of each NID, 2014–2016

Over the course of the year, Pakistan implemented nine campaigns: six National Immunisation Days (NIDs) and three Sub-national Immunisation Days (SNIDs) (Figure 4). Except for the October SNID and May NID, the quality of the campaigns at the national level as measured by third-party independent monitoring has remained above the NEAP national target of >90%. However, performance varied from province to province. Punjab met the NEAP target in all nine campaigns, Khyber Pakhtunkhwa and FATA in eight of nine campaigns, Sindh in seven of nine campaigns, Balochistan in four of nine campaigns, and Islamabad in three of eight campaigns (Figure 4). Performance for Azad Jammu and Kashmir (AJK) was above target in four of five campaigns, and on three of six campaigns for Gilgit-Baltistan (GB) (Figure 4).

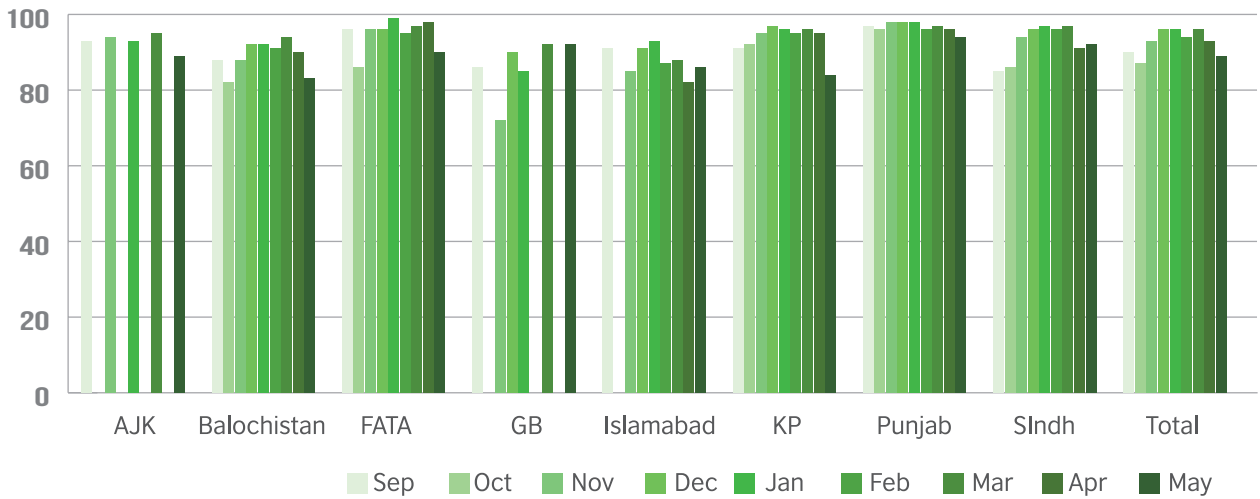


Figure 4 – SIA Coverage Measured by Independent Post-Campaign Monitoring September 2015–May 2016. Note: NEAP 2015 - 2016 target was – 90%

In the highest-risk Union Councils, where the programme assesses campaigns using lot quality assurance sampling (LQAS), performance improvement was evident (Figure 5). This was especially the case in Khyber Pakhtunkhwa and Balochistan where the proportion passing LQAS increased from less than 50% during the September NID to more than 80% by February (Figure 5). In the core reservoir districts of the Khyber-Peshawar corridor and the Quetta block, the LQAS pass rate has increased to more than the 2015 - 2016 NEAP high-risk UC and core reservoir target of 80%, but has remained below target in Karachi (Figure 6).

The improvements observed in campaign reach and quality were driven by crucial enabling activities that created the essential conditions in which SIAs can be successful—namely, community acceptance, community demand, and access and security.

A strong and well supported **communications strategy**, "Sehat Muhafiz" (Guardians of Health) was very effective in building community acceptance and demand for vaccination. In the most recent survey conducted by Harvard School of Public Health, 100% of households were aware of polio, and 97% said they intended to give polio vaccine drops to their children. The proportion of households reporting the vaccinator visit as pleasant was 97%.

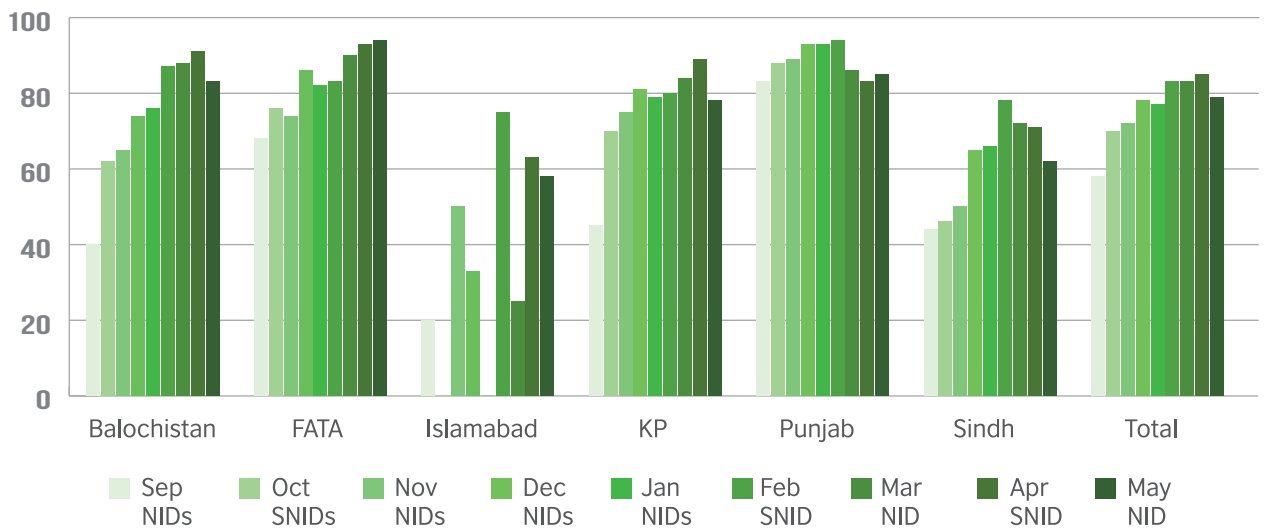


Figure 5 – Proportion of high-risk Union Councils passing LQAS, Pakistan, September 2015–May 2016. Note: NEAP 2015 - 2016 high-risk UC target was – 80%

Access and security improved progressively throughout the year, and in May 2016 only approx. 2,500 target children remained beyond the reach of the programme. With the deployment of security forces in support of vaccination teams, the national, provincial, and local governments have utilised enormous resources to ensure that access to children is guaranteed. The provision of adequate security for vaccinators and their timely deployment during campaigns has resulted in the successful execution of single-phased campaigns across the country since January 2016. The resolve and commitment shown by senior government officials in the face of tragedy targeting police officers and other security personnel has been inspiring. Access to children and security for vaccinators is no longer an obstacle to eradication.

The introduction and expansion of **Community-Based Vaccination (CBV)** initiatives has helped drive SIA quality, especially in the core reservoir districts. As of May 2016, 10,955 Community Health Workers (9,232 vaccinators and 1,723 supervisors) were deployed, targeting 2.3 million children in 472 high-risk Union Councils. The result of the CBV approach has been twofold: 1) improved access to children and increased coverage in CBV Union Councils, and 2) a decreased need for security teams across the district that has therefore improved access to children and increased coverage in Union Councils that use the mobile team strategy. This has been especially evident in Karachi, which as a result of CBV expansion was able to move from a multi-phased campaign to a single-phased campaign.

Between January and April 2016, **combined bOPV/IPV campaigns** were implemented in the core reservoir areas. The proportion of Union Councils in the core reservoirs passing LQAS was: Khyber agency (100%), Peshawar (85%), Quetta Block (70%), and Karachi (51%)—where a UC was considered to have passed if, after assessing 60 children, eight or fewer were found to be unvaccinated and estimated coverage was $\geq 80\%$.

Health Camps were used effectively to build trust and acceptance for vaccination in targeted communities, as well as to identify and vaccinate under-immunised children. Over the course of 4,653 camps implemented over two phases in 2015 and 2016, 1,057,733 beneficiaries including 402,502 (38%) children younger than 5 years old were reached. Among them were 20,288 (5%) children who were ‘zero’-dose, receiving OPV for the first time. There were 148,655 children who received at least one

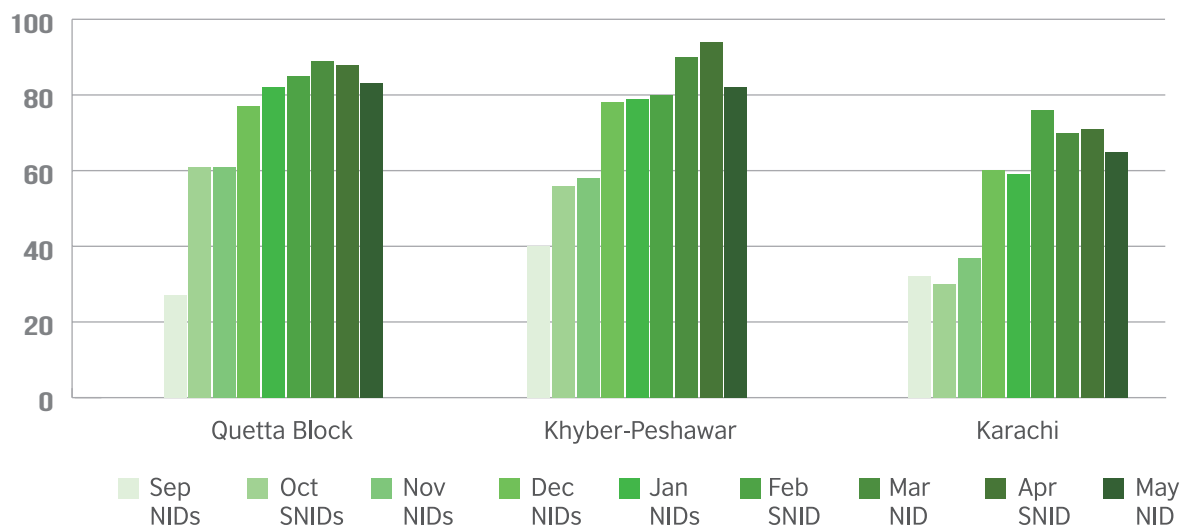


Figure 6 – Proportion of high-risk Union Councils passing LQAS in the three poliovirus core reservoirs, Pakistan, September 2015–May 2016. Note: NEAP 2015–2016 target was – 80%.

dose of a routine immunisation antigen, including 33,124 (22%) who received a routine immunisation dose for the first time during the camp.

During the implementation of the 2015 - 2016 NEAP, the strategy for vaccinating **High-Risk Mobile Populations (HRMP)** was put forward with a new focus on vaccinating children in transit during SIAs, rationalising the number and positioning of Permanent Transit Points (PTPs), and improving performance at the Afghanistan–Pakistan border. Since the beginning of 2016, 2.5 million unvaccinated children were vaccinated by transit teams during SIAs. From January to April 2016, a total of 7.9 million children were vaccinated at PTPs. The proportion of ‘zero’-OPV dose children vaccinated during the last two campaigns was 0.8%. Additionally, the age group for vaccination at the border was increased to 10 years—and more staff, resources, and training were provided to these teams.

Over the course of the year, the newly-established **Emergency Operations Centres (EOCs)** gained strength in management, oversight, and accountability and increased focus on systematic implementation of the 2015 - 2016 NEAP at all levels. Quarterly NEAP reviews were regularly held by the National Polio Management Team (NPMT) and, where necessary, course corrections were made. The EOCs now provide an essential platform for government staff and GPEI partners to come together as “one team under one roof,” guided by the NPMT and led by the Prime Minister’s Focal Person for Polio Eradication.

The EOCs ensure that the programme is driven by high-quality data and comprehensive, real-time risk assessment. With their support, the quality of **campaign monitoring** has improved. Pre-campaign third-party monitoring has highlighted gaps in preparedness in many districts. Both third-party post-campaign monitoring (PCM, conducted in all districts) and lot quality assurance sampling (LQAS, conducted in high-risk UCs) are now collecting primary data using electronic handheld devices. This has improved the speed of programmatic review and utilisation of data. Regular formal and informal interactions with provincial EOCs, Provincial Task Forces (PTFs), and District Polio Control Rooms (DPCRs) improved engagement of the National EOC with all levels of the programme. Whenever necessary, the National EOC made regular visits to Tier 1 and 2 districts, provided technical support, and facilitated real-time problem solving.

Underpinning all programmatic activity has been **sustained Government commitment and oversight** at every level. The Prime Minister’s continued oversight and direct involvement through the National Task Force (NTF) and the Prime Minister’s Focus Group (PMFG) have allowed the programme to heighten oversight and encourage accountability everywhere. Key oversight bodies are functioning well with strong leadership from senior Government Officials and Ministers. Divisional Task Forces have emerged as crucial for oversight in key areas such as Karachi, Sukkur, and Larkana.

Through the implementation of an **Accountability and Performance Management Framework**, the government and partnership have ensured that “accountability at all levels” becomes a guiding principle for all. This has resulted in the rewarding of good performance and, where necessary, the active removal of underperforming senior governmental or partnership staff from positions of authority.

Programme-wide accountability has had direct impact on improving support for community health workers. Progress on **payment of frontline workers (FLWs)** has been vital. During the low season, districts were able to ensure timely payment of FLWs 81% of the time. However, district variations persist, and there’s more work to be done to ensure compliance with stipulated programme guidelines.

While significant progress has been made, there are still major **challenges** across the programme in reaching the goal of interrupting transmission. Even though there is growing evidence that the intensity

of transmission has ebbed, poliovirus is still present in multiple districts—and there are many areas with **gaps in SIA performance**, making them potential outbreak zones. Of special concern is ongoing transmission in areas that have been flagged for critical gaps in oversight, accountability, programme performance, and surveillance.

The response of the programme to low performance in SIAs is to always work to ensure that each and every child is visited by a well-trained and accepted vaccinator in every round. Yet challenges have persisted in critical areas throughout the low season, challenges that include: gaps in microplanning; inadequate micro-synchronisation; a disjointed transit vaccination; and poor selection, training, and supervision of FLWs. The underlying reasons were ultimately shortcomings in the capability, capacity, and retention of staff in the field, compounded by poor management and oversight.

These challenges, gaps, and shortcomings will be addressed in detail as essential components of the 2016 - 2017 NEAP. How quickly the programme addresses those deficiencies will determine the speed at which the programme covers the last mile of the road towards zero polio in Pakistan.

LESSONS LEARNED

We are all intertwined.

- Our frontline workers rely on an accepting community and a secure environment
- The success of our operations relies on the performance of our frontline workers
- Our operations rely on a strong platform of political commitment and management oversight
- We can only succeed when all elements of the programme work together seamlessly

Well-selected, trained, supervised, and monitored Frontline Workers (FLWs) are the key to success.

- The focus on the motivation and morale of vaccinators and other FLWs—especially through a greater emphasis on training, timely payment, and supportive supervision—has contributed significantly to improved performance
- In the core reservoir districts, the implementation of the **Community-Based Vaccination (CBV)** approach has been a boon for the programme
- The role of **Areas in Charge (AICs)** is vital and NEAP 2016 - 2017 must focus on their selection, training, and performance as a means to improve the performance of mobile teams

Community acceptance and demand are the bedrock for success.

- The communication strategy has delivered on the goal of increasing acceptance within the community and improving trust of vaccinators at the doorstep
- More needs to be done to improve acceptance in small population pockets where community acceptance is suboptimal

The 2015 - 2016 paradigm shift away from coverage toward continuously **tracking and vaccinating all missed children** has resulted in higher-quality campaigns and significant reductions in recorded missed children.

Combined IPV/OPV SIAs are important.

- Reaching immunity levels sufficient to interrupt transmission in the core reservoirs has been difficult due to a high birth cohort, large inward and outward migration, high population density, bad sanitation conditions, poor hygiene practices, and low socioeconomic status of communities
- A large-scale **combined bOPV/IPV SIA** targeted at core reservoirs and other high-risk districts following multiple rounds of bOPV provided a valuable immunity boost that could mean the difference between continued low-incidence transmission and interruption

Routine immunisation services matter.

- The highest under-immunised fraction remains amongst children younger than 6 months. Considering the high birth cohort in the core reservoirs, the inability of the programme to rapidly close the emerging immunity gap associated with a new birth cohort remains a challenge

- The programme needs to work closely with the Expanded Programme on Immunisation (EPI) to improve routine immunisation service delivery in Tier 1 districts

Vaccinating **High-Risk Mobile Populations** may be the key to reaching persistently missed and under-served groups.

- As the overall population immunity gap continues to narrow in settled populations, the programme recognises the disproportionate risk posed by under-immunisation among highly mobile migratory, nomadic, or internally displaced populations

Government ownership of the programme solves problems and drives success.

- **Poor oversight and management** in parts of the country where endemic circulation persisted were not always identified early enough
- Surfacing issues and problems must be encouraged and not sanctioned
- Addressing these gaps in oversight and management and instituting enhanced accountability mechanisms through the empowerment of key Divisional Task Forces is a priority

The “**One Team under One Roof**” concept works.

- The EOC network now provides a strong platform for the programme
- The “one team” concept must function better in some districts and Union Councils

Good data drives quality.

- While tremendous progress has been made in improving pre-, intra-, and post-campaign monitoring, there has been an overreliance on post-campaign data at the expense of pre- and intra-campaign information
- We should not rely only on data, but also listen carefully to the observations of monitors on the ground. Sometimes it is an astute observation that identifies the problem, and often well in advance of data analysis!

We need a “**Surveillance System for Eradication.**”

- While **surveillance quality** improvement plans have incrementally raised sensitivity, the relatively high fraction of “long chain transmissions” has highlighted gaps in surveillance

THE NATIONAL EMERGENCY ACTION PLAN

2016 - 2017

GOAL

The overall goal of the National Emergency Action Plan for Polio Eradication is to stop Wild Poliovirus (WPV) transmission by end of 2016 and sustain interruption through 2017.

STRATEGIC OBJECTIVES

1. Stop poliovirus transmission in all reservoirs
2. Detect, contain, and eliminate poliovirus from newly infected areas
3. Maintain and increase population immunity against polio throughout Pakistan
4. Stop the international spread of WPV by decreasing risk across common transnational reservoirs
5. Sustain polio interruption through increased routine immunisation coverage in core reservoirs

GUIDING PRINCIPLES

Reaching and vaccinating persistently missed children and detecting and responding rapidly to the presence of poliovirus are the cornerstones of NEAP 2016 - 2017. In order to achieve this, the 2016 - 2017 NEAP sets forward the following 11 guiding principles.

1. **Effective Collaboration** – We operate and communicate as “one team under one roof”
2. **Reaffirm Open Communication** – We promote honest, open communication and easy access to information
3. **Active & Continuous Improvement** – We surface challenges—both big and small—to actively learn lessons and pursue creative approaches, leading to continuous improvement in our work
4. **Dedication** – We are proudly committed to providing outstanding quality in everything we do to reach every child
5. **Integrity** – We hold the highest ethical standards, investigating all data discrepancies
6. **Commitment** – Our frontline workers are our most valuable asset, and we are dedicated to attracting, retaining, and supporting the highest-quality workforce
7. **Agility** – We constantly innovate to find fast, effective, and sustainable solutions to real-time field problems
8. **Tenacity & Boldness** – We resolutely focus on results to ensure a healthy future for all of Pakistan’s children
9. **Individual and Team Recognition** – We have a performance and learning culture that promotes listening to field teams and recognizing performance

10. **Organisational and Individual Responsibility** – We are all accountable to the highest personal and professional standards and we hold to responsible practices that will ensure short- and long-term success
11. **National & Organisational Oversight on Accountability** – We provide fair and robust oversight and “checks and balances” to deliver quality services of the best value and effectively meet the needs of the communities and children we serve

SPECIFIC DELIVERABLES AND TARGETS

The NEAP 2016 - 2017 will be implemented through three main Areas of Work (AOWs):

1. **Programme Operations:** Ensuring that all vaccination activities reach all targeted children
2. **Risk Assessment and Decision Support:** Ensuring that programme operations are driven by the best available data
3. **Management, Oversight, and Accountability:** Ensuring that the programme is well-supported, managed, and coordinated with oversight and accountability for all

Key Programme Deliverables

- Conduct 5 NIDs and 4 SNIDs with remaining unvaccinated children <2% of recorded missed children, reaching 95% coverage by third-party post-campaign monitoring (PCM) and achieving a lot quality assurance sampling (LQAS) pass rate $\geq 90\%$
- Implement a combined bOPV/IPV campaign in Tier 1 districts and as many Tier 2 districts as possible, depending on IPV vaccine availability
- Expand Community-Based Vaccination to 100% of Union Councils in Khyber, Peshawar, Quetta, Killa Abdullah, and Pishin, and $\geq 60\%$ of target population in Karachi
- Focus on improving the quality of campaigns in Union Councils in Tier 1, Tier 2, and Tier 3 districts conducting SIAs using a mobile team strategy with the aim of achieving all key performance indicators (KPIs)
- Improve routine immunisations service delivery in Union Councils conducting community-based vaccination such that IPV-1 and Pentavalent 3 coverage in the Union Councils is raised to $\geq 80\%$
- A surveillance system missing no transmission and detecting all AFP cases, meeting all KPIs, achieving an annualised non-polio AFP (NPAFP) rate of ≥ 6 per 100,000 at the lowest possible geographic unit, and reaching a stool adequacy rate $> 80\%$ (with adequate stool defined in line with global guidelines—i.e., as two stool specimens arriving in good condition and collected from an AFP patient 24-48 hours apart and within 14 days of the onset of paralysis)

District Risk Categorization

The overall national risk profile of the programme has steadily reduced, and the programme remains on track for interruption of virus transmission. Given the scale

of the challenge that lies ahead, a more aggressive approach is being pursued for NEAP 2016 - 2017. The aim is to ensure any emerging immunity gap, particularly among new birth cohorts and children younger than 2 years, is quickly closed. Sustained performance improvements especially in the ever-shrinking pockets that continue to harbour the virus will be key.

To achieve its strategic objectives, the programme has reconfigured districts into four distinct risk tiers and developed primary targets and key performance indicators for all three AOWs (Panel 1, Table 1, and Annex 1). These are core reservoir districts (Tier 1), high-risk districts (Tier 2), vulnerable districts (Tier 3), and low-risk districts (Tier 4). The tier classification of districts was completed after detailed consultation with the Provincial EOCs and the GPEI partnership and was supported by risk modelling carried out by the Institute for Disease Modelling (Figure 7).

The programme defines a “core reservoir” as any clearly definable contiguous geographic zone spanning a division, or up to four closely linked districts and/or agencies, with proven persistent local WPV1 circulation and a repeated history of reseeding the virus outside the immediate transmission zone. **Persistent local circulation is defined** as the presence of at least one local lineage of WPV1 for at least two low seasons. Using this definition, the programme has homed in on the areas of Pakistan that are the primary in-country source of infection for all other districts. The programme has identified the city of Karachi, the districts of Quetta block (Quetta, Pishin, and Killa Abdullah), and the Khyber-Peshawar corridor (Khyber agency and Peshawar district) as the “core reservoirs” within Pakistan.

Regardless of tier classification, all regions of Pakistan will be expected to meet the overarching goal of the NEAP 2016 - 2017. However, each tier will have specific goals, objectives, and strategies.

Panel 1 – District Tier Classifications for NEAP 2016 - 2017

Tier 1 Core reservoir districts

Number of Districts: 11;
Target population 4,042,214 (11%)

Goal:
Interrupt endemic and/or persistent local transmission using multiple strategies

Strategy:
NID + SNID + CBV in selected UCs + Priority 1 for combined bOPV/IPV SIA + Routine immunisation service delivery support + other auxiliary support

Tier 2 High-risk districts

Number of Districts: 33;
Target population 5,746,129 (16%)

Goal:
Interrupt transmission if transmission is ongoing, decrease vulnerability

Strategy:
NID + SNID + CBV in selected UCs + Priority 2 for bOPV/IPV SIA + Routine immunisation service delivery support + other auxiliary support

Tier 3 Vulnerable districts and low-risk districts reporting case(s) in 2016

Number of Districts: 24;
Target population 7,246,474 (20%)

Goal:
Decrease vulnerability
Strategy: *NID + SNID*

Tier 4 Low-risk districts

Number of Districts: 87;
Target population, 19,638,741 (54%)

Goal:
Maintain high population immunity
Strategy: *NID only*

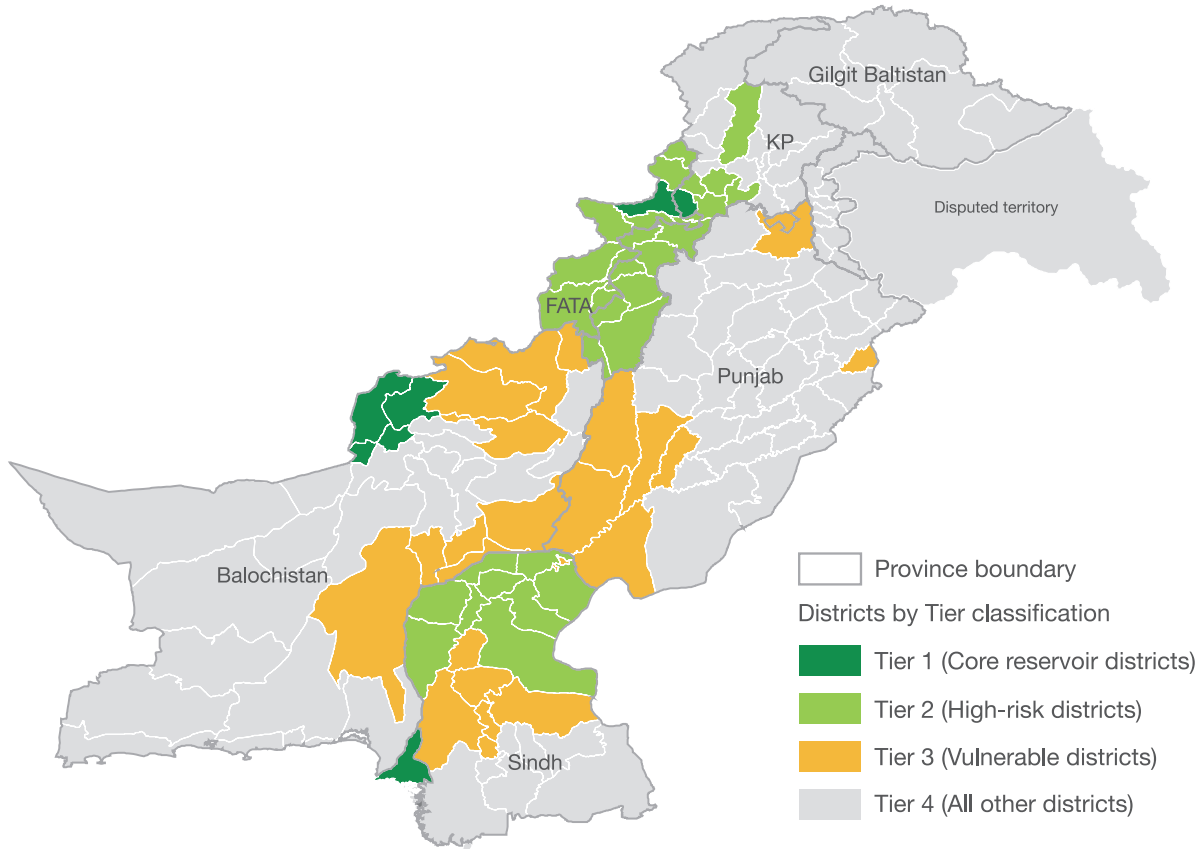


Figure 7 – Map of Pakistan showing the different district tier classifications for 2016 - 2017.

QUARTERLY MILESTONES

Quarter 1 – July to September 2016

- Achieve common risk assessment and alignment of strategies to decrease transnational risk and deliver “zero polio” across the common reservoirs
- Complete the targeted expansion and realignment of the Community-Based Vaccination (CBV) model
- Revise all microplans in all districts with special attention to mobile-team areas: Karachi, Northern Sindh, and Southern KPK
- Implement a surveillance improvement plan that will include the deployment of dedicated staff and the realignment of environmental surveillance sites fully implemented and surveillance targets met
- Develop and approve routine immunisation improvement plans for CBV areas in Tier 1 districts
- Hold National and Provincial Expert Review Committee Meetings
- Complete July, August, and September SIAs
- Conduct first NEAP Quarterly Review by September 2016

Quarter 2 – October to December 2016

- Complete Containment Phase I
- Secure and Deliver IPV doses needed for combined bOPV/IPV SIAs
- Achieve all performance targets and indicators outlined in the NEAP
- Complete October, November, and December SIAs
- Conduct second NEAP Quarterly Review by December 2016
- Interrupt WPV transmission

Quarter 3 – January to March 2017

- Begin to respond to any Sabin-like type 2 virus circulation, in accordance with the post-switch type 2 virus response plan
- Complete January, February, and March SIAs
- Hold National Certification Committee meeting
- Conduct a full round of combined IPV/bOPV campaigns in all Tier 1 districts
- Conduct third NEAP Quarterly Review by March 2017

Quarter 4 – April to June 2017

- Complete April and May SIAs
- Conduct fourth NEAP Quarterly review by June 2017

Table 1 – Primary Targets by Area of Work for the 5 Programme Strategic Objectives of the NEAP 2016 - 2017

Strategic Objectives	Activities	Scope	Primary Targets Programme Operations	Primary Targets Risk Assessment and Decision Support	Primary Targets Management Oversight and Accountability
1. Interrupt polio transmission in all core reservoirs	<ul style="list-style-type: none"> ■ 5 NIDs ■ 4 SNIDs ■ 1 combined bOPV/IPV SIA ■ RI Outreach ■ Expansion of CBVs 	<p>Area: 11 Tier 1 districts: Karachi (6 districts), Peshawar, Khyber, Quetta, Pishin, and Killa Abdullah</p> <p>Target population: 4,042,214 children younger than 5 years old</p>	<ul style="list-style-type: none"> ■ ≤2% of recorded missed children remaining unvaccinated at end of campaign ■ 95% coverage in third-party post-campaign monitoring (PCM) in all districts ■ 90% of Union Councils passing lot quality assurance sampling (LQAS) ■ All key performance indicators met. 	<ul style="list-style-type: none"> ■ Annualized non-polio AFP rate of ≥ 6 per 100,000 at the lowest geographic unit ■ ≥ 80% of stool specimens adequate (using GPEI definitions of stool adequacy) ■ All isolated WPV have VP1 divergence of ≤1% from closest genetic relative ■ All key performance indicators met. 	<p>Frequency</p> <ul style="list-style-type: none"> ■ PMFG: quarterly ■ NPMT: quarterly ■ PTF: quarterly ■ PEOC: post-campaign ■ Divisional: post-campaign ■ District: pre-, intra-, and post-campaign
2. Detect, contain and eliminate poliovirus from newly infected areas	<ul style="list-style-type: none"> ■ 5 NIDs ■ 4 SNIDs ■ 1 combined bOPV/IPV SIA (if IPV vaccines available) ■ RI Outreach ■ Expansion of CBVs 	<p>Area: 33 Tier 2 districts, 24 Tier 3 districts</p> <p>Target population: 12,992,603 children younger than 5 years old</p>	<ul style="list-style-type: none"> ■ ≤2% of recorded missed children remaining unvaccinated at end of campaign ■ 95% coverage in third-party PCM in all districts ■ 90% of Union Councils passing LQAS ■ All key performance indicators met. 	<ul style="list-style-type: none"> ■ Annualized non-polio AFP rate of ≥ 6 per 100,000 at the lowest geographic unit ■ ≥ 80% of stool specimens adequate (using GPEI definitions of stool adequacy) ■ All isolated WPV have VP1 divergence of ≤1% from closest genetic relative ■ All key performance indicators met. 	<p>Frequency</p> <ul style="list-style-type: none"> ■ PMFG: quarterly ■ NPMT: quarterly ■ PTF: quarterly ■ Divisional: post-campaign ■ District: pre- and intra-campaign

Strategic Objectives	Activities	Scope	Primary Targets Programme Operations	Primary Targets Risk Assessment and Decision Support	Primary Targets Management Oversight and Accountability
3. Maintain and increase population immunity against polio	5 NIDs	Area: 87 Tier 4 districts Target population: 19,638,741 children younger than 5 years old.	<ul style="list-style-type: none"> ■ ≤2% of recorded missed children remaining unvaccinated at end of campaign ■ 95% coverage in third-party PCM in all districts ■ 90% of Union Councils passing LQAS ■ All key performance indicators met. 	<ul style="list-style-type: none"> ■ Annualized non-polio AFP rate of ≥ 6 per 100,000 at the lowest geographic unit ■ ≥ 80% of stool specimens adequate (using GPEI definitions of stool adequacy) ■ All isolated WPV have VP1 divergence of ≤1% from closest genetic relative ■ All key performance indicators met. 	<p>Frequency</p> <ul style="list-style-type: none"> ■ PMFG: quarterly ■ NPMT: quarterly ■ PTF: quarterly ■ Divisional: post-campaign ■ District: pre-, intra-, and post-campaign
4. Strengthen routine immunisation coverage in core reservoirs	Monthly RI outreach delivering all antigens including IPV1	Area: 11 Tier 1 districts: Karachi (6 districts), Peshawar, Khyber, Quetta, Pishin, and Killa Abdullah Target population: 805,000 children younger than 1 years old.	<ul style="list-style-type: none"> ■ >80% routine immunisation coverage for IPV-1 and Penta 3 in areas covered by Community-Based Vaccination ■ ≥ 70% of children remain seropositive for poliovirus type 2* in areas conducting sero-prevalence surveys ■ All key performance indicators met. 	<ul style="list-style-type: none"> ■ All surveillance sites report on their AFP cases on a weekly basis, including “zero reporting” when no AFP cases were identified during the previous week. ■ All key performance indicators met. 	<p>Frequency</p> <ul style="list-style-type: none"> ■ PMFG: quarterly ■ NPMT: quarterly ■ PTF: quarterly ■ Divisional: post-campaign ■ District: pre-, intra-, and post-campaign
5. Stop international spread of WPV by decreasing risk across common transnational reservoirs	SIA synchronisation Joint risk assessment and alignment and coordination of risk management	Area: Khyber-Peshawar corridor and Greater Nangarhar region of Afghanistan. Quetta block in Pakistan and Greater Kandahar region of Afghanistan	<ul style="list-style-type: none"> ■ Align risk assessment and risk management across the two countries with the goal of ensure aggressive interventions within the reservoirs and IHR-compliant vaccination regime along the borders. 	<ul style="list-style-type: none"> ■ All isolated WPV across both countries have VP1 divergence of ≤1% from closest genetic relative. 	<p>Frequency</p> <ul style="list-style-type: none"> ■ PMFG: quarterly ■ NPMT: quarterly ■ NEOC: quarterly ■ PEOCs: post-campaign

* Following the tOPV to bOPV switch, type 2 vaccine can only be delivered via IPV either via combined bOPV/IPV SIAs or routine immunisation.

PRIORITIES BY AREA OF WORK 2016 - 2017

The 2016 - 2017 NEAP outlines a move to functional management structures that will streamline planning and operations, as well as support and reinforce effective decision making, monitoring, and oversight. With the introduction of the “one team under one roof” concept, the EOC network became a strong platform for the programme. The strategic focus of the EOC on virus risk management and the appropriate programme operations strategies to address them has been integral to sharpening the focus of the 2016 - 2017 NEAP.

The goals and objectives of NEAP 2016 - 2017 will be delivered across the programme’s three key Areas of Work (AOWs):

1. **Programme Operations** will ensure high-quality and focused activities to reach and vaccinate all target children through core and complementary immunisation activities.
2. **Risk Assessment and Decision Support** will drive programme priorities and strategies using the best available data and timely operational research.
3. **Management, Oversight, and Accountability** will oversee progress towards the achievement of NEAP goals, objectives, and targets through effective management support and coordination, real-time resolution of bottlenecks, and assigning clear accountability for good performance and under-performance alike.

These AOWs will be reflected in the functional management structures of the Emergency Operations Centres (EOC) at both the National and Provincial levels.

Reaching these goals and objectives will require that all levels of the programme generate specific deliverables through the implementation of specific series of high-priority tasks and activities. These deliverables, tasks, and activities will be tracked through NEAP Implementation Work Plans and Quarterly NEAP Reviews. In addition, they will be monitored with specific reference to team and individual accountability.

PROGRAMME OPERATIONS

Programme operations include all activities focused on reaching and vaccinating all target children. Key among these are supplementary immunisation activities (SIAs) and routine immunisation service delivery. However, closing the immunity gap requires more than effective vaccine management systems; it also depends heavily upon successful community engagement, community acceptance, and access to targeted children in an environment that is safe for vaccinators to work. Taken altogether, these activities represent the central pillars of programme operations for coordinating eradication efforts in Pakistan.

SUPPLEMENTARY IMMUNIZATION ACTIVITIES (SIAS)

The core strategy for 2016 - 2017 NEAP remains the same as the 2015 - 2016 NEAP: **house-to-house campaigns** to reach every child under five years of age with the Oral Polio Vaccine (OPV) with every visit.

Campaign strategy and spacing will continue to follow the template set forward by the 2015 - 2016 NEAP, allowing time for preparedness, monitoring, and post-campaign follow-up and adjustment. For 2016 - 2017, this will mean the delivery of at least **280 million bOPV doses** through 11 NIDs and SNIDs reaching up to 37 million children with each campaign (Annex 2).

Rounds will include:

- 1 SNIDs in July targeting Tier 1 districts and areas conducting case response rounds
- 5 SNIDs rounds targeting all Tiers 1-3 districts
- 4 NID rounds target all districts
- 1 Phased combined bOPV/IPV SNID targeting Tier 1 districts and northern Sindh and the southern Khyber Pakhtunkhwa belt of Tier 2 districts, depending on IPV vaccine availability

Planned "House-to-House" SIAs will be delivered using two strategies:

1. Community-Based Vaccination in Tier 1 districts
2. Mobile Team Vaccination outside Tier 1 districts

Community-Based Vaccination

In previous years, efforts to control polio in high-risk areas of Pakistan were not successful in interrupting transmission, despite the vigorous implementation of a Short Interval Additional Dose strategy. The causes were many and complex: there were major setbacks in access and security, poor monitoring and supervision, and unreliable data, which altogether contributed to poor campaign rounds and an accumulation of persistently missed children.

The 2015 - 2016 NEAP, after learning from recent successes in Karachi, implemented community-based vaccination (CBV) in core reservoir districts with two primary objectives:

1. To improve campaign quality and access in the high-risk UCs of the reservoir districts through sustained community engagement and the use of local, permanent vaccinators equipped with tools and the knowledge needed to build community trust
2. To track and immunise the cohort of children persistently missed during vaccination campaigns in the high-risk UCs in Tier 1 districts, including those from underserved communities: nomadic families, seasonal labourers, migrants, slum-dwellers, and populations in transit, as well as the new birth cohort

As of the end of May 2016, there were 10,955 Community Health Workers vaccinating children in 472 Union Councils (Panel 2).

Now, after detailed and inclusive consultation and discussion across the programme, and in response to a recent independent review that praised community-based vaccination (CBV), the National Polio Management Team plans to expand the CBV initiative to both cover as many Union Councils as possible within Tier 1 districts (located within the core reservoirs) and maintain CBV in Tier 2 districts where it is already in place. The community-based vaccination strategy will now become the backbone of the programme and NEAP implementation for Tier 1 districts.

Priorities for 2016 - 2017

- Bring together all existing variations of what was previously called “Continuous Community-Protected Vaccinations (CCPVs)” and unite them within a coordinated and jointly managed Community-Based Vaccination (CBV) initiative to streamline methodologies, staff selection, training, supervision, and monitoring
- Expand the new CBV initiative to cover all target children within the Tier 1 districts, to the extent possible. The proportion of target population covered is expected to increase from 67% to 100% in Khyber agency, 76% to 100% in Peshawar, 39% to 64% in Karachi, and from 39% to 100% in the three districts of the Quetta block (Quetta, Killa Abdullah, and Pishin). The expansion will be implemented jointly by PEI partners under the coordination and oversight of the respective EOCs and will be operational with effect starting in August 2016. In non-CBV UCs of Karachi, an aggressive plan to strengthen mobile teams will be implemented
- Ensure independent pre-, intra-, and post-campaign monitoring for each SIA
- Carefully review progress and challenges in implementation during Quarterly NEAP Reviews and through a more formal review of CBV implementation in the first quarter of 2017

Panel 2 – Community-Based Vaccination, Facts and Figures (June 2016)

- 10,955 Community Health Workers deployed
- Target: 2.3 million children in 472 high-risk Union Councils
- Teams: 7,188 vaccination teams
- Vaccinators: 9,232, 82% female (7,534 female vaccinators)
- Supervisors: 1,723. Supervisor-to-team ratio, 1:4.2

Mobile Team Vaccination

Outside Tier 1 districts, a Mobile Team Vaccination strategy will remain the backbone of the programme and NEAP implementation for those regions.

During the implementation of NEAP 2015 - 2016, a number of initiatives aimed to improve the quality of vaccination activities carried out by mobile teams. Their success was evident, based on:

- A reduction of the proportion of “no teams” among recorded missed children in third-party post-campaign monitoring: from 52% in the November NID, to 18% in the May NID
- A decrease in the proportion of recorded missed children: from approx. 7% before September, to approx. 3% per campaign in 2016
- Improved timeliness of payments to frontline workers (FLWs): over the course of the low season, districts met required timelines 81% of the time

While the overall performance of mobile teams improved across the country (as indicated by PCM and LQAS data), a number of UCs implementing the mobile team strategy continue to perform poorly. These

UCs have been systematically identified, and action has been taken to improve microplanning, as well as team selection, training, and supervision.

For NEAP 2016 - 2017, further efforts will be focused on improving the performance of mobile teams in all districts.

Priorities for 2016 - 2017

July – September 2016

The development and implementation of a **comprehensive Action Plan** to improve SIA performance in low-performing UCs with a particular focus on Karachi, northern Sindh, and Southern KPK through the revision of microplans—and through the selection, retention, and training of UCMOs, AICs, and FLWs.

- Improve team selection by forming a “team selection task team” at the UC-level. The task team will consist of the UCMO, AICs, UCPWs, UCCOs, and community representatives whose goal will be to achieve retention of local female teams, a composition which will meet the performance indicators of the NEAP 2016 - 2017
- Ensure the timeliness of all payments for FLWs through close weekly follow-ups by the Payments Task Team at the national and provincial levels, in order to improve the submission speed of required information via the Direct Disbursement Mechanism (DDM) by DPCRs and APCRs
- Review and modify the payment duration for field workers (e.g., AICs) to reflect any additional time needed to ensure adequate pre-campaign preparations, including microplan revisions and validations to ensure household targets are correct and vaccinator assignments are appropriate and realistic to the areas they serve
- Incorporate the outcomes of the training needs assessment into the current structured training methodology for FLW
- Assess the quality and reach of planned training sessions by strengthening the monitoring and evaluations of the training programme

September 2016 – May 2017

- Develop and monitor the Accountability and Management Framework at district, divisional, and provincial levels as appropriate to drive performance improvement in low-performing UCs
- Prepare a mechanism to consistently and continuously identify low-performing UCs, districts, and divisions. All provinces, Islamabad, FATA, and AJK should prepare a list of low-performing UCs on a quarterly basis
- Provide increased supportive supervision to campaign preparation and implementation
- Expand independent monitoring of all phases of SIAs with special focus on improved assessment of pre- and intra-campaign indicators

Complementary Strategies

In addition to the planned OPV SIAs, a number of complementary strategies will be implemented to reach and vaccinate persistently missed children.

These complementary strategies include:

- At least one combined IPV/OPV SIA aimed at Tier 1 districts as a priority and including as many Tier 2 districts as possible, if IPV vaccine is made available from global stocks
- Vaccination of high-risk mobile populations and children in transit during SIAs
- Complete implementation of currently planned health camps to build community trust

Core and complimentary strategies will be closely aligned and monitored. As with core strategies, complementary strategies will be increasingly focused to ensure maximum impact, adequate supervision, monitoring, and return on investment.

Combined bOPV/IPV SIA

The programme estimates that a combined bOPV/IPV SIA that plans to target all children between 4 and 23 months and achieves 80% coverage will decrease the immunity gap across the district by 1.5% to 4.5% on top of what might be achieved by an additional round of bOPV-only SIA. This gain in closing the immunity gap is needed to increase the probability of stopping endemic circulation, particularly in areas with high force of infection.

During 2015 - 2016 a number of SIAs were carried out using a combination of bOPV and IPV to target under-immunised children in high-risk UCs and districts. These activities resulted in the vaccination of 1,140,115 children between 4 and 23 months of age who received a single dose of IPV. However, the performance varied from place to place: in FATA the proportion of UCs passing LQAS (at $\geq 80\%$ coverage, $\leq 8/60$ children unvaccinated) was 85%, whereas the proportion for Peshawar, Quetta block, and Karachi was 85%, 70%, and 51%, respectively.

Through the implementation of these critical activities, a number of lessons were learned in relation to microplanning, social mobilisation, and engagement/coordination with EPI. When considered in relation to factors that drive poliovirus circulation in the Tier 1 and Tier 2 districts—high population density, high birth cohort, poor sanitation, and weak EPI in high-risk districts—these lessons will bolster preparations for future planned activities.

For the implementation of NEAP 2016 - 2017, the programme will implement a further one-phased combined bOPV/IPV SIA targeting children between 4 and 23 months in all Tier 1 districts and as many Tier 2 districts as possible. The goal of the bOPV/IPV strategy is to increase the probability of interrupting endemic circulation in these areas and increase the resilience of the population against any possible re-introduction of new viruses circulating elsewhere. In order to ensure alignment with the GPEI partnership, the National EOC has made available a detailed plan for 2015/2017.

Priorities for 2016 - 2017

- Circulate to the GPEI partnership a **revised version** of the strategic document, “Combined bOPV/IPV vaccination campaigns as a tool of polio eradication in Pakistan, 2015/2017,” submitted last year by the programme. The National EOC will be tasked with updating it for 2016/2018
- Implement one high-quality phased combined bOPV/IPV round targeting 3.3 million children (3.9 million vaccine doses) between 4 and 23 months

High-Risk and Mobile Populations:

The programme has recognised the importance of reaching and vaccinating children in transit during SIAs, as well as reaching and vaccinating children in highly mobile migratory, nomadic, or internally displaced populations.

During the implementation of NEAP 2015 - 2016, these activities were systematically reviewed and a **High-Risk Mobile Population Strategy** was developed. This strategy focused on:

- Ensuring that children on the move have the opportunity to be vaccinated during SIAs
- Rationalising the number of Permanent Transit Points (PTPs) for vaccination to ensure that they were appropriately placed and adequately staffed, supervised, and monitored
- Systematically identifying and mapping all mobile, migratory, nomadic, and internally displaced populations in Pakistan with a view toward ensuring that these populations are included in SIA microplans
- Vaccinating mobile populations at PTPs or as part of special vaccination activities (e.g., during festivals or seasonal movement) before departure and/or on arrival
- Increasing the targeted age group for vaccination at border crossing points with Afghanistan to 10 years and ensuring more systematic vaccination at these points

Since the beginning of 2016, 2.5 million unvaccinated children were vaccinated by mobile teams during SIAs. From January to April 2016, a total of 9.4 million children were vaccinated at PTPs. The proportion of 'zero'-OPV dose children vaccinated in April and May 2016 was 0.8%. However, the number of unvaccinated children vaccinated at transit sites during the May NID increased by 14% when compared to the January NID.

To address this gap, the high-risk mobile population (HRMP) strategy will be further refined in 2016 - 2017 to focus on reaching persistently missed children both during SIAs and through PTPs and special vaccination activities.

Priorities for 2016 - 2017

- Fully implement International Health Regulations requirements regarding the vaccination of populations moving across international borders
- Expand PTPs to manage increased risk in northern Khyber Pakhtunkhwa, bordering Afghanistan's Greater Nangarhar region
- Continue to review PTPs along the Afghanistan-Pakistan border in-line with changing cross-border risk assessments
- Implement a **comprehensive independent monitoring framework for PTPs**
- Identify and map all completed HRMPs. Translate HRMP mapping exercise to include these populations in UC and district microplanning

Health Camps

Health camps are the only demand-driven intervention geared towards building acceptance and trust. The health camp strategy has helped close the immunity gap and reach 'zero'-OPV dose children in the highest-risk UCs. However, it is a relatively expensive intervention, and the number of zero-dose children reached through the camps is declining. Thus, in bridging this work with community-based strategies of NEAP 2016 - 2017, 500,000 doses of OPV will be reserved for camps until the end of 2016.

Priorities for 2016 - 2017

- Continue to implement all planned health camps through the end of 2016
- Ensure harmony across data collection, collation, analysis, and dissemination for all health camps
- Ensure **monthly, high-level summaries** of 'zero'-OPV dose children are shared with all stakeholders

- Review health camp performance to assess their impact on community acceptance and access to unreached children, to be conducted by November 2016 ahead of the Quarter 2 NPMT meeting in December 2016

ROUTINE IMMUNISATION SERVICE DELIVERY

To stop transmission in areas with endemic circulation of poliovirus, the programme estimates that immunity levels may need to exceed 95%, based on serological data from other historically endemic areas in Pakistan that have remained polio-free for many years (e.g., Faisalabad¹).

In all the models developed by the programme to assess risk of outbreaks or continued transmission, poor routine immunisation has been a clear predictor of the likelihood of a case of WPV in a district. Steep challenges to closing the immunity gap arise with each new birth cohort. The estimated number of newly-born children in areas with endemic circulation is one million per year. It is a race against time to ensure that these children achieve full immunity before they contribute actively to poliovirus transmission dynamics.

Under NEAP 2016 - 2017, the programme will continue to collaborate with the Pakistan Expanded Programme on Immunisation (EPI) to identify and exploit synergies in surveillance, social mobilisation, and service delivery across the country. Specifically, the programme will work closely with EPI to improve routine immunisation service delivery in areas implementing CBV strategy, primarily Tier 1 districts. The intent is to support routine immunisation outreach activities for one week per month as aligned with the SIA schedule through the CBV workforce which assists with identifying and tracking of children and selecting optimal outreach sites. The goal is to achieve at least 80% coverage in all antigens for children younger than one year old. As an indicator, IPV-1 and Pentavalent-3 routine immunisation coverage will be monitored.

Priorities 2016 - 2017

- Provincial EOCs with Provincial EPI to develop a **joint work plan on routine immunisation improvement** in UCs implementing CBV strategy in Tier 1 districts
- Conduct a **comprehensive assessment** of routine immunisation service delivery infrastructure for all CBV UCs in Tier 1 districts, to be completed by September 2016
- Develop **new tools** to capture detailed routine immunisation information for children younger than one year old. Using this tool, the programme will capture baseline information and report monthly on progress made.
- Implement monthly routine immunisation session plans for all CBV UCs to strengthen routine immunisation through outreach services

COMMUNICATIONS & COMMUNITY ENGAGEMENT

"*Sehat Muhafiz*": Enabling successful vaccination at the doorstep

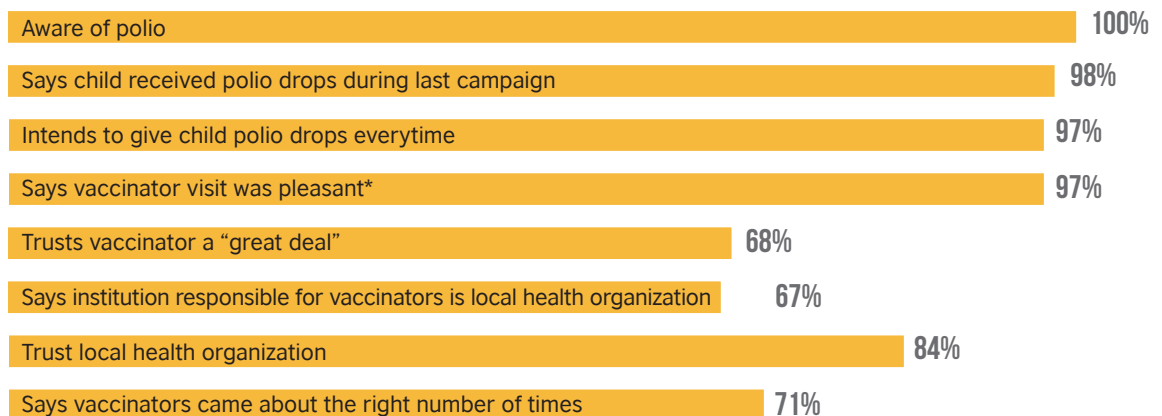
Under the 2015 - 2016 NEAP, a two-pronged communication approach was introduced to: 1) promote all vaccination, including polio, as a social norm that everyone adheres to, and 2) build trust and goodwill for health workers by humanising them in all programme communications. "*Sehat Muhafiz*" (or Guardians of Health) was a marked shift from the programme's traditional reliance on risk and awareness of polio, and the impact of this shift in messaging has been carefully studied.

¹ Recent seroprevalence survey conducted in Faisalabad shows type 1, type 2, and type 3 seroprevalence of 99.1%, 95.4%, and 95.4%, respectively.

Knowledge, Attitudes and Practice surveys were conducted by the Harvard School of Public Health at the end of 2013 and early 2014, in October and November 2014—and once more between January and April, 2016. The surveys revealed high degrees of reported acceptance, awareness, and intent to vaccinate (Figure 8). Most importantly, it showed greatly improved perception of vaccinators, revealed by self-reported assessments of experiences (Figure 8).

The poll also revealed areas of focus for the 2016 - 2017 communication and community engagement strategy, particularly in relation to the issues and concerns raised by caregivers of still missed and persistently missed children.

Caregiver...



* Very Pleasant" (65%) and "Somewhat Pleasant" (32%)

Figure 8: Caregiver acceptance and future intentions to vaccinate and perceptions of programme, Knowledge, Attitudes and Practices Survey, Pakistan, February – April 2016.

NOTE: Survey was done in core reservoirs and high-risk districts.

The eradication of polio continues to depend on the success of health workers, and their success in the field revolves around short, interpersonal interactions between health workers and caregivers. This cannot be done without an enabling and supportive environment for "Sehat Muhafiz", including effective training, social mobilisation and community engagement, actionable data, appropriate tools, and good morale and motivation.

Targeted Community Engagement

It is evident from last year's success in targeted communications that community engagement in the Pakistan polio programme is at a 'tipping point,' contributing to increased local trust and reduced numbers of missed children.

Importantly, the vaccinator- and community-norm focused communication strategy reflected the programme's overall strategies by moving from broad, national tactics to targeted communication designed for the priority 10% in the Tier 1 and 2 districts. Quantitative and qualitative data from Tier 1 and Tier 2 districts show that, while household acceptance of

OPV in Pakistan is the highest it has ever been, parents who accept OPV nevertheless nearly always believe that someone close to them is unsupportive of polio vaccination. This dynamic demonstrates

Final Communique of the 13th Islamic Summit of the Heads of State/Government of the OIC Member States Date: 15/04/2016

148. The Conference reaffirmed that preserving the wellbeing and physical health of children is a duty of every parent and society as prescribed by Islam. It, therefore, appealed to the religious scholars and leaders to support the polio eradication campaign and encourage people to respond positively to it.

near-universal compliance with OPV, but little demand. In this context compliance, although high, is fragile. Without a consistently supportive social environment that reinforces vaccination, individual compliance is easily put at risk—particularly in the face of negative media, a negative experience with a health-worker, rumours, misperceptions, social pressures, and fears of judgment.

Community engagement, then, can serve as a key enabler of demand-driven vaccination, opening doors to the most difficult-to-reach children and keeping them vaccinated until they reach 5 years of age. Bringing community support for OPV on par with the levels of individual support will help secure vaccine acceptance until interruption and maintain demand until certification. The community engagement strategy, introduced in the Tier 1 districts in the first half of 2016, will be as part of NEAP 2016 - 2017.

Priorities for 2016 - 2017

- Focus on parents and caregivers of still missed and persistently missed children
- Provide social support for the health workers and vaccinators ("*Sehat Muhafiz*") in the local area
- Provide social support for the importance of repeated vaccination
- Improve the relationship between the vaccinator (the face of the programme), the programme (people's experience with polio eradication), and the community
- Ensure vaccination is delivered in a manner that is reflective and respectful of community preferences

Dynamic Norm-Focused Mass Media

The mass media, as with all enabling communication tactics, has been fully integrated with the programme's operational strategy. Beyond representing the programme's goals and end-game in the fight against polio in Pakistan, phased campaigns that respond to and honestly reflect the operational reality of the programme have been critical to success of the programme on the ground and at the frontline.

The "*Sehat Muhafiz*" approach in 2015 - 2016 had two key mass-media stages. The first, "We are All Intertwined," was designed to present vaccination as a social norm amid the backdrop of the interconnectedness of family, children, and the traditions that define a place and culture. The second phase, "Strangers No More," was timed with broader efforts to improve training and resolve delayed payment and morale issues. Building on the social-norms approach of Intertwined, Strangers No More sought to directly build trust for the "*Sehat Muhafiz*". Vaccinators are presented as fathers, mothers, and members of the community with full lives, talents, and skills not limited to their role in the polio programme.

Priorities 2016 - 2017

- Continue and build upon the "We are All Intertwined" and "Strangers No More" themes with greater intensity
- Prepare to shift to a more celebratory tone as progress in virus interruption continues, one that recognises the contribution of health workers and their role in the community
- Include more routine immunisation and broader health messages as the programme increasingly turns to child health in the years until certification. Any transition of this type would depend on both epidemiology and confidence on the ground in the interruption of transmission.
- Regardless of programme scenario, continue the adapted and localized approach through targeted channel selection and messaging, with the majority focus on the Tier 1 and Tier 2 districts

POLIO REHABILITATION INITIATIVE FOR CHILDREN PARALYZED BY POLIO

Launched in 2007, the project “Improving the quality of life of children suffering from polio-related disabilities in Pakistan” has been implemented under the umbrella of the Polio Rehabilitation Initiative (PRI). The major objective of the initiative is to enhance the mobility and dignity of children suffering from disabilities caused by polio and to mainstream them as productive members of society. The project is a unique combination of home-based and institution-based rehabilitation, and services are being provided at the doorstep of children suffering from polio-related physical disabilities.

Since its inception, over 800 children have been assessed and provided with medical rehabilitation (provision of orthotic devices, physiotherapy and surgical correction) and social rehabilitation (school enrolment). The goal of the rehabilitation programme is to provide rapid assessment and appropriate rehabilitation services to mitigate secondary complications caused by paralysis. There was a backlog of 266 cases throughout the country since 2013 due to restricted accessibility, administrative challenges, and limited funding; however, the programme has since resolved these issues and is back on track again.

During the 2015 - 2016 NEAP year, the programme conducted the following activities:

- Evaluated and began rehabilitation for 13 cases diagnosed as of June 2016
- Assessed and began rehabilitation for 183 and 38 cases from 2014 and 2015, respectively
- Reevaluated and provided orthotics to 50 cases currently in the programme
- Enrolled 75 children between the ages of 4 and 10 in school

Priorities for 2016 - 2017

- Assess and begin rehabilitation for all newly diagnosed cases within 15 days.
- Address the backlog of cases from 2013 (45), 2014 (183), and 2015 (38)
- Coordinate with Provincial EOCs to coordinate follow-up of patients and to provide monthly updates on progress

ACCESS & SECURITY

Access

The objective of the programme’s access strategy is to identify and track inaccessible children and find solutions to vaccinate, regardless of reason or region.

Access is proactively monitored before, during, and after each campaign so as to ensure appropriate follow-up actions are taken, as needed. At the start of the current campaign season, almost all of Pakistan’s 37 million children under 5 are accessible to the programme. What remain are approximately 2,500 inaccessible children. Most are limited to concentrated geographical pockets inside FATA.

In areas with accessibility to all children, there are often safety issues that require coordinating security support to safeguard vaccinators as they conduct campaigns. The programme works with the relevant law enforcement and security agencies to ensure that the provision of security support is appropriate, timely, and adequate. Security support is monitored throughout each campaign with feedback provided on a real-time basis to address gaps. In order to ensure maximum impact,

campaigns are conducted in a single phase of 3 to 5 days. Notwithstanding multiple commitments, every campaign conducted since January 2016 has been a single-phased campaign and has proceeded as planned.

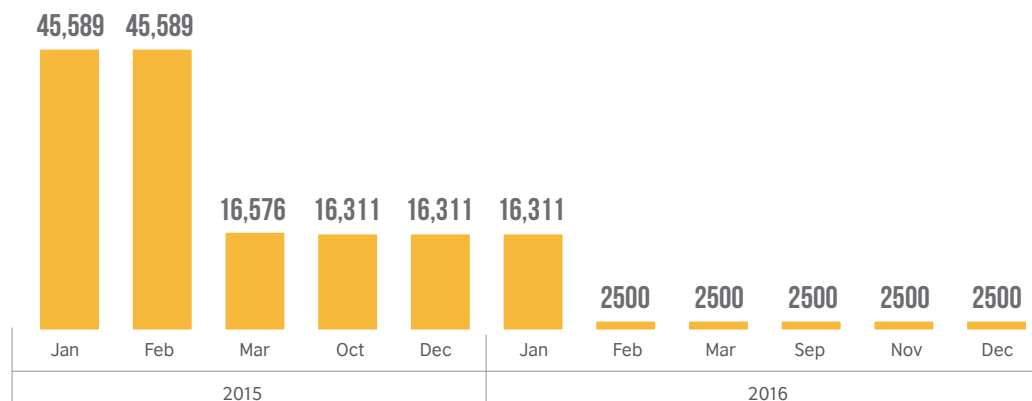


Figure 9 – Estimated number of children in areas considered inaccessible in FATA, Pakistan, July 2015 – May 2016

Priorities for 2016 - 2017

- Maintain access to all children in areas with fragile security and/or ongoing security operations through sustained engagement and coordination with security agencies
- Continue to closely track and verify “inaccessibility” with stand-by readiness to immediately reach any inaccessible children as soon as they become accessible or move out of that area

Security

Throughout 2015 - 2016 NEAP implementation, there was a sustained reduction in security incidents involving polio workers and a general reduction in levels of fear, especially in areas that were previously seen as insecure. The provision of a secure environment in which vaccination teams and other programme staff could operate was a major feature of NEAP 2015 - 2016. Careful and coordinated security planning that involved security services at the district, provincial, and national levels played a significant role in creating a safe environment for SIAs. This achievement of the programme is particularly noteworthy when considered in relation to the number of frontline workers (FLWs) who were involved in last year’s SIA campaigns: on average, over the course of the low season, security forces protected 199,189 FLWs per campaign.

Security efforts not only provide protection for FLWs; they also directly and beneficially impact campaign preparation and vaccine delivery. Last year, the sustained commitment of security services resulted in the delivery of single-phased campaigns across the country, particularly in Peshawar, Quetta block, and Karachi. This achievement effectively reduced the burden on technical teams of de-facto increased rounds, allowing for better SIA preparation and implementation. Additionally, the introduction of CBV in some Union Councils allowed for the provision of adapted security measures that were less burdensome on security services.

Entering into the 2016 - 2017 NEAP, however, security remains a constant concern to the programme—and while recognising the massive commitment of security services to the polio programme, these coordinated efforts must be sustained into 2016 - 2017 if campaign quality is to be maintained and further improved.

Priorities for 2016 - 2017

- Continue security planning and coordination before SIAs at UC, district, and provincial levels
- Maintain single-phased SIAs with no cancellations or postponements due to lack of availability of security personnel
- Continue real-time security monitoring and assessment by Provincial and National EOC with rapid incident management when required according to Standard Operating Procedures

COORDINATION WITH AFGHANISTAN

Epidemiology of the wild poliovirus (WPV) clearly shows an intertwined transmission along the common border of Afghanistan and Pakistan. The geographic pattern to the spread of the virus is reflected in the close cultural-linguistic ties of the two core virus reservoirs that connect the Greater Nangarhar area of Eastern Afghanistan and the Greater Kandahar area of Southern Afghanistan to Pakistan's Khyber-Peshawar corridor and the Quetta block, respectively.

Analysing epidemiology alongside population movement has brought focus to programme strategies designed to target core reservoirs in both Afghanistan and Pakistan. Torkham (in the northwest) and Friendship Gate (in the southwest) are the main border-crossing points between the reservoirs of Pakistan and Afghanistan. Transmission along the border is heavily facilitated by the large number of people crossing the border at these two points on a daily basis. It is estimated that more than one million children younger than five years old cross the border annually. This scale of population movement leads to a cross-pollination of viruses across the two countries.

Since June 2015, the two countries have been synchronising major programme activities. The two National EOCs are now interacting on a weekly basis through designated national focal points, and the highest level administrative and political leadership convene regular face-to-face meetings or video conferences. Additionally, the teams of the bordering districts and Union Councils are meeting before and/or after each round of SIAs.

Priorities for 2016 - 2017

- Agree on a common risk assessment and management strategy in adjoining provinces (e.g., scale and scope of SIAs)
- Continue the regularity of meetings / interactions at the national, provincial, and district levels, and improve the quality of these interactions. Each meeting should have an agreed and clear agenda, as well as clear, documented, and actionable outcomes
- Consolidate local information on population movement through provincial teams and communicate to the National EOC on a monthly basis for compilation and review. Necessary information will be shared with Afghanistan's National EOC
- Fully implement the mitigation measures put forward by the International Health Regulations regarding stopping the spread of cross-border poliovirus
- Continue sharing communications materials and media mapping relevant for common reservoirs with Afghanistan. Ad-hoc engagement around particular communication issues should continue with focus (i.e., engaging influencers to resolve a communication issue)

VACCINE MANAGEMENT SYSTEM

Vaccine Management

Vaccine Management's aim is twofold: 1) to ensure that the programme has sufficient vaccine quantities, and 2) to safeguard the quality of the vaccine down to the service delivery point.

In the 2015 - 2016 NEAP, maintaining a sufficient supply of OPV and IPV to meet the requirements for SIAs and routine needs has been a key programmatic priority. The programme must have the capacity to respond to changing demand requirements due to epidemiological shifts in the virus, outbreaks in any one type, and increased target populations, while also meeting demand requirements for routine immunisation.

With the 2016 - 2017 NEAP, although Vaccine Logistics Management Information System (vLMIS) is functional and used by 83 districts and towns, compliance in regards to timeliness and completeness of data reporting from all level needs rigorous monitoring.

Priorities for 2016 - 2017

- Monitor monthly vaccine stock levels with the National EOC Vaccine Management task team reporting on availability and forecast
- Fully implement **vaccine management SOPs** with particular attention on Tier 1 districts and a special focus on optimal functionality in District Vaccine Management Committees and continual improvement in SOP compliance and reporting quality
- National Vaccine Management Committee to meet regularly as per TORs to oversee all the pertinent vaccine management issues in the country, including implementation of vLMIS in all remaining districts
- Strengthen regular reporting by Provincial Vaccine Management Committees (PVMCs) to the National Vaccine Management Committee (NVMC) on Provincial and District Stores' SIA OPV and IPV stock balance within one week following each SIA for polio

RISK ASSESSMENT AND DECISION SUPPORT

Risk Assessment and Decision Support includes all activities focused on ensuring that programme operations are driven by the best available data and operational research, with information reaching decision makers and frontline staff in a timely manner and in a format that helps drive programme priorities, performance, and accountability.

Risk Assessment and Decision Support activities include:

- Surveillance
- Laboratory Services
- Containment
- Monitoring and Evaluation
- Information Management Systems
- Rapid Response Units
- Innovation and Operational Research

SURVEILLANCE

A surveillance system for eradication

Detecting every poliovirus transmission chain in a timely manner is a key objective of the programme and integral to the goals of NEAP 2016 - 2017. To achieve this, surveillance must—at a minimum—meet global indicators in all districts.

Under the 2015 - 2016 NEAP, the surveillance system met and even surpassed the levels of performance required by the global guidelines, particularly through numerous surveillance quality reviews conducted by the programme.

With the 2016 - 2017 NEAP, continuing to address the gaps identified by last year's reviews remains a priority. In 2016 - 2017, the surveillance system will aim for an additional performance boost to achieve the sensitivity levels needed by a programme eradicating a virus in one of the last two remaining reservoirs on the planet.

A new focus for the surveillance programme will be to quickly identify, assess, and respond to “missed poliovirus transmission.” Previously, the programme used the term “orphan virus” for poliovirus isolates with nucleotide sequences that are greater than 1.5% divergent from the known genetic sequences. To enhance surveillance sensitivity, polio virus transmission will be defined as “missed” if any isolated poliovirus from either a case or an environmental sample is divergent from its closest genetic relative by $\geq 1\%$. While “missed transmissions” indicate poor surveillance somewhere within the system, it doesn't necessarily mean that the lapse in surveillance is local. Consequently, a “missed transmission” event will trigger an immediate and comprehensive investigation—and the programme will simultaneously take special steps to enhance virus detection in areas that are potentially harbouring the virus.

Priorities for 2016 - 2017

- Under the National EOC's Risk Assessment and Decision Support Team, a Surveillance for Eradication Task Team (SETT) will oversee the development and implementation of a **National Surveillance Work Plan for 2016 - 2017** in line with priorities outline by the 2016 - 2017 NEAP
- The SETT will meet regularly (at least every two weeks) to review surveillance data and monitor progress on the National Surveillance Work Plan against key performance indicators and process indicators
- Utilise new technology to improve the collection, collation, and analysis of all surveillance data
- Report progress every two weeks to the EOC Management Support Team
- Undertake additional measures—such as enhanced active case search, “surveillance sweeps,” healthy children sampling, contact sampling, and improved environmental surveillance—in areas with recent evidence of transmission, including the core reservoir zones and high-risk Tier 2 districts (North Sindh), to ensure that any ongoing transmission does not go undetected

Acute Flaccid Paralysis Surveillance

The surveillance infrastructure in all districts must be capable of detecting all cases of acute flaccid paralysis (AFP) in a timely manner. In addition, the system should be able to investigate all cases, as well as collect and appropriately store, ship, and test stool specimens at the WHO-accredited, NIH-established **Regional Reference Laboratory** to confirm the presence or absence of polioviruses.

The objectives for 2016 - 2017 will be to improve the sensitivity and quality of AFP surveillance by:

- Providing a **dedicated PEI workforce for AFP surveillance**, especially at the district level (Tiers 1-2) and at the divisional level (Tier 3-4)
- Improving the performance of the existing system through better supervision, close monitoring, and diligent application of SOPs
- Using innovative measures such as improved community engagement, surveillance sweeps, enhanced active case search, healthy children sampling, and contact sampling to increase surveillance sensitivity in areas with ongoing poliovirus transmission

Priorities for 2016 - 2017

- Expand AFP surveillance infrastructure and workforce to meet the needs of the programme
- Ensure that the designated and dedicated district surveillance officers are in place to support the District Surveillance Coordinators; track and report on progress towards meeting the corresponding NEAP 2016 - 2017 indicator
- Establish a functional **community-based AFP surveillance system** in areas with poor basic health infrastructure—e.g., FATA, districts in Balochistan, districts in Interior Sindh, and Union Councils using a CBV strategy. On a bi-weekly basis, the SETT should report to the National EOC on progress made towards the implementation of this system
- Support active surveillance by conducting active case search during polio campaigns and other SIAs. The number of cases reported and investigated will be tracked and reported by the SETT
- Enhance supervision and monitoring of the active reporting sites which will support the development of a national database of all sites

- Enforce weekly reporting on the number and proportion of active visits and the number and proportion of sites in compliance with weekly reporting (including zero-reporting). Where necessary, expand AFP surveillance network to include more health facilities, including private sector and the informal health sector
- Prepare and finalise a **protocol with clear trigger mechanisms** for “healthy children stool sampling” and “contact sampling.” Such a protocol may help improve the probability of detecting circulation in areas where the programme suspects an undetected circulation is ongoing
- In accordance with global guidelines, establish a **National Expert Review Committee (ERC)**

Environmental Surveillance

Samples collected from the environment have played a critical role in providing insight into the transmission dynamics of the poliovirus in Pakistan. As the programme nears the goal of finally interrupting transmission, and as the case-to-infection ratio continues to decline, the importance of environmental surveillance in the timely detection of transmission cannot be under-estimated.

Under the 2016 - 2017 NEAP, a careful, targeted expansion and redeployment of surveillance sites (especially in Tier 1 and Tier 2 districts) will be implemented. The potential programmatic impact of these additional sites means it will be critical that the laboratory has the capacity to respond nimbly to the needs of the programme, as determined by the SETT. The programme will review the lab’s capacity and subsequently ensure it can meet the needs of the programme for the next year. The programme will also explore the possibility of using new sampling techniques (e.g., BMFS) currently under evaluation in improving the reach and efficiency of the environmental surveillance system.

Priorities for 2016 - 2017

- Expand the numbers of **environmental surveillance sites** by at least 10 new sites. Surveillance sites in Tier 1 and Tier 2 districts will be assessed and rationalized by August 2016, and Karachi, Quetta block, and other areas with ongoing transmission will be given priority. This expansion will be implemented in phases and completed by the end of the second quarter of the NEAP Implementation (December 2016)
- Develop an SOP to determine procedures and triggers for increasing the frequency of environmental sample collection from monthly to bi-weekly. Reasons for increasing sampling frequency may include: enhancing the utility of newly-added sites, determining existing sites suitable for temporary closure, and supporting enhanced surveillance activities to detect poliovirus transmission in an area of special interest
- Conduct a joint quarterly review (surveillance team member and a person from the lab) of the sample collection procedures of at least 20% of environmental surveillance sites. Provide field workers with onsite training on sample collection
- Further improve quality of data by using technology to collect and submit additional data

Post-Switch Poliovirus Type 2 Surveillance

Considering the switch from tOPV to bOPV has been successfully concluded, and considering the risk of re-emergence of a type 2 Vaccine Derived Poliovirus (VDPV) is at its greatest within the next 12 months, it is critical that special vigilance be paid to any evidence of circulating type 2 virus. In addition to WPV2 and VDPV2, this includes Sabin-like type 2 circulation.

Priorities for 2016 - 2017

- Develop an updated **poliovirus type 2 protocol** that's aligned with the April 20, 2016 Global Protocol, and approved by the SETT and the National EOC
- Include all type 2 viruses isolated from a case or the environment in the surveillance team's weekly report, starting with the implementation of the 2016 - 2017 NEAP in July. In addition to tables and/or graphs, a **month-by-month map** of all type 2 viruses isolated will be included
- Provide the VP1 nucleotide variations of all poliovirus type 2, starting in September 2016
- Make the status of type 2 circulation a standing agenda item at every SETT meeting
- Carefully investigate and develop a **calibrated response plan for all Sabin-like type 2 virus events**, in addition to responding possible WPV2 or VDPV2 outbreaks, starting from end of August 2016

LABORATORY SERVICES

The Regional Reference Laboratory (RRL) at the National Institute of Health (NIH) in Islamabad, Pakistan is the cornerstone for both Pakistan and Afghanistan polio eradication activities. The lab has consistently provided timely laboratory results, including genetic sequencing results of all WPVs and VDPVs for both stool and environmental samples. Senior virologists regularly brief the National EOC and provide detailed interpretation of the laboratory results. The lab also reports on the quality and timeliness of delivery for all samples received.

In 2015, the lab processed 21,775 stool specimens and 644 environmental samples. The lab also tested 2,893 isolates for intratypic differentiation and analysed 405 isolates for genetic sequencing.

For the 2016 - 2017 NEAP, the programme will focus on ensuring that the laboratory has the capacity to meet the increasing demands arising from the push to improve surveillance sensitivity. Already, the increased number of stool samples from both Afghanistan and Pakistan and the expansion of environmental surveillance sites observed in the past year has pushed the lab close to the limit of what it can deliver. Thus, the primary objective for the next few months is to ensure the laboratory is meeting the growing demands of the programme.

Priorities for 2016 - 2017

- Assess resources required to support the anticipated 25% increase in stool and environmental samples. This **assessment** will confirm additional staff, reagents, equipment supplies, and space requirement and it must be completed by mid-August 2016 and shared with the SETT with a **proposed timeline** for acquisition of resources
- Expedite the acquisition of the agreed increase reagents laboratory personnel and required reagents, to be monitored monthly by the SETT

CONTAINMENT

The purpose of containment is to reduce the risk of reintroduction of poliovirus into the community. The global strategic plan for containment of polioviruses requires implementation of poliovirus safe handling and containment measures to minimize the risks of a facility-associated reintroduction of the virus into

the polio-free community. Many facilities in Pakistan store specimens that may potentially contain polioviruses. In the initial laboratory surveys conducted between November 2015 and June 2016, 1,583 biomedical laboratories were identified. None of the labs were found to have materials that contain or potentially contain WPV2 or VDPV2.

It is important to note that, with the exception of the Regional Reference Laboratory (RRL) for Polio Eradication Initiative established at the NIH, Pakistan does not have any other laboratory that analyses poliovirus-containing specimens. RRL has achieved and implemented required levels of biosafety and biosecurity measures with strict adherence to the containment practices required for poliovirus non-essential facilities.

Priorities for 2016 - 2017

- Identify full-time **national and provincial focal persons** to support the RLL in accelerating the implementation of containment requirements
- In 2015 - 2016, the programme developed Terms of Reference (TORs) for a National Containment Coordinator and Containment Committee and submitted a proposal to the Ministry. The programme will work on getting a formal notification of the formation of a **National and Provincial Containment Committees**
- Review the inventory of all biomedical facilities with a view to updating the list of facilities storing materials that contain or potentially contain WPV or VDPV, and work to ensure a **biosafety level 2 in all enterovirus laboratories**
- Complete the appropriate documentation for the switch from tOPV to bOPV in April 2016 and maintain vigilance through heightened type 2 surveillance. With the exception of what's needed to continue to carryout essential laboratory activities (e.g., serosurveys), the programme will destroy or transfer to poliovirus essential facilities, all materials containing type 2 poliovirus
- Continue to document and report to the National EOC on the status of the implementation of Phase I, Phase II, and Phase III containment requirements

MONITORING AND EVALUATION

The programme has made tremendous progress in ensuring thorough monitoring of SIA performance. Tools used for pre-, intra-, and post-campaign monitoring have been standardized. Third-party post-campaign monitoring (PCM) has been and will continue to be held as an independent estimate of campaign coverage in each district, providing assessment and analysis for any missed children. Post-campaign lot quality assurance sampling (LQAS) monitoring has been continually expanded in scope over the last year: the number of UCs assessed each round has nearly doubled, from 265 in January 2015 to 536 in January 2016, and Data Support Centres have continued to track missed children in high-risk UCs. As importantly, pre- and intra-campaign monitoring has been expanded with provision of real-time data to provinces and districts so corrective action can be taken during the campaigns. In addition, the implementation of post-campaign electronic data collection using the Open Data Kit (ODK) platform has dramatically increased the speed of post-campaign performance reviews using LQAS and third-party monitoring data.

Priorities for 2016 - 2017

- Rebalance SIA performance measurement away from LQAS and PCM and towards pre-campaign and intra-campaign monitoring with real-time provision of actionable data to implementers at provincial, district, and UC-levels
- Continue to implement the third-party PCM and explore targeted narrowing of geographical units in Tier 1, Tier 2, and Tier 3 districts. Expand the LQAS footprint to 100% of the high-risk Union Councils per round
- Develop **electronic data collection platforms** for pre-campaign and intra-campaign data, and systematize the use of these data at the frontline
- Establish a framework for monitoring of the implementation of the Accountability and Performance Management Framework (APMF)
- Introduce a **4-month serosurvey** of selected high-risk Union Councils in Tier 1 and Tier 2 districts. This will provide a composite indicator on the programme's capacity to close the immunity gap using the outlined SIA strategy. A good performance indicator will be a type 3 seropositivity of $\geq 90\%$ among children between 6 and 12 months of age

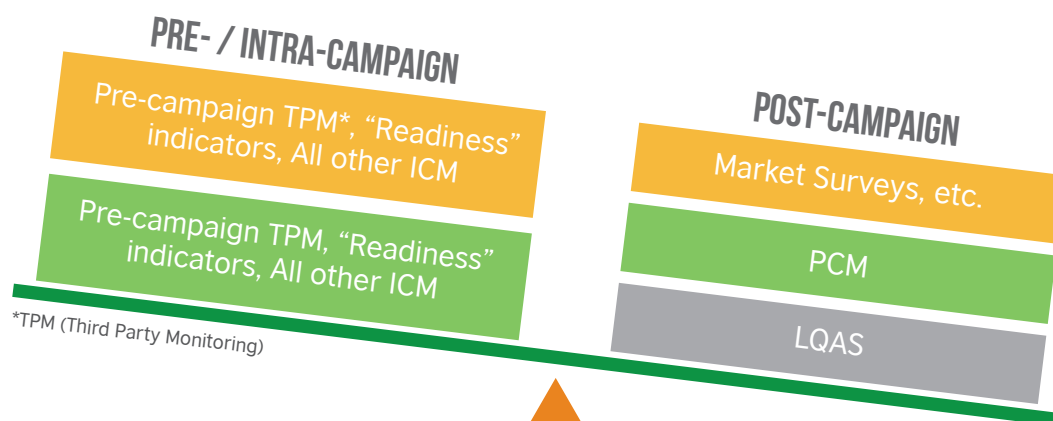


Figure 10 – The balance in the use of SIA performance measures is one of the priorities of NGAP

INFORMATION MANAGEMENT SYSTEM

During the implementation of NEAP 2015 - 2016, the programme deployed information management tools that included an EOC online platform linked with the Integrated Disease Management Information System (IDIMS). These platforms have ensured the availability of data when and where it is needed. However, the growing needs of the programme require further refinement of the available tools.

For the development and support of NEAP 2016 - 2017 goals, Information Management shall continue to respond to the growing needs of the programme by developing time-bound milestones for each quarter. Step-by-step continued integration of all programmatic data into IDIMS and the EOC online platform will be pursued. All data will be continually accessible and available in a meaningfully usable format to all staff, from oversight and management to frontline workers.

One area where the programme has truly lagged behind its peers across the globe is in the use of 21st century public health mapping techniques to hone a spatial understanding of disease epidemiology and more effectively monitor vaccination strategies. Unleashing the full potential of these tools will be a game changer, especially in areas such as Karachi where very high-quality programme performance is a prerequisite to eradication. The programme will work with the Prime Minister's office to get all special approvals for the use of these public health tools at the National and Provincial EOCs.

Priorities for 2016 - 2017

- Continue to enhance the **EOC online platform**, particularly by improving the interface for users and providing both “executive information” and meaningful and usable data for frontline workers
- Continue the step-by-step integration of all programmatic data into IDIMS and the EOC online platform, starting with DDM data visualizations, third-party PCM, surveillance data systems, and the Accountability and Performance Management Framework
- Develop **electronic versions of all SIA pre- and intra-campaign monitoring tools** for use by all monitors
- Improve the quality and utility of the dashboards and make as much of the data exportable in easy analysable formats

RAPID RESPONSE UNIT

In view of programme needs at this critical stage—where the programme must have a timely and aggressive response to any epidemiologic or programmatic risk and ensure multidimensional investigation of problems (addressing epidemiologic, programmatic and social aspects)—the programme established Rapid Response Units (RRU) at the National and Provincial EOCs. RRUs provide immediate capacity to respond to “virus” or “performance” events that threaten the programme's capacity to interrupt wild poliovirus transmission. The RRU members are multi-disciplinary, multi-agency members working under the “one team under one roof” concept that was introduced through the Accountability and Performance Management Framework.

The objectives of the Rapid Response Units are to:

- Track and monitor data from all sources in order to detect events with potential epidemiologic or programmatic risk
- Conduct event assessment and coordinate joint investigation / response
- Provide actionable recommendations and track and support their implementation
- Provide immediate capacity to assess and respond to any type 2 event
- Build capacity for rapid response across the programme

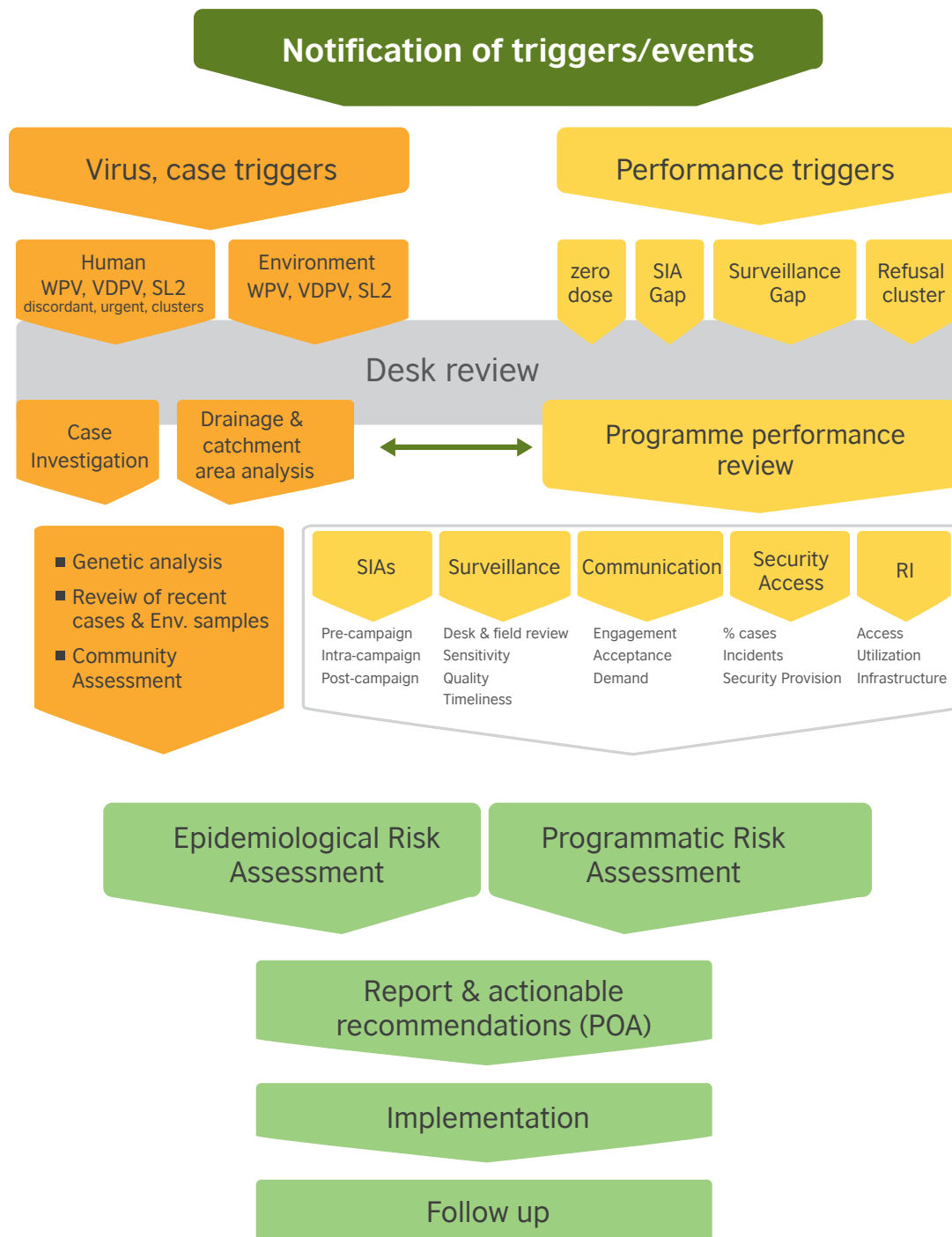


Figure 11 – Actions taken by the Rapid Response Unit following triggers for investigation.

The National Rapid Response Unit was established in March 2016 and is now operational. Furthermore, rapid response focal points have been appointed in each Provincial EOC with ongoing orientation and training in critical procedures, such as processes for arriving at recommended actions in response to different triggers (Figure 11).

Since its launch, the National RRU has been deeply engaged in a number of event responses including:

- Investigations of persistent virus transmission in Peshawar and Karachi
- Investigations of WPV isolations from environmental surveillance sites (Faisalabad, Rawalpindi, DG Khan)
- Risk assessment and case responses in Bannu, Shikarpur/North Sindh, and DI Khan
- Early risk assessment for poliovirus type 2 discordant AFP case in Battagram and Khyber Pakhtunkhwa, including the development of possible response plan for the National EOC

Under the 2016 - 2017 NEAP, the RRUs will be further strengthened with an expanded workforce, more in-depth training, and better tools for tracking events and action plans.

Priorities for 2016 - 2017

- Expand the workforce and fill all vacancies
- Finalize the **Rapid Response Unit SOPs and training package**; carry out induction training for provincial RRUs
- Develop **national guidelines** for detection and response of poliovirus type 2 events
- Finalize the **web-based trigger identifier and event tracking system**
- Build the surge capacity of the RRU by identifying and developing surge rapid response rosters

INNOVATION AND OPERATIONAL RESEARCH

In order to ensure the best available data is fully utilised for all decision making, the National EOC formed an Innovation and Operational Research Working Group. The goal of the group is twofold: 1) to ensure the programme efficiently harnesses appropriate, significant (consequential), and operationally feasible innovations, and 2) to research findings in support of its efforts to eradicate polio in Pakistan.

Priorities for 2016 - 2017

- Closely work with the Agha Khan University to conduct multiple **serosurveys** in selected high-risk UCs in Tier 1 and 2 districts to provide a **composite indicator** on the programme's capacity to close the immunity gap. This will provide programme data on the impact of the SIA strategy and allow for course correction, if required.
- Work with scientists at the Institute of Disease Modelling, Kid's Risk, and the Imperial College to use various **modelling techniques** for monitoring risk and testing the potential value of various strategies
- Collaborate with the Harvard School of Public Health on research aimed at monitoring the Knowledge, Attitudes and Practices of communities living in the highest-risk districts.
- Continue to review innovative proposals from field, staff, and partners with the aim of identifying potential tools to complement or improve operations and surveillance

MANAGEMENT, OVERSIGHT, AND ACCOUNTABILITY

The objective of the of the management, oversight, and accountability function is to ensure that the NEAP goals, objectives and targets are met through effective management support and coordination, transparent oversight at the appropriate level and real-time performance management and clear accountability.

During the implementation of the 2015 - 2016 NEAP, Management, Oversight, and Accountability achieved the following goals:

- Oversight mechanisms were fully established at national, provincial, and district level with the creation of important Divisional oversight mechanisms and task forces in Khyber Pakhtunkhwa (Peshawar) and Sindh (Larkhana, Sukkur and Karachi)
- The Prime Ministers Focus Group became an important oversight mechanism working to implement and track recommendation of the Prime Ministers Task Force
- Provincial Task Forces benefitted from the sustained engagement of Chief Secretaries and key District Polio Eradication Committees (DPECs) delivered high performance under the leadership of Deputy Commissioners in priority high risk Districts such as Quetta and Peshawar Districts
- The EOC network became fully functional under the guidance of the National Polio Management Team consisting of the National EOC Coordinator and the five Provincial EOC Coordinators
- The Accountability and Performance Management Framework was rolled out with tracking and monitoring of accountability measures taken by both Government and GPEI partners. In Khyber Pakhtunkhwa, the government allocated PKR 6 million as a reward and recognition money for top performers. In addition, disciplinary action was taken against 79 government officials and 33 WHO staff, while 124 UNICEF staff and 397 Tehsil monitors were replaced. In Sindh, Divisional-level task forces were formed in response to poor oversight at district-level. In Punjab, the province has established a strict accountability regime that rewards good work and takes action against poor performance
- Financial planning and donor management was managed effectively by a multi-disciplinary, multi-agency Financial Task Team and serious issues with FLW payments were solved
- Systematic coordination was established with the Afghanistan Programme at every level i.e., national, provincial, district, and UC

However, significant lapses in management and oversight were noted in particular at the district level in high-risk areas and at the divisional level in the unwelcome turn-over of leadership. In particular, lapses in management and oversight in Sukkur and Larkana Divisions as well in Bannu district contributed to poor programme performance and the re-establishment of transmission following importation.

For NEAP 2016 - 2017 the Programme will redouble its efforts to sustain professional management and oversight where it is adequate and focus primarily on improving management, oversight and accountability where it is weak or absent. The principles guiding this process are outlined in Panel 3.

Panel 3 – Principles driving the Oversight, Management, and Accountability Process

“One team under one roof”

- *The Government and GPEI partners have come together to ensure that—across the national, provincial and district levels—all activities are planned, coordinated, and evaluated using a single operational platform*
 - *At the national and provincial levels, **Emergency Operations Centres (EOCs)** have become fully functional and provide the operational platform for all*
 - ***District Polio Control Rooms (DPCRs)** have been strengthened in Tier 1 and Tier 2 districts to provide a similar platform*
- *These platforms provide management and coordinate support to all aspects of NEAP implementation*

“What gets measured gets done.”

- *“Risk Assessment and Decision Support” drive “Programme Operations”*
- *The programme is focused on key deliverables and performance indicators rather than rigid structures*
- *Performance management is the key to success*

“All operational phases matter.”

- *The programme measures performance in all operational phases: pre-, intra-, and post-campaign*
- *The programme seeks to immediately implement corrective action before and during campaigns*
- *The programme ensures that post-campaign monitoring drives corrective actions*

“Accountability for all.”

- *Individual and team accountability has been placed at the heart of the programme*
- *An “Accountability and Performance Management Framework” has been developed and implemented*
- *Everyone and every team in the programme is accountable to deliver their assigned tasks and ensure that relevant performance targets are reached*
- *Operational accountability is to the Polio Programme, with administrative accountability resting with the relevant Government Department or partner organisation*

ESSENTIAL MANAGEMENT AND OVERSIGHT STRUCTURES

The oversight and management objectives for NEAP 2016 - 2017 is that each level of the system will have:

- A functioning **oversight mechanism** with comprehensive oversight from the levels above (Figure 12)
- A defined **operational centre** that has adequate resources and a dedicated workforce to deliver on NEAP implementation
- Effective **leadership** that will manage the operational centre and provide the essential link to oversight mechanisms

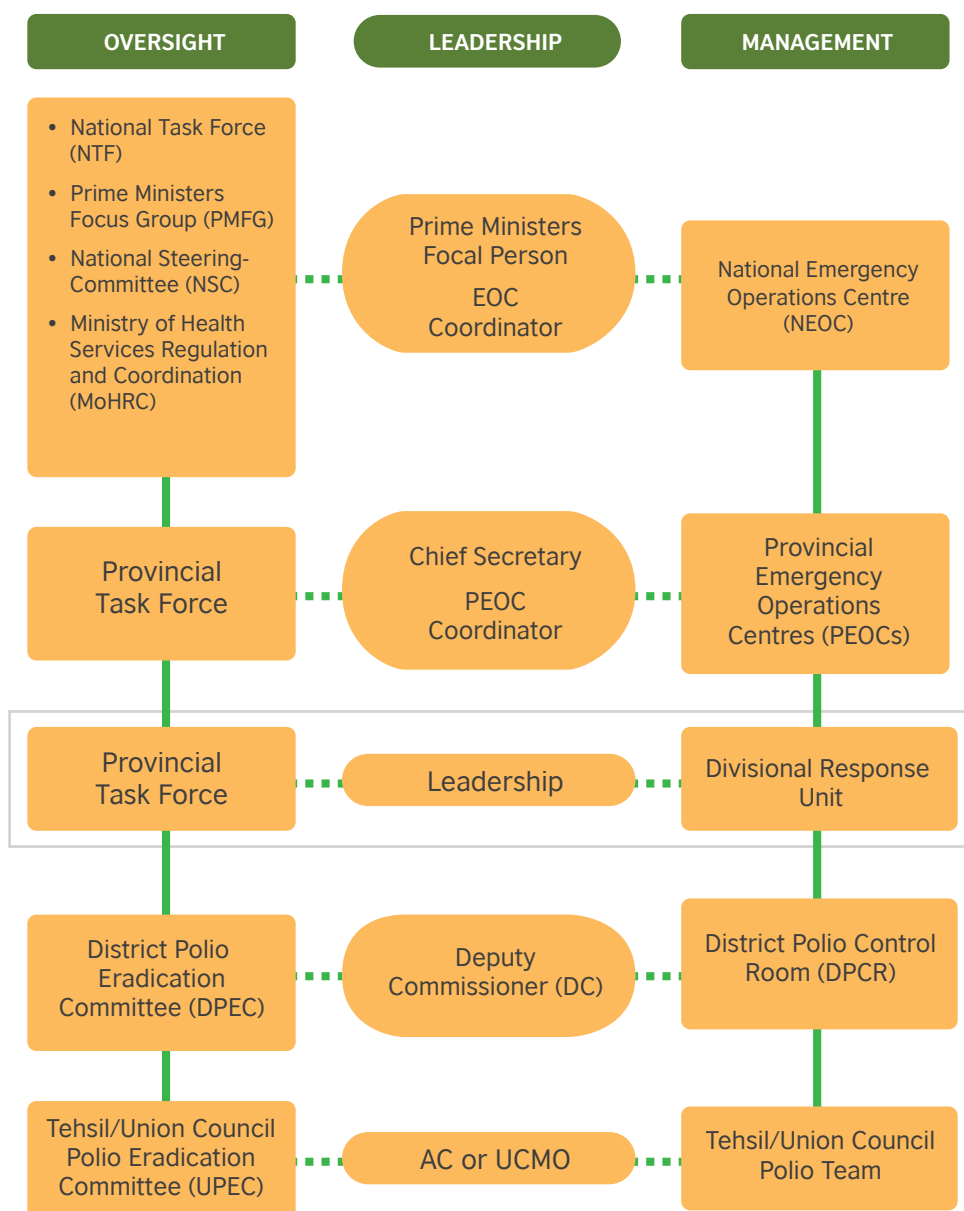


Figure 12 – Pakistan Polio Eradication Initiative (PEI) Oversight and Management Structures

Priorities for 2016 - 2017

- Provide effective oversight through accountable leadership, quality work planning and implementation
- Hold regularly scheduled daily, weekly, and quarterly meetings of the EOC network that are formalised through agendas and written minutes, signed off by the chair and distributed appropriately
- Establish updated functional management structures at national and provincial level with relevant task teams
- Develop a **tracking mechanism** to follow up on agreed actions/tasks with designated focal points
- Prepare quarterly updates on resource requirements, mobilisation, and utilisation, including timely payments to FLWs
- Provide clear guidance on “red lines” and supportive supervision for the **Accountability and Performance Management Framework**, rolled out to the EOC network
- Identify critical enhancements and opportunities for Afghanistan-Pakistan strategic and risk management coordination
- Provide sustained engagement with international oversight bodies

PROGRAMME OVERSIGHT

The objectives of oversight in the Polio Eradication Initiative (PEI) are to:

- Review and approve strategy, implementation work plans, and SIA Micro-plans
- Ensure that adequate resources (e.g. financial, human resources, security) are available for implementation
- Drive individual and team performance and accountability (Figure 13)
- Advocate and communicate on behalf of the Polio Eradication Initiative

The key oversight bodies with TORs, functions and membership are detailed in Annex 3.

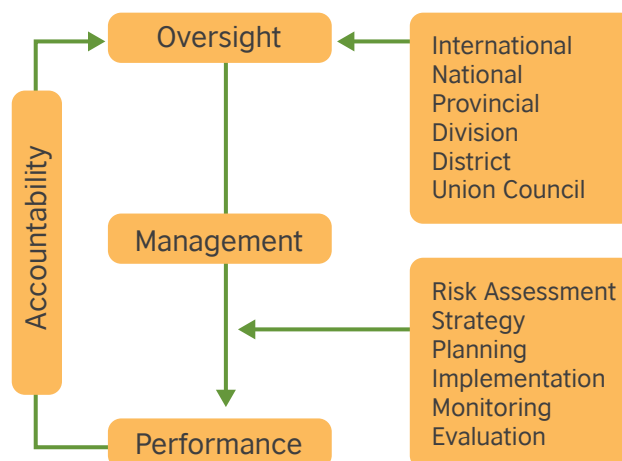


Figure 13 – Linking Oversight and Management to Performance

Priorities for 2016 - 2017

Ensure that each oversight body has:

- Specific TORs with “notification” from appropriate political authority
- Designated leadership
- Regularly scheduled meetings with agendas
- Written minutes signed off by the chair and disseminated appropriately
- A tracking mechanism to follow up on agreed actions/tasks with designated focal points

PROGRAMME MANAGEMENT

Overall management of the PEI rests with the Prime Minister’s Focal Point (PMFP) who serves on behalf of the Prime Minister. The PMFP oversees the management of a network of six Emergency Operations Centres (EOCs): one at the national level and five others across the four provinces of Pakistan and FATA.

Role, Structure, and Functions of Emergency Operations Centres (EOCs)

The EOCs (National and Provincial) will provide a platform for all Government and GPEI partner activities. As such, they effectively house the “one team under one roof” concept that drives coordination across vaccination activities and eradication efforts. Each EOC will be managed by an EOC Coordinator who will have day-to-day responsibility for management and implementation. The PMFP and the six EOC Coordinators will form the National Polio Management Team (NPMT), and together they will be primarily responsible for delivering the objectives and targets in NEAP 2016 - 2017.

EOCs will have a functional management structure (see Figure 14) that is focused on the three NEAP 2016 - 2017 Areas of Work (AOWs) that include:

- **Programme Operations** that plans and delivers quality immunisation activities
- **Risk Management and Decision Support** that detects and assesses epidemiological and programmatic risks and provides support to risk management
- **Management, Oversight, and Accountability** which integrates key strategic management and support functions (Figure 15)

Each EOC will have a minimum of three multi-disciplinary, multi-organisational teams that focus on planning, implementation, and tracking of the key tasks and activities required for NEAP 2016 - 2017.

Each of these Areas-of-Work will be supported by a number of existing “Task Teams” and “Working Groups,” some of which are time-limited in nature and others of which have ongoing functions and tasks.

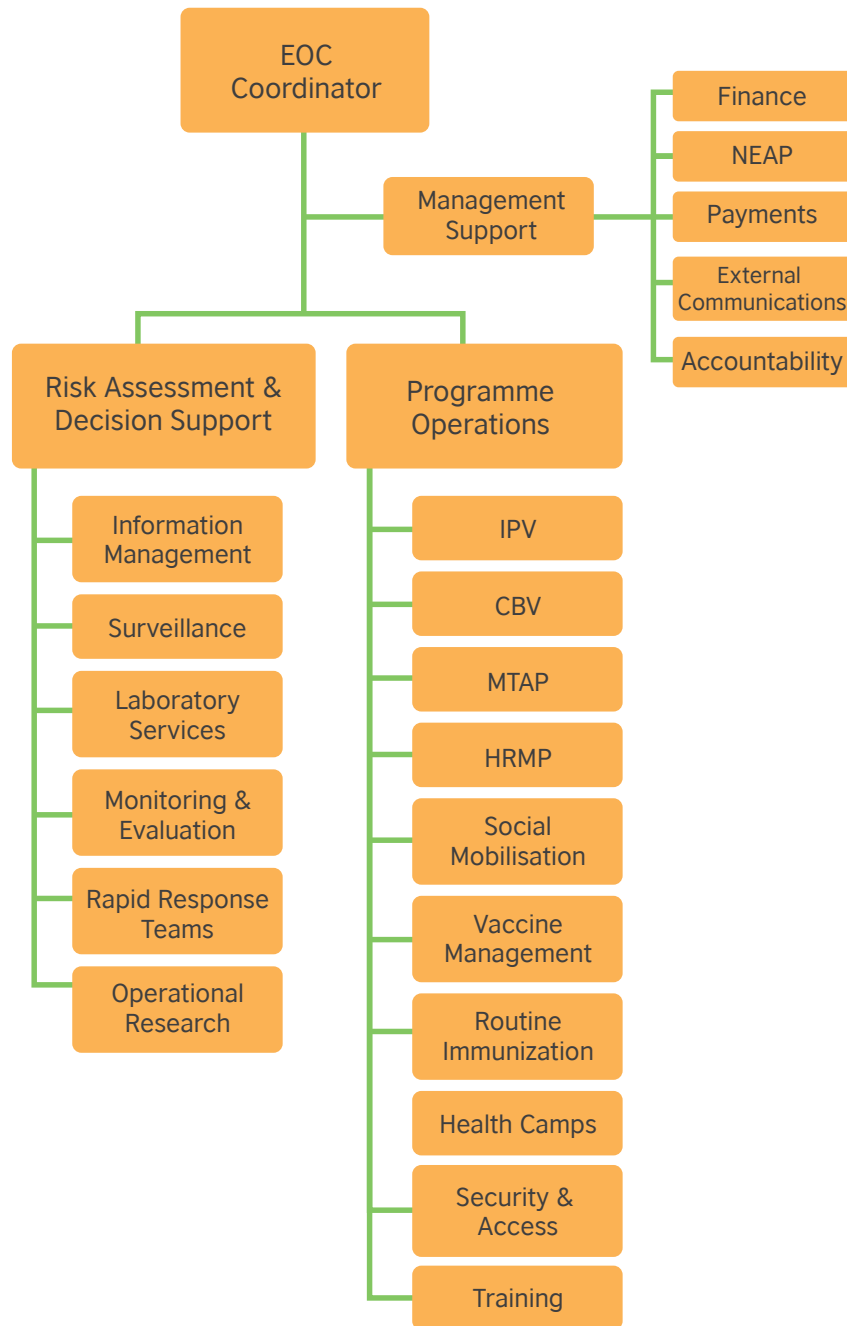


Figure 14 – Functional Structure of Emergency Operations Centre
 Note: Overview not meant to serve as an organogram.

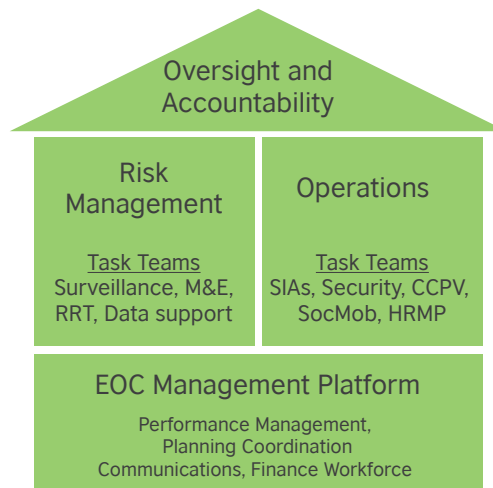


Figure 15 – Core Functions of Emergency Operations Centre

Priorities for 2016 - 2017

- Assess epidemiological risk and programme performance on an ongoing and real-time basis
- Plan for NEAP implementation, SIAs, and any designated supplementary/emergency activities
- Implement planned activities in an efficient and effective manner with respect to performance and timelines
- Support districts, Tehsils, and Union Councils as they implement work plans and activities
- Monitor the performance of all individuals and teams with respect to performance targets and key performance indicators
- Evaluate the implementation of all SIAs after each round as well as overall NEAP implementation on a quarterly basis and ensure that all recommendations/actions points are implemented and tracked
- Communicate within and outside the programme effectively

District Management Structures

At the district level, District Polio Control Rooms (DPCR) are the critical platform for NEAP implementation. Under the leadership of the Deputy Commissioner (DC) and District Health Officer (DHO), each DPCR is responsible for all aspects of campaign planning and implementation.

During 2015 - 2016 NEAP implementation, DPCRs in Tier 1 and Tier 2 districts were strengthened with upgrades to the working environment. Through the deployment of more than 250 additional staff to high-risk districts, a focused surge in human resources was undertaken by the GPEI partnership.

However, not all DPCRs are functioning at the level required to deliver high-quality rounds in all Union Councils. For example, during the May NID, 64 (38%) of the 167 districts, agencies, or towns that were evaluated had a third-party PCM coverage less than the NEAP target of 90%. Additionally, there are still issues regarding clarity of roles and responsibilities between partners. It is critical that the “one team under one roof” concept be fully implemented at this level.

For NEAP 2016 - 2017 to be effective, and in order to reach the endgame of zero immunity and the interruption of transmission, further efforts will be made by DCs, DPECs, and Provincial EOCs to improve DPCR performance.

Priorities for 2016 - 2017

- Reinforce the previously distributed Standard Operational Procedures for DPCRs
- Each DPCR to define a **functional structure** with clear assigned roles and accountability
- DC, Assistant Deputy Commissioner (AC), and DHOs to clarify DPCR management and support roles with a defined core management team which holds regular meetings to ensure work plan implementation and SIA quality
- Ensure that “Surveillance for Eradication” is clearly defined as a priority function of DPCRs, with regular desk reviews of surveillance performance
- Focus particular attention on DPCRs in Tier 1 and 2, with PEOCs defining further workforce and infrastructure investments required before the August SNID

Tehsil and Union Council Management Structures

Management structures for PEI remain weakest at the Tehsil and Union Council levels. The key challenge remains the Union Council Medical Officer (UCMO), whose role is central to success but whose capability and commitment were noted during NEAP 2015 - 2016 to be below par.

In the high-risk UCs, more than 3,550 Union Council-level workers were deployed as part of the surge coordinated by the GPEI partnership to support the UCMO. These were in the form of Union Council Polio Officers (UCPOs) and Union Council Communication Officers (UCCOs)—staff positions that have specific terms of reference that support the role of the UCMO in campaign microplanning, training, and supervision.

However, in many instances staff at the UC-level have not come together to work as “one team” with clear responsibilities, regular meetings, and joint implementation of the most critical and central task at the UC-level—SIA planning and implementation. In districts implementing the mobile team approach, this has exacerbated an already negative impact in performance. While Community-Based Vaccination (CBV) addresses many of the management shortcomings in targeted areas, it is not a feasible solution for the vast majority of UCs. The programme is therefore still heavily reliant on mobile teams and on the quality of the “basics” at this level.

The leadership and support of the UC Polio Team is central in all phases of campaign planning and implementation.

- Microplanning, including micro-census/target population adjustment, resource estimation and planning, work load assignment
- Selection, training, and supervision of Areas in Charge (AICs)
- Selection, training, and supervision of frontline workers (FLWs)
- Community mobilisation
- Vaccine management

Over the implementation of NEAP 2015 - 2016, the critical importance of the AIC in delivering vaccines to every child has emerged time and time again. While major efforts have been made to improve AIC training, issues have emerged in every campaign regarding the quality of microplans, the absence of route maps, poor team selection, inappropriate or uneven workloads, inadequate supervision, and sub-optimal same-day follow up and 14-day catch-up.

Therefore, implementation under NEAP 2016 - 2017 will seek to specifically address AIC performance as a particular priority, especially in high-risk districts and low-performing Union Councils (LPUCs). In circumstances such as these, Tehsil-level management and oversight structures are very useful. Where there are clusters of LPUCs and where UC management is sub-par, a Tehsil-based management structure led by the Assistant Commissioner (AC) may provide for better accountability, oversight planning, and implementation.

Priorities for 2016 - 2017

- Implement a mechanism to consistently and continuously **identify and track low-performing UCs**
- Develop and implement comprehensive **Provincial Action Plans** to improve SIA performance in LPUCs through revision of microplans, as well as the selection, retention,

and training of UCMOs, AICs, and FLWs. High-risk districts will be prioritised in these plans and the selection, training, and retention of AICs will form the core of the plans

- Increase **DPCR supportive supervision** for campaign preparation and implementation through specific assignment of UC support functions across the DPCR, with the same DPCR staff providing ongoing support to performance improvement in one or more UCs
- Focus on ensuring that the **Union Council Polio Team** is clearly defined with assigned responsibilities and accountability
- Extend the work cycle at UC-level by reviewing and modifying the payment duration for field workers (e.g., AICs) as necessary to reflect any additional time needed to ensure adequate pre-campaign preparations, including microplan revision and validation
- Improve mobile team composition by forming a “team selection task team” at the UC-level. The task team will consist of the UCMO, AICs, UCPWs, UCCOs, and community representatives
- **Expanded independent monitoring of all phases of SIAs** with special focus on improved assessment of pre- and intra-campaign indicators
- Each province and district will determine whether a **Tehsil management structure** would provide a boost in planning, supervision and performance, especially where there is clustering of low performance. These Tehsil Units will be led by ACs and report to the DPCR

WORK PLANNING, IMPLEMENTATION AND EVALUATION

NEAP 2015 - 2016 was implemented through the translation of the strategic document into dedicated NEAP Work Plans at National, Provincial, and District Levels. A major planning meeting was held in Lahore in July 2015 at which the National EOC, Provincial EOCs, and senior staff from 12 Tier-1 DPCRs worked together to review work plans and ensure their alignment with NEAP. The implementation of these plans was then tracked through a network of NEAP focal points established by the National EOC. In addition, quarterly reports on NEAP implementation were developed and reviewed at meetings of the National Polio Management Team.

However, despite the positive impact of these activities throughout the 2015 - 2016 NEAP, this process was not implemented systematically at the district level due to weaknesses in management capacity, as well as other overriding priorities such as SIA planning and implementation. It was also noted that, while the Work Plan data was entered into a detailed predesigned spreadsheet at each level, this tool was not ideal for sharing information or tracking progress.

Priorities for 2016 - 2017

- Convert the 2016 - 2017 NEAP strategy into **NEAP Implementation Work Plans** at the national and provincial levels and track them regularly for implementation status
- Designate a **NEAP implementation focal point**. Focal points from the National and Provincial EOCs will coordinate this process to ensure that implementation planning is done in a timely manner and that the plans are tracked for implementation.
- Enter NEAP Work Plans into an **electronic tool linked to the EOC Dashboard** so that implementation may be tracked by the appropriate team and monitored by oversight bodies and higher management levels

- Review NEAP implementation quarterly with the NPMT and publish a formal report that outlines and tracks key actions
- Conduct a comprehensive review for NEAP 2016 - 2017 at the end of the annual period, which will feed into the drafting process for **NEAP 2017-2018**. All actions emerging from NEAP reviews will be tracked to implementation.

ACCOUNTABILITY AND PERFORMANCE MANAGEMENT

Accountability is a process by which responsibilities are upheld and roles are aligned in order to ensure support, supervision, and success on the ground and through all levels of work in the fight against polio in Pakistan. In a fundamental sense, the work of creating a polio-free Pakistan is one that is dedicated to—and, as such, accountable to—the children of Pakistan, their parents, and the communities that nurture them.

During the 2015 - 2016 NEAP, an Accountability and Performance Management Framework was developed and implemented to ensure that the programme reaches its objectives and delivers on NEAP Work Plans. This document offered a Framework for bridging across the roles and responsibilities of a multi-level programme that is also multi-disciplinary and multi-organisational.

The Framework supported the 2015 - 2016 NEAP by effectively building on the “one team under one roof” concept. It did so by defining the accountability of individuals, teams, districts, provinces, federal-provincial government, and partners to each other—and by providing a basis for oversight, measurement, evaluation feedback, and performance improvement. Its overall aim was to drive accountability through the identification of both good and bad performance with associated mechanisms for recognition, rewards, and sanctions, as required.

In this Framework, everyone in the programme is accountable and the programme itself is accountable to the Government, the Nation and its people.

The Accountability and Performance Management Framework (APMF) operates under three guiding principles.

- **Accountability: everywhere and for everyone.**
 - All Levels: Union Council (UC), district/agency, provincial, national, and international
 - All Individuals and Teams: Political, managerial, and operational
 - All Partners: Government, GPEI, and donors
- **Performance must be regularly monitored, measured, and evaluated.**
 - Both quantitatively and qualitatively
 - For individuals, teams, and the programme as a whole
 - In real time and through analysis of key performance indicators (KPIs)
 - With progress measured toward completion of agreed tasks and activities, KPIs, and NEAP implementation objectives and targets
- **Responsive feedback processes must be put in place to ensure accountability.**
 - Performance evaluation will be fed back in a systematic way
 - Rewards for good performance will be the backbone of the system
 - Poor performance will be first subject to investigation and assessment, with a performance improvement process put in place before sanctions are applied
 - Such responsive processes will be administered with full transparency

Progress with implementation of the Framework has been satisfactory thus far, with programme and GPEI partners now tracking accountability measures taken with staff at all levels. Oversight bodies have taken on the responsibility of ensuring accountability, which is supported by regular reports and performance data. Linking measured performance to accountability has improved transparency within the programme and has allowed problems and risk to be surfaced in a timely fashion.

For the 2016 - 2017 NEAP implementation, key performance indicators (KPIs) are now under constant monitoring and available across the whole programme on the upgraded EOC Dashboard for timely response to emerging risk or poor performance. However, the balance of such measures remains on punitive actions for poor performance, not on recognition and rewards for excellence.

Priorities for 2016 - 2017

- Better processes for performance monitoring, evaluation, and feedback for both individuals and teams
- Better recognition mechanisms, rewards, and incentives for good performance
- Better processes for investigation and intervention (support and sanctions) for poor performance
- Improvements to available online tools for monitoring performance against NEAP objectives (PEI Online Dashboard)

FINANCIAL PLANNING, RESOURCE MOBILISATION AND PAYMENTS

The Programme has developed more capacity in resource mobilisation, financial planning, and management of payments of Frontline Workers (FLWs).

Two important multi-organisational task teams have been instrumental:

- The National EOC Finance Task Team has tracked the availability of financial resources and has been central to the formal financial documentation requirement of the Planning Commission for financial planning (PC1) for the three-year period (2016 – 2018) for polio eradication—as well as engaging bilateral partners with a view toward ensuring the programme remains fully funded. In addition, the Team is now tracking PC1 financial implementation and reporting regularly to the Economic Affairs Division (EAD)
- The Payments Task Team has worked with all stakeholders to streamline and make payments to Frontline Workers (FLWs) more efficient and timely
 - Payments to FLWs have been integrated into one Direct Disbursement Mechanism (DDM) which is managed by WHO
 - The performance of this system is now tracked in real-time with EOCs following up immediately where delays in data submission have led to delays in payment
 - Negotiations with providers have led to substantial reductions in transaction costs
 - All backlogs of payments through the United Arab Emirates Pakistan Assistance Program (UPAP) mechanism in high-risk UCs have been cleared
 - Provincial top-ups have been disbursed by two provinces (Sindh and Punjab)
 - All future provincial top-ups will use the DDM platform with WHO making special arrangements for 0% pass-through charges by WHO on these funds

Priorities for 2016 - 2017

- Carefully track financial flows both into and out of the programme to ensure that “cash flow” issues do not cause delay, postponements, or cancellation of any activities
- Regularly engage with donor/development partners at the national level to ensure:
 - Situational awareness
 - Emerging priorities
 - Funding utilisation and needs
- Report quarterly to relevant Government Authorities on PC1 financial implementation
- Update GPEI Financial Resource Requirements (FRR) as required
- Implement innovations in DDM:
 - Use innovative payment mechanisms in difficult-to-reach areas
 - Develop “user specification” for a new version of DDM

ENGAGEMENT WITH INTERNATIONAL POLIO OVERSIGHT BODIES

Over the last year the programme has engaged intensively with a broad range of international polio management and oversight bodies. These include:

- The Independent Monitoring Board for Polio (IMB)
- The Pakistan Technical Advisory Group (TAG)
- The Polio Oversight Board (POB)
- The WHO Regional Committee (RC) and World Health Assembly (WHA)
- The WHO International Health Regulations (IHR) Emergency Committee

The programme has prepared carefully for each engagement and engaged transparently, surfacing key challenges and risks as well as proposing innovative solutions. The programme is grateful to these bodies for their continuous advice and input and looks forward to similar engagements in the coming year.

ANNEXES

ANNEX I – KEY PERFORMANCE INDICATORS

Programme Operations

Objective	Target	Data Source
No child is left unvaccinated because of poor planning.	All Union Councils have “zero missed” children due to “no team”.	Administrative data from IDIMS and intra and post campaign monitoring
Team composition supports the greatest possible access to all households.	All teams have at least one adult, local, female member in each campaign.	Third-party pre-campaign monitoring, intra-campaign monitoring, and Direct Disbursement Mechanism data
Workload of teams is rationalized in such a manner that revisits to vaccinate missed children take place as quickly as possible.	All vaccination teams are able to revisit households with recorded missed children and vaccinate at least 50% of recorded missed children on the same day.	Administrative data from IDIMS and Data Support Centre
Overall campaign quality ensures high population immunity.	At district-level – as measured by third-party post-campaign monitoring, all districts reach vaccination coverage above 95%. As measured by third-party post-campaign monitoring, Market Surveys, and other post-campaign indicators, at least 95% of districts in each province and FATA have vaccination coverage $\geq 95\%$.	Third-party post-campaign monitoring data
Campaign quality in the highest-risk Union Councils is improved to reach levels that can interrupt transmission or prevent outbreaks.	At Union Council level – UC passes post-campaign LQAS assessments. At District, Divisional and Provincial level – at least 90% of Union Councils pass LQAS. Tier 1 and Tier 2 districts only – In areas targeted for four-month surveys (Karachi, Khyber, Peshawar, Quetta block, Larkana Division, and Sukkur Division), at least 90% of children are seropositive for poliovirus type 3. ³	LQAS data, Serosurveys
All infants in Tier 1 and Tier 2 districts obtain full protection from the poliovirus as soon as possible.	Routine immunisation coverage for IPV-1 and Penta 3 in areas covered by community-based vaccination is more than 80%. In areas conducting sero-prevalence surveys, at least 70% of children remain seropositive for poliovirus type 2. ⁴	

2 Since type 1 seroconversion can also be as a result of WPV type 1 transmission (the only wild poliovirus still circulating), the programme will use type 3 seroconversion as a proxy measure for good vaccine delivery. In the most recent serosurvey from Faisalabad, the seroprevalence for type 3 was 95.4%.

3 Following the tOPV to bOPV switch, type 2 vaccine can only be delivered via IPV either via combined bOPV/IPV SIAs or routine immunisation.

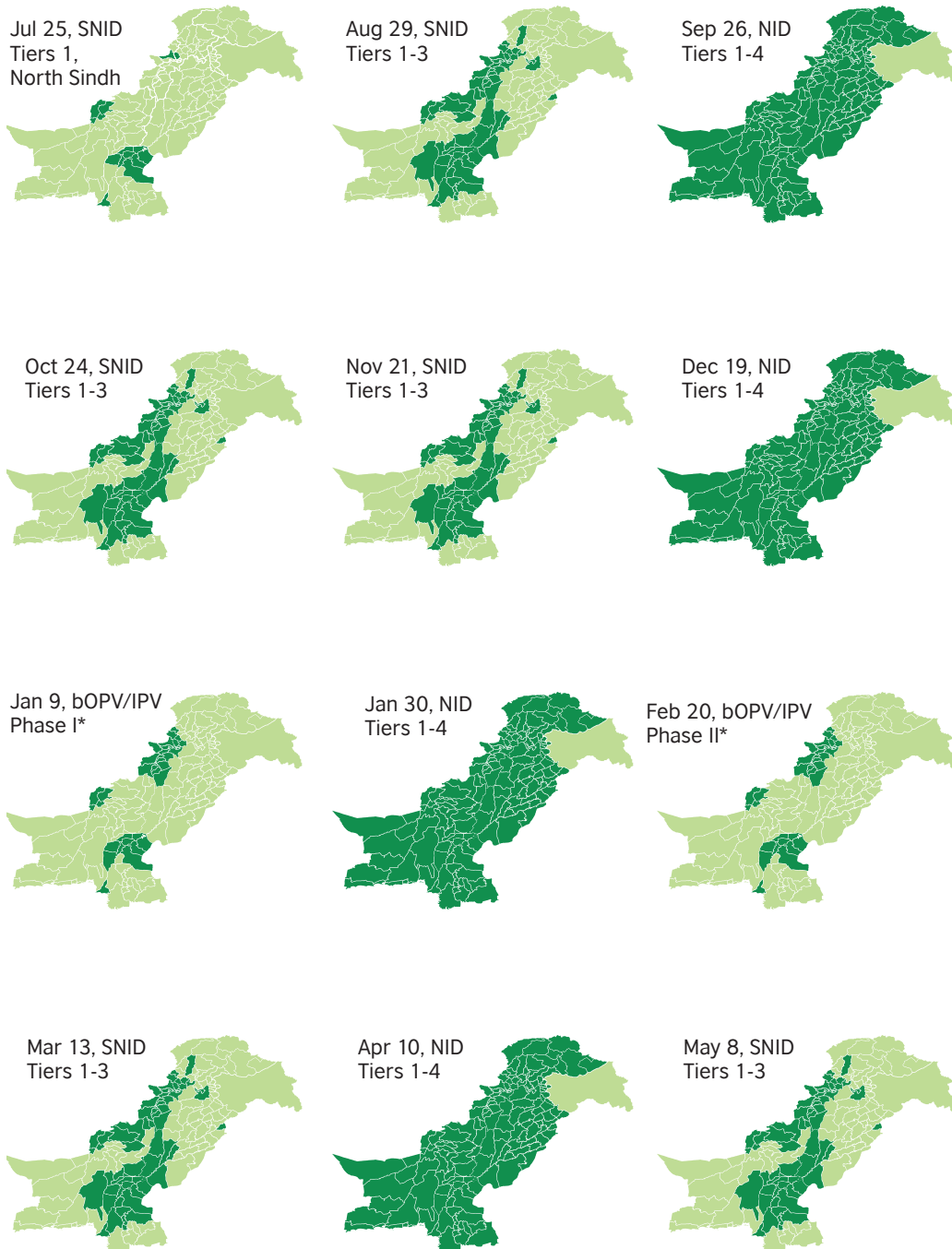
Risk Assessment and Decision Support

Objective	Target	Data Source
<p>Surveillance and reporting of cases is improved at the lowest administrative levels.</p>	<p>All surveillance sites report on their AFP cases on a weekly basis, including “zero reporting” when no AFP cases were identified during the previous week.</p> <p>All Union Councils of all provinces, Islamabad, and Azad Jammu Kashmir, and all Tehsils of FATA have reported at least 1 case of AFP in the preceding 36 months.</p> <p>At least 70% of Union Councils in any District in Punjab, Sindh, and KP, and 70% of Tehsils in provinces have reported at least 1 case of AFP in the preceding 24 months.</p> <p>At least 70% of Tehsils in Punjab, Sindh, and KP and 70% of districts in other provinces have reported at least 1 case of AFP in the preceding 6 months.</p>	<p>AFP surveillance data, and National Weekly Reporting Database</p>
<p>AFP surveillance sensitivity is improved such that all chains of poliovirus transmission in Pakistan are detected in a timely manner.</p>	<p>Isolated poliovirus from any source is divergent from its closest genetic relative by <1%.</p> <p>Reports and distribution maps of all poliovirus type 2 (including Sabin-like) is included in the weekly reports.</p>	<p>Laboratory data</p>
<p>The scope and scale of monitoring activities is ensured to be good enough to detect performance shortfalls in a timely manner.</p>	<p>All pre-campaign tools are collectable and/or can be submitted electronically into a centralized database.</p> <p>In every campaign round, pre-campaign, intra-campaign, and post-campaign assessments using third-party independent monitors and LQAS cover 100% of the highest-risk Union Councils in Tier 1 and Tier 2 districts.</p>	<p>National EOC Online Platform</p>

Management, Oversight, and Accountability

Objective	Target	Data Source
<p>Overall implementation of the Emergency Plan is closely monitored.</p>	<p>The National Polio Management Team meets and reviews the NEAP on a quarterly basis</p>	<p>Minutes of the National EOC</p>
<p>The frontline and supervisory workforce is supported and held accountable at all levels.</p>	<p>Provincial Task Force meetings are held on a quarterly basis to review performance</p> <p>The Divisional Task Forces under the Commissioner's leadership review performance after every campaign</p>	
<p>District-level leadership and oversight is active before and during all campaigns.</p>	<p>Deputy Commissioner chairs pre- and intra-campaign performance reviews at district levels.</p> <p>100% of Union Councils in Tier 1, Tier 2 and Tier 3 districts have a qualified UCMO</p>	
<p>The surveillance system as a whole is made fundamentally strong by ensuring appropriate human resources at the highest level.</p>	<p>All Tier 1 and 2 districts and all divisions in Tier 3 and 4 have dedicated surveillance officers</p>	

ANNEX 2 – 2016 - 2017 SUPPLEMENTARY IMMUNISATIONS CALENDAR



* The combined bOPV/IPV SIA will be conducted in two phases. Tier 1 districts and depending on availability of IPV vaccine, selected Tier 2 districts will be targeted.

ANNEX 3 — ESSENTIAL COMMITTEES FOR POLIO ERADICATION

National Level

1. National Task Force for Polio Eradication

In pursuance of the Prime Minister's Office U.O No. 881/M/SPM/2014 dated 18th April 2014, the Prime Minister has approved the National Task Force for Polio Eradication with the following composition:

1. Prime Minister Islamic Republic of Pakistan (Chair)
2. Governor, Khyber Pakhtunkhwa
3. Chief Minister, Government of Punjab
4. Chief Minister, Government of Sindh
5. Chief Minister, Government of Khyber Pakhtunkhwa
6. Chief Minister, Government of Balochistan
7. Chief Minister, Government of Gilgit Baltistan
8. Prime Minister, Azad Jammu & Kashmir
9. Minister, Ministry of National Health Services, Regulations & Coordination (MoNHSRC)
10. Prime Minister's Focal Person for Polio Eradication (Secretary)
11. Secretary to the Prime Minister
12. Secretary, MoNHSRC
13. Representative of Chief of Army Staff

The task force shall meet two times a year and perform the following functions:

- a) To oversee and monitor the progress made against the National Emergency Action Plan for Polio Eradication and direct necessary remedial measures
- b) To ensure inter-provincial and inter-sectoral coordination and give direction on issues
- c) To ensure adequate resources are secured for the implementation of National Emergency Action Plan for Polio Eradication

2. Prime Minister's Focus Group on Polio Eradication

The Prime Minister Office constituted the Focus Group on Polio Eradication and in October 2015 designated the following as members of the Focus Group:

1. Secretary to the Prime Minister (Chair)
2. Federal Secretary, Ministry of National Health Services (Co-chair)
3. Chief Secretaries for Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan
4. Additional Chief Secretary, FATA
5. Joint Secretary, Prime Minister's Office
6. Director General, National Crisis Management Cell/ Focal Person from the Ministry of Interior
7. Director General, Ministry of National Health Services
8. Representative of the GHQ, Engineer-in-Chief Branch
9. Emergency Coordinator, National EOC
10. National Technical Consultant, National EOC

The Minister State Ministry of National Health Services and Prime Minister's Focal Person will attend the meetings on special invitation.

Regular quarterly meetings of the Prime Minister's Focus Group will be held with the following objectives:

- Provide continuous oversight for the implementation of National Emergency Action Plan for Polio Eradication
- Review the progress of the programme in all provinces and areas to identify gaps and take appropriate remedial measures as required
- Delineate reasons for low performance in districts/agencies to ensure accountability and report to the National Task Force chaired by the Prime Minister

3. National Polio Management Team for the Polio Eradication Initiative (PEI) and Expanded Programme on Immunisation (EPI)

The National Polio Management Team (NPMT) is directly responsible for the day-to-day management of Pakistan's polio eradication efforts. The team is responsible for continually monitoring and reviewing programme performance and implementation of the NEAP 2016-17.

The Chair of the NPMT is the Prime Minister's Focal Person. The National EOC Coordinator is the secretary. Additional members include, the Provincial EOC Coordinators, EOC Coordinator FATA, federal and provincial EPI managers and heads of polio partners (WHO, UNICEF, BMGF, N-STOP, CDC, Rotary International, USAID etc.) are the core members. The chairperson of the NPMT can determine membership as the need arises.

Terms of Reference

- NPMT will guide the programme implementation based on decisions of the National Task Force and advice of Technical Advisory Group (TAG) and Independent Monitoring Board (IMB) for the Global Polio Eradication Initiative (GPEI)
- It will periodically report on the current epidemiological status of Polioviruses
- It will be responsible for all the activities under PEI, including development and implementation of oversight
- It will calculate the need, location, and frequency of Supplementary Immunisation Activities (SIAs) in the country based on surveillance data review
- It will review logistics requirement and procurement for the forthcoming campaigns
- It will endorse the communication plan
- NPMT will also be responsible for campaign evaluation results and feedback to the provinces
- The EPI Manager will report on EPI performance, especially in Tier 1 and Tier 2 districts
- The EPI Manager will also give regular updates on the vaccine supply situation for both polio campaigns and EPI
- The EPI Manager will provide updates on other vaccine-preventable disease outbreaks

4. National Emergency Operations Centre

Pursuant to decisions of the National Task Force on Polio Eradication meeting chaired by the Prime Minister on November 5, 2014 in the Prime Minister's Office, Islamabad, the National Emergency

Operations Centre (EOC) for Polio Eradication has been established with the following:

Terms of Reference

- a) To act as national hub for planning, coordinating, information gathering, surveillance, and monitoring of Polio Emergency activities in accordance with the National Emergency Action Plan for Polio Eradication
- b) To provide technical inputs and situation analysis, as well as the other information on a regular basis to the Prime Minister's office, the Ministry of National Health Services, Regulations and Coordination, and all relevant stakeholders, highlighting issues and challenges for information and required interventions
- c) To coordinate and develop effective liaison with all Provincial Task Forces for Polio Eradication on regular basis with a view to monitor progress against set targets
- d) To instil a sense of urgency in the implementation of polio eradication activities and thereby control poliovirus transmission by the end of 2016
- e) To review monitoring and surveillance data and give feedback to the provinces and districts for remedial measures to improve the quality of polio campaign and control the poliovirus
- f) To act as apex body at the national level, coordinating the provinces to ensure standardized immunization service delivery and sustained availability of technical and material resources
- g) To prepare the forecasting of project requirements for the Ministry of National Health Services, Regulations and Coordination to generate resources and provisions for security of polio teams in high-risk areas through the Cabinet Committee on Immunisation
- h) To review the progress of routine immunisation regularly and advise relevant offices for prompt action

Led by the Prime Minister's Focal Person and under the daily management and leadership of the National EOC Coordinator, the National EOC is a central point for all activities of polio eradication, bringing together the government and the partnership (WHO, UNICEF, BMGF, CDC, N-STOP, Rotary International etc.). The National EOC will continue its assistance to the Prime Minister's Focal Person and will be responsible for monitoring the NEAP indicators and tracking effective implementation of the strategic decisions and guidance provided by the National Task Force and the National Technical Advisory Group.

In addition, the National EOC Coordinator chairs daily morning meetings at 9.30am that are attended by team leads of partner agencies and senior technical staff placed in the National EOC. The TORs of daily morning meetings are: 1) to share the current activities held and planned for the day, 2) review updates of ongoing activities of surveillance, SIAs, etc., and 3) plan for future activities through its different task teams such as surveillance, SIAs, training, Transit Points, Finance, and Oversight & Accountability. These Task Teams are responsible to work assigned to them in this morning meeting and will present for endorsement.

5. National Steering Committee Meetings through Video Link with Provincial EOCs

The PM Focal Person chairs the National Steering Committee (NSC) meeting weekly. The National EOC Coordinator is a Secretary of the NSC and All Provincial EOC Coordinators, team leads of partner agencies as well as National and Provincial Technical senior officers are the members of this committee.

Terms of Reference

1. To share surveillance updates and discuss actions required
2. To review preparation, implementation, and post-campaign monitoring results of SIAs
3. To agree on new initiatives such as CBV, health camps, etc.
4. To share updates of recent important activities and those in next week's plan
5. Any other issue requiring consensus

Provincial and Divisional Level

1. Provincial Task Force (PTF)

The Chief Secretary must lead the Provincial Task Force for Polio Eradication and fast-track implementation of the National Emergency Action Plan in their respective province. The Provincial Task Force will ensure oversight to the programme and accountability based on low-performing areas, as well as take necessary steps for motivating the DCs/DCOs/PAs of the districts/agencies consistently performing well during all the phases of the campaign and in surveillance.

The Provincial Task Force is comprised of the Chief Secretary (Chair), Provincial Health Secretary (Secretary) and senior officials from line departments (Home/Law and Enforcement Agencies, Education, Information, Local Government, Auqaf, and Chief Minister Office), a Pakistan Army representative, DG Health, EPI Manager, and provincial representatives of partner agencies (WHO, UNICEF, BMGF, CDC, N-STOP, Rotary International, etc.). All meetings of the PTF will be facilitated by the Provincial EOC Coordinators. All Deputy Commissioners/District Coordination Officers of the province/Political Agents (PA) of FATA will attend the meeting of the PTF and share progress in their respective jurisdictions.

Terms of Reference

The PTF should review and monitor all aspects of the PEI, including SIAs and surveillance. Specifically, such aspects include:

- a) Progress made in province according to the National Emergency Plan of Action for Eradication of Polio, providing guidance on challenges faced by each district
- b) Involvement of district and sub-district level arm of government to assume the responsibility of ensuring implementation of district-specific plan
- c) Involvement of the line departments, assigning specific roles and tasks to each department for successful campaign implementation
- d) The plan and progress for advocacy and social mobilisation activities at provincial and sub-provincial levels, ensuring availability of adequate resources and their optimal use
- e) The plan and progress for surveillance at provincial, district and sub-district levels, ensuring availability of adequate resources

There are several sub-committees that report to the Provincial Task Force, including:

- a) The **Provincial Security Coordination Committee**: Reviews the security situation of all districts before implementation of campaigns. This committee will take appropriate action to ensure safe implementation of the polio immunisation campaigns.
- b) **Provincial Vaccine Management Committees**: Headed by EPI Managers to improve their functioning by maintaining all stock positions at the provincial stores, gathering information from the districts, providing feedback to them, and presenting input to the Federal Vaccine Management Committee. These committees will review the available vaccine stocks in the province on a regular basis and monitor vaccine distribution versus utilisation on a daily basis during the campaign. They will take corrective action to address any discrepancies while ensuring adherence to vaccine distribution based on microplan requirements, avoiding any vaccine wastage and accounting for all doses distributed in the field.
- c) **Provincial Emergency Operations Centres**: Established with the concept of “one team under one roof” and led by the Government. A fulltime dedicated senior government officer is deputed in each province and in FATA to lead the provincial EOCs with the assistance of partner agencies. The Coordinator is the main facilitator of the Provincial Task Force and will report directly to the chairperson of the Provincial Task Force.

2. Provincial Emergency Operations Centre

Pursuant to decisions of the National Task Force on Polio Eradication meeting chaired by the Prime Minister on November 5, 2014 in the Prime Minister’s Office, Islamabad, the Provincial Emergency Operations Centre (EOC) for Polio Eradication has been established with the following:

Terms of Reference

- a) To act as the provincial hub for planning, coordinating, information gathering, surveillance, and monitoring of Polio Emergency activities in accordance with the National Emergency Action Plan for Polio Eradication
- b) To provide technical inputs and situation analysis, as well as the other information, on a regular basis to the Provincial Task Force and all relevant stakeholders, highlighting issues and challenges for information and required interventions
- c) To coordinate and develop effective liaison with all Provincial Task Forces for Polio Eradication on a regular basis with a view to monitor the progress against set targets
- d) To instil a sense of urgency in the implementation of polio eradication activities and thereby control poliovirus transmission
- e) To review monitoring and surveillance data and give feedback to the districts for remedial measures to improve the quality of polio campaign and control the poliovirus
- f) To act as apex body at the province level, coordinating the divisions and districts to ensure standardized immunisation service delivery for Polio Emergency and sustained availability of technical and material resources
- h) To review the progress of the routine immunisation regularly and advise relevant offices for prompt action

3. Divisional Task Force (DTF)

The Divisional level structure has been fundamental in ensuring progress is made on oversight and management deficiencies in Karachi, Larkana, Sukkur, Peshawar, and Islamabad. The Commissioners chair task forces and have regular meetings before and after each campaign with the Deputy Commissioners who are responsible to provide leadership to polio eradication in their respective districts. The DTF has proposed a divisional level committee meeting headed by the Commissioner and held as and when required to discuss and find solutions for proper implementation of polio eradication activities in the division.

The DTF has responsibility for oversight and will meet on a monthly basis to monitor progress on NEAP implementation. The DTF will meet under the leadership of the Commissioner and with participation by Deputy Commissioners of all districts within the Division.

The DTF has been established in areas with potential performance gaps or requiring strong coordination at the divisional level. The DTF will review preparation for campaigns including operational, security, and awareness arrangements, focusing on missed children and missed areas identified in the last campaign to cover in the forthcoming campaign.

District, Tehsil, and Union Council Level

1. District Polio Eradication Committee (DPEC)

Each District/Agency will have a District Polio Eradication Committee (DPEC/APEC) to oversee polio eradication and routine immunisation activities at district/agency level and coordinate all line departments and local partners including NGOs to ensure high-quality implementation of vaccination campaign strategies and plans to achieve recommended results in the National Emergency Action Plan.

The District PEC headed by the DC/DCO and Agency PEC headed by the Political Agent meets:

- At least 7 days before the campaign to review preparedness and take course-corrective actions
- Daily during the campaign days to review the campaign implementation and troubleshoot challenges
- 2-5 days after the end of catch-up to review the outcome of the campaign against the set of standard indicators and review the progress of the actions taken for poor performance in the last campaigns

The participation of the Chairperson and the Secretary of Committee is mandatory with binding attendance of all concerned departments: health, police, education, revenue, and local government, as well as Assistant Commissioners of all Tehsils in the district, representatives of partner agencies, district heads of public health programmes, private sector organisations, community representatives (parliamentarian), and district Khateeb (religious preacher). Head of the DPEC can extend membership on an as-needed basis.

The purpose of DPEC meetings is to review the status of surveillance and campaign preparations/implementations, in addition to assessing the results of UPEC meetings (completeness and timeliness) and considering specific requests from the UPECs and any interventions required to make corrections at the UC-level.

The meeting of the DPEC must have in its agenda:

- a) The follow-up of actions / decisions from the last meeting and person(s) to be held accountable in case of faltering; review of key performance indicator trends (process and outcome)
- b) Appropriateness for plans for pre-, intra-, and post-SIA phases with focus on the comprehensiveness of microplans, including transit strategy with supervision plan, training quality, and effective house-to-house visits to all families with follow-up of those having absent children
- c) Specific tasks assigned to the DPEC members in relation to the next SIA
- e) The Secretary of the DPEC must maintain record of all approved meeting minutes for sharing, when required
- f) The health department and local law enforcement must jointly-prepare a district security plan for implementation of the campaign and submit it to the DC to be reviewed in the DPEC. It is the responsibility of the DC to authorize whether or not a campaign can proceed with the necessary security arrangements for vaccination teams. The DC and local law enforcement should seek advice of community influencers and religious leaders about security plans and measures. If necessary, the DC may approach to the Chairman of the Provincial Security Coordination Committee for additional support

2. Tehsil Polio Eradication Committee (TPEC)

There is occasionally a management gap between the district and UC-level, therefore it is proposed to fill such gaps with the involvement of Tehsil/taluka administration and health departments in supervision and monitoring support of the UCs. This is the rationale for the recommendation to establish Tehsil Polio Eradication Committees (TPECs). TPECs will be four-member teams, headed by the Assistant Commissioner (AC), wherever required, to assist the UCMOs in implementation of polio campaign activities and monitor progress. The AC may also represent the Tehsil in the DPEC meetings.

Optimal functionality and accountability of the TPEC must be ensured through the designation of the Assistant Commissioner (AC) as chairman and Deputy District Health Officer (DDHO) as its secretary, with the police officer in charge of the Tehsil as an integral part.

The meeting of the TPEC will be conducted one day after the last UPEC meeting and at least 1-2 days before the DPEC meeting. The DDHO will hold a meeting with the TPEC chairman in Tehsil/taluka of their assignment before the DPEC meeting and present information on their Tehsil/taluka during the DPEC meeting, including UC-wise information/data of their assigned Tehsil. The partners' staff will ensure training of the DDHO (Tehsil focal person). A review meeting chaired by the TPEC chairman should be held with all chairpersons of UCs and will bring particular challenges to the DC for resolve.

3. Union Council Polio Eradication Committee (UPEC)

The UPECs' formation, composition, and functionality have been variable in all of the provinces. The functionality of the UPEC must be supported and made accountable with the designation of the fulltime Union Council Medical Officer as Chairman and the Revenue Officer as Secretary, with binding membership of important UC-level stakeholders. Each UPEC is expected to develop UC-specific campaign and surveillance work-plans.

The meeting of the UPEC should be 15 days before the campaign with an agenda that includes:

- Review of the implementation status of the previous meeting's decisions
- Review and endorsement of the integrated microplans including composition and quality of vaccination teams and transit team strategy with supervision plans
- The engagement of the community influencers for information and motivation of the community
- Plans for quality training, supervision, and real-time process data transmission on a daily basis

The UCMO will ensure that all Area In-Charges (AICs) in the UC meet their teams daily at the end of each day's assignment. The AICs will collate and compile the data/information from the tally sheets of the teams and report to the UCMO, who will collate and compile all of the data for the UC and report to the District Control Room. The AICs and the UCMO will critically analyse the tally sheets of the teams on a daily basis and strategize interventions accordingly. The partners' UC-level staff (where available) will assist with the tally sheet analysis and strategizing field interventions.

4. Office bearers of the local bodies at the Union Council

Local Bodies are a system of Government that provides the facilities to the people in specific areas to solve people's problems at the local level, allowing public participation in decision-making. It has three levels—district, Tehsils, and Union Councils—under the administrative control of provincial local government. The essence of this system is that the Local Governments would be accountable to the citizens for all their decisions.

The lowest tier, the Union Council is a corporate body covering the rural as well as urban areas across the whole district. It consists of a Chairman, Vice Chairman, and 8 to 13 members (general council members and representatives of ladies, farmers / labourers, and minorities).

In every Union Council, the local government has placed the Union Council Secretary to coordinate and facilitate to the elected body of the Union Council in community development, functioning of the Union Committees, and delivery of municipal services. The UC Secretary is also responsible to track birth, marriage, and death registration and security system through chowkidars.

The UC Secretary has been assisting the health department in routine vaccination of children by providing a list of registered births to vaccinators, as well as playing a role as the Secretary of Union Council Polio Eradication Committee. They can also bridge the gap between UPEC and local police for security arrangements in risk areas, monitor campaign activities, and assist in vaccination of missed children, especially refusals.

There is a need to establish an official agreement with the local government to use the services of the UC-level Secretaries for Routine Immunisation and Polio Eradication.

ANNEX 4: UNION COUNCIL-LEVEL SCORE CARD

	Area of Work	Task and Indicators	Outcome
1.	Oversight & Management	UPEC planning meeting occurs 15 days before each SIA (Y/N)	
2.	Oversight & Coordination	UPEC review meeting occurs after each SIA (Y/N)	
3.	SIA–Preparation	Area in Charge microplans revised and validated by responsible UC staff before each SIA (Y/N)	
4.	SIA–Preparation	UC microplan revised before each SIA (Y/N)	
5.	SIA–Preparation	Number of vaccinators completing training with standardized national Interpersonal Communication (IPC) Module before each SIA (# and %)	
6.	SIA–Preparation	Vaccination Teams with at least one female member (# and %)	
7.	Access and Security	Security plan completed with local law enforcement and integrated with microplan (Y/N)	
8.	SIA–Missed Children	Missed children tracked and vaccinated (# and %)	
9.	Communications– Refusals	Refusals converted (# and %)	
10.	Information Management/M&E	LQAS Pass (Y/N)	
11.	Information management/ M&E	SIA report sent to DPCR within one week of campaign (Y/N)	
12.	Surveillance–AFP	AFP zero reporting completed weekly (Y/N)	

ANNEX 5: DISTRICT-LEVEL SCORE CARD

	Area of Work	Task and Indicators	Outcome
1.	Oversight & Coordination	UCs completing UPEC Meetings 15 days before SIA (# and %)	
2.	Oversight & Coordination	DPEC meets at least 7 days before SIA	
3.	SIA-Preparation	UCs with revised microplan before SIA (# and %)	
4.	SIA-Preparation	UCs with microplan validated by responsible district staff (# and %)	
5.	SIA-Preparation	UCs completing vaccinator training using standardized national IPC module before each SIA (# and %)	
6.	SIA-Preparation	Number of vaccination teams with at least one female vaccinator (# and %)	
7.	SIA-Vaccine & Logistics	Number of UCs receiving vaccine supplies at least 4 days before SIA (# and %)	
8.	Access & Security	District security plan completed before each SIA (Y/N)	
9.	Access & Security	UCs with security plan completed before each SIA (# and %)	
10.	SIA-Missed Children	Missed children tracked and vaccinated at district level in each SIA (# and %)	
11.	SIA-Missed Children	UCs tracking and vaccinating 90% of missed children (# and %)	
12.	Communications- Refusals	Refusals converted each SIA (# and %)	
13.	Information Management/M&E	UCs passing LQAS (# and %)	
14.	Information Management/M&E	District vaccination coverage by PCM in each SIA where applicable (%)	
15.	SIA-CBV	Number of CHWs selected and trained (#)	
16.	Information Management/M&E	CBV areas passed LQAS (Y/N)	
17.	SIA-Payments	Vaccinators paid within 14 days of campaign completion (# and %)	
18.	Oversight & Coordination	DPEC review meeting within one week of SIA (Y/N)	
19.	Information Management/M&E	District SIA report sent to P-EOC within one week of SIA (Y/N)	
20.	Surveillance-AFP	Number of AFP cases reported in district (#)	
21.	Surveillance-AFP	AFP cases investigated within 7 days of onset (# and %)	
22.	Surveillance-AFP	UC completing AFP zero reporting completed weekly (# and %)	
23.	Surveillance-AFP	District AFP stool adequacy (%)	

ANNEX 6: PROVINCIAL-LEVEL SCORE CARD

	Area of Work	Task and Indicator	Outcome
1.	Oversight & Coordination	Provincial UCs meetings before SIA (# and %)	
2.	Oversight & Coordination	Provincial DPECs meeting before SIA (# and %)	
3.	Oversight & Coordination	Provincial Task Force meets quarterly (Y/N)	
4.	SIA–Preparation	Provincial UCs with revised microplan before SIA (# and %)	
5.	SIA–Preparation	Provincial UCs with microplan validated by responsible district staff (%)	
6.	SIA–Preparation	Provincial UCs completing vaccinator training using standardized national IPC module before each SIA (# and %)	
7.	SIA–Preparation	Vaccination teams with at least one female vaccinator (# and %)	
8.	SIA–Vaccine & Logistics	UCs receiving vaccine supplies at least 4 days before SIA (# and %)	
9.	Access & Security	Districts in province completing security plan before each SIA (# and %)	
10.	Access & Security	UCs in province with security plan completed before each SIA (# and %)	
11.	SIA–Missed Children	Missed children tracked and vaccinated (province) in each SIA (# and %)	
12.	SIA–Missed Children	Districts tracking and vaccinating 90% of missed children (# and %)	
13.	Communications– Refusals	Provincial refusals converted each SIA (# and %)	
14.	Information Management/M&E	Provincial UCs passing LQAS (# and %)	
15.	Information Management/M&E	Districts in province with greater than 90% coverage by PCM in each SIA where applicable (# and %)	
16.	Information Management/M&E	Provincial vaccination coverage by PCM (%)	
17.	SIA–Planning	Number of Community Volunteers selected and trained (#)	
18.	Information Management/M&E	CBV areas in provinces passed LQAS (# and %)	
19.	SIA–Payments	Vaccinators in province paid within 14 days of campaign completion (# and %)	
20.	Oversight & Coordination	Districts carrying out DPEC review meeting after SIA (# and %)	
21.	Information Management/M&E	Provincial SIA report sent to N-EOC within two weeks of SIA (Y/N)	
22.	Surveillance–AFP	Number of AFP cases reported in province (#)	
23.	Surveillance–AFP	Provincial AFP cases investigated within 7 days of onset (# and %)	
24.	Surveillance–AFP	Provincial UCs completing weekly AFP zero reporting (# and %)	
25.	Surveillance–AFP	Provincial AFP case investigation within 7 days of onset (# and %)	
26.	Surveillance–AFP	Provincial AFP stool adequacy (%)	



صحت محفوظ



National Emergency Operations Centre
Islamabad, Pakistan