

Pakistan Polio Eradication Initiative
National Emergency Action Plan
2021-2023

National Emergency Operation Centre, Islamabad

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Acronyms and Abbreviations

AAV All Age Vaccination	NA Not Available
AC Assistant Commissioner	NEAP National Emergency Action Plan
ADC Additional Deputy Commissioner	NEOC National Emergency Operations Centre
AFP Acute flaccid paralysis	NID National Immunization Days
AKU Agha Khan University	NSTOP National Stop Transmission of Polio
AoW Area of Work	NTF National Task Force
BCG Bacillus Calmette-Guérin	NVI No Virus Isolated
BMGF Bill & Melinda Gates Foundation	ORPG Outbreak Response and Preparedness Group
C4D Communication for Development	OPV Oral Polio Vaccine
C4E Communication for Eradication	PCM Post-Campaign Monitoring
CBV Community-Based Vaccination	PEI Polio Eradication Initiative
CDC U.S. Centers for Disease Control and Prevention	PEOC Provincial Emergency Operations Centre
CHW Community Health Worker	PID Primary Immunodeficiency Disorder
COMNet Communications Network	PMC Persistently Missed Children
cVDPV2 circulating Vaccine-Derived Poliovirus type-2	PSEA Protection from Sexual Exploitation and Abuse
CR Case Response	PTF Provincial Task Force
DC Deputy Commissioner	PTP Permanent Transit Point
DEOC District Emergency Operations Centre	RRL Regional Reference Laboratory
DHO District Health Officer	RRU Rapid Response Unit
DPEC District Polio Eradication Committee	RSP Religious Support Person
DQA Data Quality Assessment	SHRUC Super High-Risk Union Council
DQSA Data Quality and System Assessment	SIA Supplementary Immunization Activity
DSRC District Surveillance Review Committee	SL2 Sabin-Like type-2
EI Essential Immunization	SM Social Mobiliser
EOC Emergency Operations Centre	SMT Special Mobile Team
EPI Expanded Programme on Immunization	SNID Sub-National Immunization Days
ER Event Response	SOP Standard Operating Procedure
ERM Evening Review Meeting	TAG Technical Advisory Group
ES Environmental Surveillance	ToRs Terms of Reference
FLW Frontline Worker	TTSP Temporary Tehsil Support Person
GCSS Geographic Coverage Support System	UC Union Council
GIS Geographic Information System	UCCO Union Council Communication Officer
GPEI Global Polio Eradication Initiative	UCMO Union Council Medical Officer
HH Household	UCPO Union Council Polio Officer
HR&MP High-Risk and Mobile Populations	UNICEF United Nations Children's Fund
IHR International Health Regulations	UPEC Union Council Polio Eradication Committee
IPV Inactivated Polio Vaccine	VDPV Vaccine-Derived Poliovirus
ISD Integrated Service Delivery	VDPV2 Vaccine-Derived Poliovirus type-2
IDM Institute of Disease Modelling	VPD Vaccine Preventable Disease
KPI Key performance indicator	WASH Water, Sanitation and Hygiene
LHW Lady Health Worker	WHO World Health Organization
LQAS Lot Quality Assurance Sampling	WPV Wild Poliovirus
M&E Monitoring and Evaluation	WPV1 Wild Poliovirus type-1
MPQA Microplan Quality Assessment	

Foreword

The Pakistan Polio Eradication Programme successfully recovered from the setback of the COVID-19 pandemic and a widespread polio outbreak by the second half of 2020. Several Supplementary Immunization Activities were implemented in the form of Outbreak Responses to cVDPV2 using type-2 containing vaccines and WPV1 preventive rounds using bOPV. The surveillance system was largely preserved during the pandemic and has now fully recovered and regained the sensitivity that enables timely detection of any polioviruses.



Thus far in 2021, Pakistan has reported only one case of WPV1, from Killa Abdullah in Balochistan, which had an onset of paralysis in January. There has also been a significant reduction of WPV1 positive environmental samples, as well as evidence of limited circulation of cVDPV2. This current situation of polio epidemiology avails a unique opportunity for the country to interrupt the circulation of all types of polioviruses.

The Polio Oversight Board visited Pakistan twice in 2021, during which high-level Global Polio Eradication Initiative (GPEI) delegations met with senior government officials led by his excellency Mr. Imran Khan, the Prime Minister of Pakistan. He confirmed the highest level of political commitment to make history. The *GPEI Polio Eradication Strategy 2022-2026* was officially launched from Islamabad during the POB visit.

The Ministry of Health Services, Regulation and Coordination, represented by the National Emergency Operations Center, is confident that it is fit for the purpose of eradication since it conducted a programmatic transformation successfully in high-risk districts. Provincial PEI teams are also working tirelessly in the required pace and harmony. However, there are still remaining management and ownership challenges at sub-district level, and this National Emergency Action Plan outlines straightforward ways to address and fill these gaps.

With the unique opportunity of the current epidemiology and with appropriate EOC teams at the National, Provincial and District levels operating with utmost urgency, transparency and accountability backed by an outstanding senior political commitment and junior level ownership, I am confident that the programme will not let the chance of interrupting poliovirus transmission slip away and will timely deliver on the promise to our children and the whole world by pushing forward toward global polio eradication.

Dr. Faisal Sultan
Special Assistant to the Prime Minister
National Health Services, Regulation and Coordination

Executive Summary

Due to Covid-19 pandemic, the Pakistan polio programme ('the Programme') faced several challenges, particularly in terms of interruption of mass immunization activities in the first half of 2020. However, by July 2020, operations were fully restored, and all planned Supplementary Immunization Activities (SIAs) have been successfully implemented in all parts of the country.

In January 2021, a WPV1 case was reported from Killa Abdullah, Balochistan Province – to date, there has not been another WPV1 case reported in the country. This reduction in polio cases has been accompanied by a marked reduction in the proportion of WPV1-positive isolates from the environment and a reduction in cVDPV2 detections from both AFP cases and environment, availing a golden opportunity for the Programme to stop transmission of all polioviruses.

The Pakistan Polio Eradication Initiative National Emergency Action Plan (NEAP) 2021-2023 has been developed with this epidemiological context in mind. While ensuring alignment with the *GPEI Polio Eradication Strategy 2022-2026*, the guiding principles for this NEAP are **strong government ownership, the One Team model, staff empowerment, an urgency mindset, transparency and accountability, and approaches tailored to local contexts**. To achieve Pakistan's goal of interrupting transmission by 2023, the Programme will need to have empowered ownership of district and sub-district teams to lead local problem-solving, and also will need to retain appropriate, capacitated, and motivated frontline staff. Guided by the principles above, this NEAP is structured around seven Key Programme Priorities with approaches to reach the Programme's objectives. A gender mainstreaming approach is taken throughout these seven Key Programme Priorities in line with the GPEI gender strategy.

One of the Key Programme Priorities is *Risk Assessment, Programme Monitoring and Data for Action*. The Programme employed evidence-based scientific methods, including risk assessments and disease modeling techniques, to classify districts into Very High-Risk, High-Risk, Medium and Low-Risk categories. As such, the NEAP specifies packages of interventions by risk-prioritized districts where 25 Very High-Risk districts (with 26% of the <5 years target population) are considered the key reservoirs for sustaining WPV1 transmission and are therefore targeted for additional focus and intervention.

There are several important shifts in this NEAP, but high on the list is operational improvements to reduce the number of children missed by SIAs. This includes enhancing basic SIA and outbreak response operations, directly engaging families and communities of persistently missed children through specific influencers and allocating locally acceptable frontline workers (FLWs). Given the potential of mass population due to the humanitarian crisis in neighboring Afghanistan, the Programme will ensure campaign operations and communications are adapted to reach these vulnerable populations. Priority examples of technology use to support program improvement for SIAs include:

- Updated and intensified outbreak response SOPs to improve the speed and effectiveness of response to any evidence of poliovirus transmission
- Innovative tools to support and enhance frontline workers' performance
- Expanded GIS-based micro-planning to reach all geographical areas to reduce exclusion of children in microplanning
- A vaccination tracking system during SIA implementation in high priority areas to give real-time updates on team movement and identify missed areas for immediate corrective action
- An android-based application for senior supportive supervisors to summarize observations and recommend corrective actions, while passively tracking the supervision footprint

This NEAP places more emphasis and focus on implementing the workplan developed to address gaps identified during the October 2021 external surveillance review, and on integrating vaccination service delivery between PEI and EPI. Synergy will be pushed further towards integration of planning, implementation, and monitoring of all vaccination interventions. Polio Programme involvement in EPI activities will increase, with polio staff at the district and sub-district levels actively engaged to make sure all PEI priority areas are fully covered and chronically missed and zero-dose children are reached. Integrated service delivery, coupled with other public health interventions, will be improved and guided by evidence to increase compliance in priority communities.

Overall, the NEAP 2021-2023 draws on the strengths of polio programme in Pakistan and redoubles the focus at the district and sub-district levels with interventions, innovations and modifications that capitalize on the current epidemiological situation to permanently interrupt transmission of all polioviruses by the end of 2023.

Introduction

The Pakistan Polio Eradication Initiative (PEI) National Emergency Action Plan (NEAP) 2021-2023 has been developed in alignment with the *GPEI Polio Eradication Strategy 2022-2026* and in the context of the unique opportunity to stop poliovirus transmission once and for all. This NEAP emphasizes urgency and accountability, and increased ownership and political drive at all levels with a focus on flexibility at the district and sub-district levels. The following Key Principles will guide the Programme across the country:

- **Strong government ownership:** At every level, government will take greater responsibility and accountability for the success of the Programme, with appropriate decision rights allocated, and with support and technical advice from partners.
- **One Team model:** Government and partners will continue to work together as one team across different functional areas (SIA operations & communications, surveillance, etc.).
- **Empowering staff:** Management structures will encourage and enable district, UC and area-level teams to highlight challenges and problem-solve. Structures will be responsive and will adapt based on feedback from the field.
- **Urgency mindset:** Imbue strong sense of emergency into the Programme to minimize time from “issue to decision” and “decision to action.”
- **Transparency and accountability:** Everyone at every level will clearly understand what is expected of them and others around them, with appropriate channels for accountability further strengthened.
- **Reflecting local level differences:** Further tailor specific approaches and structures to local contexts whether this is necessary due to local government structures that vary by province, the availability of staff from the PEI partners, or differences in strategy.

Strategic Goal

The NEAP 2021-2023 Strategic Goal is ***to permanently interrupt all poliovirus transmission in Pakistan by the end of 2023.***

Key Programme Priorities

To achieve the Strategic Goal set out above, the Programme will prioritize the following approaches:

1. **Strong Government Commitment and Oversight.** Vision: strong government commitment and oversight from the highest political leadership of the honorable Prime Minister, through the National Task Force for Polio Eradication, provincial leaders, and additionally through engagement with district administrations of priority districts.
2. **Proficient and Empowered District Teams Supported by Polio Emergency Operations Centers (EOCs).** Vision: EOCs at the national, provincial and district levels with full authority and resources to design and deliver polio operations fit-for-purpose to achieve eradication, and with continued support of partner agencies that provide critical technical and operational contributions through these platforms.

3. **Risk Assessment, Programme Monitoring and Data for Action.** Vision: data-based risk assessments and disease modeling techniques prioritizing interventions and allocating resources; multiple data sources being triangulated to guide decision-making and iterative improvements to interventions.
4. **Reaching Missed Children.** Vision: programme simplified with high-quality implementation of SIAs that are intensified to reach previously unreached children by further revising the microplans, building capacity of the frontline teams, fixing cold chain issues, building alliances with priority communities to increase trust for immunizations, applying a risk-based approach to monitoring and supervision, enhancing security support to frontline teams, and ensuring that frontline workers remain motivated.
5. **Certification Level Surveillance** Vision: highly sensitive AFP and environment surveillance systems in place that timely detect poliovirus transmission and provide reliable evidence of poliovirus elimination.
6. **Outbreak Preparedness and Response** Vision: robust outbreak preparedness, detection and response mechanisms that timely contain all emerging events.
7. **Targeted Risk-Based Interventions.** Vision: additional essential immunization and other health services targeted and delivered to communities most at risk for maintaining poliovirus transmission based upon risk assessment.

Programme Priority 1: Strong Government Commitment and Oversight

- *Maintain full commitment of government for oversight of polio eradication activities at every level.*

Government ownership

In line with the Key Principles, government ownership at each level is critical. This requires representatives at all levels to be closely involved as appropriate. National leadership will oversee and ensure the implementation of NEAP across provinces in coordination with various government line departments and the Pakistan Army. Senior provincial leadership will solve problems around collaboration with government line departments, including delays in implementation, issues in human resources, and conflicts between departments/staff. District and UC leadership will resolve issues pertaining to coordination with other line departments, planning and implementation of campaigns, and monitoring and reporting progress on ground.

The Programme's primary engagement with government is through national, provincial, district and UC level oversight bodies, i.e., the National Task Force (NTF), the Provincial Task Forces (PTFs), District Polio Eradication Committees (DPECs), and Union Council Polio Eradication Committees (UPECs) – see details in Appendix B1. Each government department has defined roles and responsibilities in the Programme in the pre-campaign period and during campaigns (details in Appendix B2) with slight differences in reporting and governance structures across provinces (details in Appendix B3).

Programme Priority 2: Proficient and Empowered District Teams Supported by Emergency Operations Centers (EOCs)

- *Address limitations and challenges of government ownership of the Programme particularly at district and UC levels by empowering the EOCs and Deputy Commissioners and building capacity to develop, own and implement district-specific plans that reflect ground realities and address local challenges.*

To reach and maintain eradication-level implementation of field interventions, the Programme will focus on four components:

1. Effective programme management structures at each level
2. Further clarification and definition of decision rights
3. Performance management
4. Capacity building

1. Programme management structures

In support of the government, there are dedicated Programme management structures at each level, as follows:

NEOC: The National Emergency Operations Centers (NEOC) is an implementation structure at the national level that is led by a government appointed NEOC Coordinator. The NEOC Coordinator reports to the Special Advisor to the Prime Minister (SAPM) on Health and to the National Task Force (NTF) on Polio Eradication. The proposed NEOC structure (described in Appendix B4) will be simplified to increase government ownership, leadership, and teamwork. These structural changes will be complemented with a set of enablers to improve the operations of the NEOC, including management of routine meetings and decision-making (using the right information and data, with the required people involved), effective accountability and performance management, regular interactions with higher-level government and political leadership, and regular engagement with the Provincial EOCs.

PEOC: Provincial Emergency Operations Centers (PEOCs) are implementation structures at the provincial level, each with a full-time dedicated senior government officer – the PEOC Coordinator – deputed in each province to lead the PEOCs with the assistance of partner agencies (WHO, UNICEF, BMGF, NSTOP, Rotary International). The PEOC Coordinator reports directly to the Provincial Task Force (PTF) on Polio Eradication chaired by the Chief Secretary. PEOCs are the provincial hubs for planning, coordinating, conducting surveillance, and monitoring all polio eradication activities in accordance with the NEAP and technically reporting to NEOC.

DEOC: District Emergency Operations Centers (DEOCs) are management bodies at the district level for polio eradication activities. Each DEOC is led by a Deputy Commissioner (DC), who is supported by one or more dedicated government officers (e.g. Additional Deputy Commission, ADC), and reports to the District Polio Eradication Committee (DPEC) chaired by the DC with the District Health Officer (DHO/CEO-Health) as the Vice-Chair. Members include District Police Officer, District Education Officer, District Revenue Officer, District Khateeb, District EPI Project Director, District Lady Health Worker (LHW) Manager, and members of the DEOC (detailed later). The DEOC is responsible for overseeing polio eradication and essential immunization activities at the district level and coordinating with all line departments and local partners to ensure high-quality implementation of vaccination campaign strategies.

For efficient implementation of NEAP strategies and activities, seven key roles are defined and will be present at each level. These roles can be played by either government or partner staff, depending on the availability, and in some areas, a single official may play more than one role. These seven roles are:

1. Government lead (to ensure oversight on all key functions)
2. Core technical lead (to advise and support on the implementation of decisions)
3. Delivery and operations (to lead the day-to-day campaign implementation)
4. Communications (to prepare targeted social mobilization and communication plans)
5. Risk assessment and response (for surveillance and monitoring teams)
6. Data (to maintain and update data and conduct analysis to guide decision-making)
7. Synergy (to ensure coordination with EPI and other government departments, such as health services)

At each level, the relevant government lead will be supported by technical staff from partner organizations (WHO, UNICEF, NSTOP, BMGF). As per the Programme's risk-based approach, the resources available from partners differ across different Risk Categories, with greater availability in Very High-Risk districts. Details on partner staff roles can be found in Appendix B5.

- **Very High-Risk areas:** Based on these principles, the Programme completed a defined structure for Very High-Risk areas (Appendix B6). Continued support from the NEOC and PEOCs will help ensure that these structures are operational and effective.
- **High-Risk, Medium Risk and Low Risk areas:** the NEOC and PEOCs will need to make any required changes to the management structures in High-Risk and beyond, based on the needs of those districts. Based on this, TORs may need to be updated and training conducted with support to ensure these structures are operating efficiently and effectively.

2. Clearly defined decision-making rights

To increase ownership of the Programme by the government and to streamline collaboration the Programme will further define the decision-making rights for all stakeholders and government counterparts. Specifically, in matters related to hiring and performance management of staff, the government will be given greater input. In line with this, the Programme has re-defined the decision-making rights (further detailed in Appendix B7).

3. Performance management

Performance management will further strengthen the one team approach by avoiding siloes between government and partners and amongst partner organizations. Building on the lessons from a pilot conducted in Peshawar in 2020, the Programme will update management systems to ensure the government has input into the overall appraisal process, and into functional (e.g., within a technical area of expertise) and institutional supervisors. The revised performance management system will also encourage managers to provide supportive feedback to staff to improve their performance and support staff to identify their own goals and priorities, with suitable templates and guidance. The Programme will implement across the country an updated approach using this three-supervisor model in line with local specificities on the team structure in each area.

4. Capacity building

The Programme will focus on building high-performing district and UC teams with the right people in the right roles with the right support. This includes trainings through a combination of in-person workshops complemented with online self-paced learning modules to create an interactive approach suitable for all staff on these topics. The focus of capacity building is in three key areas:

- Ensuring all staff understand their TORs and the expectations of each role.
- Technical skills (building technical skills related to the specific roles).
- Leadership and management skills (building both individual capabilities e.g., problem-solving, communication, etc and team capabilities, e.g., motivation and conflict resolution and teamwork).

Monitoring and tracking progress

To ensure these four components are implemented effectively, a streamlined monitoring system will be in place. The table below reflects the metric, responsibility and frequency of data collection to be identified for each of the KPIs (e.g., through surveys, tasks teams, on-the-ground monitoring). In addition, the Program will develop a dashboard, accessible to all key stakeholders, for use in decision-making.

Table 1. Progress tracking metrics

Focus area	Metric	Responsibility	Frequency
Governance and government engagement	NTF meetings held (Y/N)	NEOC	Bi-Annually
	PTF meetings held (Y/N)	PEOC	Quarterly
	DPEC and UPEC meetings held (Y/N)	DEOC	As per campaign
Structure and TORs	Allocation of staff with clear TORS at district & UC levels	NEOC+PEOC	Quarterly
Evening Review Meeting effectiveness/Data usage	% Of UCMOs/DCs chairing the respective UC/district ERMs	ICM monitoring	During campaigns
	ICM and team-level data is being used for district/UC-ERMs (Y/N)	ICM	During campaigns

Change management and implementation

The NEOCs and PEOCs will ensure management structures are more efficient and effective. A detailed work plan will contain clear responsibilities to implement these changes. The NEOC Coordinator will oversee these efforts with the relevant implementation teams reporting on progress to the Core Team. In addition, implementation teams will regularly engage with the PEOCs to resolve any emerging challenges. To succeed, all staff must understand and believe in a clear narrative underpinning the importance of these changes. Accordingly, the NEOC will develop a clear change narrative to disseminate through a variety of channels.

NEOC guidance to the Programme

NEOC core group will steer the Programme, including its implementing partners, across the board with the following actions:

- Challenge the rationale and relevance and benefit of the Programme
- Review strategies, proposals and requests from PEOCs, partner agencies, and others

- Offer advice and suggestions, and decision on approval for proposals
- Monitor and review the implementation of the advice, approvals, and decisions
- Decide on any necessary corrective actions through collaborative efforts with PEOCs and partners

Management and oversight of PEOCs

The NEOC will have oversight of how the PEOCs implement the NEAP, with a focus on supporting PEOC progress and performance in the following areas:

- Due diligence in collaboration with PEOCs and partners before key decisions are made
- Smooth implementation of policies and strategies
- Identify, monitor, and mitigate risks
- Ensure EOC business processes and systems work well
- Every action achieving expected results
- Activities comply with policies, laws, regulations, ethical standards, and gender equality
- Safeguard polio personnel, particularly FLWs
- Continuously improve Programme quality

Accountability

The NEOC Core Team will be accountable to the SAPM and NTF for implementing the NEAP. The SAPM will review progress on implementation and support as necessary. The NEOC Coordinator and Deputy Coordinator will be responsible for notifying the SAPM of bottlenecks affecting the implementation at any level. All partners working under the umbrella of the NEOC, PEOCs, and DEOCs will be accountable to deliver as agreed by the Core Team at respective levels.

Accountability by NEOC, PEOC and DEOCs

- Ensuring and contributing to an enabling environment for all personnel and teams.
- Defining clear roles, responsibilities, and deliverables for every working group.
- Identifying specific working groups/person responsible for actions or tasks generated in various meetings, particularly in daily morning meetings and Core Team meetings.
- Deploying personnel fit-for-purpose and building capacity as needed.
- Tracking progress and achievement of tasks as per due dates.
- Reviewing and responding to any correspondence from a level below promptly within ≤48 hours and provide clear advice, recommendations, and support as needed.
- Taking punitive action or corrective measures for any negligence or poor performance.
- Taking prompt action for any issue related to corruption, sexual abuse or sexual exploitation, and gender discrimination.

Gender Responsiveness

In line with the GPEI Gender Equality Strategy 2019–2023, this NEAP is making efforts to strengthen the Programme’s gender responsiveness by mainstreaming gender at various stages of programme planning and design, implementation, and monitoring and evaluation, addressing gender-related barriers to vaccination and the empowered engagement of women. The following are the priority:

- Increase ownership of and accountability for mainstreaming gender considerations into all aspects and levels of the programme.
 - 15% increase in female staff every year (All staff).
 - Build a formal GPEI partner coordination mechanism on gender that will address areas such as training, data collection and analysis, and technical support.

- Strengthen data collection and analysis and complement quantitative data with robust qualitative social data, especially through the community engagement workstream.
- Ensure specified and dedicated financial resources through the budget process.
- Create a safe work environment for all staff and contractors and enforce GPEI policies on Protection from Sexual Exploitation and Abuse (PSEA) and zero tolerance policy for perpetrators of incidents.
 - Training of all staff on gender and PSEA by end of 2022.
 - 100% investigation and resolution of all sexual exploitation and abuse incidents reported.
 - Institute specific field-level mechanisms to prioritize the safety of polio workers and beneficiaries.

Programme Priority 3: Risk Assessment, Programme Monitoring and Data for Action

Risk assessment

Using data-based risk assessments and disease modeling techniques, the Programme categorizes districts as Very High-Risk, High-Risk, Medium or Low-Risk based upon SIA performance, routine immunization, surveillance and other risk factors (detailed in Appendix A1) to effectively prioritize interventions and allocate required resources to where they are needed most (see Table 2).

The 25 Very High-Risk districts containing ~26% of the <5 years target population are considered the key reservoirs for sustained transmission of WPV1. 28 districts fall under the category High-Risk districts and contain ~18% of the target population; 40 districts fall under the category of Medium-Risk districts and contain ~26% of the target population; and the remaining 63 districts have been categorized as Low-Risk districts and contain ~30% of the target population (details in Appendix A2).

Figure 1. Risk-based district categorization

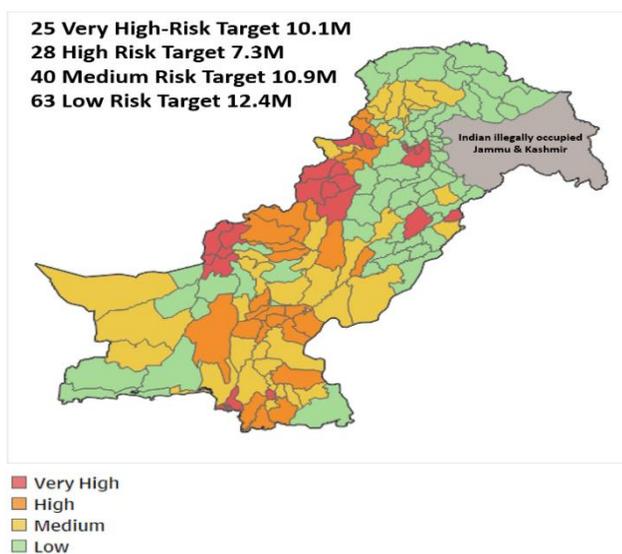


Table 2: Focused Risk-Based Programme Interventions

<i>Epidemiological Risk Categorization</i>	<i>Priority Programme Interventions</i>
<p>Very High-Risk Districts Number of Districts: 25 Target Population: 10.1M (24.8% of target Pop)</p> <p>Key Characteristics:</p>	<p>The overarching priority: Maintain a relentless focus on these core reservoir areas, ensure that transmission is interrupted, and once achieved, maintained.</p> <p>Leadership and Management: Good management is critical for good campaign performance, through:</p> <ul style="list-style-type: none"> • Agile, responsive, empowered, and accountable district and sub-district teams:

<ul style="list-style-type: none"> • <i>These districts pose the greatest risk to polio eradication in Pakistan.</i> • <i>40 SHRUCs identified as critical to Polio eradication. More focus to improve campaign quality, community engagement, and targeted support to integrated health service delivery will be given to these UCs.</i> 	<ul style="list-style-type: none"> - DC's Discretionary Fund - Flexibility to tailor SOPs/ interventions relevant to local realities • Strengthened government leadership and accountability at the UC level: <ul style="list-style-type: none"> - Focus on sub-district level, built government leadership and ownership - Extended support from DC office - Right, incentivized, and capacitated UCMOs <p>Reducing missed Children and reaching the last child:</p> <ul style="list-style-type: none"> • Extended post-campaign catch-up • Strengthen cluster level social analysis for all missed children (Beyond refusals) • Shift from programme-led to influencer and community-led. - Reinvigorate presence in UPEC • Leverage ISD to tackle community resistance- better targeting and linking of ISD service provision to refusal clusters • Use technology to improve quality of interventions, in particular introduction of GIS-based micro-planning and Vaccination Tracking Systems in addition to cold chain temperature monitoring applications • Expansion of mobile applications that help for real-time data and reporting
<p><i>Very High-Risk Districts (continued)</i></p>	<p>Strengthening RI and Access to Services:</p> <ul style="list-style-type: none"> • Strengthen linkages between facilities and community for defaulter tracking; reporting of zero-dose children and newborns • Strengthen enrollment of zero-dose children into the EI • Jointly plan RI intensification interventions for all antigens, including IPV and OPV with possible rational expanded age groups, EOAs, health camps, etc. <p>Strengthen the use of data and evidence to inform interventions/ innovation:</p> <ul style="list-style-type: none"> • Assessment for best estimates of (target population, recorded missed children and difference between CBV vs. SMT) • Review and refine PMC engagement strategies • Use of digital technology: GIS Microplanning, Vaccinator Tracking System, cold chain, and temperature digital monitoring. • Evidence on ISD: <ul style="list-style-type: none"> ○ Health Facility Assessment ○ Impact/outcomes on ISD service delivery on addressing persistently missed children and RI coverage <p>Data for action:</p> <ul style="list-style-type: none"> • Tailored tabs in the NEOC dashboard for SHRUCs & Very High-Risk districts that depicts risk and trends using triangulation and

	<p>granular analysis of different data sets. This will also include an action tracker to monitor the performance of UCs & districts.</p> <ul style="list-style-type: none"> • Vaccinator tracking system (VTS) to improve vaccination efficiency, geolocate refusal pocket, and record cold chain • Data Quality Assessment (DQA) in SHRUCs to improve the quality of data and guide corrective action • Geo-tagging monitoring data including ICM and LQAS with Pak App to enhance the visualization of missed children <p>Innovation and operational research:</p> <ul style="list-style-type: none"> • Prioritize participatory and appreciative inquiry ‘listening sessions’ in SHRUCs, Very High-Risk, and High-Risk districts to facilitate process innovation across the workstreams • Prioritize resource-intensive new approaches/technologies in SHRUCs, Very High-Risk, and targeted High-Risk districts • Support additional/ focused operational research for programme improvement in analysing missed children, assessing post-transformation performance in SHRUCs, Very High-Risk, and High-Risk districts
<p>High Risk Districts <i>Number of Districts: 28</i> <i>Target Population: 7.3M (17.9% of target pop)</i></p> <p>Key Characteristics: <i>New endemic areas that border core reservoirs / whose populations are closely linked to core reservoirs. SIA operational challenges and poor routine immunization coverage translate to a significant population of children vulnerable to polio infection and sustained circulation. In south KP, vaccine hesitancy and demand-based refusals constitute a significant challenge.</i></p>	<p>The overarching priority: Interrupt circulation of WPV1 in these areas and reduce the vulnerability of children by addressing underlining issues that affect campaign quality, strengthen partnership with priority communities to counter vaccine hesitancy, and where required, implement targeted ISD activities.</p> <p>Reach missed children:</p> <ul style="list-style-type: none"> • Empower frontline workers: <ul style="list-style-type: none"> - Appropriate gender and language FLW - Provision of required security - Provide logistic funds (500pkr/day) • Agile, responsive, empowered, and accountable district teams: <ul style="list-style-type: none"> - DC’s Discretionary Fund (High-Risk Districts South KP) - Flexibility to tailor SOPs/ interventions relevant to local realities • Review engagement PMC conversion strategies in South KP <ul style="list-style-type: none"> - ComNet in these areas: Lahore, Rawalpindi, South KP <p>Improve immunity:</p> <ol style="list-style-type: none"> 1. Strengthen PEI/EPI synergy: Planning, Implementation monitoring to improve RI Coverage (Birth dose, zero-dose, and defaulters) 2. Expansion of ISD to select high-risk areas (UCs) <p>Data for action:</p> <ul style="list-style-type: none"> • In addition to NEOC dashboard data, UC Risk Assessment module further support the following:

	<ul style="list-style-type: none"> - Identify and prioritize UCs for MPQA, LQAS, and PCM activities - Guide deployment of federal and provincial monitors in the areas where support is required - Guide ISD to identify geography for health camps and other interventions targeting priority communities hesitating vaccination, especially in South KP <ul style="list-style-type: none"> • Perform advanced data analysis and triangulation to guide the programme where supportive supervision should be strengthened • Conduct DQA on a need basis <p>Innovation and operational research:</p> <ul style="list-style-type: none"> • Prioritize participatory and appreciative inquiry ‘listening sessions’ in SHRUCs, Very High-Risk, and High-Risk districts to facilitate process innovation across the workstreams • Prioritize resource-intensive new approaches/technologies in SHRUCs, Very High-Risk, and targeted High-Risk districts • Support additional/ focused operational research for programme improvement in analysing missed children, assessing post-transformation performance in SHRUCs, Very High-Risk, and High-Risk districts
<p>Medium-Risk Districts <i>Number of Districts: 40</i> <i>Target Population: 10.9M (26.7% of target population)</i></p> <p>Low-Risk Districts <i>Number of Districts: 63 districts</i> <i>Target Population: 12.4M (30.4%)</i></p> <p>Key Characteristics: <i>Addressing the existing performance gaps in Medium & Low-Risk districts is a formidable challenge because of its size, not because of the complexity of the problems.</i></p>	<p>Priorities and focus:</p> <ul style="list-style-type: none"> • Adhere to basic operational principles to raise and maintain acceptable campaign quality • Identify low-performing UCs and conduct in-depth analysis of their problems and offer support tailored to their needs • Strengthen monitoring of campaign quality • Ensure optimum AFP surveillance system • Robust Outbreak Preparedness and Response

The NEOC Control Room will support the tracking of implementation of the Risk Category-wise priorities as per set timelines by the relevant EOC sections/units. Likewise, there will be a dedicated desk for each Risk Category within PEOC Control Rooms with close coordination with Data Support Centers (DSCs) that will remain in real-time coordination with the districts to ensure optimal support to the districts from the PEOC in terms of SIAs implementation, district requests/queries, required support, etc.

Data for action

At the national level, the NEOC Control Room is the custodian of all data, records, and the web based EOC dashboard. All key data components/elements required for review, analysis, and decision support are maintained up to date on a real-time basis as per requirement of the Programme. Ensuring efficient, reliable, and secure data flow from field to national level, often involving interface between multiple databases, remains one of the pivotal roles of the NEOC Control Room.

The Information Management Team in the NEOC, working across different groups and with data management teams in the PEOCs, regularly develops, reviews, and updates data collection and reporting systems to generate evidence to guide eradication efforts.

Data for action priorities for 2021–2023

The core objectives of the Information Management Team during the upcoming NEAP encompasses the overall improvement of existing systems ensuring real-time data collection from the field to support real-time decision-making at all levels. Further enhancement of the NEOC dashboard will include the following:

- Tailored tabs in the NEOC dashboard for SHRUCs & Very High-Risk districts that depict risk and trends using triangulation and granular analysis of different data sets. This will also include an action tracker to monitor the performance of UCs & districts.
- To support ERMs, add a district performance scorecard and district and UC profiles to the NEOC dashboard to provide real-time data for better decision-making
- Provide GIS mapping in priority districts as required and with support from Survey of Pakistan, including improvement and updating of district and UC shapefiles and establishment of data sharing with the Survey of Pakistan through thin client access at the NEOC
- Update surveillance tab on NEOC dashboard with additional visualizations to support planning and action on the Q4 2021 Surveillance Review recommendations
- Identify priorities for UC/area level data collection to connect to same-day analysis on the NEOC dashboard; includes UC/area level access to systems/dashboards
- Extract EPI data (specific indicators) from EPI data sets and link them to the NEOC dashboard
- Design module for realistically tracking target populations and generating alerts where there are discrepancies
- Develop training guidelines and video tutorials for master trainers from provincial and district level to build analytical capacity for data-driven actions
- *See Table 2 for priorities by district risk categories*

Programme Priority 4: Reaching Missed Children

- *Utilize an integrated three-prong approach of strengthened campaign operations, participatory community engagement to reduce still-missed children, and community-led rollout of ISD activities in polio priority areas.*
- *Leverage technology to improve the quality of vaccination activities and to reach chronically missed children through GIS-based micro-planning, vaccinators' tracking system, cold chain monitoring, and supportive supervision unified applications.*

Campaign Implementation

This area of work covers campaign operations, communication & community engagement, media, high-risk and mobile population (HR&MP) activities, Afghanistan - Pakistan coordination, cold chain logistics management, training, and monitoring and evaluation.

Situation analysis

Despite the high household coverage rates, the number of children still missed in each campaign remains a concern. A review of the four NIDs following the resumption of SIAs in July 2020 shows a trend of reduction in still missed children; however, despite repeated training sessions before each campaign and continual updating of micro-plans, the ability of mobile teams to reach all children remains below expectations. Ongoing challenges include:

- Compromised quality of team micro-plans, team composition, irrational workloads, and inadequate training that leads to poor quality of implementation
- Insufficient effectiveness of communication and social mobilization activities
- Inadequate supervision by the district administration

Campaign Operations

Technical scope

- Implement three NIDs across all districts and three SNIDs (50% population) annually in addition to required case responses guided by the evolving WPV1 and cVDPV2 epidemiology (Appendix C). To ensure ample time for campaign preparation, communication, and community engagement, the SIA schedule will be spaced so there will be an average seven-week interval between campaigns
- Leverage planned EPI campaigns, such as typhoid conjugate vaccine (TCV) and measles-rubella (MR) campaigns, to vaccinate children under five years against polio. These campaigns are included in the polio SIA calendar
- Use all available vaccine options (bOPV, tOPV, mOPV2, IPV, and nOPV2) guided by the epidemiology and need
- Within the SHRUCs and other HRUCs identified by PEOCs strengthen the integration of campaign operations, participatory community engagement, and community-led roll out of ISD activities in polio priority communities

Overarching approach: Back to Basics

The programme initiated the management transformation to **address operational issues throughout the planning, implementation, evaluation, and review phases of SIAs**. This NEAP focuses specifically on leveraging this management structure to support local problem solving that prioritizes the basic components that need to be properly in place before implementing subsequent activities. A major chunk of time and expertise will go towards supporting FLWs including appropriate selection and allocation of staff, training quality, rationalized and practical micro-plans, and supportive supervision. The core structure includes a meticulously followed pre-campaign preparedness schedule and taking informed decisions at the district and sub-district levels based on overall readiness to start. Missed children will be recorded through the existing data tools so district teams can take appropriate action. Post-campaign reviews will take place at UC, district, provincial and national levels after each round to inform decisions for upcoming SIAs.

Communication and Community Engagement

The overarching goal of the Communication for Development (C4D), including media and advocacy AoWs, is to sustain positive social norms for vaccination throughout the country and increase vaccine acceptance in high-risk areas through a comprehensive communication strategy, focused particularly on priority community engagement (PCE).

During the NEAP period the Programme will integrate media and public communication approaches at different levels. This will allow the Programme to re-position and reinforce polio eradication as a national public cause for the protection of children, and to reduce refusals by creating a conducive environment for FLWs to vaccinate children at the doorstep. Key approaches to achieve these objectives include

- Seamless operation of the **COMMnet structure with SIA implementation**
- Leverage **community influencers'** support for social mobilization and community engagement activities that build caregiver and family knowledge, awareness, and motivation in support of polio vaccination
- Involve **RSPs** to conduct advocacy sessions and meetings at Masajid, Madaris, and refusal cluster-centered social gatherings in addition to facilitating Friday sermons in every Friday congregation
- Engage **mass media, social media and press**
- Engage **influencers including public/private partnerships**

Community engagement within SIA implementation

Strengthening community ownership and accountability for community engagement interventions and results will be the main priority during 2021-2023. Providing opportunities and platforms for community dialogue and feedback will be mainstreamed with campaign operations to continue making progress on resolving persistent refusals. This will entail placing an enhanced COMNet workforce at the area level in Very High-Risk Districts to realign the workforce to emerging challenges. Community engagement in Very High-Risk districts will prioritize direct engagement of families and communities of persistently missed children through specific influencers, especially targeting those from priority 1 communities, utilizing the presence of locally acceptable frontline workers. SHRUCs have received an enhanced communication network down to the household level to implement a comprehensive package of communication interventions in 2020. Detailed activities for each campaign phase are described in Table 3.

Influencer engagement

The programme will also develop advocacy strategies and enhance multi-sector partnerships with key public and private institutions and high-level national and provincial influencers, focusing on increasing and amplifying the contribution of external voices and strengthening social norms related to campaign success and overall vaccine acceptance in high-risk areas. Activities will include:

- Conduct advocacy outreach and engagement with elected officials and politicians at the federal level to promote the right of vaccination for every child
- Implement FLW motivation sessions and high-visibility events with public opinion shapers and influencers, including paediatric and medical associations and celebrities
- Give visibility to some donors' contributions from neighbouring and nearby countries within the region to shift the perception of the polio vaccine being a 'western agenda' by
- Ensure high-level religious engagement through the National Islamic Advisory Group for Polio Eradication (NIAG) and other platforms
- Strategically engage with private sector organisations to promote vaccination

Religious Support Persons (RSPs) and Provincial Scholars Task Force (PSTF)

Selected through deputy commissioners together with relevant partners representatives, mostly being local Pesh Imams and/or Madaris teachers, RSPs will serve as a key approach for accessing and convincing the population strongly motivated by religious obligations and those affected by religious misconceptions. Under the new institution-based approach, RSPs will conduct advocacy sessions and meetings at Masajid, Madaris, and refusal cluster-centered social gatherings in addition to facilitating Friday sermons in every Friday congregation, with quarterly progress tracking against planned activities.

Mass media, social media, and press

C4E will continue following the PEI Communication Strategy to create an enabling environment for sustaining social norms for vaccination countrywide and increasing vaccine acceptance in high-risk areas. Activities for the key channels of media engagement, mass media messaging, online and social media engagement, and targeted interventions for introduction of nOPV2 and other emerging priorities, are outlined below in Table 4.

High-risk and Mobile Populations

Mobile populations present a distinct challenge to stopping polio transmission in Pakistan, as children of high-risk and mobile populations (HR&MP) – migrants, nomads, displaced communities, refugees, and brick kiln workers – are often missed in house-to-house campaigns, remaining under-immunized. During SIAs the Programme will incorporate HR&MP into all microplans and monitor coverage, and will continue to implement a strategy to vaccinate all age populations at key Pakistan-Afghanistan crossing posts in line with International Health Regulations (IHR). The Programme will additionally position transit vaccination teams around the areas with temporary access challenges and limitations and planning for possible influx of refugees. Campaign activity details are described by epidemiological risk category below in Table 3.

High-risk and mobile populations priority activities outside SIA operations

- Identify, track, and vaccinate seasonal migrants moving within and across Pakistan-Afghanistan
- Conduct field assessment(s) to understand HR&MP patterns and design interventions on PEI/EPI activities accordingly
- Maintain and expand all age vaccination at all cross-border points
- Nominate HR&MP focal persons at the district level and ensure delivery of priorities by DEOCs
- Review and strengthen communication strategies at all three corridors including district-to-district coordination, mapping key influencers in border areas, engaging in community-led activities on respective sides of the Pakistan and Afghanistan border
- Hold quarterly coordination meetings between provinces and bordering districts and review available data to track HR&MP progress and challenges for joint corrective actions
- Strengthen border crossing all age vaccination (AAV) effectiveness through joint review and assessment with Afghanistan
- Use Pak-App Data Kit for PTP vaccination data entry (including vaccine use) by each supervisor at the end of their shift for real-time reporting

Table 3. Operations and Community Engagement activities by Campaign Phase and District Risk Category

Campaign Phase 1: Pre-campaign planning		
Epidemiological risk category	Operations	Communications
<p><i>Very High-Risk Districts</i></p> <p><i>(activities in addition to those implemented across All Districts)</i></p>	<p>Planning for quality SIAs</p> <ul style="list-style-type: none"> • Conduct all planned SIAs (NIDs, SNIDs, and CR as per epidemiology) with 6-8 week spacing between campaigns • Campaign duration extended to 7 days (5 days HH vaccination + 2 days catch-up) • Employ the CBV strategy in SHRUCs and other high-risk union councils, and Special Mobile Team (SMT) approach in remaining UCs • Update simplified registration books before each campaign to include vaccination of guests, HR&MP, and street children • Conduct integrated microplan development with polio, comms, EPI, and LHWs <p>Special focus on SHRUCs:</p> <ul style="list-style-type: none"> • Appropriate human resources: <ul style="list-style-type: none"> - Balanced, independent selection of appropriate teams (local females who speak the local language/dialect and are culturally appropriate to the community they serve), supported by local influencers. <u>Mandatory for priority community areas (defined as >50 households of same community living in one team area)</u> - Verify team appropriateness in CBV UCs on a quarterly basis - Selection process of FLWs through third party with verification by DEOC and PEOC - Revise and update all FLWs TOR to align with programme priorities and fit the purpose • Roll out training series to improve the convergence of communication and operation activities and enhance the synergy between the PEI and EPI and ISD • Special focus on ensuring HRMP children, including guests, are represented in microplan 	<p>Implement COMNet structure</p> <ul style="list-style-type: none"> • Train COMNet and Influencers and Community Health Workers (CHW) on package family care practices • Enhanced COMNet structure down to <u>Area level</u> in the Very High-Risk Districts • Enhanced COMNet structure down to <u>household level</u> in SHRUCs <p>HR&MPs</p> <ul style="list-style-type: none"> • Develop an intra-provincial communication plan for HR&MP • Priority on placing social mobilizers at traditional Bus stops between Lakki Marwat, Tank, Bannu and DI Khan <p>Special focus on SHRUCs and HRUCs:</p> <ul style="list-style-type: none"> • Cluster-level communication planning with communities in SHRUCs and HRUCs: <ul style="list-style-type: none"> - Communication planning through a “challenge mapping” exercise with community leaders and community groups' participation - Special focus on NA/hidden children in Baluchistan

	<ul style="list-style-type: none"> • Employ a participatory community approach, engaging local influencers in review and verify of microplans • Household mobilisers join vaccination teams 	
<p><i>High Risk Districts</i></p> <p><i>(activities in addition to those implemented across All Districts)</i></p>	<p>Planning for quality SIAs</p> <ul style="list-style-type: none"> • Conduct all NIDs • SNIDs cover 70% of High-Risk districts and 50% of Medium-Risk districts guided by epidemiology, CR as per epidemiology • Update micro-plans before each campaign capturing all settlements, including hamlets, and field validate these regularly using GIS maps where available to ensure that micro plans include all villages and settlements in an area <p>Address persistent operational gaps</p> <ul style="list-style-type: none"> • Improve competencies, motivation, and morale of frontline workers (FLWs) through regular formal and on-the job-training, supportive supervision, and providing security support where needed • In High Risk Districts reduce missed children to $\leq 0.75\%$ of target by utilising effective local solutions <ul style="list-style-type: none"> – Facilitate vaccinator access into households by female vaccinators – Identify differentiated approaches to vaccinate continually missed children where standard programme approaches have failed 	<p>Enabling environment for delivering and acceptance of polio and other integrated services to marginalized communities in High Risk Districts</p> <p>Focus on advocacy with trusted Pashtun influencers including individual leaders, NGOs, and CBOs, and district administrations</p> <p>Partnership and mobilization of trusted Pashtun NGOs & CBOs of For Pashtun pockets and SKP</p> <ul style="list-style-type: none"> • Enhanced Communication Network down to priority Area level for HRUCs in the High-Risk Districts of DG Khan • Community mobilization in Pashtun pockets in Punjab, Sindh, Balochistan as well as HRUCs in SKP through alliances with locally trusted Pashtun CBOs and NGOs • Advocacy and mobilization of district administration to address demand-based refusals in SKP • Train all frontline workers (CHWs, LHWs, EPI assistants) on effective communication skills and ISD messaging for a broad package of interventions including immunization, WASH, Nutrition, etc.
<i>All Districts</i>	<ul style="list-style-type: none"> • Provide frontline workers with required logistics, including PPEs, vaccine carriers, and adequate transportation, particularly in hard-to-reach areas • Ensure appropriate selection of vaccination teams: female teams that speak local language/dialect and are culturally appropriate to the community they serve • Maintain technical capacity of vaccination teams, modifying training material to address context-specific challenges that teams face • Regularly review and update micro-plans in consultation with local councillors, notables, revenue and security staff, and other line departments to ensure all villages, hamlets, Mohallas, and streets are part of a micro plan and assigned to a team 	

	<ul style="list-style-type: none"> • Maintain an appropriate team-to-house/target vaccination ratio (not exceeding 100 household/day/team) through regular workload rationalization reviews in identified areas • DEOCs submit line list of zero-dose and still missed children to District-level EPI teams for their follow-up • Polio to support EPI in EOA planning by sharing lists of and data of zero-dose and still missed children and ensuring proper implementation and vaccination of those children • Incorporate HR&MP into all microplans • Bring Provincial RRUs (PRRUs) into collaboration with the National RRU to provide guidance on SOPs regarding all PEI activities, enabling them to exercise a UC-based approach to assess, identify, plan, facilitate, track and measure interventions in zones of interest, focusing on high-risk UCs and others as guided by the epidemiology
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Campaign Phase 2: Implementation		
Epidemiological risk category	Operations	Communications
<p><i>Very High Risk Districts</i></p> <p><i>(activities in addition to those implemented across All Districts)</i></p>	<p>Technology innovations to support FLWs during SIAs</p> <ul style="list-style-type: none"> • Introduce GIS-based vaccine tracking system, the Geographic Coverage Support System (GCSS) across all Very High Risk Districts • Expand utilization of NEOC Mobile Application across all Very High Risk Districts <p>Leverage CBV network in SHRUCs and HRUCs</p> <ul style="list-style-type: none"> • CBV vaccinators to convey messages on key family care practices, report zero-dose children/newborns during their interaction with households during and in-between campaigns • CBVs use referral slips to refer children for integrated health services at health facilities • During campaign CBVs provide information to families on upcoming extended outreach activities and integrated health camps 	<p>Revitalize Refusal Mediation Committees in HRUCs with the representation of relevant influencers (religious leaders, doctors, schoolteachers, others)</p> <p>Communication support to ISD Referral to integrated services and health Camps in high refusals reporting areas for chronic and sick refusals will be undertaken. Social mobilizers will be trained to refer sick children, especially from refusals to Health camps/Health facilities. The social mobilizers will also conduct counselling of communities on key family care practices.</p> <p>Media content placement on targeted platforms: integrated content on local cable TV, radio, and social media across all Very High-Risk Districts</p>
<p><i>High Risk Districts</i></p>	<p>Implement Geographic Coverage Support System (GCSS), for real-time monitoring of SIAs in select areas in High Risk Districts</p>	<p>Social mobilizers and relevant influencers visit households of all chronic refusal clusters for counselling and conversion.</p>

<i>(activities in addition to those implemented across All Districts)</i>		Media content placement on targeted platforms: integrated content on local cable TV, radio, and social media in HRUCs within High Risk Districts.
<i>Across all areas</i>	<ul style="list-style-type: none"> • Provide security support wherever needed and demonstrate the duty of care for frontline workers, especially women • Provision of logistic funds for FLWs to support vaccination teams' movement, as well as security personnel attached to them in the beginning of the day, at the end and whenever, it is needed for revisits • Monitor HR&MP coverage during SIAs • Provision of financial support to FLWs and security personnel in case of death or injury in the line of duty through structured funds coordinated by NEOC • Use of technology to facilitate and maximize vaccination of children, especially in high-risk areas where children are often missed due to geographical expanse or sub-optimal team performance. • Implement GPS based Vaccinators Tracking System for real-time monitoring of SIA • Use GIS maps of UCs showing clear boundaries with adjacent UCs. Where GIS maps are not available, use hand-drawn maps clearly showing the working areas for the Area in Charge officer and team route maps showing the movement/ directions from start to end house of each working day. • Report OPV zero-dose children's data to nearest EPI centre 	

Between campaigns		
Epidemiological risk category	Operations	Communications
<i>Very High Risk Districts</i>	CBV vaccinators convey messages on key family care practices, report zero-dose children/newborns during their interaction with households during and in-between campaigns	<p>Social mobilizers together with relevant influencers will visit all still refusals and PMCs in SHRUCs and HRUCs in Very High-Risk in between campaigns for counselling and conversion</p> <p>Build solid and sustainable alliances of influencers capable of responding to vaccine hesitancy among priority community sub-groups who share common connections, such as ethnolinguistic traditions and religious or political affiliations</p> <p>Organize special outreach activities related to the engagement of Pashtun leaders from KP in Karachi and Quetta Block</p>

		RSPs' will support the PEI efforts as part of the C4D team in 91% of the Very High-Risk districts with complete coverage of SHRUCs in line with programme priorities, nature of refusals, and the influence of religious scholars
<i>High Risk Districts</i>		RSPs' will support the PEI efforts in between campaigns as part of the C4D team in 25% of High-Risk districts In line with programme priorities, nature of refusals, and the influence of religious scholars.

Table 4 – Priority C4E Activities 2021-2023

Media channel	Priority Activities
Media engagement	<ul style="list-style-type: none"> Engage local, regional, and international media on polio eradication news and narratives that support programme success Address and mitigate the impact of negative media coverage related to PEI
Mass media – TV/Radio/Print/Outdoor Placements/Phones	<ul style="list-style-type: none"> Incorporate programme updates in media narratives to promote transparency Integrate organic, external messaging from advocates outside of the programme to handle negative propaganda Address issues of concern to specific communities through targeted media campaigns to build trust in the programme and integrate local influencer endorsements and announcements
Public engagement through social media and digital platforms	<ul style="list-style-type: none"> Develop a comprehensive social media strategy with tools Enhance programmatic updates through the Social Media Cell (SMC) Improve sentiment and trend analysis utilisation, including the Brand Lift Study conducted in partnership with Facebook for content generation Engage influencers, including external social media teams, to produce user-generated content that supports the programme Continue bridging communication between parents, caregivers, polio workers, and the Polio Programme through the 1166 Helpline and WhatsApp Helpline. A complaints management software will be developed for further enhancement of response capacity
Emerging priorities and defined interventions	<ul style="list-style-type: none"> Co-create narratives and solutions to address complex underlying narrative issues in southern Khyber Pakhtunkhwa Implement the novel oral polio vaccine type 2 (nOPV2) communications plan for the planned use of nOPV2 Conduct ongoing sentiment analysis and community assessments (building on 2020 studies) to mitigate any related negative impact on the Programme and vaccine acceptance; integrate media narratives advocating the continuation of essential immunization and polio services delivery in the context of COVID-19 and emerging community responses to COVAX

Afghanistan - Pakistan Bilateral Coordination

Closer coordination with Afghanistan is essential to address common reservoir and corridor challenges related to the prevailing security situation in Afghanistan. The Programme will develop a contingency plan to address the evolving needs of the population on the move in Pakistan. For this NEAP period the Hub will provide support in the following priority bilateral activities for the period 2021-2023 include:

- Synchronize SIA calendar with Afghanistan including schedules, vaccine type, and targeted age groups
- Develop and monitor a multi-level contingency plan to facilitate vaccination of Afghan children coming into Pakistan including a possible influx of refugees
- Joint data analysis between Pakistan and Afghanistan (surveillance, Essential immunisation, SIA, high risk and mobile population movement data, social profiling) to guide the identification of challenges and guide action

Vaccine Cold Chain and Logistics Management

The Program will ensure uninterrupted vaccine supply for all scheduled SIAs across the country through regular reviews and updates on vaccine requirements in line with the SIA schedule. Targeted IPV campaigns will be considered as additional support to boost the immunity of children at core reservoir areas. With the imminent rollout of nOPV2, the Programme will need to ensure the country is prepared to this new vaccine where and when appropriate. Priority cold chain and logistics management activities for the NEAP period 2021-2023 include:

- Provide technical guidance and training for vaccine management and cold chain maintenance focusing on cVDPV2 response campaigns using type 2-containing vaccine for the interruption
- Provide support to EPI to authorize and approve of novel OPV2 (nOPV2), specifically the completion of readiness documents and submission to the GPEI
- Provide 2-4 additional buffer stock vaccine carriers at each UC level to ensure effective cold chain
- Keep track of issuance and availability of vaccine carriers and cold boxes supplied to all districts for regular inventory updating
- Explore the revival of the Cold Chain Equipment Manager (CCEM) system and make it compatible with existing polio and EPI computer platforms and systems where feasible

Training and Guidelines/Tools Development

Following the pause in SIAs and restrictions in gathering in large groups due to COVID, it is essential to ensure adequate training of both new and veteran polio staff to support quality campaigns. During this NEAP period the program will have the following focus on trainings across all areas in Pakistan:

- Develop training material for all PEI activities in consultation with the concerned technical unit of the programs
- Conduct induction training of newly recruited staff and planning refresher training based on needs identified by their respective supervisors
- Develop training guidelines and video tutorials to build the capacity of trainers and FLWs.
- Develop and distribute training toolkits and handouts for FLW's training
- Ensure adequate training of FLW's by using stall method and provided training toolkits. Corrective actions may be ensured via monitoring training activities
- Conduct operational research on different programme interventions including, but not limited to pilot testing and assessment of any new intervention in the program

Programme Monitoring & Evaluation (M&E)

The programme M&E area of work analyses data, reviews progress and challenges, identifies gaps, and ensures the planning and implementation of monitoring activities to improve SIA quality and reduce missed children. M&E provides monitoring of all SIA phases (pre-, intra-, and post-campaign). M&E also assesses routine immunization, especially focusing on Very High-Risk districts. M&E employs three main assessment surveys namely intra-campaign monitoring (ICM), post campaign monitoring (PCM) and lot quality assurance sampling (LQAS). The monitoring approach for SIAs is in Table 5, and priority M&E activities by district epidemiological risk category are outlined in Table 6.

Innovation for M&E to improve campaign quality: Geographic Coverage Support System and NEOC App

New for this NEAP, the Programme will introduce a GIS-based vaccine tracking system for SIAs: the Geographic Coverage Support System (GCCS). GCCS is a mobile (Android) application-based system to identify missed communities/houses as per the microplans and door-to-door visits of mobile vaccination teams. The goal is to improve pre-campaign planning as well as help in coverage during campaign days with missed area notification. Data from mobile app streaming will be stored locally on servers/storage provided by NEOC with appropriate security layers including user-level authentication.

GCCS will use the following proxy to calculate missing areas of microplans:

- **[RED ZONE]** No Track found = Area not visited/Crossed 50-meter tile in less than one minute = Not stopped / No Settlement
- **[AMBER ZONE]** Spent more than one minute but less than 3 minutes = Visited/Stopped
- **[GREEN ZONE]** Spent more than 3 minutes per 50 x tile = Activity like drops administered

During this NEAP period the NEOC will support expansion of the NEOC Mobile Application to support real-time preparation, supportive supervision, and monitoring during the pre-campaign period, observations for corrective actions during intra-campaign activities, and recording findings for corrective actions and final reporting during post-campaign monitoring.

Table 5: Monitoring approach for SIAs

	Intra-campaign monitoring (ICM)	Post-campaign monitoring (PCM)	Lot quality assurance sampling (LQAS)
Purpose	To assess team performance and immediately fix any issues	To assess the quality of the campaign	To assess the quality of the campaign
Timing	During all campaign days	After the last catch-up day	After the last catch-up day
Scope	All areas	<ul style="list-style-type: none"> • All UCs in Very High-Risk Districts • 20% of UCs in Districts of other risk categories 	Number of Lots per campaign determined by NEOC. UCs first selected from Very High-Risk Districts, then followed by UCs from other risk categories based on need
Sampling methodology	Random clusters of teams are surveyed each day by all field monitors	3 clusters and 2 spot surveys taken from	• 6 clusters of 10 households per Lot

	(national, provincial, district and UC level)	schools, parks, hospitals, etc.	
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Table 6: M&E priorities by epidemiological risk category: 2021-2023

Epidemiological risk category	M&E
<i>Very High Risk Districts</i>	<p>In addition to priorities for High, Medium & Low-Risk category districts:</p> <ul style="list-style-type: none"> • In Very High-Risk Districts & SHRUCs establish a system ensuring that district gaps, challenges, and progress are regularly identified, reviewed, and solutions identified from the 'bottom-up' • Conduct an annual routine immunization survey in SHRUCs and Very High-Risk districts • Design and implement a training module to build staff capacity among UCPOs, PDAs, UCCOs and TTSPs at district and UC levels
<i>High Risk Districts</i>	<p>In addition to priorities for Medium & Low-Risk category districts:</p> <ul style="list-style-type: none"> • Refine and implement PCM strategy, including vaccination of missed children found by the monitors during field activities (during intra- and post-campaign activities) • Implement biannual data quality and system assessments (DQSAs) of desk and field reviews
<i>Medium & Low Risk Districts</i>	<ul style="list-style-type: none"> • Implement a post-campaign routine data quality assessment (RDQA) led by provincial M&E for data accuracy • Implement PCM strategy in targeted districts, including vaccination of missed children found by the monitors during field activities (during intra- and post-campaign activities) • Track progress and adjust to unforeseen risks using the new M&E matrix with milestones, outcomes and KPIs to identify programme weaknesses in a timely way and implement corrective and mitigating measures as appropriate • Review all aspects of campaign monitoring methodologies (all phases of the campaign), ensuring utility for decision-making and corrective actions at all levels • Implement district and UC scorecards to evaluate campaign performance for corrective actions • Implement data analysis triangulation in priority areas to support data-driven decisions • Standardize data compilation feedback from all monitoring sources to support access for all users • Ensure immediate sharing of all post-campaign activities data through NEOC to PEOCs to facilitate timely action taking by the field teams (vaccination of missed children through sweep/redo, context-based interventions, and long-term interventions as required) • Implement a mechanism to systematically track data in inaccessible areas through third-party field monitors

M&E priorities 2021–2023 at NEOC level

- Expand the utilization of the NEOC Mobile Application
- Enhance M&E framework for all immunization activities, unifying data analysis approaches and review processes, including the use of technology to provide granular vaccination coverage
- Develop a result-based matrix (logical framework) and assign M&E activities under strategic objectives to measure the outcome of interventions
- Conduct quarterly progress review meetings for national and provincial M&E teams
- Capacity building of all M&E tiers to ensure expected results including biannual federal facilitators' workshops (with a trickle-down plan) for supportive supervision; expanded scope of PCM; and providing high-quality feedback and information for action

Programme Priority 5: Certification Level Surveillance

- *Address gaps identified from the October 2021 external surveillance review*
- *Conduct one external surveillance review during this NEAP period*

Detecting every poliovirus transmission chain in a timely manner is essential for outbreak response, programme planning and eventual polio-free certification. Surveillance must – at a minimum – meet global standards in all districts.

Current situation

While only one WPV case has been reported in 2021 in Pakistan as of week 48, there have been 63 positive Environmental Surveillance (ES) samples that have tested positive for WPV. Following a three-month period where all ES sites in Pakistan tested negative, a site in Tank, Khyber Pakhtunkwa province tested positive in November 2021 demonstrating ongoing poliovirus circulation. As we approach zero, the programme will come under external and internal scrutiny and will be required to ascertain whether 'zero' is 'zero' or otherwise. The surveillance team will perform at maximum capacity especially beefing up its efforts to meet the challenge of orphan viruses. Small steps taken today will significantly increase the probability of sustaining good surveillance well into the post-certification and post-cessation era.

Surveillance Priorities 2021-2023

This section covers the roles of the NEOC surveillance team, specific community-based surveillance and analysis activities for SHRUCs, Very High-Risk districts, and select High-Risk districts, acute flacid paralysis (AFP) surveillance, ES surveillance, and vaccine-preventable disease (VPD) surveillance. It also covers activities for the regional reference laboratory (RRL) serving both Pakistan and Afghanistan.

Priority surveillance activities at NEOC level

- Develop an accountability framework outlining key responsibilities and expected deliverables of surveillance staff at national, provincial, and district levels
- Implement and track progress on the workplan to address gaps developed following the 2021 external surveillance review
- Enhance oversight and accountability of the Surveillance and Laboratory units
- Regularly conduct in-depth analysis on the NEAP indicators
- Conduct regular performance reviews at district and sub-district levels
- Incorporate primary immunodeficiency disorder (PID) surveillance in the system

- Proactively identify potential risk areas through innovative analytical techniques such as blue line mapping and modeling approaches
- Begin establishing the foundation for the post-certification programme

Priority activities for SHRUCs, Very High-Risk districts, and select High-Risk districts

- Establish and maintain community-based surveillance (CBS) in SHRUCs and Very High-Risk districts
- Triangulate insights into community behaviour from field and communication colleagues against risk assessments informing programme trajectory
- Translate sentinel events including simultaneous outbreaks of other VPDs to guide programme against risk fluctuations and impending outbreaks/ areas of focus

Priority activities for AFP surveillance

In addition to strengthening the capacity, oversight, and accountability of the AFP surveillance system to meet eradication certification standards and addressing gaps identified in the external surveillance review, the main activities for AFP surveillance for districts as coordinated by the provincial EOCs include:

- Conduct joint national/provincial field reviews in areas with surveillance concerns
- Identify and rectify surveillance weaknesses through data analysis, field reviews, and field support
- Enhance and expand community-based surveillance (CBS) in areas with poor health infrastructure or hard-to-reach areas and populations by identifying key community informants and tracking the proportion of AFP cases reported by the community
- Train newly recruited staff, healthcare providers, district surveillance coordinators and/or dedicated partner surveillance officers on AFP surveillance as per revised SOPs
- Conduct quarterly audits on progress and risk assessments and joint reviews, ensuring regular surveillance reviews are conducted at each administrative level
- Conduct monthly district surveillance review committee (DSRC) meetings chaired by Chief Executive Officers (CEOs) or District Health Officers (DHOs)

Priority activities for environmental surveillance

- Maintain and intensify the quality and sensitivity of ES networks (61 sites in 41 districts/towns) to continue detecting any WPV1, VDPV2 case/s, and any breakthrough transmission of cVDPV2
- Maintain flexibility to set up ad hoc ES sites in priority areas guided by epidemiology
- Ensure that at least 25% of ES sites are reviewed during the NEAP 2021- 2023 period to assess sensitivity and build the capacity of field staff
- Conduct an immediate investigation of any site with no virus isolation (NVI) sample

Vaccine-preventable disease surveillance

The Programme will continue reporting vaccine-preventable disease (VPD), particularly measles and neonatal tetanus, to EPI through the AFP surveillance network. The Programme will analyze VPD data reported through its network and share with EPI teams at the provincial and national levels on a weekly basis. In this NEAP 2021- 2023 period, the programme will work to further strengthen VPD surveillance at the district level with the support of the ISD and PEI/EPI synergy task team.

Priority activities for the Regional Reference Laboratory (RRL)

The RRL, a WHO accredited laboratory under National Institute of Health in collaboration with WHO and CDC, provides diagnostic facilities not only to Pakistan but also to Afghanistan. In this NEAP 2021- 2023 period the RRL will need to its capacity to process samples for the region and roll out novel testing methods in addition to the following activities:

- Prioritize testing of polio samples and maintain capacity of the serology lab
- Maintain electronic information management system and introduce an electronic system to manage essential laboratory supplies
- Conduct pilot testing and optimization of polio serology assay using S19 strains
- Establish deep sequencing capacity for poliovirus
- Ensure biosafety and biosecurity measures in the laboratory

Programme Priority 6: Outbreak Preparedness and Response

- *Implement new outbreak response SOPs as per international standards for every polio case and environmental surveillance isolate for both WPV1 and cVDPV2*

During this current NEAP period the Programme will establish an efficient Outbreak preparedness and response group. This group will allow the Programme to apply timely outbreak response interventions as per GPEI SOPs described below in Table 7 by providing data and context to inform decisions by the NEOC with support from the Hub. Outbreak response activities are outlined in the following phases: risk assessment and initial notification, investigation, response management.

Table 7: Event/Outbreak Response SOPs

Context	Management Response	Immunization Response	OPV Type	Other Responses
WPV1 or cVDPV isolated from human or environmental samples	Event briefing meeting within 24 hours of notification from lab at the NEOC, nominate incident manager. Three level discussion with province and district to decide on response within 72 hours after the first meeting.	Round zero (2wk) + SIA1 (2wk) + SIA2 (4-6weeks) + SIA3/ mop-up, EOA, Intensified RI (4-6 weeks)	As appropriate to the type of virus isolated IPV, fIPV	As per updated GPEI's event/outbreak SOPs
aVDPV isolated from human or environment samples		EOA, Intensified RI	As appropriate to the type of virus isolated IPV, fIPV(2wk) OPV Mop-up activities if no SIA within next 1m	
Poliovirus isolated from human or environment samples due to containment breach or from a person with immune deficiency disease	Event briefing meeting within 24 hours of notification from lab at the NEOC, nominate incident manager.	Follow the updated GPEI/WHO protocol	As per GPEI/WHO protocol	As per GPEI/WHO protocol
Polio virus isolated from humans or environment across the border (Afghanistan)	Meeting within 24 hours followed by three level calls with province and districts as well as cross border coordination	Development of outbreak response plan.	GPEI/WHO protocols	GPEI/WHO protocols

Risk assessment and initial notification

The Programme will proactively identify areas of epidemiological concern to be included in outbreak response by employ evidence-based scientific methods including data-based risk assessments and disease modeling techniques. Upon identification of a poliovirus, the NEOC will classify the detection as an event or an outbreak according to GPEI SOPs. At an initial event briefing the NEOC will assign an IM to coordinate the required investigation. The Program will conduct an initial risk assessment conducted within 48 hours of any event/outbreak to determine any need for an immediate zero round.

Investigation

PEOCs will be responsible for coordinating national and district level investigation team to conduct detailed case investigations that provide input on the scope of a response. To do this the investigation team will review, assess, support, and track every aspect of immunization in persistently problematic areas including but not limited to SIA planning, preparations, implementation, and EPI delivery, as well as infrastructure, logistics, management, community engagement and communication. Additional components of the investigation phase include:

Response management

The PEOCs will consolidate the proposed response plan based on findings of the investigation. This will include recommendations on scope of response based on risk assessment and contextual factors. The NEOC will then coordinate with GPEI Hub and ORPG at HQ to approve response and authorize vaccine usage. The NEOC and PEOC will track implementation ensuring high quality response campaigns, including field visits if and when required.

Programme Priority 7: Targeted Risk-Based Interventions

Integrated Services Delivery in support of Polio Eradication

It has long been recognized that a significant number of refusals are based on families' and communities' dissatisfaction with being offered only polio vaccination and not other basic health care and social services. The Integrated Services Deliver (ISD) component of the Polio Eradication Programme is designed to address that issue. Its objectives are:

- Reduce hesitancy to vaccination in priority, high risk communities.
- Increase OPV and IPV coverage among children to interrupt polio virus transmission.
- Strengthen immunity among children against other diseases and treatment of common infections contributing to good health, growth and development of children in the high-risk districts.

The key elements of the ISD strategy are:

- Increased EPI-PEI Synergy with a focus on reaching zero dose children and increasing immunization coverage
- Community outreach through Integrated Health Camps and other Integrated Outreach models with defined evidence based minimum ISD package

- Advocacy for provision of a focused evidence-based interventions package of basic child and maternal health and social services

This strategic approach will be implemented in the 25 very high-risk districts (that also include the 40 polio super-high Risk Union Councils)

1. EPI-PEI Synergy

Building on the existing EPI/PEI synergy framework, the program will focus on the following:

- Support EPI programme to identify and reach all zero-dose children and contribute to achieving full immunization coverage among children aged below 2 years.
- Collaboration and joint implementation of the multi-antigen outreach campaigns
- Facilitate EPI in the monitoring of immunization activities in the field.
- Capacity building of EPI field staff in micro planning and effective communication.

2. Provision of Integrated Child Health Services Through Community Outreaches

The goal is to increase access to evidence-based services for children and caregivers in areas reporting missed children, persistently missed children, still missed children and with poor access to services. Targeted outreach services contribute to building community trust encouraging communities to get children vaccinated, access services and overall contribution to improved immunity among the children. Under this platform, services may be delivered through Integrated Health Camps, Integrated Outreaches or Child Health days informed by evidence on the need and gaps. Targeted community engagement and social mobilization activities are essential for successful outreach activities.

Resources from the polio program will support delivery of defined minimum package of child health services delivered through Integrated Health Camps implemented during the polio campaign calendar and cycle.

3. Advocacy Package: Delivery of evidence-based core Health and Social Development Services

The country is in the process of rolling out the Universal Health Coverage agenda with a defined Package of Essential Services delivered through the Primary Health Care approach.

The evidence-based package of services includes maternal and child health, nutrition, Essential Immunization interventions including Water, Sanitation and Hygiene (WASH) that has been added for the polio high risk areas. This presents an opportunity to address the multiple deprivations and vulnerabilities among children living in the polio high-risk Union Councils and Districts. The set of health and social development services in the polio high-risk areas reflect the country's alignment of the Universal Health Coverage Benefit Package with the Disease Control Priority 3 interventions¹, to contribute to the goal of

¹ September 2018, Pakistan became the first country in the world to align its UHC Benefit Package with the DCP3 recommended high impact interventions. The package includes 117 interventions selected for the community, Primary Health Care (PHC) and First Level Hospital (FLH), of which 88 are for immediate implementation.

polio eradication. Three main service delivery platforms have been identified to effectively reach vulnerable and underserved communities living in the polio high-risk areas. These include facility-based services, outreach and campaigns and community based.

Through advocacy and networking, the polio program will work collaboratively with other Programmes such as the Universal Health Coverage initiative, WASH (Water Sanitation and Hygiene), Donors and other respective Implementing Partners to put in place mechanisms for the populations living in the polio high-risk areas to have improved access to these critical services.

4. Community engagement (well planned, coordinated, and implemented).

The Programme will implement Priority Community Engagement strategies to widen the voice base of the Polio Eradication Initiative to regain and sustain community trust with a focus on the reduction of missed children/refusals and resistance to vaccination in priority areas. Some key activities include the following:

1. Mapping and engaging key influencers to support PEI community engagement and identify, map, and engage key influencers in key communities across polio-endemic areas beyond just the campaign period.
2. Health Promotion and awareness-raising for integrated services, health camps.
3. Support to chronic refusals and other underserved families.

ISD monitoring and reporting

Under the coordination of the EPI program, a third party has been engaged to strengthen the monitoring and reporting function within the ISD program. The program will leverage on this system for reporting of the strategic ISD interventions and indicators. Reports will be generated from the existing reporting systems, including the EPI, DHIS, National Nutrition Programme, polio programme, etc. Reporting will be by UC and district and will track target achievement.

Key outcome indicators aligned to polio eradication (Very High-Risk Districts UC level)

In 2021-2023 NEAP period, the ISD task team will aim to:

- Supplement to achieve 80% Pentavalent III coverage in Very High-Risk through active follow-up on coverage of zero-dose children and EI defaulters in Very High-Risk.
- Achieve the 50% reduction in polio refusals in Very High-Risk UCs by the end 2022
- Reduction (50%) of zero dose children in polio high risk area(s).

■

The selection criteria included the effectiveness, burden of disease, feasibility, cost-effectiveness, equity, budget impact, financial risk protection, and social and economic impact. By category, there are 42 interventions on RMNCH, 12 on Infectious Diseases, 13 on NCDs, and 21 on Health Services.

Appendices

Appendix – A: Risk Assessment

Appendix – A1: Risk Assessment Methodology

Risk Assessment Methodology																																			
NEOC Methodology	IDM Methodology																																		
<ul style="list-style-type: none"> SIA, Surveillance, RI and Additional risk factors have been selected for district risk categorization. 30% risk weightage has been assigned to SIAs, 35% weightage assigned to Surveillance, 25% weightage assigned to RI and 10% risk weightage assigned to additional risk factors component. 	<p>Model framework</p> <ul style="list-style-type: none"> Target of prediction: WPV1 case probability in Q4 2021 / Q1 2022 given data through Q3 2021 Methods adapted from Mercer et al, 2017, previously used in NEAP prioritization A random effects binomial regression of case occurrence in 6 months periods <p>Data</p> <ul style="list-style-type: none"> Outcomes: case probability in 6 month periods since 2005 Candidate predictors (lagged): cases/ES district, 1st/2nd neighbor cases/ES, radiation model cases/ES, RI under-immunized fraction (NPAFP w/smoothing), estimated type 1 immunity <p>Random effects</p> <ul style="list-style-type: none"> Spatially structured effects representing historical risk by district, i.e. higher or lower risk not explained by explicit exposure or susceptibility Temporally structured errors to prevent overfitting to predictors 																																		
<table border="1"> <tr> <td>SIAs</td> <td>Household Coverage</td> </tr> <tr> <td>Indicators</td> <td>Still Missed % out of target</td> </tr> <tr> <td></td> <td>Still Refusal % out of target</td> </tr> <tr> <td></td> <td>LQAS Pass %</td> </tr> <tr> <td>Surveillance Indicators</td> <td>District achieving critical surveillance standard</td> </tr> <tr> <td></td> <td>District infected in last 3 year (AFP or ES or Both)</td> </tr> <tr> <td></td> <td>Orphan virus in last 3 year</td> </tr> <tr> <td></td> <td>Compatible case in last 3 year</td> </tr> <tr> <td>RI Indicators</td> <td>NPAFP IPV Coverage (6-23M) %</td> </tr> <tr> <td></td> <td>NPAFP OPV3 Coverage (6-23M) %</td> </tr> <tr> <td></td> <td>Zero dose% of NPAFP cases</td> </tr> <tr> <td></td> <td>Admin Coverage OPV3</td> </tr> <tr> <td></td> <td>Admin Coverage IPV</td> </tr> <tr> <td>Additional Factors</td> <td>HRMP Population Movement</td> </tr> <tr> <td></td> <td>Mega Cities</td> </tr> <tr> <td></td> <td>Population density</td> </tr> <tr> <td></td> <td>Force of infection -Neighboring districts</td> </tr> </table>	SIAs	Household Coverage	Indicators	Still Missed % out of target		Still Refusal % out of target		LQAS Pass %	Surveillance Indicators	District achieving critical surveillance standard		District infected in last 3 year (AFP or ES or Both)		Orphan virus in last 3 year		Compatible case in last 3 year	RI Indicators	NPAFP IPV Coverage (6-23M) %		NPAFP OPV3 Coverage (6-23M) %		Zero dose% of NPAFP cases		Admin Coverage OPV3		Admin Coverage IPV	Additional Factors	HRMP Population Movement		Mega Cities		Population density		Force of infection -Neighboring districts	
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Appendix – A2: District Risk categorization

Very High		High		Medium		Low		Low	
Province1	District1	Province1	District1	Province1	District1	Province1	District1	Province1	District1
BAL	KABDULAH	BAL	DUKKI	BAL	BARIKHAN	KP	ABOTABAD	AJK	BAGH
	CHAMAN		JAFARABAD		CHAGHAI		BATAGRAM		BHIMBER
	MASTUNG		KHUZDAR		DBUGTI		BUNER		HAVELI
	PISHIN		KSAIFULAH		HARNAI		CHITRALLOWER		JEHLUM_VALLEY
	QUETTA		LORALAI		JHALMAGSI		CHITRALUPPER		KOTLI
ISB	CDA		NSIRABAD		LASBELA		HARIPUR		MIRPUR
	ICT		SHARANI		MUSAKHEL		MALAKAND		MUZAFFARABAD
KP	BANNU		ZHOB	GB	PANJGOUR	PUNJAB	MANSEHRA		NEELUM
	DIKHAN	KP	BAJOUR	KP	SIBI		ATTOCK		POONCH
	KHYBER		CHARSADA		WASHUK		BAHWLNAGAR	BAL	SUDNUTI
	LAKKIMRWT		HANGU		DIAMER		BHAKKAR		AWARAN
	PESHAWAR		KARAK		DIRLOWER		CHAKWAL		BOLAN
	TANK		KOHAT		DIRUPPER		CHINIOT		GWADUR
	WAZIR-N		MOHMAND		KOHISTANLOWER		GUJRAT		KALAT
	WAZIR-S		NOWSHERA		KOHISTANUPPER		HAFIZABAD		KECH
PUNJAB	FAISALABAD	PUNJAB	DGKHAN	PUNJAB	KOLAIPALAS		JHELUM		KHARAN
	LAHORE		MULTAN		KURRAM		KHANEWAL		KOHLU
	RAWALPINDI	SINDH	BADIN	PUNJAB	MARDAN		KHUSHAB		NOSHKI
SINDH	HYDERABAD		GHOTKI		MARAKZAI		LAYYAH		SOHBATPUR
	KHICENTRAL		JACOBABAD		MUZFARGARH		LODHRAN		SSIKANDARABAD
	KHIEAST		KAMBAR	SINDH	RAJANPUR		MBDIN		ZIARAT
	KHIKAMARI		KASHMORE		RYKHAN		MIANWALI	GB	ASTORE
	KHIKORANGI		LARKANA		DADU		NANKANASAHIB		GHANCHE
	KHIMALIR		SANGHAR		JAMSHORO		NAROWAL		GHIZER
	KHISOUTH		SHIKARPUR		KHAIRPUR		OKARA		GILGIT
	KHIWEST		SUJAWAL		MATIARI		PAKPATTEN		HUNZA
			SUKKUR		MIRPURKHAS		SAHIWAL		KHARMANG
			THATTA		NFEROZ		SARGODHA		NAGAR
					SBENAZIRABAD		SHEIKHUPURA		SHIGAR
					T.ALLAHYAR		SIALKOT		SKARDU
					TMKHAN		TTSINGH		
					UMERKOT	SINDH	VEHARI		
							THARPARKAR		

Appendix – B: Management, Oversight, and Accountability

Appendix B1 (Programme governance bodies)

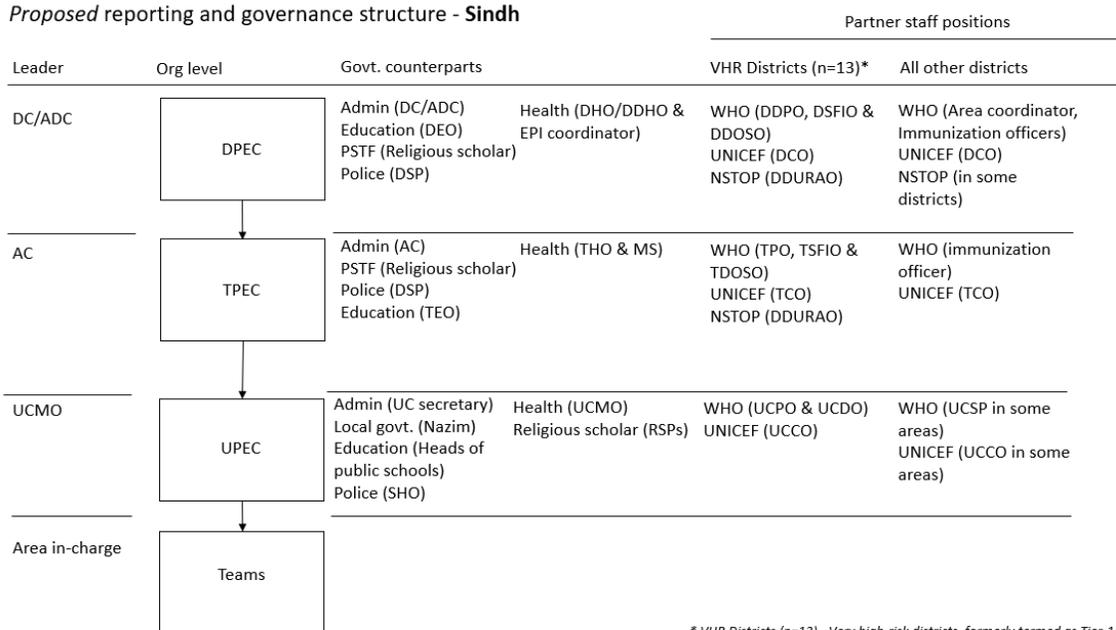
- **National Task Force for Polio Eradication (NTF):** The NTF is the national oversight body, headed by the Prime Minister, with the participation of the Chief Ministers/Chief Secretaries from all provinces. As per defined frequency, the NTF shall meet at least once every quarter and be responsible for overseeing and monitoring the progress on NEAP implementation in each province, promoting inter-provincial and inter-sectoral coordination, and ensuring adequate resource allocation for the programme.
- **Provincial Task Force (PTF):** The PTF is an oversight body in each province, led by the respective Chief Minister/Chief Secretary, to oversee the implementation of the NEAP. As per the defined frequency, the PTF shall meet at least once every quarter. It comprises of the members/representatives from the home department, law enforcement agencies, education department, information department, local government, Auqaf, and partner agencies (WHO, UNICEF, BMGF, N-STOP), as well as commissioners and deputy commissioners of all divisions and districts. The purpose of the PTF is to review progress made in the province against NEAP targets (with greater attention to SHRUCs), ensure district and sub-district level structures are implementing district-specific plans, help involve line departments (where needed), oversee advocacy and social mobilization activities, and ensure adequate resource allocation for the programme at the province.
- **District Polio Eradication Committee (DPEC):** The DPEC is the leading implementation body at the district level, chaired by the Deputy Commissioner with the District Health Department Officer (CEO-Health/DHO) as the Vice-Chair. Members include District Police Officer, District Education Officer, District Revenue Officer, District Khateeb, District EPI Manager, District LHW Manager, and members of the District EOC (detailed later). This entity is responsible for overseeing polio eradication and essential immunization activities at the district level and coordinate with all line departments and local partners to ensure high-quality implementation of vaccination campaign strategies.
- **Union Council Polio Eradication Committee (UPEC):** The UPEC is the implementation body at the UC level, chaired by a full-time health department representative (Medical Officer, in-charge of the Health Facility, Lady Health Supervisor). The health department representative is assisted by Partner staff in the technical management of polio eradication activities. Additionally, each UPEC chair is also assisted by other line departments i.e., education department (Principal / Headmaster of Government Schools), representative of Station House Officer (SHO), local government representative, staff of the Health Facility, all area in-charges/area supervisors, and partners' UC-level staff. The UPEC is responsible for ensuring that SIAs and other polio eradication activities are well planned and carried out effectively, and progress towards achieving the targets are measured against all indicators in each UC.

Appendix B2 (Roles of Government Departments)

Departments	Role	
	During SIAs	Between SIAs
District Administration	<ul style="list-style-type: none"> • Provide oversight, strategic support, and decision-making for critical issues (e.g., security, hard refusals, etc.) • Engage other government departments for supporting polio eradication activities 	<ul style="list-style-type: none"> • Conduct meetings before the campaign to review the preparedness of UCs and post-campaign reviews to review overall performance. • Liaison with the PEOC for improvement of polio activities, including performance management of district staff
Health Department	<ul style="list-style-type: none"> • Provide technical input to the District Administration. • Coordinate with different units of the health department ensuring support for polio activities in the district. • Ensure visits to areas with high refusals and interaction with communities to address vaccine-related concerns 	<ul style="list-style-type: none"> • Monitor and supervise SIA preparation and campaign activities (especially integration of ISD components)
Law Enforcement Agencies	<ul style="list-style-type: none"> • Respond to security-related queries (e.g., around deployment) and problem-solve security challenges 	<ul style="list-style-type: none"> • Work with the Programme to address specific challenges and potential resistance
Religious Support Persons	<ul style="list-style-type: none"> • Contribute to problem-solving, with particular focus on religious refusals and community resistance 	<ul style="list-style-type: none"> • Work with SMs during mobilization activities pre-campaign
Education Department	<ul style="list-style-type: none"> • Facilitate polio activities within schools during campaign days 	<ul style="list-style-type: none"> • Place Polio Programme material in schools • Hold sessions with parents in schools to advocate the Programme

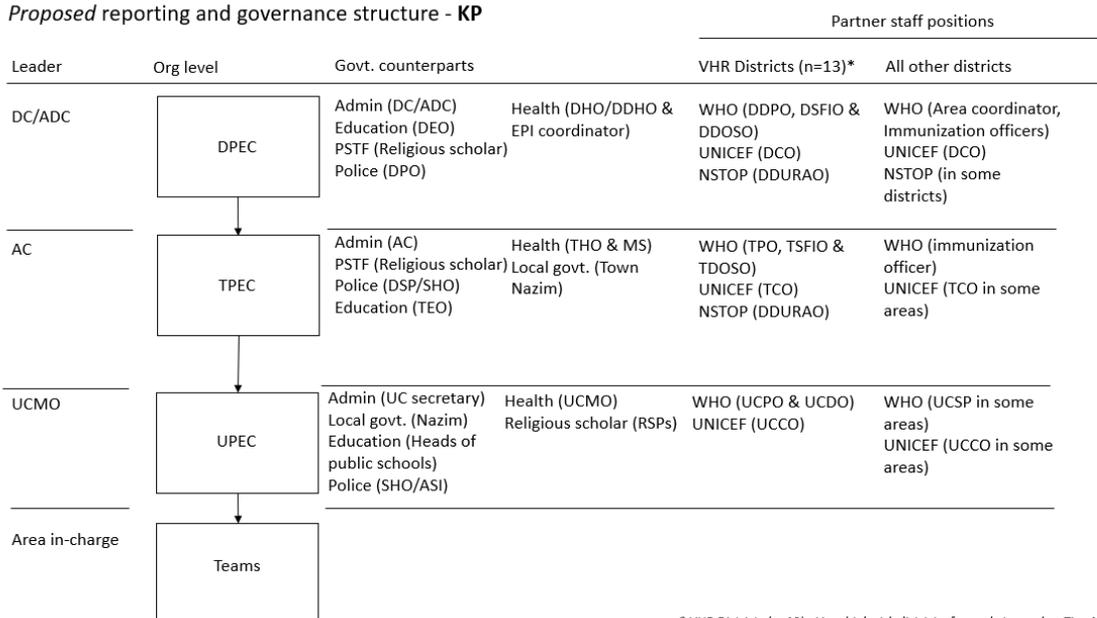
Appendix B3 (Provincial Reporting and Governance Structures)

Proposed reporting and governance structure - Sindh



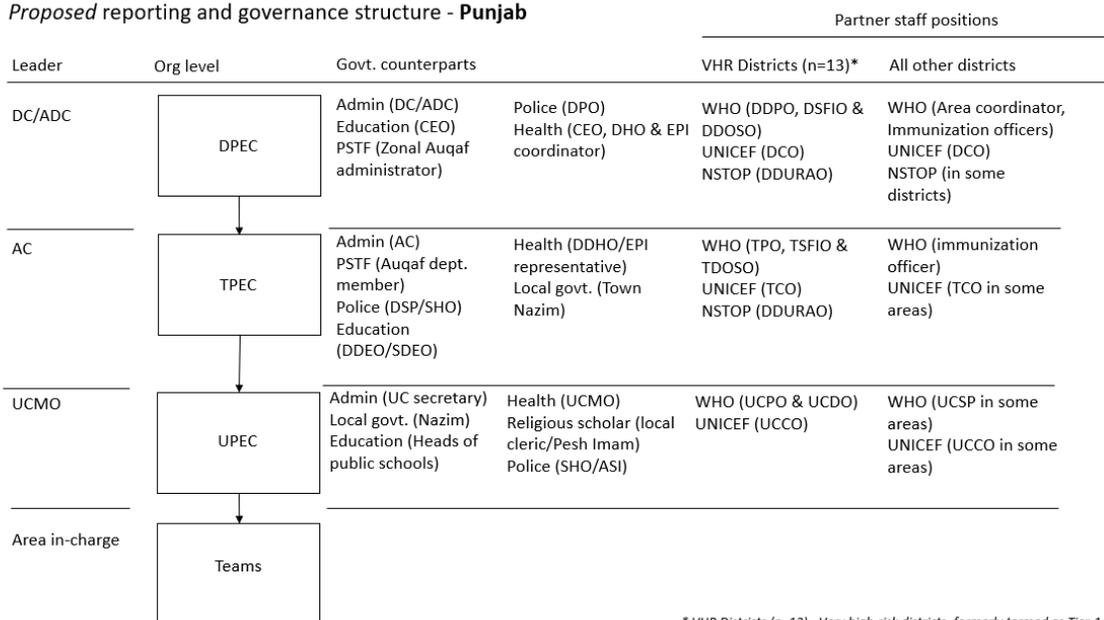
* VHR Districts (n=13) - Very high-risk districts, formerly termed as Tier-1 districts

Proposed reporting and governance structure - KP



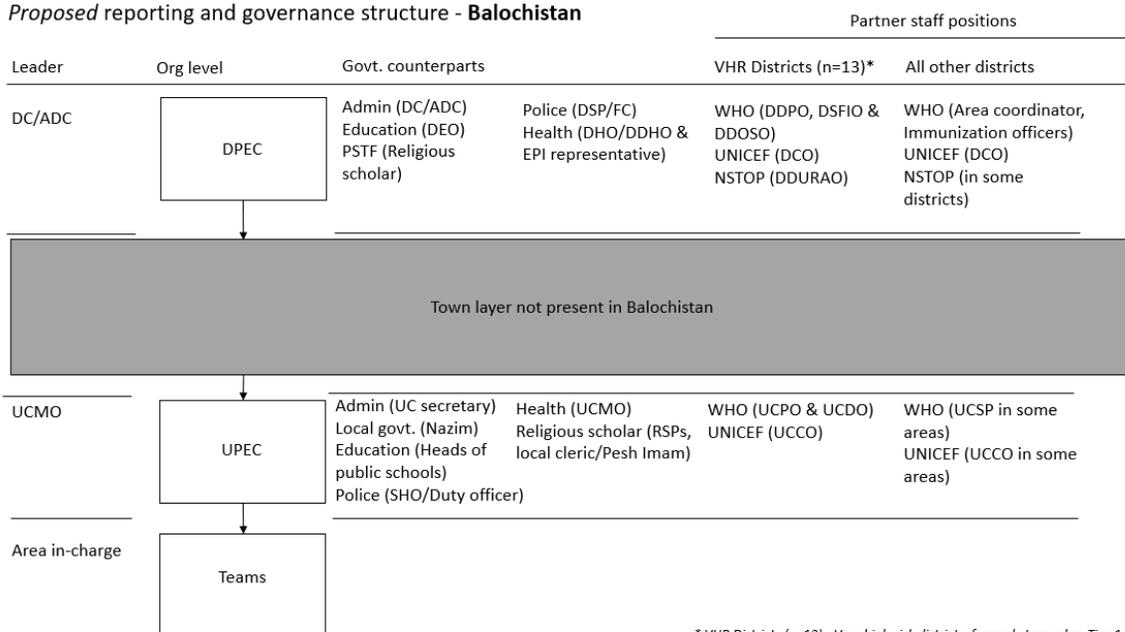
* VHR Districts (n=13) - Very high-risk districts, formerly termed as Tier-1 districts

Proposed reporting and governance structure - Punjab



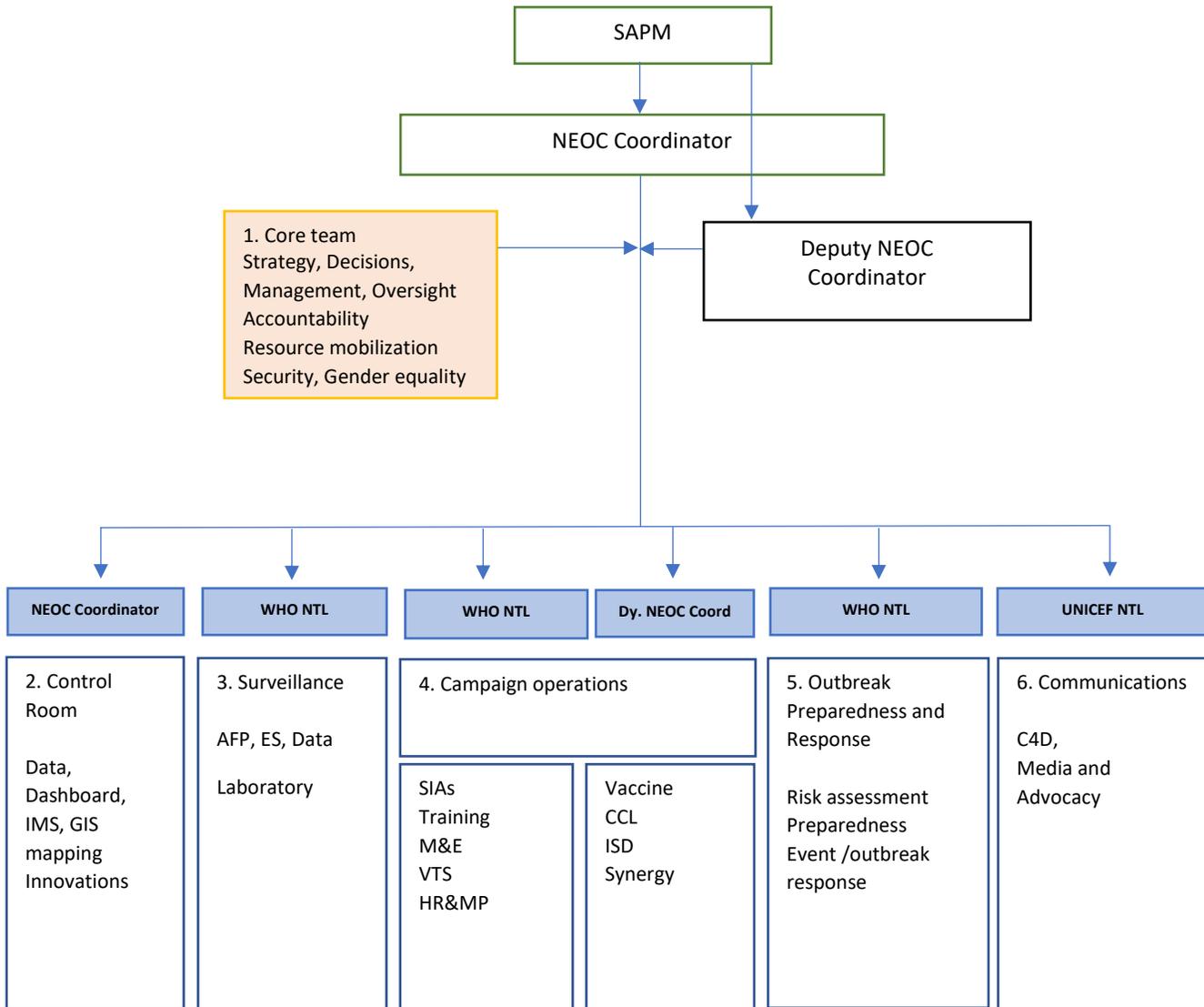
* VHR Districts (n=13) - Very high-risk districts, formerly termed as Tier-1 districts

Proposed reporting and governance structure - Balochistan

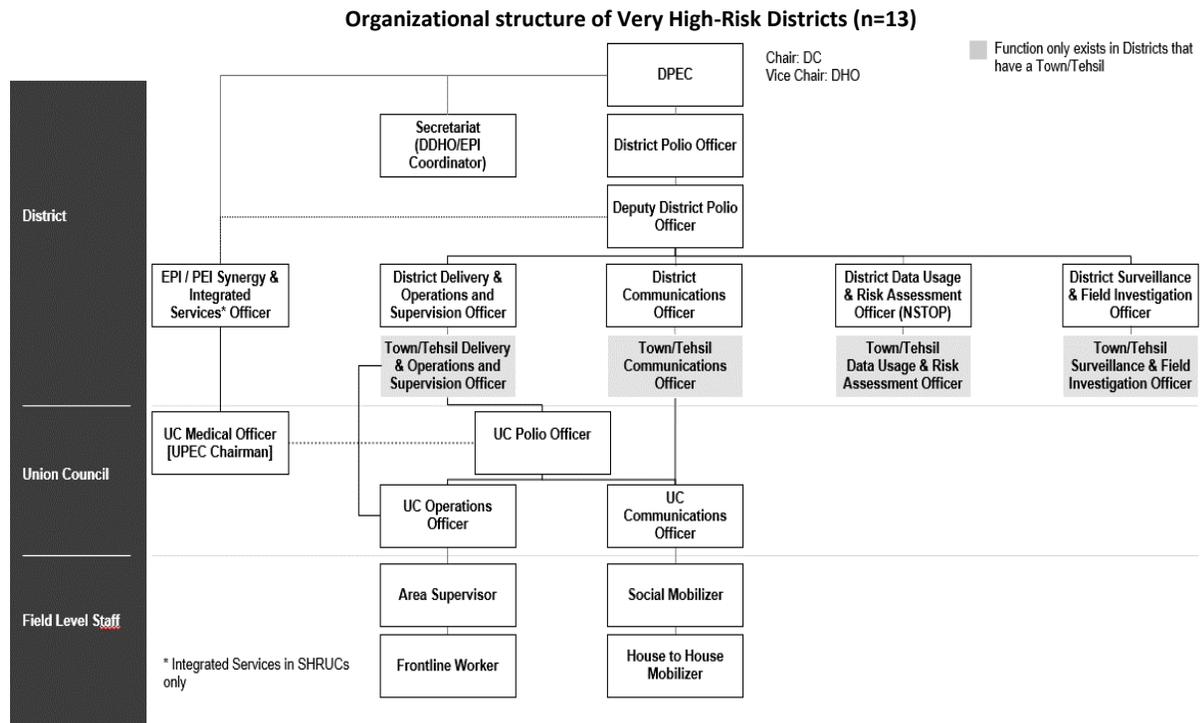


* VHR Districts (n=13) - Very high-risk districts, formerly termed as Tier-1 districts

Appendix B4 (NEOC Structure)



Appendix B5 (13 Districts of Very High-Risk district group)



Appendix B6 (Decision Rights) - (13 Districts of Very High-Risk district group)

RASCI is a decision-making framework with the following components:

- **Responsible:** Someone who does the work and is responsible for the quality of work done
- **Approve:** Someone who gives final sign-off before the action is taken and is held accountable for the outcome
- **Support:** Someone who can support the execution of the responsibility
- **Consult:** Someone who should be consulted
- **Inform:** Someone who needs to know about decisions made but does not need to be part of the process (and does not have veto rights)

Based on this framework, government role should be increased in some of the key management decisions as indicated below:

Responsibilities		Partner (UC/Dist. level)	3 rd party	National CG	Prov. CG	(A)DC	(D)DHO	UCMO	Comments
Role definition	▪ Defining responsibilities and TORs	I	I	R/A	C	I	I	I	▪ N/A
Recruitment	▪ Shortlisting candidates – field staff	C	R/A	I	I	I A	I A	I C	▪ To drive ownership at district/UC, govt. counterparts can be engaged in the recruitment of their team
	▪ Shortlisting candidates – district/UC staff	N/A	R/A	I	I	I C/A	I C	I C	
	▪ Managing recruitment process	N/A	R	N/A	N/A	N/A	N/A	N/A	
Training	▪ Identifying training needs	C	I	R	C	I C	I C	I C	▪ Government counterparts can also be consulted in assessing training needs for the program staff and providing input on particular focus areas
	▪ Finalizing training content	I	N/A	R/A	C	I	I	I	
	▪ Managing training process	S	I	R	S	I	I	I	
	▪ Managing 3 rd party performance	I	I	R	I C	I C	I	I	
Performance management	▪ Performance appraisal – field staff	R/A	I	I	I	I	I	I C/A	▪ In order to lead operations, government counterparts can give feedback for the program staff and help manage consequences/incentives for low/high performers
	▪ Performance appraisal – district/UC staff	R/A ¹	I	I	R/A ²	I C/A	I C/A	I	
	▪ Managing PM process	I	R	I	I	I	I	I	
	▪ Defining incentives for high-performers	I	S	R/A	I	I C	I C	I C	
	▪ Managing consequences for low-performers – field staff	C	R/A	I	C	I C/A	I C	I C	
	▪ Managing consequences for low-performers – district/UC staff	C	R/A	I	C	I C/A	I C	I	
Overall team management	▪ Managing team deployment (leaves, etc.) – field staff	A	R	I	I	I C	I	I C	▪ N/A
	▪ Managing team deployment (leaves, etc.) – district/UC staff	R/A ¹	N/A	I	R/A ²	I C	I	I C	▪ N/A

Note: 3rd party refers to 3rd party HR; CG refers to Core Group

1. District partner staff will be responsible for UC partner staff
2. FEOC is responsible for District staff

Appendix – C: SIA Calendars 2021-2023

Pakistan SIA Calendar for 2021

Dates	SIAs	Scope	Target	Remarks
January	NIDs	100%	40,080,149	Conducted
March	NIDs	100%	39,686,021	Conducted
June	SNIDs	50%	33,731,363	Conducted
August	SNIDs	50%	23,743,021	Conducted
August	OBR-0 DI Khan	1%	470,299	Conducted
September	NIDs	100%	41,469,543	Conducted
October	OBR-KP	9%	3,732,259	Conducted
November	Co administration*	100%	41,469,543	*Additional bOPV dose with MR nationwide campaign, site to site vaccination for <5 yrs aged children
December	NIDs	100%	41,469,543	Overall target of <5 yrs aged children

Tentative SIA calendar in 2022

Dates	SIAs	Scope	Target	Remarks
January	SNIDs	50%	20,734,772	Scope may change bases on evolving epidemiology
March	NIDs	100%	41,469,543	Overall target of <5 yrs aged children
May	SNIDs	50%	20,734,772	Scope may change bases on evolving epidemiology
July	SNIDs	50%	20,734,772	Scope may change bases on evolving epidemiology
September	NIDs	100%	41,469,543	Overall target of <5 yrs aged children
November	NIDs	100%	41,469,543	Overall target of <5 yrs aged children

Tentative SIA calendar in 2023 *(Targets for NID shall be revised towards the last quarter of 2022)*

Dates	SIAs	scope	Target	Remarks
January	SNIDs	50%	20,734,772	Scope may change based on evolving epidemiology
March	NIDs	100%	41,469,543	Overall target of <5 yrs aged children
May	SNIDs	50%	20,734,772	Scope may change based on evolving epidemiology
July	SNIDs	50%	20,734,772	Scope may change based on evolving epidemiology
September	NIDs	100%	41,469,543	Overall target of <5 yrs aged children
November	NIDs	100%	41,469,543	Overall target of <5 yrs aged children

Appendix – D: Key Performance Indicators

SIA Operations

Objective	Indicators
Team composition supports the greatest possible access to all households.	<ul style="list-style-type: none"> • $\geq 90\%$ of teams have at least one local team member (Proficient in language/dialect of the community) in each SIA. • $\geq 80\%$ of teams have at least one female member where it is expected/culturally acceptable.
Workload of teams is rationalised in such a manner that revisits in the afternoon are feasible.	<ul style="list-style-type: none"> • $\geq 90\%$ vaccination teams and supervisors should have rationalized workload.
Overall campaign quality ensures high population immunity.	<ul style="list-style-type: none"> • All PCM UCs should achieve $\geq 95\%$ of coverage based on finger marking. • $\geq 90\%$ LQAS lots should achieve pass at $\geq 95\%$ coverage.

Social Mobilization and Community Engagement

Objective	Indicators
Social Mobilization and Community Engagement	<ul style="list-style-type: none"> • $\geq 80\%$ of caregivers expressing trust in polio vaccination • $\leq 5\%$ among still missed children are due to refusal
Enhance vaccination activities through improved coverage of birth doses.	<ul style="list-style-type: none"> • $\geq 80\%$ of the new-borns receive 'OPV birth dose' in 25 Very High-Risk districts.

Surveillance

Objective	Indicators
Ensure highly sensitive AFP surveillance is maintained	<ul style="list-style-type: none"> • $\geq 5\%$ of all reported AFP cases re-validated by the Area Coordinator and above. • 100% districts achieve key surveillance indicators (NPAFP, Stool Adequacy and 60-day follow-up for inadequate cases). • 100% ES sties meet the standards of isolating viruses in $\geq 50\%$ samples collected.