

Report of the Sixteenth Meeting of the Technical Advisory Group on Poliomyelitis Eradication in Afghanistan and Pakistan (TAG)

Doha, Qatar
22-25 May 2024





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TECHNICAL ADVISORY GROUP ON POLIOMYELITIS
ERADICATION IN AFGHANISTAN AND PAKISTAN (TAG)

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ACRONYMS

AFP	Acute flaccid paralysis	NEOC	National Emergency Operations Center
bOPV	Bivalent oral polio vaccine	NID	National immunization day
EMR	Eastern Mediterranean Region	OPV	Oral polio vaccine
EOC	Emergency Operations Center	PCM	Post-campaign monitoring
EPI	Essential Programme on Immunization	PEI	Polio Eradication Initiative
ERC	Expert Review Committee	PEOC	Provincial Emergency Operations Center
ES	Environmental surveillance	PHEIC	Public Health Emergency of International Concern
ES+	Positive environmental surveillance sample	RCA	Root cause analysis
EV	Enterovirus	REOC	Regional Emergency Operations Center
FDI	Federal Directorate of Immunization, Pakistan	RI	Routine immunization
fIPV	Fractional inactivated polio vaccine	RUR	Reaching the Unreached
FLW	Frontline worker	S2S	Site-to-site
GPEI	Global Polio Eradication Initiative	SAGE	Strategic Advisory Group of Experts on Immunization
GPEI Hub	Global Polio Eradication Initiative Hub for Afghanistan and Pakistan	SBCC	Social and behaviour change communication
H2H	House-to-house	SIA	Supplementary immunization activity
ICM	Intra-campaign monitoring	sNID	Subnational immunization day
IHR	International Health Regulations	SOP	Standard operating procedure
IMB	Independent Monitoring Board	Southern KP	Southern Khyber Pakhtunkhwa
IOM	International Organization for Migration	TAG	Technical Advisory Group for Afghanistan and Pakistan
IPC	Interpersonal communication	UC	Union Council, Pakistan
IPV	Inactivated polio vaccine	UNHCR	The UN Refugee Agency (United Nations Office of the High Commissioner for Refugees)
ISD	Integrated service delivery	UNICEF	United Nations Children's Fund
LQAS	Lot quality assurance sampling	WHO	World Health Organization
M2M	Mosque-to-mosque	WPV1	Wild poliovirus type 1
mOPV1	Monovalent oral polio vaccine type 1		
MR	Measles-rubella vaccine		

ACKNOWLEDGEMENTS

The Technical Advisory Group for Polio Eradication in Afghanistan and Pakistan (TAG) acknowledges and commends the efforts of the Afghanistan and Pakistan polio programmes, appreciates the extraordinary commitment of the frontline workers and the law enforcement officers and security personnel who work to protect them, and pays tribute to those who have lost their lives while working to ensure a polio-free world.

The TAG also wishes to acknowledge the support of all national and regional entities to end poliovirus transmission, including the National Emergency Operations Centers in both countries, the Regional Reference Laboratory for Polioviruses in Islamabad, the Global Polio Eradication Initiative (GPEI) Hub for Afghanistan and Pakistan, Rotarians in Pakistan and Afghanistan, the World Health Organization's Regional Office for the Eastern Mediterranean, the United Nations Children's Fund (UNICEF) Regional Office for South Asia, the US Centers for Disease Control and Prevention, the Bill & Melinda Gates Foundation, and Gavi, the Vaccine Alliance.

The TAG members extend their sincere thanks to the State of Qatar for hosting an impactful sixteenth TAG meeting in Doha, Qatar. The TAG appreciates the support of the GPEI Hub for organizing the TAG meeting and for maintaining regular follow up with the countries on the TAG recommendations. The TAG noted and is grateful for the enhanced collaboration and commitment to urgently interrupt poliovirus transmission that was demonstrated by all parties during this May 2024 meeting.



EXECUTIVE SUMMARY

The Technical Advisory Group for Polio Eradication in Afghanistan and Pakistan (TAG) convened in May 2024 in Doha, Qatar, to review and assess the status of polio eradication efforts over the past 11 months amid expanding wild poliovirus type 1 (WPV1) transmission and multiple contextual challenges in both countries. The TAG meeting was convened at a critical time for the two countries and the global polio eradication programme. The international spread of poliovirus is the only Public Health Emergency of International Concern (PHEIC) declared by the Director-General of the World Health Organization (WHO). Afghanistan and Pakistan are the only two remaining polio-endemic countries in the world, constituting a joint epidemiological bloc and making the interruption of the virus a joint endeavour.

The Global Polio Eradication Initiative (GPEI) *Strategy 2022-2026: Delivering on the Promise of a Polio-Free World (1)* aims for the certification of polio eradication in 2026. Together with the polio programme teams from both countries and representatives from GPEI partner organizations, the TAG analysed poliovirus epidemiology and the programmes' activities to interrupt the virus and assessed the feasibility of achieving WPV1 interruption in the near term.

The TAG provided strategic guidance and worked with the country programmes to articulate priorities for the next six months and align on pathways for interrupting transmission in the next low-transmission season (i.e., by end-April 2025), with the following key takeaways:

■ **Transmission of the YB3C genetic cluster of the poliovirus has not been detected anywhere in either country since November 2023. This represents progress despite formidable challenges to vaccination campaign implementation in Southern Khyber Pakhtunkhwa (Southern KP), the only area where YB3C was persisting.** (Note: for more information on the remaining genetic clusters and their evolution, please see the *Situation Analysis* section.)

■ **Transmission of the YB3A genetic cluster of the poliovirus has expanded significantly outside of the East Region of Afghanistan, with environmental detections across both countries since the June 2023 TAG meeting, which is of great concern.** This expanded transmission has resulted in YB3A evolving into two new genetic clusters, YB3A4A and YB3A4B. **Transmission continued unabated through the most recent low season, with historic polio reservoirs now sustaining transmission.** The number of infected districts has more than tripled in the two countries between June 2023 and May 2024. The four historic polio reservoirs (i.e., areas which have historically sustained poliovirus circulation and exported the virus to other areas) have been reinfected. Two of these, Kandahar in Afghanistan and Peshawar in Pakistan, have reached 12 months of ongoing transmission. The other two, Karachi and Quetta (both in Pakistan), have had ongoing virus circulation for more than six months. This poses a significant challenge to the goal of interrupting WPV1 transmission in 2024 and warrants immediate attention.

■ **The TAG noted the paucity of paralytic polio cases relative to widespread environmental detections of poliovirus**, particularly with no cases detected in Peshawar since 2020 and none in Karachi since September 2023. So far, there is no geographic clustering of polio cases. This lack of paralytic cases despite widespread environmental detections of virus is in part a reflection of the expanded network of environmental sites, with a near doubling of the number of samples tested in 2023 (2536 samples) compared with 2022 (1325 samples). The expanding sites and sampling are detecting the virus more efficiently as it moves with mobile populations. Secondly, the relative scarcity of cases likely reflects overall high levels of population immunity to polio, except in parts of Quetta Bloc and the South Region of Afghanistan, areas that are known to have significantly undervaccinated populations and remain at risk of paralytic polio outbreaks.

■ **The TAG concluded that stopping all WPV1 transmission by the end of 2024 under the current circumstances is unrealistic; however, WPV1 interruption may be possible in the next low-transmission season if the TAG recommendations are implemented urgently and comprehensively.** The TAG recommendations addressed the following as essential to success:

- **Endemic transmission:** Ensure the total elimination of YB3C and stop the persistent endemic YB3A transmission in the East Region of Afghanistan. Implement at least four high-quality vaccination campaigns in Southern KP with secure access to all children, and aggressively search for any surviving chains of YB3C transmission. Implement

the recommendations of the recent external programme audit in the East Region of Afghanistan to further improve the quality of campaigns and conduct a similar programme audit on the Pakistan side of the Northern cross-border corridor.

- **Improve the quality of vaccination campaigns to stop all outbreaks: Identify and reach missed children across both countries.**

- Redefine and comprehensively remap migrant and mobile populations and settlements.
- Focus on ensuring transparent information about missed children and transparent reporting of refusals, particularly in historic reservoirs, and comprehensively address programme dynamics that are resulting in collusion and fake vaccination.
- Conduct thorough programme quality assessments in border districts.
- Implement focused and intensified local cross-border coordination.
- Ensure adequate preparations for the recently allowed house-to-house (H2H) vaccination modality in the South Region of Afghanistan, particularly political, administrative, social and community support for this campaign modality that has been restored after a gap of six years.

● **Strengthen programme leadership, team cohesion, coordination and performance management.** The TAG urged the programmes to fully leverage the high level of national political commitment, international support, sufficient resources and clear understanding of challenges and solutions to end polio.

Moving into the high season for polio transmission, the TAG recommended that both country programmes continue to implement strategies and define priorities according to the risk categorization model recommended by the [TAG at their October 2022 meeting](#) (2). With the intensity of current WPV1 transmission and the presence of social, operational and security risk factors, the programme is now at risk of sustaining prolonged transmission within and outside of historic polio reservoirs. Nevertheless, interrupting transmission by the end of the next low season, though ambitious, is still possible, and will require a balance between urgency and quality in implementing the TAG recommendations.

Gaps in programme leadership, coordination, and team cohesion – combined with staggered and sub-optimal quality campaigns, continued unpredictable population movements, a complex information landscape, and persistently low routine immunization (RI) coverage in polio-critical geographies – are the primary drivers of risk. Nonetheless, both programmes have reached a high level of sophistication and quality and possess the resilience, capabilities, resources and support needed to finish the job.

The following detailed report paves the way for the next six months by providing tailored recommendations for each risk category, geography and programmatic area of work. Urgent and comprehensive implementation of these recommendations should result in the successful interruption of WPV1 transmission in Afghanistan and Pakistan.

INTRODUCTION

The 2024 meeting of the Technical Advisory Group for Polio Eradication in Afghanistan and Pakistan (TAG) was convened in Doha, Qatar, from 22 to 25 May, under the auspices of the Regional Director of the World Health Organization (WHO) Eastern Mediterranean Region (EMR) on behalf of EMR Member States and the Global Polio Eradication Initiative (GPEI) partnership. The TAG is an independent body that advises and makes recommendations to the relevant authorities in both countries and to the GPEI partner organizations on national polio eradication programme policies, strategies and operations.

The timing of the 2024 TAG meeting was particularly important given the eradication timelines outlined in the GPEI Strategy 2022-2026. It also provided a critical opportunity to formulate strategic guidance to the new federal and provincial governments in Pakistan, and the authorities in Afghanistan, at a time of WPV1 resurgence in both countries.

PREAMBLE

The international spread of poliovirus is the only ongoing Public Health Emergency of International Concern (PHEIC) declared by the Director-General of the World Health Organization (WHO). There are only two countries in the world where transmission of the last remaining serotype of the wild poliovirus, wild poliovirus type 1 (WPV1), remains endemic: Afghanistan and Pakistan. The primary goal of the GPEI's eradication strategy (*GPEI Strategy 2022-2026: Delivering on the Promise of a Polio-Free World*) (1) is to interrupt endemic transmission in these two countries, with the aim of ending WPV1 transmission by the end of 2023 (a goal that was not achieved) and certifying global wild poliovirus eradication by the end of 2026.

The 2024 TAG meeting objectives were to:



Review and discuss overall progress and current strategies and action plans for interrupting WPV1 transmission since the last TAG meeting in June 2023.



Review the implementation of outbreak response and advise modifications to stop WPV1 circulation in historic reservoirs.



Review strategies adopted by Afghanistan and Pakistan to map, track and vaccinate migrant populations, as well as settlements and communities in border districts, and provide guidance.



Review the supplementary immunization activity (SIA) schedule for the remainder of 2024.



Articulate the priorities and pathways to ending transmission of WPV1 in Afghanistan and Pakistan.

The meeting resulted in the TAG articulating clear priorities and recommended actions for the programmes in both countries and for the GPEI and its partner organizations to end transmission of WPV1 in Afghanistan and Pakistan. The 2024 TAG meeting outcomes and recommendations will also inform the eleventh meeting of the Eastern Mediterranean Regional Subcommittee on Polio Eradication and Outbreaks and the twenty-third meeting of the GPEI Independent Monitoring Board (IMB), both set to take place in July 2024, as well as ongoing overarching GPEI strategy discussions.

MEETING PROCEEDINGS

In-person meeting sessions began on 22 May, chaired by Dr Jean-Marc Olivé, Chair of the TAG. Remarks were made on behalf of the Minister of Health of Qatar, Her Excellency Dr Hanan Mohamed Al Kuwari. Dr Rayana Bou Haka, the WHO Representative in Qatar, also welcomed participants. Dr Qalandar Jan Ibaad, the Acting Minister of Health Afghanistan and Dr Shahzad Baig, National Coordinator, Polio Eradication in Pakistan made opening remarks on behalf of the respective national authorities. Dr Tajudeen Oyeyemi Oyewale from the United Nations Children’s Fund (UNICEF) Afghanistan and Mr Aidan O’Leary, Director of Polio Eradication for WHO and Chair of the GPEI Strategy Committee, also provided remarks. The full list of programme participants and the meeting agenda are provided in the Annex.

In preparation for the meeting, TAG members, national polio programme representatives, and representatives from GPEI partners met virtually to discuss key themes and questions to inform the agenda and discussions. Topics included: the relevant geo-political context, cross-border collaboration and border vaccination strategies, poliovirus epidemiology, progress and challenges in stopping endemic transmission and outbreaks, and gaps in programme implementation, including operational and social and behaviour change communication (SBCC) interventions in different epidemiological zones identified by the risk categories previously established by the TAG (the risk categories are defined and discussed in detail later in this document). Afghanistan and Pakistan polio programme representatives posed specific questions for TAG guidance and recommendations and provided updates on the implementation status of the recommendations from the 2023 TAG meeting. They also submitted detailed meeting pre-reads that were reviewed by participants. This pre-TAG review enabled the agenda to be focused on the most relevant programme areas.

SITUATION ANALYSIS

The persistent transmission of wild poliovirus in Afghanistan and Pakistan from the low-transmission season of 2023-2024 to the beginning of the high-transmission season of 2024 is deeply concerning considering the evidence of progress that was achieved during 2021 and 2022, when the countries were experiencing geographical localization of transmission to two small geographies and the programme was on the brink of success. Each

geography was infected with a distinct genetic cluster of WPV1, namely YB3A in Afghanistan and YB3C in Pakistan. The latter is on the verge of extinction, indicating progress.

Afghanistan and Pakistan, as a single epidemiological bloc for polio, are now threatened by extensive spread of WPV1, particularly since August 2023.



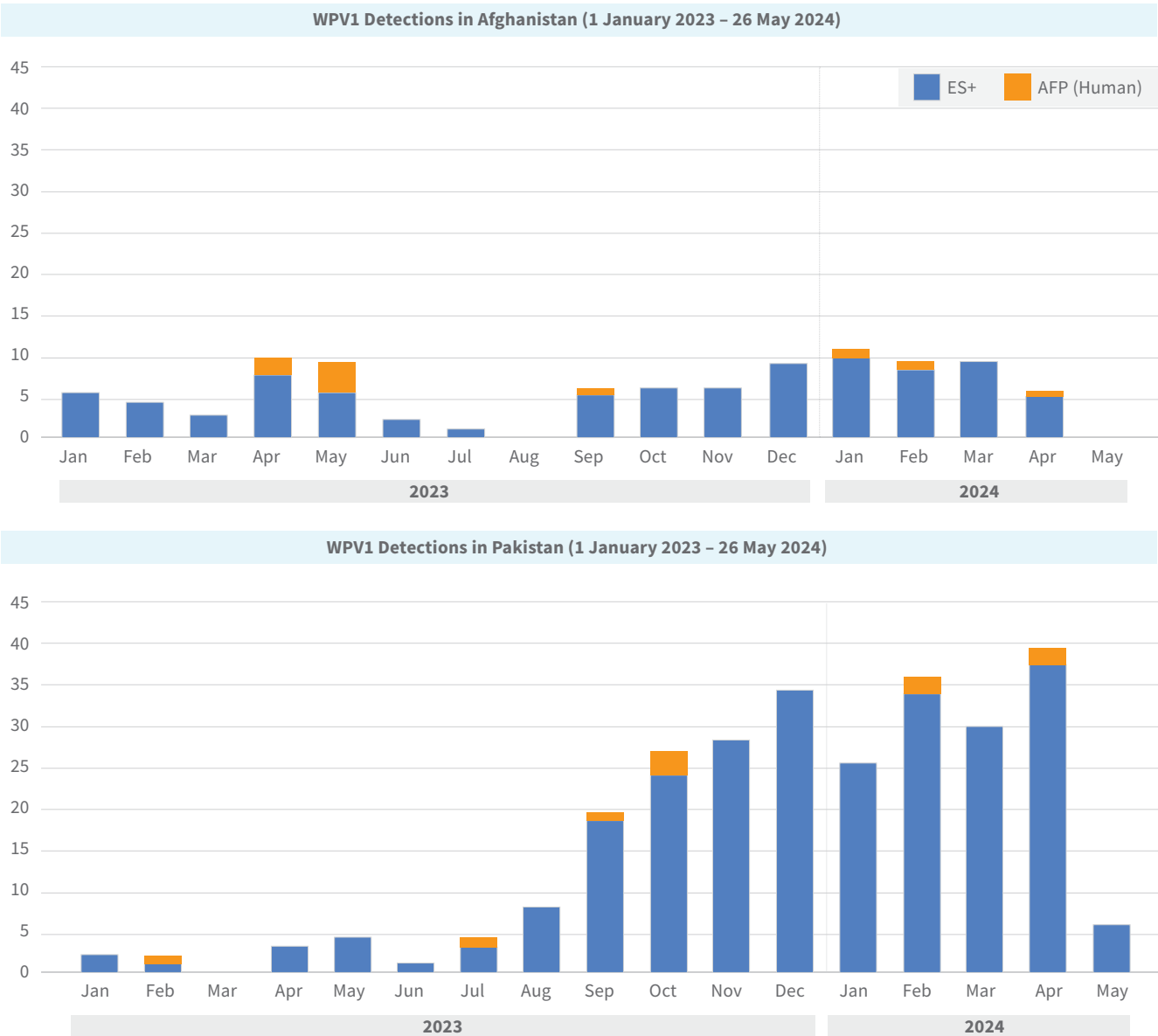
Endemic transmission in Pakistan: Substantial progress has been made toward interrupting the YB3C genetic cluster of WPV1. **The programme has a strong opportunity to eliminate YB3C, the only cluster that remained endemic in Pakistan after 2020.** A single district, Bannu, reported three polio cases with isolation of YB3C strains and a total of five environmental samples were positive for the strain in 2023 (3). The last detection of YB3C was also reported from Bannu in the endemic zone of Southern KP, Pakistan, in November 2023. The last detection of YB3C outside of Southern KP was in Lahore in January 2023 (3). The programme has not been able to consistently vaccinate large populations in Southern KP since November 2023, putting at risk the progress achieved against YB3C and risking the establishment of circulation of the imported YB3A strains in the area.

Endemic Transmission in Afghanistan: Transmission of the YB3A cluster of WPV1 continued through 2023 and to date in 2024 in the East Region of Afghanistan. A recently conducted independent audit of the programme validated the reliability of data and the high quality of vaccination campaigns in the East Region. None of the programme elements identified for improvement can on their own explain the continued detection of YB3A endemic transmission in the Region. A combination of the following factors, however, might explain the continued detection: 1) Extensive population movements across the border and within Afghanistan, 2) inconsistent mapping and inclusion of new migrants and guests in the microplans before each campaign, 3) the likely significant participation of populations straddling the border between Afghanistan and Pakistan in the ongoing transmission dynamics, 4) the clustering of refusals, especially among migrant populations from Pakistan residing

along the border, 5) the current process for post-campaign (PCM) monitoring that may not be identifying all missed children, and 6) the inability of male vaccinators and monitors to access households to identify missed children.

Outbreaks resulting from the expansion of the YB3A WPV1 Cluster: Extensive spread and transmission of YB3A is now a significant threat to the success of the programme. The spread has resulted in YB3A further evolving into two active genetic clusters, YB3A4A and YB3A4B. By the end of 2023, there were a total of 12 WPV1 cases reported (six in each country). Three of the 12 cases were due to YB3C WPV1 in Southern KP. In Afghanistan and Pakistan, 62 and 126 WPV1 positive environmental samples (ES+) were reported, respectively (3). Of these 126 positive samples, only six detected YB3C in Pakistan. As of 26 May 2024, an additional six WPV1 cases (three in each country), 33 ES+ in Afghanistan, and 140 ES+ in Pakistan have been reported – all belonging to the YB3A4A or the YB3A4B cluster (3). In the second half of 2023 and the first half of 2024, the virus has spread widely in Pakistan and in the South Region of Afghanistan, affecting key areas including Karachi, Peshawar, Quetta Bloc and Kandahar which had been free of polio for more than two years. In Pakistan, the spread has affected more than 40 districts beyond the endemic area in Southern KP. Similarly in Afghanistan, the virus spread to 10 districts outside the endemic area (East Region), including provinces in the South Region with longstanding low immunity levels, a cause for concern (3).

Figure 1: WPV1 cases and detections in Afghanistan and Pakistan



Source: Acute Flaccid Paralysis and Environmental Weekly Surveillance Record Files

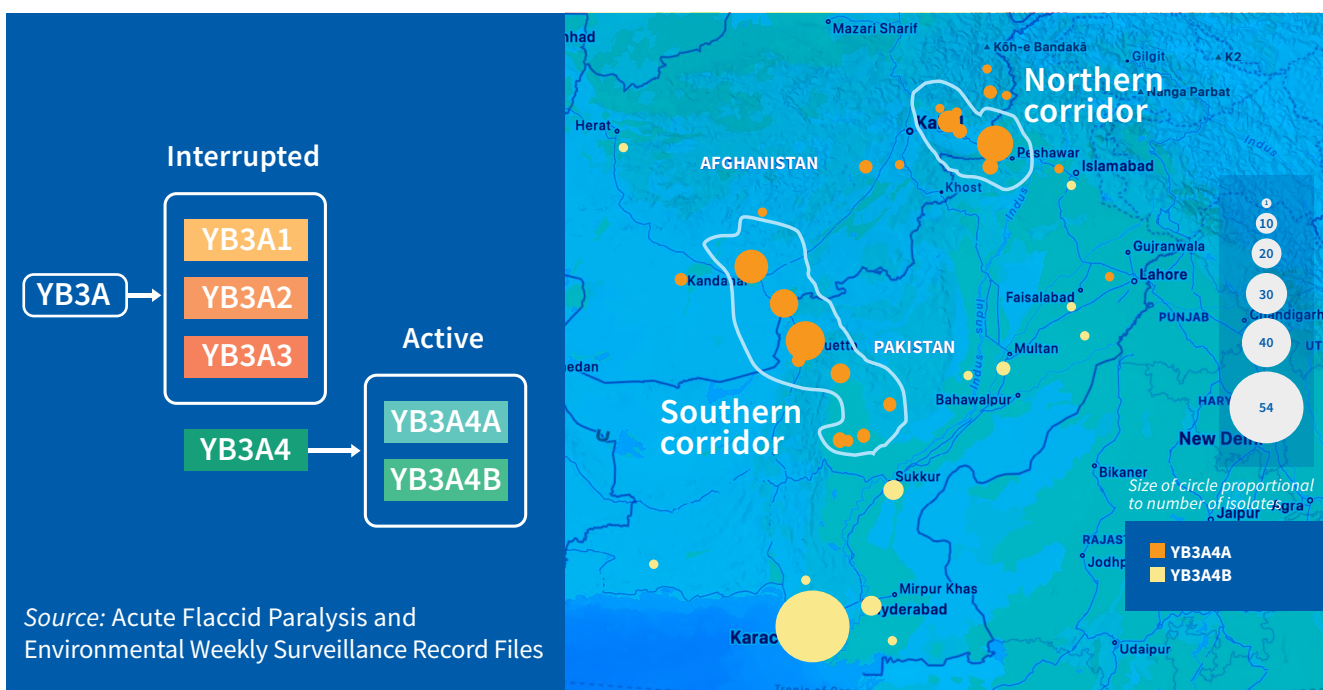
Table 1: WPV1-infected Districts in Afghanistan and Pakistan

	Jun 2023	May 2024
Afghanistan	9	18
Pakistan	8	45
TOTAL	17	63

Source: Acute Flaccid Paralysis and Environmental Weekly Surveillance Record Files

Evolution of the WPV1 genetic clusters, including the expansion of the YB3A cluster: Due to continued evolution during circulation, the genetic clusters expanded from 2022 to 2024. Although the YB3C genetic cluster of the poliovirus has not been seen since November 2023 and transmission of the three previously circulating YB3A WPV1 genetic clusters – YB3A1, YB3A2, and YB3A3 – has been interrupted, the intensity of transmission of the remaining YB3A genetic cluster, YB3A4, has resulted in its split into two clusters, YB3A4A and YB3A4B, which appear to be the only WPV1 clusters surviving in 2024. As shown in the figure below, YB3A4A is a shared cluster in the Northern and Southern cross-border corridors, and YB3A4B is mainly active in Pakistan following amplification of an imported YB3A strain in Karachi (3).

Figure 2: Geographic distribution of active WPV1 poliovirus clusters in Afghanistan and Pakistan



While both programmes have implemented most of the 2023 TAG recommendations, the following factors appear to have played an important role in the evolution of the current epidemiology of polio, particularly the expansion of the YB3A genetic cluster and the re-establishment of its transmission in the historic reservoirs: 1) Multiple virus introductions across many districts, particularly the rapid spread and escalation of detections in Karachi and the repeated introductions in Peshawar from September

2023 onwards, strongly suggest large-scale and unusual population movements that coincided with the massive repatriation of Afghan citizens. 2) Repeated detections and the reappearance of strains as orphan or long-chain viruses in Peshawar and other districts of Khyber Pakhtunkhwa and Quetta Bloc also suggest significant participation by populations living in border districts in the transmission of YB3A across both sides

of the border. 3) The situation in historic reservoirs is further challenged by programme pressure dynamics that result in a lack of transparency in reporting of missed children (due to refusals as well as other factors), fake vaccination and collusion, a decline in the quality of operations, and an inability to overcome entrenched vaccine hesitancy. 4) The underlying immunity levels in the Killa Abdullah and Chaman districts have remained low and could not be improved in 2023 due to security concerns and disruptive protests. 5) The campaigns in Quetta Bloc were disrupted by cancellations and the staggering of implementation due to security threats.

Although there has been progress towards the elimination of YB3C in Southern KP, the programme has not been able to consistently vaccinate large populations in the endemic zone since October 2023. There has therefore been a growing immunity gap in the area since November 2023, as large numbers of children (more than 700 000 children left out in one round and more than 430 000 left out in two rounds from November to April) have been left out because campaigns were cancelled due to security threats. This is concerning as the growing immunity gap can reverse the progress against YB3C and is creating conditions for the recently detected YB3A strains to establish transmission in Southern KP. The objective of interrupting the virus remains well within grasp, but only if every single contributing

factor is fully addressed. These factors include unwavering political commitment; a cohesive “one team” approach with strong performance management based on motivation and accountability that improves the quality of campaign operations and fosters a favourable shift in community acceptance and support of the programme, which in turn results in the substantial reduction in the number of missed children; and the full backing of law enforcement agencies. Fortunately, the programmes possess the necessary expertise, resources and capabilities to succeed in interrupting transmission; final success requires coherent and vigorous deployment of these assets.

Reinfection of historic reservoirs: since the last TAG, all historic reservoirs are reinfected and sustaining transmission, as reflected through the reporting of six WPV1 cases and 198 WPV1 ES+. Additionally, Central Pakistan is reporting repeated detections of WPV1. While the TAG was concluding, new sequencing data demonstrated that Kandahar and Peshawar have re-established transmission from the same lineage for 12 months. Quetta/Pishin and Karachi have sustained transmission for nine and eight months, respectively.

Figure 3: Reinfection of historic reservoirs by clusters (1 January 2023 – 22 May 2024)

	Pakistan			Afghanistan
	Peshawar	Quetta Bloc	Karachi Bloc	South Region (Excluding Uruzgan)
WPV1 cases	0	2	2	2
WPV1 ES+	41	50	79	28
Number of sites	6	7	12	9
Number of sites with persistent WPV1 detections	3	7	11	4
% Positive ES sites				
2022	11%	0%	0.6%	0%
2023	47%	17%	15%	8%
2024	38%	77%	73%	37%

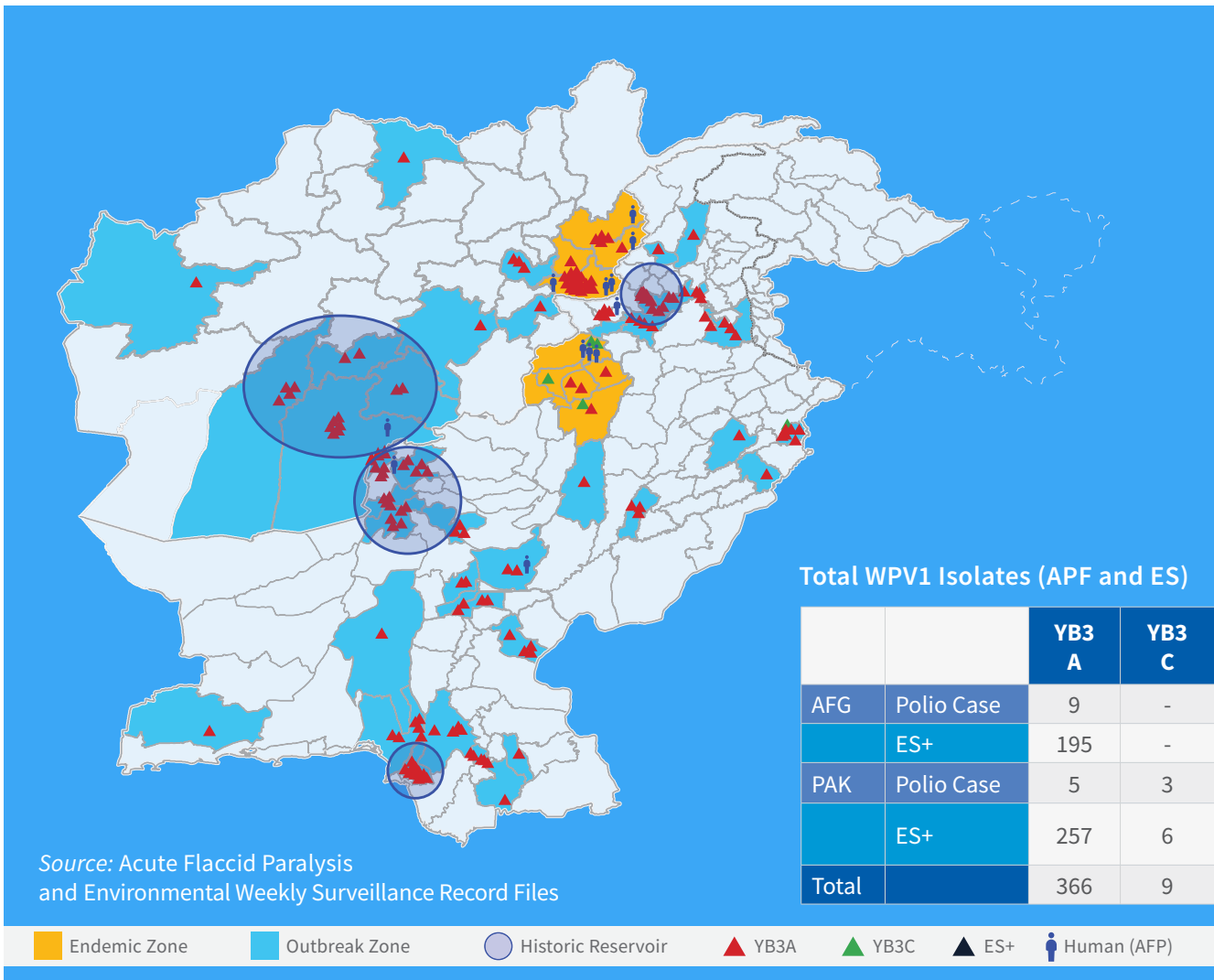
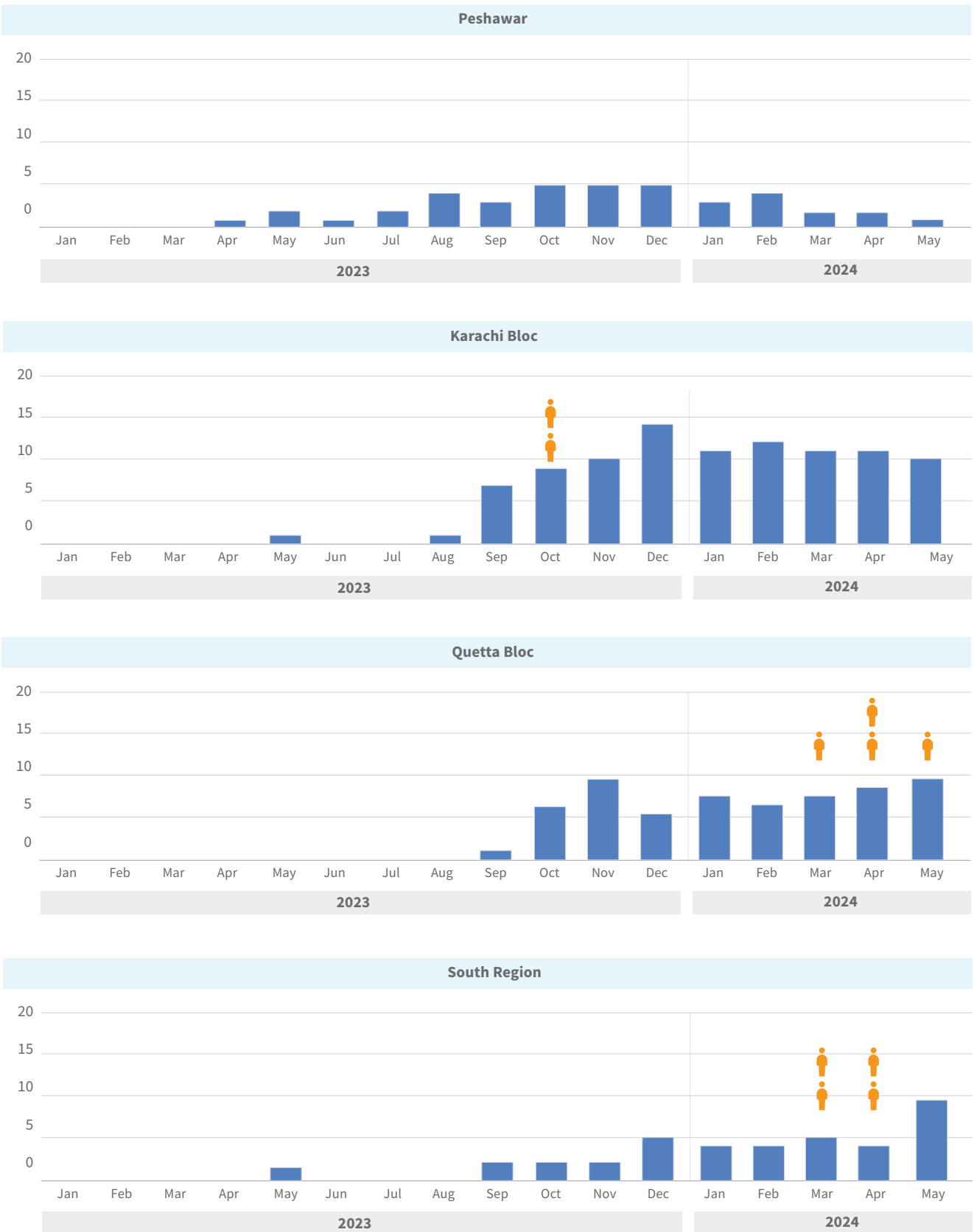


Figure 4: WPV1 detections in historic reservoirs, January 2023 - May 2024

■ ES+ 🧑 Polio Case



Source: Acute Flaccid Paralysis and Environmental Weekly Surveillance Record Files

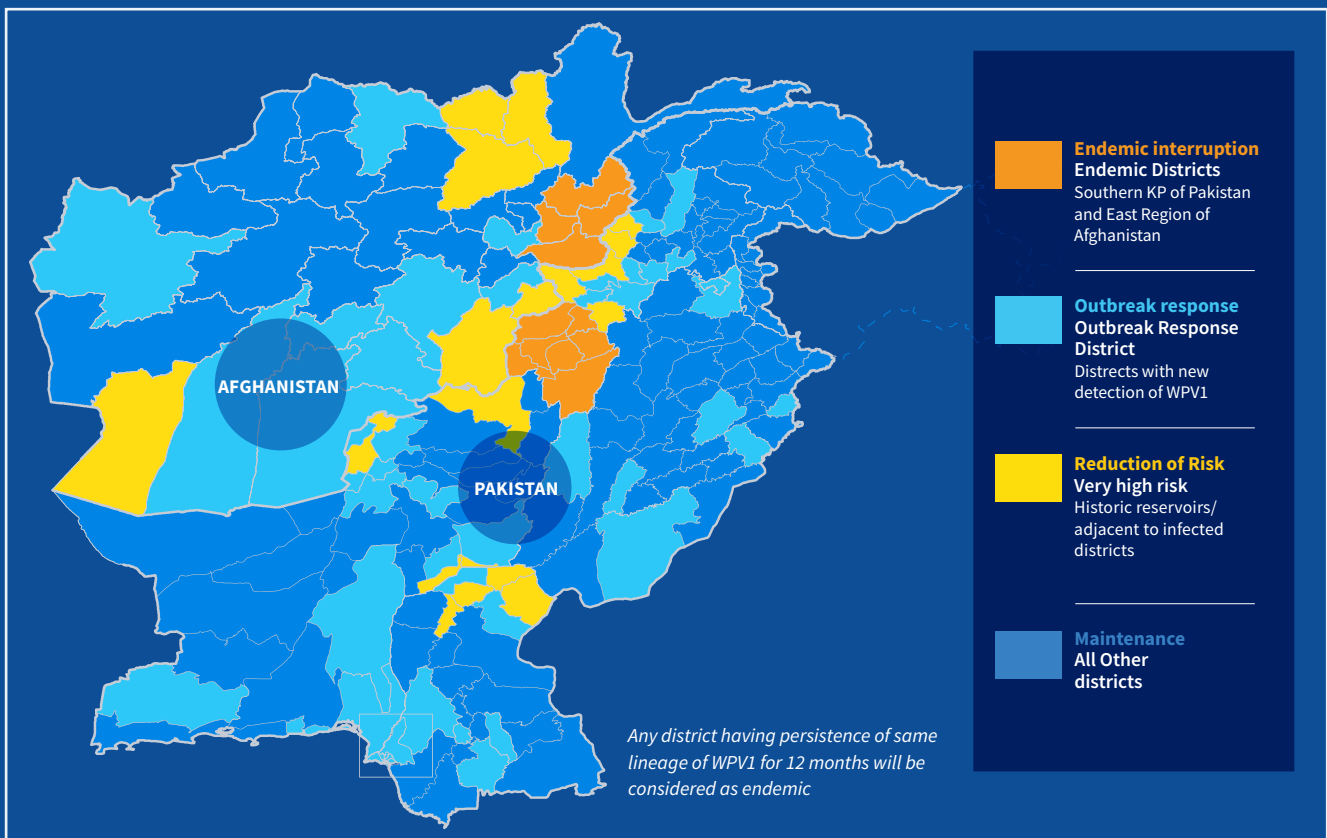
NOTE ON THE RISK CATEGORIZATIONS FOR PROGRAMME PLANNING AND IMPLEMENTATION

While WPV1 transmission has increased significantly since the June 2023 TAG meeting, the principles of the risk categorization remain valid. The TAG therefore recommends maintaining the risk categorization established at its *October 2022 meeting* for programme operations (2). The categories for campaign/outbreak response activity will therefore remain based on four epidemiological risk categories: the previously defined

endemic zones of Southern KP and the East Region of Afghanistan, outbreak districts, risk reduction districts and maintenance districts.

Outbreak districts that have sustained ongoing circulation of a particular genetic sub-lineage of WPV1 virus for 12+ months will be considered as having re-established transmission.

Figure 5: Epidemiological risk categorizations for programme planning and implementation



FINDINGS AND RECOMMENDATIONS

FOR THE ENDEMIC ZONES

Southern KP, Pakistan

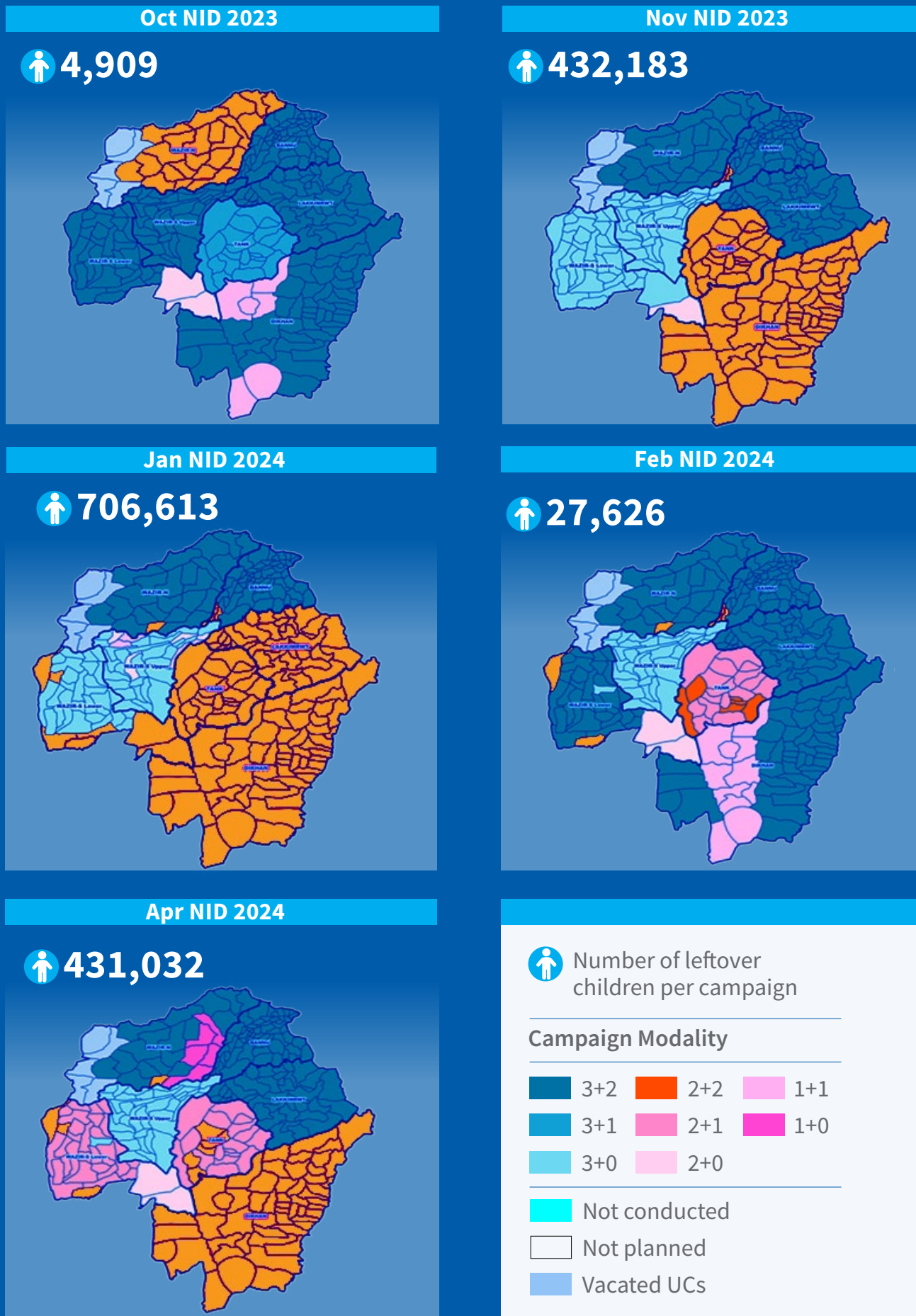
Considerable progress has been made toward the elimination of the YB3C genetic cluster of WPV1, which was last detected in the Bannu district in November 2023. This is due to the joint efforts of the Provincial Emergency Operations Center (PEOC) in Khyber Pakhtunkhwa, the South KP Hub (i.e., the GPEI Hub Office in Southern KP), and the frontline workers (FLWs) vaccinating children in a challenging operating environment. The polio programme has also put significant effort into reaching all missed children in Southern KP, including through complementary strategies beyond SIAs (for example, efforts to coordinate with the Essential Programme on Immunization (EPI), which are detailed in the Polio Eradication Initiative/Essential Programme on Immunization Synergy section).

Several union councils (UCs) in Bannu, where YB3C was last detected, and adjacent areas in the North Waziristan district have not consistently

implemented vaccination campaigns during the last 12 months due to the prevailing security situation. Large numbers of missed (specifically, “leftover”) children in recent campaigns range from 4909 to 706 613 in total, and Dera Ismail Khan, the biggest district by population in Southern KP, has not been covered in three of the last four SIAs. In Southern KP overall, no SIAs were conducted between June and September despite the TAG recommendation to conduct an SIA every 4-6 weeks (notable exceptions were in Bannu and North Waziristan, where SIAs were conducted in August 2023 as part of an outbreak response) (4).

Additionally, as described in detail in the Surveillance section, surveillance efforts in Southern KP must be improved and intensified to detect and halt transmission of all forms of poliovirus.

Figure 6: Campaigns and missed (leftover) children per campaign in Southern KP, October 2023-April 2024



Source: Khyber Pakhtunkhwa Endemic Region - South KP PowerPoint presentation to the TAG

TAG Recommendations for Southern KP:

Reaching missed children

- Steps should be taken to cover all missed children through the harmonized implementation of at least four high-quality campaigns in the next six months through the 3+2 modality, as recommended previously by the TAG.
- Continue to find modalities to vaccinate children in the hardest to access UCs of Bannu and North Waziristan.

Social and behaviour change communication (SBCC)

- Develop consensus on the SBCC strategy and its implementation plan and share with the TAG for review.

Coordination

- Secure stronger coordination and teamwork at all levels.

Surveillance

- Key acute flaccid paralysis (AFP) surveillance performance indicators are still not meeting the required benchmarks. Urgent efforts are needed to improve surveillance performance.
- Organize an aggressive search of YB3C transmission in and around Southern KP.

East Region, Afghanistan

Substantial progress has been achieved through the efforts and resilience of the team in the East Region, and through improvements in the quality of programme activities. Nonetheless, there has been persistent transmission of the YB3A cluster since May 2022. All provinces became infected in 2024, and there is evidence of missed transmission in or outside the Region (e.g., four long-chain and one orphan virus detected in Nangarhar since October 2023), as well as shared transmission across the Northern corridor (3). There is a substantial number of refusals in the East Region, as evidenced in the most recent January 2024 subnational immunization day (sNID), where 23% of missed children were due to refusals. An increasing trend of refusals is being observed overall in the Region (5). There is also evidence of transmission among older-age children and low RI coverage overall, with Penta 3 (i.e., children receiving three doses of the pentavalent vaccine) at 33.7% and only 24% of children fully immunized (per EPI administrative coverage data) (6).

Taking into consideration the [2023 GPEI IMB recommendations](#) (7), an independent external programme audit was recently conducted in the East

Region of Afghanistan to explore the disconnect between the persistent transmission of poliovirus and reported improvements in the quality of polio programme operations. The audit produced positive findings related to the validity and reliability of SIAs and surveillance data reported by the country's programme while also identifying key areas for improvement, particularly in terms of microplanning, monitoring and evaluation of campaign quality, and strengthening certain aspects of surveillance (e.g., fully investigating all orphan viruses). The full audit report will be available online by the end of July 2024.

The TAG's observations and recommendations for the East Region broadly align with the findings and recommendations of the external audit, and the TAG therefore recommends the urgent implementation of these recommendations. Following the implementation of the audit recommendations, additional programme activities such as fractional IPV (fIPV) campaigns and careful alignment with the Big Catch-Up, a global post-COVID-19 RI recovery plan, can be prioritized.

TAG Recommendations for the East Region of Afghanistan:

Immediate implementation (within the next three months) of the main findings of the external programme audit related to supplementary immunization activities (SIAs)

- With operations and SBCC team participation, jointly review, discuss and update all microplans before each campaign to include all in-moving and out-moving, internally mobile, migrant, refugee and guest children.
- Fine-tune the standard operating procedures (SOPs) for post-campaign and lot quality assurance sampling (LQAS) monitoring to further improve detection of missed children.
- Set targets by province for the engagement of female vaccinators and supervisors and monitor progress quarterly.
- Continue to identify and map missed children, particularly refusals, to address clusters of undervaccinated children with a particular emphasis on border districts.
- Optimize the integration of operational and SBCC elements of microplans and coordination of activities.
- National leadership should encourage local officials to fully participate in vaccinating their children. Local officials should lead by example by publicly vaccinating their children.
- Continue the aggressive schedule of SIAs every 4-6 weeks to interrupt transmission. The interval between SIAs can be adjusted if more time is needed for critical quality improvements. Note that each vaccination campaign in the East Region should include the epidemiologically linked communities in the Northeast.
- Given the community acceptance of SIAs in older age groups, consider the implementation of additional older age campaigns, if necessary.

Immediate implementation (within the next three months) of the main findings of the external programme audit related to surveillance

- Continue to fully investigate every orphan virus to identify gaps in surveillance and to define links to high-risk and undervaccinated populations, particularly focusing on border districts and migrant populations.
- Review the AFP Surveillance Expert Review Committee's (ERC) process, access to diagnostic testing and adherence to WHO criteria for classifying cases as "polio-compatible," especially when a non-polio cause cannot be established.

Fractional inactivated polio vaccine (fIPV) campaign implementation

- Once the quality improvements outlined in the audit have been accomplished (within the next three months), develop plans to implement an fIPV campaign for children under five, identifying undervaccinated and high-risk populations that will benefit most from the fIPV campaign.

Routine immunization (RI) /alignment with the Big Catch-Up

- Engage, understand and, where possible, align with the Big Catch-Up in the East Region in ways that do not jeopardize quality of ongoing SIAs and facilitate implementation of the Big Catch-Up.

FINDINGS AND RECOMMENDATIONS FOR OUTBREAK DISTRICTS: HISTORIC RESERVOIRS

(SOUTH REGION OF AFGHANISTAN, QUETTA BLOC, KARACHI BLOC, AND PESHAWAR BLOC IN PAKISTAN)

Since the last TAG meeting, all historic polio reservoirs (i.e., areas which have historically sustained poliovirus circulation, and which have also historically exported the virus to other areas) in Afghanistan and Pakistan have been reinfected and sustained transmission for

at least nine months. A total of six WPV1 cases and 198 ES+ samples have been reported, with persistent detection in 25 out of 34 environmental surveillance (ES) sites (74%) since April 2023. There has also been an increase in the percentage of positivity of ES sites in all historic reservoirs between 2022 and 2024, except in Peshawar, where a decrease was observed in 2024 as compared to 2023 (3).

Table 2: Human cases and environmental surveillance data in historic polio reservoirs in Afghanistan and Pakistan, June 2023 to May 2024

	Pakistan			Afghanistan
	Peshawar	Quetta Bloc	Karachi Bloc	South Region (Excluding Uruzgan)
WPV1 cases	0	2	2	2
WPV1 ES+	41	50	79	28
Number of sites	6	7	12	9
Number of sites with persistent WPV1 detections	3	7	11	4
% Positive ES sites				
2022	11%	0%	0.6%	0%
2023	47%	17%	15%	8%
2024	38%	77%	73%	37%

Source: Acute Flaccid Paralysis and Environmental Weekly Surveillance Record Files

At the time of this writing, some districts in the historic polio reservoirs of Afghanistan and Pakistan are on the verge of becoming classified as endemic districts rather than outbreak districts. Kandahar in Afghanistan and Peshawar in Pakistan have re-established endemic transmission given that a particular lineage of virus has been detected persistently for more than 12 months in these areas (3). It will therefore be crucial for these affected areas to urgently implement all the programmatic recommendations and action plans discussed during the May 2024 meeting.

Table 3: Duration of circulation of a particular lineage of WPV1 in historic polio reservoirs, based on molecular analysis

Country	District	First Isolation	Last Isolation	Duration
Afghanistan	Kandahar	May-23	Apr-24	12 Months
Pakistan	Peshawar	May-23	Apr-24	12 Months
	Quetta/Pishin	Sep-23	May-24	9 Months
Pakistan	Quetta/Chaman	Nov-23	Mar-24	5 Months
	Karachi	Sep-23	Apr-24	8 Months

■ YB3A4A ■ YB3A4B Source: Acute Flaccid Paralysis and Environmental Weekly Surveillance Record Files

South Region, Afghanistan

The South Region faces a significant challenge in addressing a large cohort of underimmunized children. Approximately 145 000 children remained unreached in the national immunization day (NID) conducted in April 2024 (8). While site-to-site (S2S) and mosque-to-mosque (M2M) vaccination campaigns are being implemented, the recent decision of leadership to allow the house-to-house (H2H) vaccination campaign modality in the South

Region represents an essential step towards preventing a large-scale polio outbreak in the region following multiple ES detections of WPV1. Fully benefiting from this opportunity will require diligent social, political, security and operational preparations and planning to implement quality SIAs, and a critical piece of this planning will be updating microplans to ensure that all children are included.

TAG Recommendations:

Supplementary immunization activities (SIAs)

- Ensure systematic preparations for a smooth and quality implementation of three H2H SIAs as soon as possible and no later than the end of the third quarter of 2024.
 - All relevant departments (Propagation of Virtue and Prevention of Vice, Religious, the Ministry of Interior, Health, and others) and administrative and military leadership should be on board to support the campaigns.
 - Leadership should directly communicate with communities and health workers regarding the full support of the authorities for H2H polio campaigns, and regarding the priority they give to eradicating polio.
 - Community influencers, elders and local authorities should be part of the microplanning exercise.
 - Obtain the support of national and international respected religious scholars to address vaccine hesitancy and encourage vaccine uptake.

Supplementary immunization activities (SIAs)

- Continue to optimize modalities to increase vaccination coverage of children in Kandahar City.
- Redefine, remap and track migrant, mobile and returnee populations and their guests to ensure up-to-date microplans before every campaign.
- Additional strategies may include:
 - Expanded age SIAs: Start with under-five-year-olds, build trust all around and then assess the feasibility and timing of an expanded age SIA.
 - Inactivated polio vaccine (IPV) campaigns: IPV can be used to build immunity among susceptible children in the South Region, once at least three high-quality H2H campaigns have been implemented.
- As in the East Region, engage, understand and, where possible, align with the Big Catch-Up for campaign preparations, timing, and quality.

Quetta Bloc, Pakistan

In 2024, WPV1 has been detected in all districts in Quetta Bloc. There have been multiple introductions of the virus, with local circulation now occurring. Only eight of 10 planned campaigns were implemented in 2023, and suboptimal campaign quality has been observed in the Chaman and Kila Abdullah districts, the two districts known to have substantially underimmunized populations.

The support of administration and senior leadership has enabled the implementation of three successive harmonized SIAs across the province in 2024. Diligent efforts to map, track and vaccinate mobile populations are underway, and priorities for the next six months have been clearly outlined by the PEOC. It will now be crucial to maintain this high level of political commitment, ramp up surveillance efforts and coordinate with EPI to reach key populations and stop transmission.

TAG Recommendations:

Supplementary immunization activities (SIAs)

- **Political commitment:** Support from political and administrative leadership must continue to implement high-quality SIAs in Chaman and Kila Abdullah, the two districts with the lowest levels of immunity and ongoing virus circulation.
- **Migrant and mobile populations:** The multiple introductions, importations and exportations should be investigated to identify and map mobile population groups that may be carrying the virus.

Surveillance

- Key AFP surveillance indicators in Pishin and Kila Abdullah are still not meeting the required benchmarks. Kila Abdullah does not have an environmental surveillance site. Urgent efforts are needed to improve surveillance performance.

Routine immunization/alignment with the Big Catch-Up

- Commendable provincial government efforts to improve RI should:
 - Be prioritized in Killa Abdullah and Chaman.
 - Align with the Big Catch-Up for preparations, timing, and quality.

Karachi Bloc and Hyderabad, Pakistan

Karachi Bloc is arguably the most challenging geographic area, with diverse migrant, mobile and other high-risk populations living in large urban and peri-urban slums. While the trends in LQAS pass rates have not declined in 2023 compared with 2022, there remain a significant number of known missed children and refusals, with evidence of misreporting of missed children, fake vaccination and collusion in key high-risk areas (9). The Bloc detected an orphan YB3A strain in 2023 that was related to strains that were circulating in the Southern corridor and in Northern Sindh in 2019 (3), indicating the importance

of surveillance sensitivity and the identification and vaccination of missed children in Northern Sindh and the Southern corridor.

Fortunately, there is strong commitment from the highest political leadership in the Sindh province, and strong leadership in the PEOC; however, the amplification of virus in Karachi and its subsequent spread across Pakistan poses a significant risk to the programme. The polio transmission factors in Karachi therefore necessitate sustaining high-quality immunization campaigns that reach missed children, with little margin for error.

TAG Recommendations:

Missed children

- The PEOC should continue to mitigate programme pressure dynamics to encourage and promote transparency of reporting of missed children due to operational problems and refusals, and also mitigate collusion and fake vaccination. It will be critical to investigate these issues in all UCs of Karachi and Hyderabad to understand the full extent of underreported missed children.
- The advanced analytics, management, and measures to build capacity of workers adopted by the PEOC to fully identify and reach unvaccinated children should continue to be refined to achieve the quality of vaccination necessary to interrupt transmission.

Supplementary immunization activities (SIAs)

- Redefine and remap migrant populations and their guests, especially considering the changes in patterns of movement before each campaign.
- Social profiling of special geographical areas/communities with missed children, reluctant and refusal families should be undertaken jointly by SBCC and operational teams to inform microplans.
- Investigate and urgently design corrective measures for zero-dose children (campaign or RI).
- Overall low RI coverage in the highest-risk UCs requires a thorough investigation, and urgent corrective measures.
- Build analytical capacity to improve the quality and rigor of monitoring, and continuously evaluate the veracity and integrity of monitoring data.

Peshawar Bloc, Pakistan (Peshawar and Khyber)

The TAG recognizes the efforts of the Peshawar team that have prevented paralytic polio despite repeated importations of WPV1 and the establishment of local circulation. The April 2024 campaign demonstrated a notable 19% decrease in refusal clusters in Peshawar compared to the previous NID conducted in January (10).

Peshawar is a major hub and a transit destination for mobile populations from Afghanistan (including the more than

600 000 Afghan refugees returning to Afghanistan since 15 September 2023, following the initiation of Pakistan's repatriation plan, with a notable surge in November 2023) (11), with frequent movement to and from districts of the Khyber Pakhtunkhwa province bordering Afghanistan, and from other parts of Pakistan. The establishment of endemic transmission in Peshawar requires urgent steps to identify and map all migrant and mobile populations and reach all missed children while improving surveillance quality.

TAG Recommendations:

Missed children

- The PEOC should continue to mitigate programme pressure dynamics to encourage and promote transparency in the reporting of missed children due to operational problems and refusals, and mitigate collusion and fake vaccination, etc. Investigate this in all UCs of Peshawar and Khyber to understand the full extent of underreported missed children.
- Management, monitoring, analytics and capacity building measures for health workers adopted by the PEOC to identify and reach unvaccinated children should be refined to achieve the quality necessary to interrupt transmission.
- Social profiling of missed children and reluctant and refusal families should be undertaken jointly by the SBCC and operational teams to inform microplans.

Reaching migrant and mobile populations

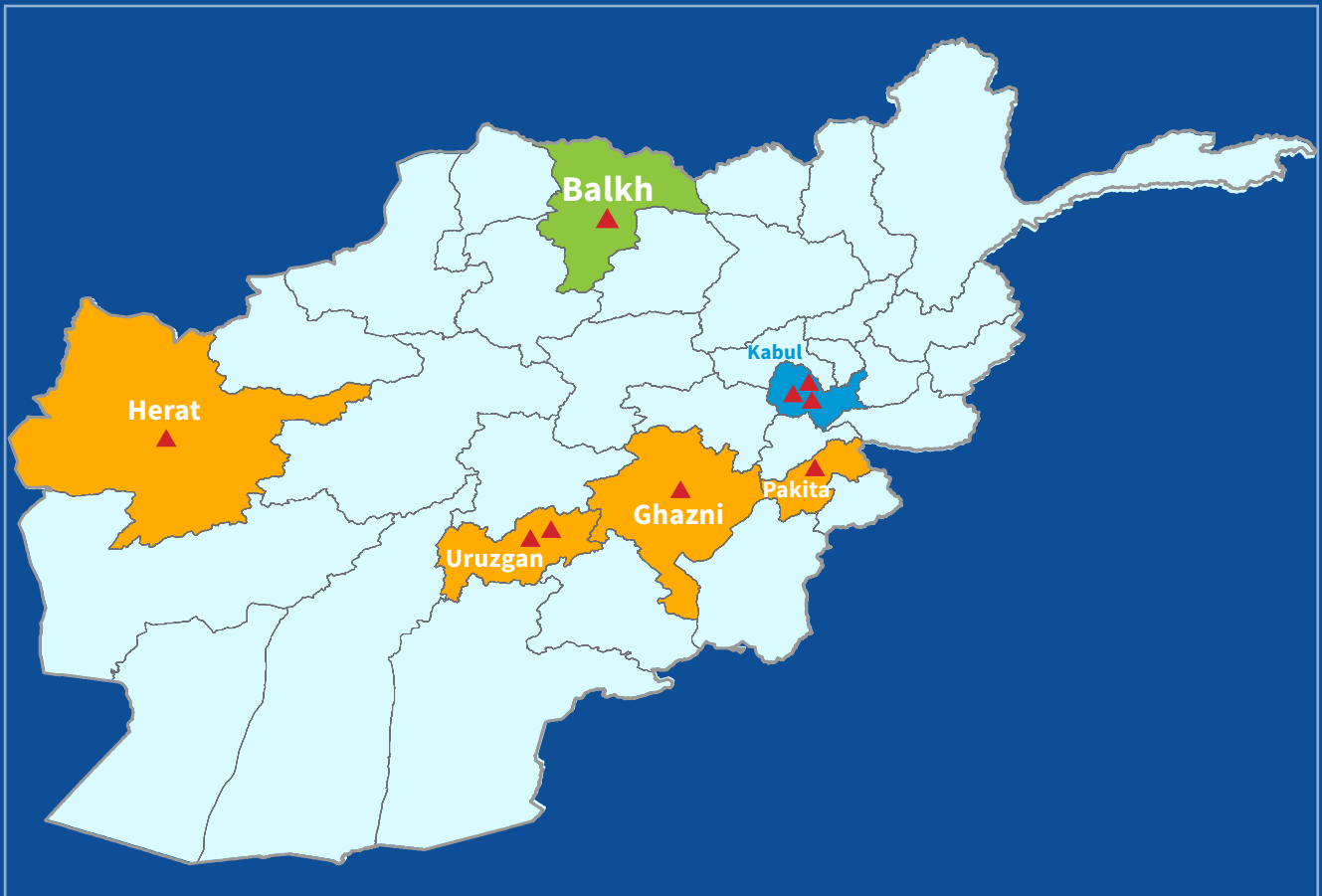
- Redefine and remap migrant and mobile populations and their guests, especially considering the changes in patterns of movement related to repatriation before each campaign.
- Special efforts should be made to investigate and map links between Peshawar Bloc and populations living in districts that border Afghanistan.

Surveillance

- The PEOC should investigate viruses detected in Peshawar, particularly orphan strains, to identify epidemiologically linked populations in and around Peshawar Bloc, particularly the border districts.
- Peshawar has had a longstanding challenge of delayed notification of AFP cases. This challenge must be thoroughly analysed, and underlying problems solved.
- Based on findings of investigations of orphan viruses, the programme should implement surveillance improvements.

FINDINGS AND RECOMMENDATIONS FOR OUTBREAK DISTRICTS OUTSIDE HISTORIC RESERVOIRS

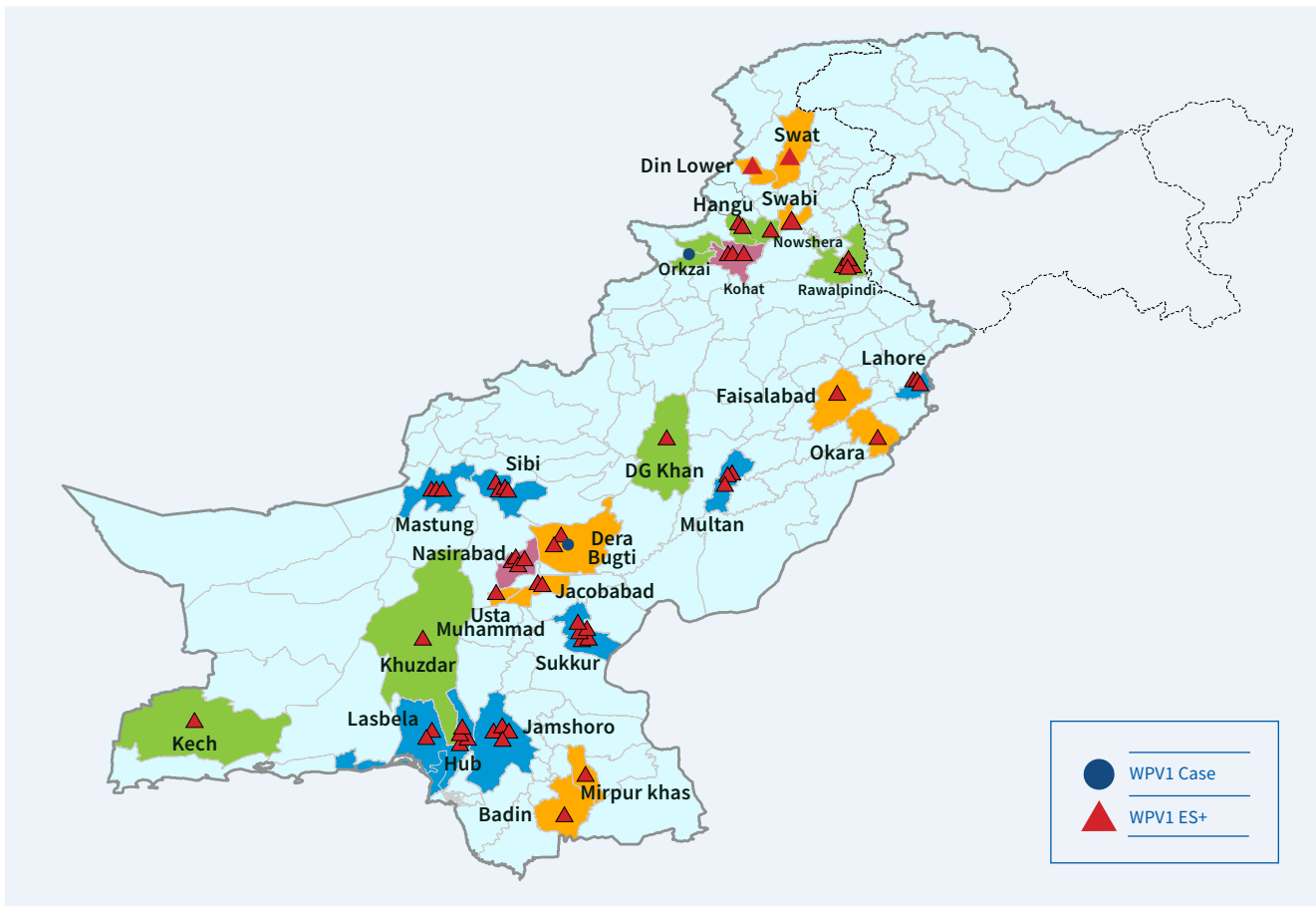
Figure 7: Outbreak response outside of historic reservoirs in Afghanistan, June 2023 to May 2024



Category	List of Districts	Total
Recent introductions, too early to assess	Herat, Pakista, Uruzgan, and Ghazni	4
No WPV1 detection for three or more months, at least three SIAs conducted	Balkh	1
Repeated introductions of different lineages	Kabul (all three viruses reflect prolonged undetected transmission)	1
Sustained the virus of a single lineage for over four months	None	0

Source: Acute Flaccid Paralysis and Environmental Weekly Surveillance Record Files

Figure 8: Outbreak response outside of historic reservoirs in Pakistan, April 2023 to May 2024



Category	List of Districts	Total
Recent introductions, too early to assess	Dir Lower, Swabi, Swat, Jacobabad, Badin, Mirpur Khas, Dera Bugti, Usta Muhammad, Okara, and Faisalabad	10
No WPV1 detection for three or more months, at least three SIAs conducted	Hangu, Orakzai, Nowshera, Khuzdar, Kech, Rawalpindi, and DG Khan	7
Repeated introductions of different lineages	Jamshoro, Sukkur, Hub, Sibi, Lasbela, Mastung, Lahore and Multan	8
Sustained the virus of a single lineage for over four months	Kohat and Nasirabad	2

Source: Acute Flaccid Paralysis and Environmental Weekly Surveillance Record Files

Afghanistan and Pakistan are also facing outbreaks in districts outside of the historic polio reservoirs. As shown in the figures above, six provinces in Afghanistan have detected WPV1 since the last TAG, with all viruses sharing the same genetic lineage except in Kabul, where repeated introductions of different lineages have taken place. In Pakistan, 27 districts outside of the historic reservoirs have detected WPV1 since January 2023, with two districts (Kohat and Nasirabad) sustaining the same virus of a single genetic lineage for over four months (3). In districts with multiple introductions and in Kohat and Nasirabad, it will be critical to implement high-quality SIAs. All orphan poliovirus strains that are detected anywhere should be fully investigated.

Southeast Region, Afghanistan

Presentations and discussions at the meeting underscored the risks posed to the Southeast Region given its proximity to the Southern KP endemic zone in Pakistan and the Southern cross-border corridor. Population movements and unresolved clustering of refusals amongst cross-border communities pose a continued risk of transmission to the Region. An increase in refusals was particularly evident in

provinces such as Paktika and Khost, with the number of refusals rising to 19 268 and 5792 in April 2024, respectively, compared to 12 611 and 4111 in May 2023 (12). Intensifying surveillance activities will be critical in identifying and investigating all viruses that may be circulating in the area, and similarly intensified operations and SBCC efforts will be needed to identify and immunize missed children.

TAG Recommendations:

Supplementary immunization activities (SIAs), social and behaviour change communication (SBCC), and surveillance

- Redefine and remap migrant and mobile populations and include them in microplans before every campaign.
- Integrated operational and SBCC efforts should be intensified to immunize all persistently missed children, particularly in known clusters of refusals and other missed children clusters.
- Actively search for poliovirus through intensified AFP surveillance and environmental sampling, given the risks of undetected transmission of YB3C and the repeated introductions from the Southern corridor.

Punjab, Pakistan

There is strong political commitment to maintain a high level of essential immunization coverage and keep Punjab polio free. Despite repeated detections, the programme has prevented the persistence of any specific lineage of poliovirus in any of its outbreak

districts. Mapping and vaccinating migrant and mobile populations and maintaining high-quality surveillance and SIA activities will enable Punjab to continue to prevent any specific poliovirus lineages from taking root.

TAG Recommendations:

Outbreak response and surveillance

- Rawalpindi, Lahore and Faisalabad and the Southern districts of Punjab host a diverse group of migrant and mobile populations. The programme should redefine, remap and vaccinate children in these populations.
- The programme should diligently evaluate the quality of surveillance and vaccination activities (RI, SIAs) in these districts, taking into consideration migrant and mobile populations.

Central Pakistan

The Central Pakistan epidemiological area comprises Balochistan, Punjab, and Sindh. The confluence of three provinces, common risk factors, hard to reach riverine areas, and detection of WPV1 in multiple

districts pose a risk of establishment and expansion of poliovirus transmission. To stop current outbreaks and prevent further spread, coordination between the three PEOC Coordinators must continue and be enhanced.

TAG Recommendations:

Outbreak response

- The PEOC Coordinators should continue exchanging information.
- The National Emergency Operations Center (NEOC) should designate a team to assist the PEOC Coordinators in the timely coordination of surveillance, risk assessment, and SIA activities across the three provinces.

FINDINGS AND RECOMMENDATIONS: RISK REDUCTION AND MAINTENANCE DISTRICTS

Given that most risk reduction districts and/or provinces are now incorporated into ongoing outbreak responses, the TAG's recommendation is for any remaining risk reduction areas to receive a total of six vaccination campaigns in the year 2024.

The TAG also provided additional specific guidance for the next six months, considering the number and scope of campaigns that have already taken place in each country over the past year.

TAG Recommendations:

Supplementary immunization activities (SIAs)

- **Risk reduction:** most risk reduction districts/provinces are now part of the ongoing outbreak responses; any remaining risk reduction areas should receive a total of six vaccination campaign opportunities in 2024.
- **Maintenance – Pakistan:** as the programme has implemented four NIDs in the previous eight months, the need for another NID should be assessed in the fourth quarter of 2024.
- **Maintenance - Afghanistan:** Reassess the need for a third NID during the fourth quarter of 2024.

QUALITY SUPPLEMENTARY IMMUNIZATION ACTIVITIES (SIA) IMPLEMENTATION

The implementation of H2H campaigns over time is the foundation of eradication. SIAs in both Afghanistan and Pakistan have reached a high level of sophistication and quality. Yet transmission continues and has expanded geographically since 2023 both in the historic polio reservoirs as well as new (“outbreak”) districts, with more than a tripling in the number of infected districts overall. One inference, drawing on data presented by the country programmes, is that gaps and unevenness in SIA quality have at least in part contributed to the virus’s recent resurgence. Going back to the basics of quality SIA implementation is therefore of primary importance given the status of transmission at this point in the eradication initiative. Secondly, it is highly likely that the pattern

of increased environmental detection, transmission of virus and occurrence of sporadic polio cases represents transmission among undervaccinated population groups, particularly among migrant settlements and moving populations. The historic reservoirs are characterized by large-scale migrant settlements and extensive population movements in and out of the districts. The quality of SIAs in specific high-risk groups is further challenged by programme pressure dynamics that result in fake vaccination, misreporting of missed children, collusion and underreporting of significant vaccine hesitancy and refusals.



Standardization of campaigns (modality, frequency, scale, volatility)

The proposed SIA activities for the remainder of 2024 will be based on the principles laid down in the recommendations, driven by each area's epidemiological risk categorization, and responsive to the current epidemiology and analysis of prospective risk, to stay ahead of the virus rather than chasing it. Additionally, discussions during the meeting underlined the importance of updated microplans featuring integrated information from both operations and SBCC as the core tool for SIA delivery.

As was noted during the meeting, the intensive schedule of SIAs may result in community fatigue and in FLWs having too little time between rounds to focus on performance assessment, identification of gaps, and improvement initiatives – which may lead to repeating suboptimal campaigns. As noted, the standard modality for SIA delivery remains H2H 3+2 (i.e., three days of campaign and two days of catch-up); however, delays and/or the staggering of delivery between areas due to certain factors such as rapid changes in the security situation can undermine campaign quality. It is therefore critical to consider all relevant factors when planning, bearing in mind that flexibility should ultimately be allowed in planning and spacing SIAs to secure time for critical campaign quality improvement

initiatives without compromising on speed of response, particularly in outbreak districts. The three principles of outbreak response – faster, better and wider – should be balanced and maintained whenever possible.

Reaching migrant and mobile populations

The current epidemiology of the poliovirus, including the patterns of detection in environmental samples and the incidence of sporadic cases, indicates that migrant and mobile populations remain unreached, and this is playing an outsized role in the persistence of the virus. Given this situation, the programme must review its strategic approaches to redefine and remap migrant and mobile populations and improve operational monitoring and engagement with these communities both when they are on the move and during periods when they are static. A thorough search and mapping should be conducted of migrant settlements, many of which are quite large and longstanding in urban and peri-urban areas and host visitors from across the border and bordering districts. Accessing these groups and communities is challenging but is now the most critical strategic element beyond the traditional and current efforts at vaccinating them whilst they are on the move.

TAG Recommendations:

Reaching migrant and mobile populations

- Both NEOCs should provide technical guidance, develop SOPs, and document best practices for mapping, tracking, and coordinated efforts (operational and SBCC) to vaccinate these population groups.
- Sufficient dedicated monitoring should be conducted to identify missed children in these high-risk groups.

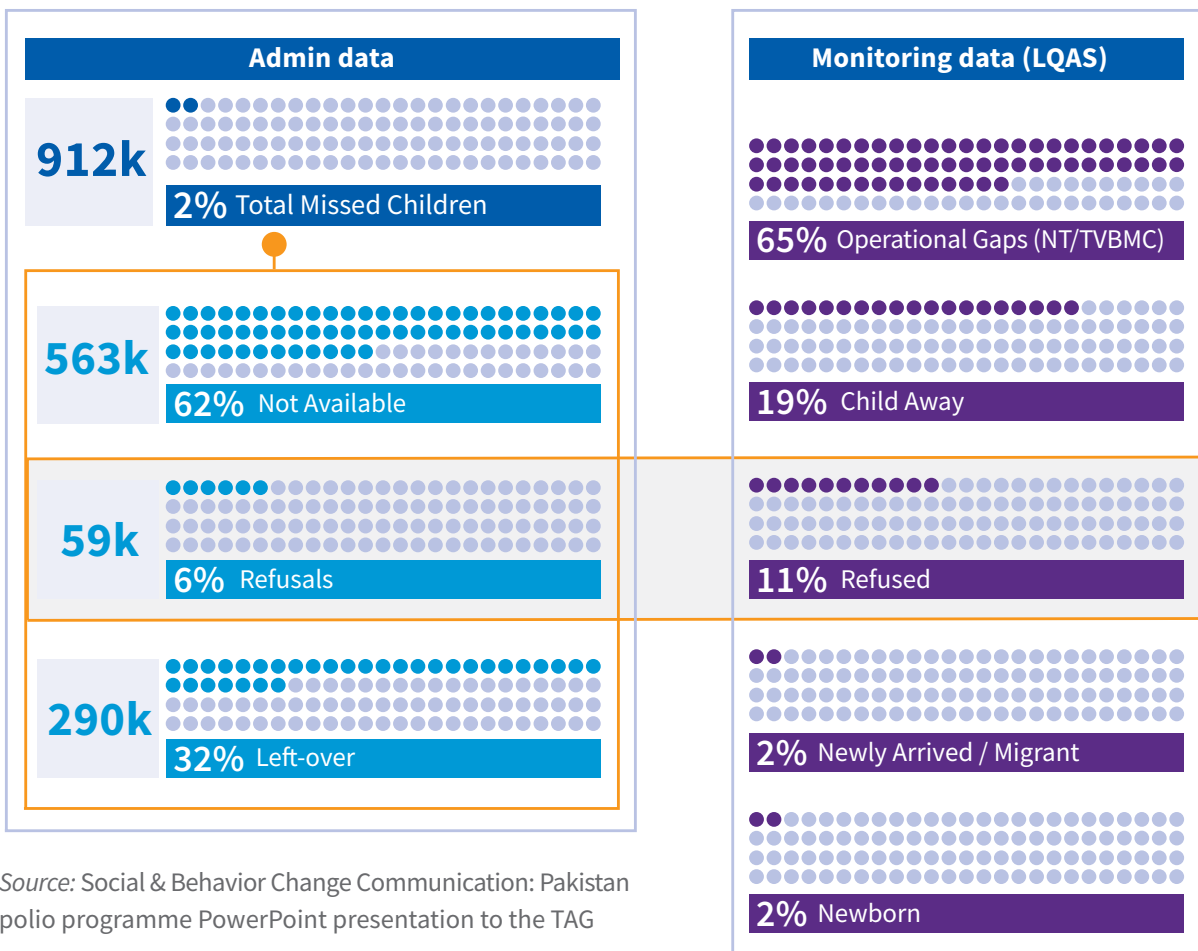
Social and behaviour change communication (SBCC)

While both country programmes have been implementing and evaluating targeted SBCC interventions, **the most crucial next step for SBCC will be the full, systematic integration of SBCC and operations at scale, including through joint microplanning.** The external programme audit in the East Region of Afghanistan clearly emphasized the importance of using integrated microplanning to harmonize social and operational planning and successfully implement and monitor polio vaccination campaigns. It will now be critical for the integration of SBCC and operations to be scaled up rapidly in endemic zones and historic reservoirs so that gains can be maximized, and transmission can be interrupted as soon as possible. To this end, the TAG recommends that each NEOC create best practice guidance for integrated microplanning and incorporate SBCC and SIA/operations information and action into one single document that will serve as the foundation for the intersection of these two workstreams.

Another critical need is expanding the focus of SBCC work from “refusals” to “all missed children.” Data presented by the countries showed that reported refusals at the local level represent

an extremely small percentage of all missed children, which on the surface is unlikely to be driving the remaining transmission; yet deeper monitoring and analyses in some areas revealed a larger number of missed children due to refusals who are also masked as “not available” children or children hidden behind locked houses (9). In Pakistan from January 2023 to April 2024, on average 912 000 children are reported as missed in each NID (2% of the total target population), of which only approximately 60 000 children are identified as “refusals”—less than 0.1% of the target (14). Results are similar in the East Region of Afghanistan (where H2H vaccination has been taking place), with refusal rates reported at around 0.3% across the provinces (15). Going forward, continued efforts are needed to fully assess the real magnitude of refusals and all missed children and renewed approaches to minimizing refusals and missed children, focusing on significant clusters of refusals and bordering areas, and ensuring that there are not spikes in time or geography that could indicate localized issues. The TAG is confident that both country programmes have sufficient systems and capacity to both detect and address this (on the ground social mobilizers, social listening/media monitoring systems, etc.). But beyond this, there is ground to be gained in widening the focus to all missed children.

Figure 9: Pakistan SBCC programme data on missed children



Source: Social & Behavior Change Communication: Pakistan polio programme PowerPoint presentation to the TAG

For each category of missed children presented by the Pakistan programme, detailed analyses of the kind that the SBCC team already does for refusals, such as understanding social profiles, would be extremely valuable. SBCC capacities can assist in identifying the reason for these children being missed and help craft the strategies and interventions to reach them. Some good examples were presented by the country teams on helping to understand the drivers for fake finger marking; on community boycott and resolution; and on identifying the social profiles of children in migrant and mobile populations and ensuring that vaccination strategies are appropriately positioned to access and vaccinate them. The SBCC team can also support the operations team in knowing when traveling children have returned home and are able to be vaccinated.

Engaging and supporting frontline workers (FLWs)

It is recognised across the programme that FLWs are the most important cadre in the global polio workforce. Their knowledge and capacity in interpersonal communication (IPC) determines the quality of SIAs, particularly in terms of whether all eligible children within a household or compound are identified and vaccinated. More than their training, the efficacy of FLWs relies on their motivation – their willingness to continue, politely but firmly, to seek out eligible children. If FLWs are treated poorly, whether in terms of recruitment, engagement, training/

refresher training, remuneration, working conditions, or pressurising/punitive supervision, it is likely their performance will fall below its potential.

To interrupt transmission for good, it will be critical for the programme to engage seriously with FLWs by returning to the listening exercise adopted recently in Pakistan and harnessing this resource in developing training materials and methods for FLWs prior to SIAs. Training for FLWs should also incorporate stronger emphasis on IPC skills, with a focus not on asking one-way polio-related questions but rather on engaging with caregivers based on genuine dialogue. Trainings can also, rather than being simply didactic, engage FLWs in drawing on their local knowledge to think about how to improve SIA quality and coverage.

Maximizing female recruitment of FLWs remains imperative in both countries, and while some progress has been made, for example in the East Region of Afghanistan, targets can and should be more ambitious. For example, female recruitment in supervisor roles may enhance the most critical layer of programme performance oversight and help make inroads into the wider need for recruiting more women into senior programme management roles. And recruiting more female intra-campaign monitoring (ICM) and PCM monitors would help address the issue of inaccessibility of households by male vaccinators and improve campaign quality by leveraging female participants.

Programme management

The TAG notes with deep concern several signs which indicate gaps in the programme regarding streamlined leadership and coordination, performance accountability, and team cohesion. These include signs of inconsistent coordination between national and some provincial/regional emergency operations centers (EOCs), fluctuating programme management arrangements for Southern KP, and the loss of

national-level cohesion during the caretaker government in Pakistan. Other indicators include the absence of an SBCC action plan in the endemic zone of Southern KP in Pakistan and in the East Region of Afghanistan, and a reluctance to take the right action at the right time (performance gaps, HR recruitments, etc.) – all of which have contributed to the deteriorating epidemiology of polioviruses.

In this regard, the TAG upholds its recommendations related to programme management and accountability previously made in October 2022 and June 2023. The TAG asks the teams to tackle all gaps in the programme regarding leadership and strengthen coordination, accountability and team cohesion in an upfront and urgent manner.

The use of fractional inactivated polio vaccine (fIPV)

There has been a growing interest in the potential of fIPV to enhance population immunity and/or campaign coverage through SIAs in both the Afghanistan and Pakistan programmes. Where underlying SIA quality (OPV) is demonstrably high, the introduction of fIPV is supported, based on clear identification of populations most likely to benefit immunologically and areas with specific needs and challenges (i.e., high-risk areas). The use of fIPV is also supported in specific areas where the deployment of jet injectors can improve vaccine demand, increase the number of registered children and enhance overall coverage with both OPV and IPV. Access to IPV and to injectors will need to be rapidly confirmed and, in the case of intramuscular injection, training and FLW capacity relating to vaccine safety must be ensured.

TAG recommendations on supplementary immunization activity (SIA) planning and implementation for the remainder of 2024

Afghanistan and Pakistan have implemented multiple large-scale SIAs since the 2023 TAG meeting, administering more than 65 million doses in Afghanistan and more than 250 million in Pakistan against targets of 11.2 and 45.4 million, respectively (8,13). Yet WPV1 transmission has expanded, and there is evidence of an increase in missed children in some known high-risk areas. The TAG therefore recommends diligent SIA planning for the next six months which should be based on the existing risk categories and ongoing risk assessments as the epidemiology of poliovirus evolves.

Afghanistan implemented 236% SIAs against their target between January and May 2024, and has proposed to

implement an additional 452% in the remainder of the year (8). Pakistan implemented 277% SIAs against their target between January and May 2024, and has proposed to implement an additional 285% in the remainder of the year (13). These repeated large-scale vaccination campaigns have evidently not impacted the epidemiology of poliovirus, implying that key populations are still not being vaccinated consistently. This emphasizes the need to focus on planning SIAs based on renewed mapping of missed population groups and rigorous risk assessments rather than continuing with more large-scale campaigns such as sNIDs or NIDs.

TAG Recommendations:

Supplementary immunization activity (SIA) implementation principles

- SIA scheduling decisions should be driven by the epidemiological risk categorization and should focus on reaching persistently missed populations with demonstrably higher quality than in previous campaigns. Advance SIA schedules are mainly prepared for resource planning and synchronization; the programme should adjust as needed based on evolving risks.
- **Country programmes should revise their SIA schedule for 2024 (July to December) based on the following recommendations.**
- The TAG recommends the same risk categorization as previously advised with the following adjustments based on the evolving epidemiology and ongoing risk assessments:
 - **Endemic zones** – SIAs every 4-6 weeks, with longer intervals if necessary for making critical quality improvements can be considered. **Ensure at least four highest-quality rounds before end of 2024.**
 - **Outbreaks:**
 - ▶ **Historical reservoirs:** at least four SIAs of very high quality with assurance that the current gaps identified have been systematically addressed (fake vaccination, collusion, lack of transparent reporting of refusals and missed children, mapping of migrant and mobile population groups, operational gaps, human resource performance management)
 - ▶ **Outbreaks outside reservoirs:** ensure rigorous implementation of Outbreak SOPs with ongoing risk assessments to guide the response.

Supplementary immunization activity (SIA) implementation principles

■ Risk Reduction and Maintenance:

- ▶ **Risk reduction:** most risk reduction districts/provinces are now part of the ongoing outbreak responses; any remaining risk reduction areas should receive a total of six vaccination campaign opportunities in 2024.
 - ▶ **Maintenance – Pakistan:** the programme has implemented four NIDs in the previous eight months; the need for another NID should be assessed in the fourth quarter of 2024.
 - ▶ **Maintenance – Afghanistan:** Reassess the need for another NID during the fourth quarter of 2024.
- There should be clear and intentional efforts to ensure synchronization in the Southern and Northern corridors – at least three rounds; and close coordination between all bordering districts between countries.

Social and behaviour change communication (SBCC)

- SBCC activities should support strategies to reduce all missed children, rather than just refusals.
 - Prioritise areas with major challenges to programme operational quality and oral polio vaccine (OPV) acceptance and coverage related to gaps in team performance, clustered refusals, and engagement of migrant and mobile populations.
- NEOC to create best practices guidance for integrated microplanning, incorporating SBCC and SIA/operational information and action in one document.

Fake vaccination, misreporting, and underestimation of missed children

- NEOC Pakistan should develop clear guidance for PEOCs to systematically identify the true extent of missed children in high-risk UCs and population groups in historic reservoirs.
- These guidelines should outline best practices for management, FLW motivation and capacity building, and ongoing monitoring and analyses of data based on lessons learned across different reservoirs.

Engaging and supporting frontline workers

- Systematic listening and engagement of the FLWs in Pakistan: Continue listening exercises and implement recommendations from the codesigned workers initiative.
- In Afghanistan, build on efforts to encourage and monitor the involvement of women in family-based structures as part of vaccination and social mobilization teams in the polio programme in the East Region.
- EOCs to support FLWs in cases of injury, harassment, and violence.

Fractional inactivated polio vaccine (fIPV) Supplementary immunization activities (SIAs)

- Pakistan: The TAG supports the use of fIPV in historic reservoirs (Peshawar, Quetta and Karachi) focusing on:
 - Areas with high-risk mobile populations.
 - Clustered missed children (including high rates of vaccine avoidance/hesitancy).
 - Documenting the number of additional children registered and reached because of fIPV.
- Afghanistan: The TAG supports the use of IPV.
 - East Region: following completion of external audit recommendations.
 - South Region: following completion of three high-quality H2H campaigns.

SURVEILLANCE

Surveillance systems at the national level in Afghanistan and Pakistan

A strong surveillance system for detecting polioviruses is currently critical for detecting the virus and monitoring the impact of interventions to interrupt its transmission, and it will eventually serve to provide evidence for interruption and certification of eradication. Afghanistan and Pakistan have well-functioning AFP and ES systems that meet global standards at the national level.

Given the critical role of ES, both country programmes have continued extensive exercises to expand their environmental surveillance networks. From 2014 to 2024, the number of ES sites increased from 31 to 123 in Pakistan, and from 11 to 43 in Afghanistan over the

same period. Both programmes also regularly coordinate with WHO's Regional Reference Laboratory for Polioviruses in Pakistan to monitor ES network performance. ES site sensitivity to detect poliovirus is assessed by the annual enterovirus (EV) detection rate from ES sites, defined as the percentage of specimens with enterovirus detected, with a target of >50%. EV rates from all ES sites in both countries have been consistently above the minimum threshold of >50%. Additionally, the programmes have implemented adaptive sampling strategies in areas where the feasibility of ES is not optimal. For example, the Pakistan programme adapted a one-time sampling strategy and was able to identify two new infected districts through this additional strategy (South Waziristan Upper in 2023 and Lasbela in 2024). Through this effort, a total of 727 one-time (ES) samples were collected (120 in 2022, 577 in 2023 and 30 in 2024) (3).



Table 4: Overview of the performance of surveillance systems (AFP, ES, and laboratory) at the national level in Afghanistan and Pakistan, 2023 (data January to December) – 2024 (Data January to May)

Indicator	Afghanistan		Pakistan	
	2023	2024	2023	2024
No. AFP cases reported	5,855	1,970	19,778	6,096
No. provinces/districts meeting two key indicators	34/34	34/34	128/159	122/159
No. specimens tested in the laboratory	12,657	3,877	60,960	18,440
Percent cases/contacts with lab results within 14 days from sample received in lab	94	85	94	89
No. ES Sites	43	43	119	123
Percent ES sites having ≥90% samples with EV rates	89	65	98	83
No. Long chain WPV1 (human, ES)	AFP=1 ES=6	AFP=0 ES=9	AFP=2 ES=23	AFP=0 ES=1
No. Orphan WPV1 (human, ES)	1 (all ES)	2 (all ES)	3 (all ES)	4 (all ES)

Source: Acute Flaccid Paralysis and Environmental Weekly Surveillance Record Files

Internal surveillance reviews and monitoring

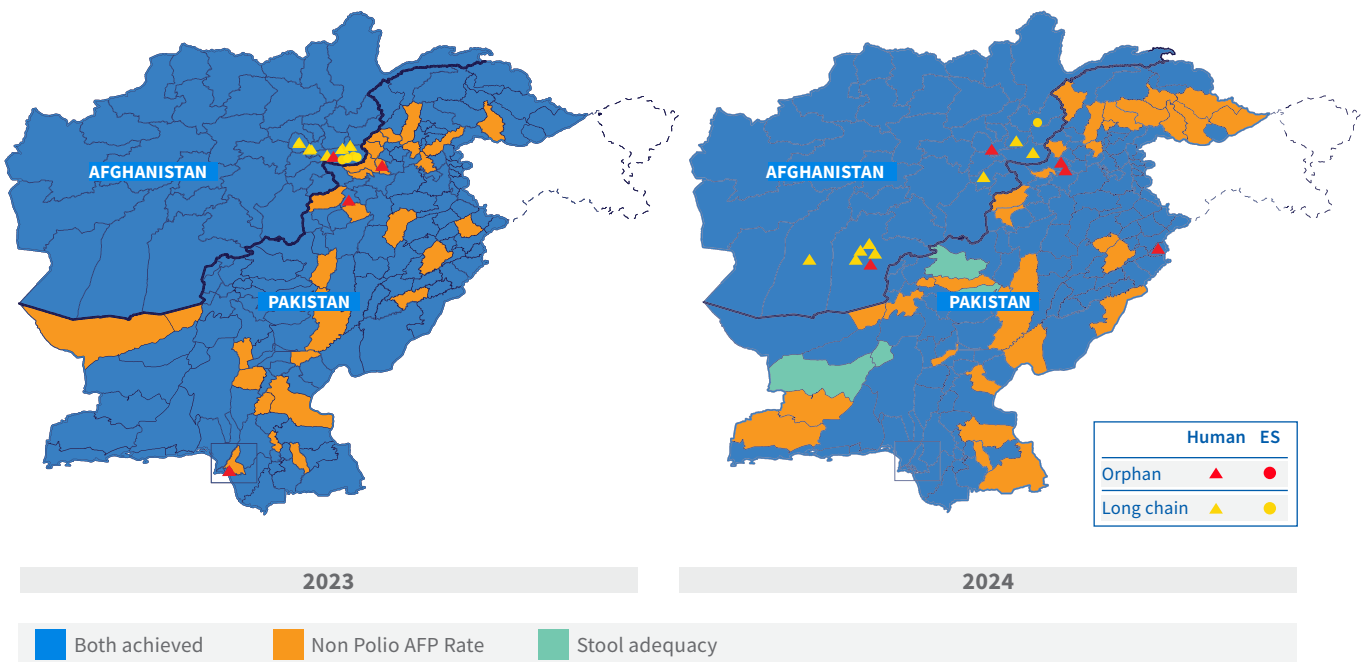
Both countries’ surveillance teams have continued to have a strong internal monitoring system which includes field surveillance reviews in prioritized geographies that take into consideration the available epidemiological information (field and molecular). The Pakistan programme conducted 71 internal reviews in 2022 and 2023 covering 140+ districts – all before the previous TAG (June 2023). A systematic follow up of actions agreed upon in these reviews has been made. Afghanistan covered 157 districts during an internal review in seven key regions in 2023. Key findings were related to knowledge of health care providers, active surveillance and systematic supervision. Corrective actions through province-specific plans were then taken, where necessary.

Critical programmatic surveillance needs

Investigating orphan viruses

Genomic sequencing of WPV1 strains from human and environmental samples demonstrate long distances between similar isolates (note that long-chain viruses are defined as 1-1.49% different in the VPV1 capsid nucleotide sequence from their closest predecessor, and orphan viruses are defined as ≥1.5% different from their closest predecessor). This highlights prolonged undetected WPV circulation and gaps in the surveillance system. The pattern of long-chain and orphan viruses suggests there are subpopulations that are contributing to persistent poliovirus transmission, including subpopulations with cross-border links, as well as potential blind spots for the programme, especially in the border districts, necessitating intricate local-level coordination along the border and across all the epidemiological corridors. Investigations of long-chain and orphan viruses should include an assessment of population links and movement patterns to guide SIA planning.

Figure 10: Joint map showing districts and provinces of Pakistan and Afghanistan meeting two key surveillance indicators (non-polio AFP rate >3 + stool adequacy >80%) separately for 2023 and 2024, overlaid by long-chain and orphan viruses for each year



Source: Acute Flaccid Paralysis and Environmental Weekly Surveillance Record Files

Improving surveillance quality at the subnational level

At the subnational level, the Pakistan programme has reported basic surveillance quality issues in critical endemic and recently reinfected core reservoir districts, namely: the Dera Ismail Khan, North Waziristan, and South Waziristan districts in the endemic zone of Southern KP, and the Pishin and Kila Abdullah districts in Quetta Bloc, noting that Kila Abdullah does not have ES. Other districts of epidemiological importance with surveillance quality concerns include Peshawar and Rawalpindi (in Punjab). Peshawar has a longstanding challenge of delayed notification of AFP cases and a pattern of detection of orphan and long-chain viruses. It is critical that any challenges with late notification are thoroughly analysed, and underlying problems resolved. In Peshawar specifically, it will be important for the PEOC to investigate viruses detected in Peshawar, and particularly orphan strains, to identify and reach epidemiologically linked populations in the area.

An aggressive search for YB3C to confirm its elimination

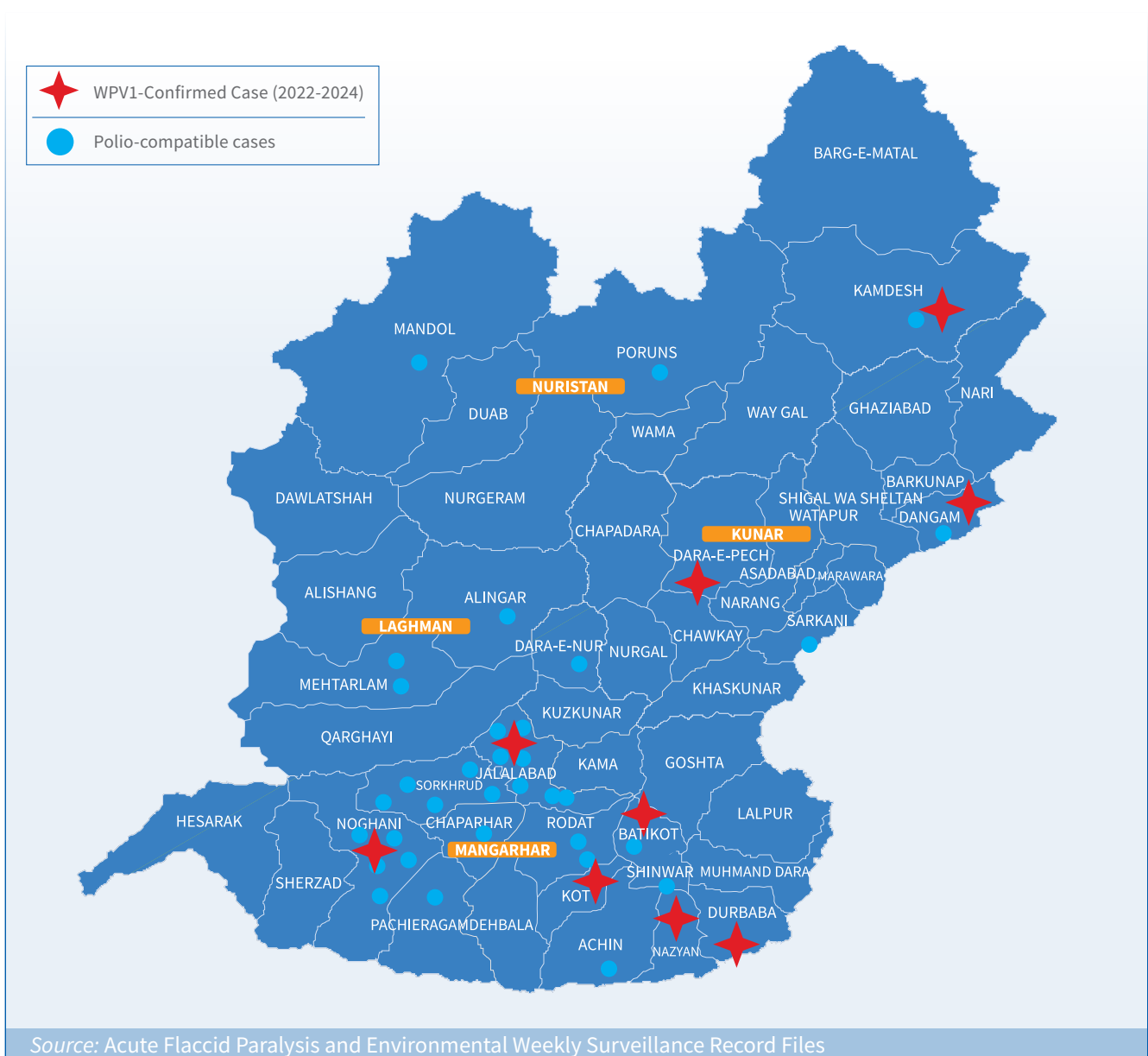
As noted in the Situation Analysis, there has been no detection of an endemic WPV1 strain related to the YB3C genetic cluster since November 2023. In the second half of 2023, all YB3C detections made were from the Bannu district, and one of them was an orphan virus (1.7% divergent from the closest match from the same district, PAK/KP/BNU/MS-1/23/009, Muslimabad Sokari site; specimen collection date 21/9/2023) (3). This reporting of orphan virus in the past 12 months, and the existence of basic surveillance quality issues in epidemiologically important districts (Dera Ismail Khan, North Waziristan, and South Waziristan Lower), are concerning and raise questions about the ability of the surveillance system in Southern KP and surrounding areas, including across the border in Afghanistan, to detect all poliovirus transmission.

Implementing the surveillance-related audit recommendations in the East Region of Afghanistan

The desk analysis from the external programme audit conducted in the East Region revealed 33 potentially polio-compatible cases in 2023 which either showed “residual weakness” at follow up or had no follow up (i.e., lost or died) and were discarded by Afghanistan’s AFP Surveillance Expert Review Committee (ERC) based on provided medical history/records. These

cases include cases from the polio-infected East and South Regions of the country (see map below). The TAG is therefore recommending a review of the ERC’s process and the adoption of the WHO case classification criteria for classifying such cases as polio-compatible, as stated in the [Global guidelines for acute flaccid paralysis \(AFP\) surveillance in the context of poliovirus eradication](#) (16), unless a non-polio cause is strongly suggested.

Figure 11: Polio-compatible cases in Afghanistan, 2022-2024



Recommendations to address gaps in surveillance or to enhance its programmatic utility in specific areas according to each risk category are provided in the relevant sections above and referenced below.

TAG Recommendations related to surveillance:

Southern Khyber Pakhtunkhwa, Pakistan

- Key AFP surveillance performance indicators are still not meeting the required benchmarks. Urgent efforts are needed to improve surveillance performance.
- Organize an aggressive search of YB3C transmission in and around Southern KP.

East Region of Afghanistan (audit recommendations)

- Continue to fully investigate every orphan virus to identify gaps in surveillance and to define links to high-risk and undervaccinated populations, focusing particularly on border districts and migrant populations.
- Review the AFP Surveillance Expert Review Committee's (ERC) process, access to diagnostic testing and adherence to WHO criteria for classifying cases as "polio-compatible," especially when a non-polio cause cannot be established.

Quetta Bloc, Pakistan

- Key AFP surveillance indicators in Pishin and Kila Abdullah are still not meeting the required benchmarks. Kila Abdullah does not have an environmental surveillance site. Urgent efforts are needed to improve surveillance performance.

Peshawar, Pakistan

- The PEOC should investigate viruses detected in Peshawar, particularly orphan strains, to identify epidemiologically linked populations in and around Peshawar Bloc, particularly the border districts.
- Peshawar has had a longstanding challenge of delayed notification of AFP cases. This challenge must be thoroughly analysed, and underlying problems solved.
- Based on the findings of investigations of orphan viruses, the programme should implement surveillance improvements.

TAG Recommendations related to surveillance:

Southeast Region of Afghanistan

- Actively search for poliovirus through intensified AFP surveillance and environmental sampling, given the risks of undetected transmission of YB3C and repeated introductions from the Southern corridor.

Punjab, Pakistan

- The programme should diligently evaluate the quality of surveillance and vaccination activities (RI, SIAs) in these districts, taking into consideration migrant and mobile populations.

Central Pakistan

- The NEOC should designate a team to assist the PEOC Coordinators in timely coordination of surveillance, risk assessment, and SIA activities across the three provinces.

Northern corridor

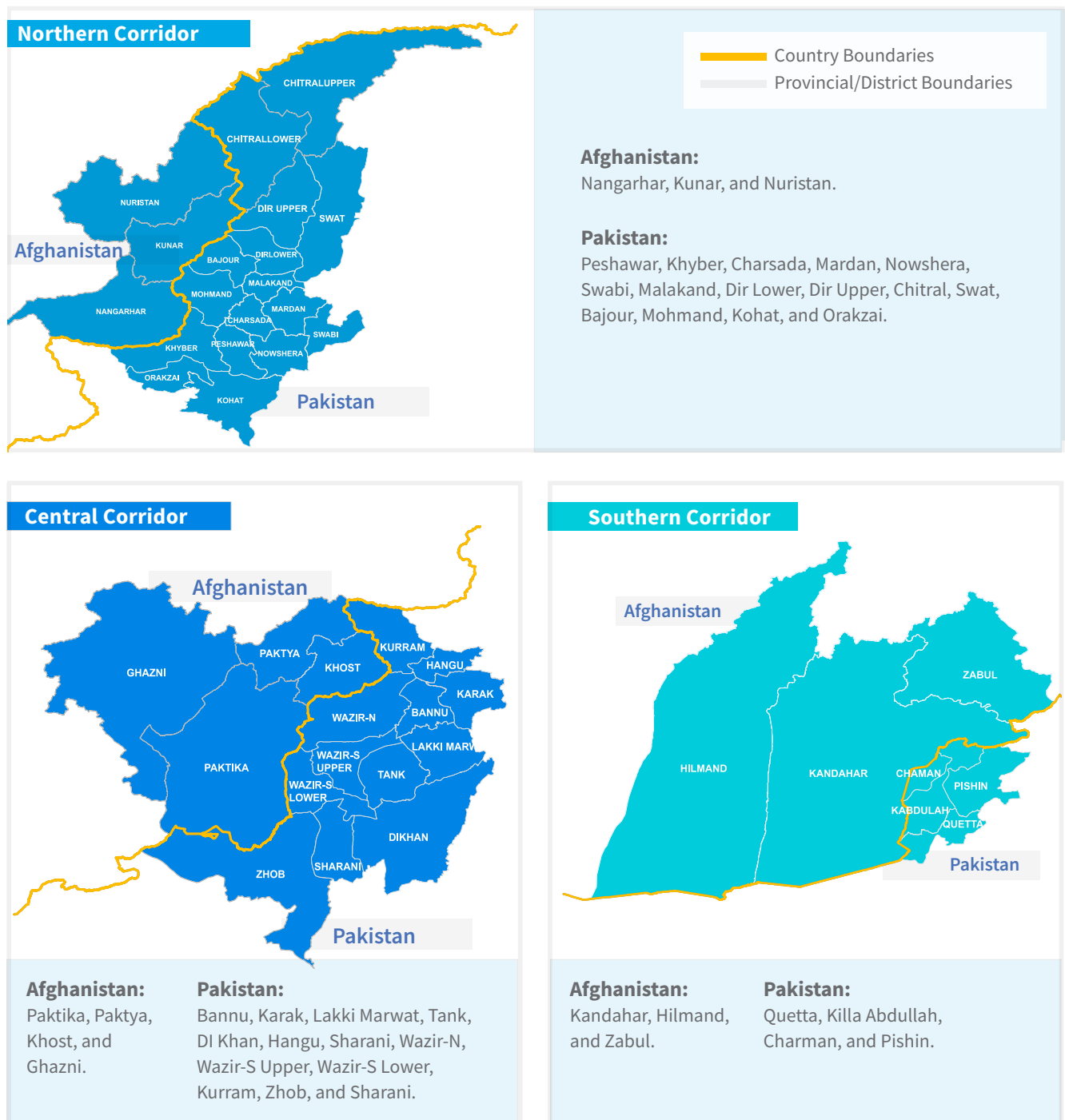
- The pattern of environmental detections, including long-chain and orphan viruses, strongly suggests that populations living in bordering districts are contributing to the persistence and spread of WPV1. Both countries should continue regular programme performance reviews, identify missed communities, and search for poliovirus in all districts along the border.
- The GPEI should conduct a similar audit to the one conducted in the East Region of Afghanistan on the Pakistan side of relevant districts in and around the Northern corridor.

Cross-border coordination

- Ensure timely joint investigation of all cross-border importations, particularly orphan viruses, and use this information for action.

CROSS-BORDER COORDINATION

Figure 12: Map of the three corridors comprising the Afghanistan-Pakistan border



As noted in the Surveillance section, current epidemiological data complemented by genetic analyses of polioviruses, risk modelling, and the pattern of ES detections suggests that subpopulations, including those with cross-border links, are contributing to the spread of poliovirus transmission.

The recent audit in the East Region of Afghanistan confirmed ongoing population movement along the Northern corridor and across the border to and from Pakistan. Recent WPV1 detections in the sewage samples in the Southeast Region (Ghazni, and Paktika) also highlight movements between the Southeast Region and the Southern corridor (3). There is increased risk of transmission in the Southern corridor because of the substantial immunity gap in the South Region of Afghanistan due to the absence of the H2H vaccination campaign modality as well as low RI coverage. More than 600 000 returnees have crossed from Pakistan into Afghanistan since September 2023 with border crossings peaking during October to December (11).

This ongoing movement across all corridors highlights the fact that Afghanistan and Pakistan truly are one epidemiological bloc and underlines the importance of continued cross-border coordination. The country programmes have already undertaken significant efforts. The GPEI Hub for Afghanistan and Pakistan and WHO and UNICEF country offices in Afghanistan have activated coordination mechanisms with the International Organization for Migration (IOM) and other entities in Afghanistan and Pakistan to better understand population movements and register and vaccinate returnees. Activities are already underway, and the programme in Afghanistan has been advised to adjust local microplans to include these populations for polio SIAs before each campaign and for RI. Regular coordination mechanisms between the country polio programmes are already in place, including monthly virtual meetings, national face-to-

face meetings, and the ongoing exchange of epidemiological data and activity tracking. The GPEI Hub also conducts quarterly corridor analyses to identify programme performance at the district level for surveillance and SIAs. Gaps are identified and discussed during the coordination meetings, and corrective actions are strategized if warranted.

Yet challenges remain. Synchronization of polio vaccination campaigns between the two countries has not been consistent, constituting a significant lost opportunity; and while vaccination at transit posts along heavily-trafficked routes has long been a major cross-border initiative of the GPEI, visits to permanent vaccination posts at border crossings have made clear that closer collaboration is needed at the operational levels in terms of joint supervision and surveys of populations crossing the border on their vaccination status in order to better understand programme quality and population movement patterns. Additionally, population mobility within both countries has become more diverse and less predictable in its patterns – including not just the movement of returnees, but also more localised refugee movement and highly localised day-to-day mobility within and between districts, including in poorly monitored and accessed border areas, as indicated by orphan and long-chain detections. A key next step in this regard will be to conduct an external programme audit in selected districts of the Northern corridor in Pakistan like the one conducted in the East Region of Afghanistan, so that strategies for reaching missed populations on both sides of the border can be identified and implemented.

TAG recommendations for cross-border coordination:

Northern corridor

- The pattern of environmental detections, including long-chain and orphan viruses, strongly suggests that populations living in bordering districts are contributing to the persistence and spread of WPV1. Both countries should continue regular programme performance reviews, identify missed communities, and search for poliovirus in all districts along the border.
- The GPEI should conduct a similar audit to the one conducted in the East Region of Afghanistan on the Pakistan side of relevant districts in and around the Northern corridor.

Cross-border coordination

- Ensure timely joint investigation of all cross-border importations, particularly orphan viruses, and use this information for action.
- Focus on identifying religious and community influencers who should be mobilized to facilitate vaccination of reluctant communities on both sides of the borders.
- Ensure the timely exchange of information including case investigation reports, outbreak response planning, movement of migrant, mobile and returnee populations, and updated microplans before each campaign.
 - Update the national and subnational frameworks and action trackers.
 - Strengthen communication and coordination with all agencies working on cross-border activities (IOM, UNHCR, Red Crescent Societies).
 - Update the cross-border vaccination records regularly.
- The TAG re-emphasizes that the GPEI Hub should continue facilitating the coordination of cross-border activities, ensuring optimal local coordination within the most critical districts of the cross-border corridors. The Hub should also organize the external audit on the Pakistan side of the Northern corridor.
- Complete the analysis of cross-border synchronisation at the district level.
- Comply with the International Health Regulations (IHR) requirement (vaccinate outgoing populations) and screen incoming populations to confirm vaccination status.
- Conduct joint monitoring and evaluation of permanent vaccination posts at formal border crossings and assess vaccination status of populations crossing the borders including returnees.
- The TAG reiterates its recommendation on joint analysis of refusals, and joint messaging among cross-border populations.

PLUSES AND COLLABORATION

WITH OTHER PROGRAMMES

Polio Eradication Initiative/Essential Programme on Immunization (PEI/EPI) Synergy

RI remains the bedrock of sustainable progress through the interruption of poliovirus transmission to certification of polio eradication. Collaboration and synergy with the RI programme therefore needs to be fundamental to GPEI collaboration, to provide a foundation of immunity through RI services that will allow the polio programme to cover hard-to-reach communities and areas.

Both countries are implementing synergistic activities between the polio eradication initiative (PEI) and EPI programmes. For example, integrated multi-antigen campaigns have taken place in Afghanistan, and the polio monitoring structure also supports RI (17). In Pakistan, EPI and PEI teams have conducted joint root cause analysis (RCA) to ensure data accuracy and assess immunization coverage. They have also

included messaging from both programmes in communication materials (18). During each vaccination campaign, zero-dose children are systematically identified and shared with EPI for their follow up, and coverage is also monitored. In critical high-risk UCs, the PEI has invested resources to enhance EPI service delivery. Additional initiatives include Reaching the Unreached (RUR) in Southern KP, through which the Pakistan EPI and polio programmes worked to reach zero-dose and underimmunized children with polio and other key routine vaccines across 69 high-risk UCs, under the direction of the Federal Directorate of Immunization (FDI). OPV coverage across three rounds of RUR was high, with 84% coverage being achieved in the third round (4). And through Pakistan's innovative Nomads Vaccination Initiative, biker teams have administered polio drops to more than 30 000 children in nomadic settlements in 17 districts, delivered over 11 000 doses of IPV, and administered 12 000 doses of other routine vaccines (19).

Yet this collaboration and progress achieved within countries is often uneven, and weaknesses in current EPI denominators make robust assessment of progress in coverage difficult to achieve. Important opportunities include collaboration at the strategic level, for example by coordinating on multi-antigen initiatives as well as the Big Catch-Up, and by

sharing resources when and where possible. Enhancing collaboration at the operational level is also critical and can be achieved by sharing microplanning data to assist in recalibrating denominators, reaching the unreached and closing coverage gaps, and enabling joint monitoring.

TAG recommendations:

Polio/Essential Programme on Immunization (EPI) Synergy

- The TAG encourages the PEI programmes to urgently share microplanning data on target populations to assist EPI in recalibrating EPI/RI denominators and to enable joint monitoring. The TAG recognizes the opportunity to engage with the Big Catch-Up and recommends timely alignment and coordination with Big Catch-Up activities in ways that improve coverage of the Big Catch-Up and ensure the sharing of data on zero-dose and high-risk vulnerable populations, without jeopardizing the quality of ongoing polio SIAs.
- All opportunities should be taken to leverage Big Catch-Up resources and other Gavi funds to strengthen government health systems and EPI service delivery.

Integrated service delivery (ISD) and pluses

Both countries provided examples of contexts where the delivery of OPV alone is not sufficient to achieve high coverage, or to overcome the challenges of both accessing and encouraging community engagement and demand. These range from using “pluses” (e.g., soap provided alongside polio vaccines) to addressing the wider health service demand from communities in poorly served and remote areas in Pakistan, particularly in the Khyber Pakhtunkhwa province through health camps, and providing additional pathways to vaccinate children in security-compromised areas.

The leverage of these additional interventions is seen as both necessary and effective in most of the contexts in which they are being targeted, with some evidence

demonstrating impact; yet it was also clear from the meeting presentations and discussions that these interventions need to be formulated to address specific community needs and drivers, be thoughtful in their geographical range, and have plans for continued provision so as not to create wider unintended consequences – and ideally also have a pathway for the more sustained delivery of interventions as polio transitions out. Developing the evidence base of efficacy (whether in accessing additional eligible households/children for vaccination or acting as a stimulus for hitherto reticent households to accept vaccination during SIAs) for both pluses and health camps, based on a clearer design of specific strategic initiatives (e.g., a composition of plus offer, range of goods/services available at camps), will assist the case for continuing and future investment.

Humanitarian engagement

There are geographies and subpopulations in Afghanistan which have diverse access challenges due to difficult terrain, insecurity, socio-cultural barriers, or vaccine hesitancy. These access challenges lead to unreached children, many of them persistently, and thus contribute to poliovirus transmission.

Reaching these additional children is therefore a key factor in interrupting transmission. Humanitarian organizations have stood up large humanitarian response programmes across Afghanistan, including in polio-priority areas. Given the depth and breadth of this response, the polio programme is collaborating with 10 organizations to support their activities and leverage their response efforts to reach additional children with polio vaccines. The main objective of this collaboration is to contribute to lifesaving humanitarian assistance while identifying ways to expand the reach of polio vaccination and RI in polio-priority areas.

The specific objectives of this GPEI humanitarian intervention include: increasing OPV coverage among children in polio-priority regions in Afghanistan, with a particular focus on children that have been previously missed by polio programme campaigns; supporting the detection of AFP case reporting; defaulter tracing for RI; supporting case response; and delivering life-saving humanitarian assistance to high-risk communities. This includes nutritional screening of 6- to 59-month-old children (and enrolment or referral for treatment for those diagnosed with severe or moderate acute malnutrition), reproductive health services, outpatient medical treatment for children and adults and health education and awareness sessions.

The overall success of the engagement is to be measured by how many children previously missed by campaigns are vaccinated with OPV by humanitarian actors, with all humanitarian agencies reporting polio vaccine delivery indicators monthly at the district level and other indicators reported on a quarterly basis in the South Region of Afghanistan.

TAG recommendations:

Pluses, health camps, integrated service delivery (ISD), and humanitarian engagement in Afghanistan

- Complete a full evaluation of pluses/health camp/ISD interventions in Kandahar City, including coverage of target populations through health camps and S2S vaccination.
- Continue to plan and engage humanitarian actors' support in the South Region.
- Assess the impact of small-scale pluses in specific border areas.

Pluses, health camps, and integrated service delivery (ISD) in Pakistan

- Complete a full evaluation of pluses/health camps/ISD interventions and their impact on improving coverage.
- Ensure that the opportunity of the Big Catch-Up, which will provide IPV vaccinations to all children under five years of age, is seized and aligned.

CONCLUSION

While significant progress has been made in both countries, including toward the elimination of the YB3C cluster of the virus, endemic transmission has essentially been re-established in Kandahar and Peshawar, with the remaining historic polio reservoirs of Karachi and Quetta Bloc also on the verge of re-establishing endemic transmission. In the current epidemiological context, the window of opportunity to interrupt transmission in Afghanistan and Pakistan will soon close unless the programme fully harnesses its capabilities and resources and returns to implementing the fundamental principles of the polio programme with a renewed focus.

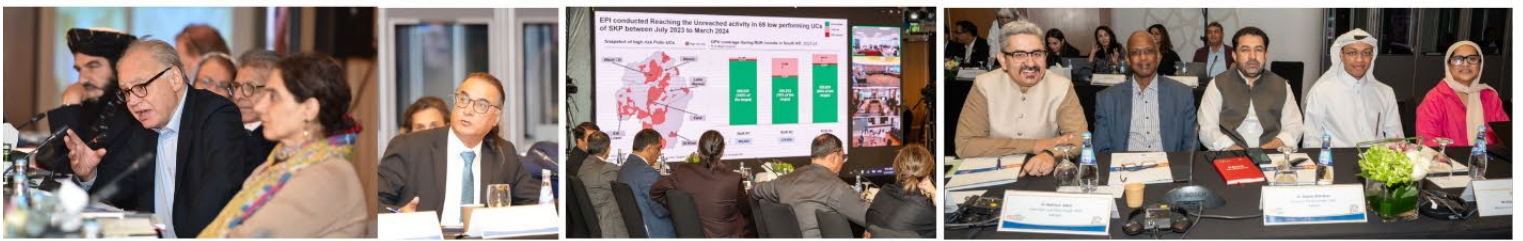
- The goal of eliminating YB3C cluster during 2024 in Southern KP is feasible; however, interrupting all WPV1 transmission by the end of 2024 under the current circumstances is unrealistic. WPV1 interruption may be possible in the next low season that ends in mid-2025 if the TAG recommendations are implemented urgently and comprehensively.

Progress against these targets and toward the implementation of all TAG recommendations as captured in this report will be assessed during **the next in-person TAG meeting in November 2024.**

Overarching priorities for the next six months to interrupt WPV1 transmission:

- Strong leadership, coordination, team cohesion, consistent support to frontline workers and performance management at all levels.
- Interruption of transmission in the endemic zones (Southern KP in Pakistan and the East Region in Afghanistan) and historic reservoirs in both countries.
- Prevention of large-scale paralytic polio outbreaks in the South Region of Afghanistan.
- Addressing identified gaps in the programme including migrant and mobile populations, border districts and missed children – particularly in areas where programme pressure dynamics have led to underestimation of missed children, collusion and fake vaccination, and issues with surveillance and data quality.

The TAG expresses its gratitude to the Afghanistan and Pakistan country programmes and particularly to the frontline workers, to the meeting hosts and participants, and to all involved in the Global Polio Eradication Initiative. The TAG is confident in the programme's ability to deliver on the ambitious shared goals outlined in this report of its May 2024 meeting and looks forward to reviewing progress in November.





WHO/Pakistan

ANNEX

REFERENCES

2024 TAG MEETING AGENDA

LIST OF PARTICIPANTS

QUESTIONS TO THE TAG FROM PAKISTAN AND AFGHANISTAN

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2024 TAG MEETING AGENDA

Meeting Objectives:

1. Review the overall progress in the past 11 months and current strategies and action plans for interrupting WPV1 transmission.
2. Review the implementation of outbreak response and advise modifications to understand reason(s) for re-establishing WPV1 circulation in historic reservoirs.
3. Review strategies adopted by Afghanistan and Pakistan to map, track, and vaccinate migrant settlements and communities especially in bordering districts and provide guidance.
4. Review and suggest SIA schedule for the remainder of 2024.

Day One		
Wednesday, 22 May 2024		
8:45-9:00	Registration	
9:00-10:00	Opening Session	
	Recitation of Holy Quran	
	Dr Rayana Bou Haka WHO Representative Qatar	
	Dr Jean-Marc Olivé TAG Chair	
	Dr Tajudeen Oyeyemi Oyewale Representative UNICEF Afghanistan	
	Dr Qalandar Jan Ibaad Acting Minister of Public Health Afghanistan	
	Mr. Malik Mukhtar Ahmad Bharath Coordinator to the Prime Minister on Health Ministry of National Health Services, Regulations, and Coordination	
	Mr Aidan O’Leary Strategy Committee Chair	
	Dr Hamid Jafari Director Polio WHO EMRO	
	Her Excellency Dr Hanan Mohamed Al Kuwari Minister of Public Health Qatar	
	Introduction of Participants	
Meeting Objectives		
Group Photo		
10:00-10:30	<i>Coffee Break</i>	
Technical Session: Setting the Context		
10:30-11:00	Global Updates	Aidan O’Leary, Director POL, WHO HQ

Day One

Technical Session: Setting the Context

11:00-12:00	<p>Overview of Afghanistan Polio Programme (Maximum 15 Slides)</p> <ul style="list-style-type: none"> • Provide an understanding of WPV1 epidemiology and a plan to interrupt transmission in the endemic zone. • How is Afghanistan responding to outbreaks? • What are the strategies adopted to map, track, and vaccinate the migrant and returnee populations? <p>Discussion</p>	NEOC Afghanistan
12:00-13:00	<p>Overview of Pakistan Polio Programme (Maximum 15 Slides)</p> <ul style="list-style-type: none"> • Provide an understanding of the YB3C epidemiology, and how confident is the programme in the progress towards elimination of YB3C? • What are the approaches adopted to stop poliovirus transmission in historic reservoirs and other geographies (outside endemic region) by end of 2024? • What are the strategies adopted to map, track, and vaccinate the migrant populations? <p>Discussion</p>	NEOC Pakistan
13:00-14:00	<i>Lunch Break</i>	
14:00-14:20	Molecular Epidemiology	Salmaan Sharif
14:20-14:30	Risk Assessment and Modelling	IDM
14:30-15:00	Discussion	
15:00-15:15	<i>Coffee Break</i>	
<h3 style="text-align: center;">Technical Session: Overview and Way Forward Endemic Regions of Pakistan and Afghanistan</h3>		
15:15-15:30	<p>Overview of Southern KP (Maximum 8 Slides)</p> <ul style="list-style-type: none"> • How is the programme managing surveillance and SIAs, and what are the remaining challenges? • What is the status of missed children? 	PEOC KP
15:30-16:00	Discussion: Conclusion on SKP	
16:00-16:15	<p>Overview of East Region of Afghanistan (Maximum 8 Slides)</p> <ul style="list-style-type: none"> • What are the potential reasons for continued WPV transmission in the East Region? • What is the status of missed children? Specific population groups program is not able to reach and may be contributing to WPV transmission? • Reasons which facilitated WPV in low-risk districts in 2024 • What do we need to do more? 	REOC East

Day One		
Technical Session: Overview and Way Forward Endemic Regions of Pakistan and Afghanistan		
16:15-16:30	Independent External Audit: East Region	Sebastian Taylor
16:30-17:00	Discussion: Conclusion on East Region	
17:00-17:30	Way Forward for Endemic Zones (Southern KP and East Region) <ul style="list-style-type: none"> • What are the strategies adopted to reach missed children? • Strategies to map and reach migrant and populations in border areas 	
18:00-20:00	Closed Session of TAG	

Day Two		
Thursday, 23 May 2024		
Technical Session: Poliovirus Outbreaks in Historic Reservoirs		
9:00-10:00	Overview of Poliovirus Epidemiology in South Region (Maximum 8 Slides) <ul style="list-style-type: none"> • Understanding poliovirus epidemiology in the South Region (highest risk) and risk of establishing circulation • What are the adopted strategies to capitalize on H2H access? <ul style="list-style-type: none"> ○ Opportunities, needs, and remaining challenges • Plans for reaching all children in Kandahar city Discussion on South Region	REOC South
10:00-11:00	Overview of Poliovirus Epidemiology in Quetta Bloc (Maximum 8 Slides) <ul style="list-style-type: none"> • Situation analysis and challenges • What is needed to ensure quality vaccination rounds and poliovirus interruption? • What are the strategies adopted to map, track, and vaccinate the migrant and border populations? Discussion on Quetta Bloc	PEOC Balochistan
11:00-11:15	<i>Coffee Break</i>	
11:15-12:00	Overview of Poliovirus Epidemiology in Karachi Bloc (Maximum 8 Slides) <ul style="list-style-type: none"> • What are remaining challenges to reach all unreached children in Karachi Bloc (addressing refusals, fake vaccination, NA, collusion, pressure, fatigue) • What are the strategies adopted to map, track, and vaccinate the migrant populations? Discussion on Karachi Bloc	PEOC Sindh

Day Two

Technical Session: Poliovirus Outbreaks in Historic Reservoirs

12:00-13:00	<p>Conclusion of YB3A Epidemiology in Southern Corridor (Linking South Region, Quetta, and Karachi Blocs)</p> <ul style="list-style-type: none"> What are the strategies adopted to map, track, and vaccinate the migrant and border populations? <p>Risk of persistence of poliovirus transmission in historic reservoirs</p>	
13:00-14:00	<i>Lunch Break</i>	
14:00-15:00	<p>Punjab and Comment on Central Pakistan</p> <p>Describe Poliovirus Epidemiology in Lahore, Faisalabad, Rawalpindi, and South Punjab</p>	PEOC Punjab
15:00-16:00	<p>Overview of Poliovirus Epidemiology in Southeast Region (Maximum 8 Slides)</p> <ul style="list-style-type: none"> What should be done to ensure there is no spillover of YB3C from southern KP? <ul style="list-style-type: none"> Rule out the possibility of YB3C in bordering districts of Afghanistan Overview of SIA quality Remaining risks and way forward <p>Discussion on Southeast Region</p>	REOC Southeast
16:00-16:45	<p>Conclusion on YB3A and YB3C Epidemiology in Central corridor (Linking Southern KP and Southeast Region)</p> <ul style="list-style-type: none"> Key takeaways and perspectives related to shared populations. <ul style="list-style-type: none"> Formal and informal cross-border movement Discussion on missed populations in bordering areas <ul style="list-style-type: none"> Inaccessibility (if any) What are the strategies adopted to map, track, and vaccinate the migrant populations? 	
16:45-17:00	<i>Coffee Break</i>	
17:00-18:00	<p>Overview of Poliovirus Epidemiology in Peshawar Bloc (Maximum 8 Slides)</p> <ul style="list-style-type: none"> What did Peshawar team do to deal with multiple detections in context with vaccination of population on move? How to interrupt polio virus transmission in Peshawar? What are remaining challenges to reach all unreached children (addressing refusals, fake vaccination, NA, collusion, pressure, fatigue) <p>Discussion on Peshawar Bloc</p>	PEOC KP

Day Two

Technical Session: Poliovirus Outbreaks in Historic Reservoirs

18:00-18:30	<p>Conclusion on YB3A Epidemiology in Northern corridor (Linking East Region and Peshawar Bloc)</p> <ul style="list-style-type: none"> • Key takeaways and perspectives related to shared transmission. • Discussion on missed populations in bordering areas <p>What are the strategies adopted to map, track, and vaccinate the migrant populations?</p>
19:30-21:30	Closed Session of TAG

Day Three

Friday, 24 May 2024

Technical Session: Cross-Cutting

9:00-10:00	EPI - PEI Synergy
10:00-10:45	<p>Overall National SBCC Perspective: Sub Categorized into Risk Zones (endemic areas and historic reservoirs (Maximum 8 Slides)</p> <ul style="list-style-type: none"> • Current SBC interventions and their results/achievements • Challenges that are both dynamic and complex with clear depiction of the multi factor and multi sector involvements • SBCC strategies (based on achievable factors) <p>Discussion</p>
10:45-11:15	<i>Coffee Break</i>
11:15-13:00	<i>Prayer Break</i>
13:00-14:00	<i>Lunch Break</i>
14:00-15:00	<p>Pluses: Review of Last Six Months and Strategies for Way Forward (Afghanistan and Pakistan) (Maximum 8 Slides)</p> <ul style="list-style-type: none"> • Where have pluses been deployed in last 12 months? • What were the pluses? • What was the impact? • Way forward <p>Discussion</p>
15:00-15:15	<i>Coffee Break</i>
15:15-16:00	<p>Integrated Programming (SBC and Operations) and Way Forward (Limitations and Challenges)</p> <ul style="list-style-type: none"> • Best practices • Lessons learnt. • Remaining challenges • Way forward <p>Discussion</p>

Day Three	
Technical Session: Cross-Cutting	
16:00-17:30	<p>Programme Efficiencies in Bordering Districts and for Migrant Populations</p> <ul style="list-style-type: none"> • Synchronization • Mapping, tracking, and vaccinating migrant populations. <ul style="list-style-type: none"> ○ Grass-root level microplanning • Monitoring • Cross-border vaccination (formal and informal crossing points) <p>Discussion</p>
17:30-17:45	Wrap Up
18:00-22:00	Closed Session of TAG

Day Four	
Saturday, 25 May 2024	
TAG Recommendations	
9:00-13:00	Closed Session of TAG
13:00-14:00	<i>Lunch Break</i>
16:00-18:00	TAG Recommendations
18:00-19:00	Closing Remarks
	Mr. Malik Mukhtar Ahmad Bharath Coordinator to the Prime Minister on Health Ministry of National Health Services, Regulations, and Coordination
	Dr Qalandar Jan Ibaad Acting Minister of Public Health Afghanistan
	Closing Remarks by CDC
	Closing Remarks by BMGF
	Closing Remarks by UNICEF
	Closing Remarks by Rotary International
	Closing Remarks by GAVI
	Closing Remarks by Donors
	Mr Aidan O’Leary Strategy Committee Chair
	Dr Hamid Jafari Director Polio WHO EMRO
	Dr Jean-Marc Olivé TAG Chair
	Date of Next TAG Meeting November 2024
Vote of Thanks	

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QUESTIONS TO THE TAG FROM PAKISTAN AND AFGHANISTAN

Questions from Pakistan:

1. The programme encounters communication challenges stemming from repeated knocks due to frequent and sudden campaigns (outbreak responses), leading to a cycle of hidden refusals manifesting as not available children, refusals, misconceptions on vaccine efficacy, etc., giving rise to questions such as “How many times do I need to vaccinate my child?” and fatigue-based findings through community feedback sessions, social listening and engagement with communities. How do we balance the epidemiological need (number of doses) with the voices of the community?

It will be critical to thoughtfully plan SIAs by considering all epidemiological factors, focusing on integrating SBCC and operations at all levels including microplanning, and bearing in mind that the overall need is for high-quality, high-coverage campaigns. This may result in fewer or differently spaced campaigns than previously envisioned. This is why the TAG recommends carefully planned SIAs for the remainder of 2024 based on the core principles outlined in the TAG’s recommendations for quality SIA implementation for each risk category.

2. What would the TAG’s recommendation be for balancing the need for large SIAs in the second half of 2024 with narrowly-focused campaigns targeting vulnerable

subpopulations? What is the relative risk to population immunity declining with a narrower SIA approach when YB3A continues to circulate widely?

Given the evolving epidemiology, the TAG reiterates that the foremost priority for SIAs is ensuring that: a) all efforts are targeted toward reaching persistently missed children in epidemiological priority areas, and b) all gaps in quality are identified and addressed rapidly. The TAG advises the country programmes to refer to the principles for SIA implementation following the same risk categorization as previously advised, with slight adjustments based on the ongoing risk assessment. These principles are found in the Quality SIA Implementation section of this report.

3. What is the TAG’s recommendation for fIPV use as part of outbreak response after three rounds of OPV have been completed and there is breakthrough transmission? Does the TAG have recommendations for repeat IPV efforts in Chaman and Killa Abdullah, given the immunity gap there and virus detection despite multiple rounds?

The TAG supports the use of fIPV in historic reservoirs (Peshawar, Quetta and Karachi) with a targeted approach, not broadly. The focus should be on areas with migrant and mobile populations and clustered missed children (including areas/subpopulations with high rates of vaccine avoidance/hesitancy). The recommendations for the use of fIPV are found in the Quality SIA Implementation section of this report.

4. What are the surveillance and vaccination benchmarks that the TAG would set to confirm the absence of YB3C in Southern KP?

Given the presence of basic surveillance quality issues in Southern KP and the reporting of an orphan WPV1 strain of the YB3C cluster in the fourth quarter of 2023, the TAG emphasizes the need to thoroughly investigate the underlying reasons for identified gaps in surveillance and to address them systematically to reach national and global benchmarks as per the National Emergency Action Plan and the GPEI Guidelines for Surveillance SIAs, respectively. Additionally, it will be important to conduct an aggressive search for YB3C across the Central corridor and neighbouring geographies. For the comprehensive list of recommendations for Southern KP, please refer to the relevant section in this report (Findings and Recommendations: Southern KP, Pakistan).

5. Is the programme's understanding of the epidemiology of YB3A correct?

Based on a thorough analysis of the molecular epidemiology, the TAG has inferred that YB3A is widely circulating in Pakistan and the historic reservoirs are sustaining its transmission. Peshawar Bloc now has endemic circulation of a YB3A-associated strain, whereas the Karachi and Quetta Blocs have re-established transmission and are on the verge of re-establishing endemic transmission. This is leading to the spread of the virus to various parts of Pakistan and poses a significant risk of spread to other countries, Afghanistan and Iran in particular. Please refer to the Situation Analysis section of this report for further reading on the current epidemiology.

6. How much of its efforts should the programme direct towards migrant and mobile populations? Are our current approaches to reach them sufficient?

Keeping in view the pattern of long-chain and orphan viruses, and the sharing of transmission especially across the corridors of movement, the TAG emphasizes an immediate and imperative need to redefine and remap migrant and mobile populations. The Pakistan and Afghanistan NEOCs should provide technical guidance, develop SOPs, and document best practices for mapping, tracking and coordinated efforts (operational and SBCC) to vaccinate these population groups. The TAG also stresses that there should be sufficient dedicated monitoring to identify missed children in these high-risk groups, and a segregated analysis and report should be available to demonstrate the programme's reach in these populations for surveillance, SIAs, RI and SBCC. Please refer to slides No. 65 and 66 in the slide deck for the findings and recommendations of the TAG.

7. Are the programme's current strategies to unmask collusion and identify the actual number and reasons for missing children appropriate? What more should the programme consider?

The TAG appreciates the initiative taken in historic reservoirs in Pakistan to uncover fake finger marking, misreporting and the gross underestimation of missed children. The NEOC Pakistan should develop clear guidance for PEOCs to systematically identify the true extent of missed children in high-risk UCs and population groups in historic reservoirs. These guidelines should outline best practices for management, FLW motivation and capacity building, and ongoing monitoring and analyses of data based on lessons learned across different reservoirs. Additionally, the TAG recommends that the teams tackle persistent gaps in the programme regarding leadership and strengthening coordination, accountability, and team cohesion in an urgent manner. Please reference slides No. 76 and 77 in the slide deck for the findings and recommendations of the TAG.

Questions from Afghanistan:

1. Can we increase the age limit up to 10 years for the three consecutive campaigns after resuming the H2H modality in the South Region?

The TAG endorses expanding the age for SIAs in the South Region given the absence of H2H vaccination campaigns for over six years and given the immunity gap in children of older age. One of three cases in 2024 from the South Region is aged 55 months. The TAG advises starting H2H vaccination with children under five years of age and, after building trust all around, conducting two expanded-age SIAs after assessing the feasibility. Please refer to slide No. 38 in the slide deck for the TAG's findings and recommendations.

2. What are some other interventions to apply for addressing the chronic refusals in the Southeast Region?

a. The number of refusal children of polio vaccine has gradually increased since the start of the campaign's H2H modality in November 2021. Looking into the number since the last TAG, we have seen that the number has increased approximately 59% (12 166), which is a point of concern.

b. To reduce this number and reach every child in the Southeast Region, we have implemented community engagement sessions, SBCC strategies, digital media engagement, the establishment and functionalization of the refusal oversight committee, task force meetings with cross-sectional government organizations,

and the deployment of Islamic scholars through the Islamic advisory group. To cope with this problem, the programme would like to seek ideas on further interventions beyond the above-mentioned activities for addressing these persistent refusals in the region.

The TAG affirms the intensification of the ongoing integrated operational and SBCC efforts to immunize all persistently missed children, particularly in known clusters of refusals. The TAG advises collaboration across the Central corridor for identifying common influencers and messaging to promote vaccination. The GPEI Hub may facilitate the two programmes in this regard. Please refer to slide No. 59 in the slide deck for the TAG's findings and recommendations.

3. Can we consider having four NIDs annually so that immunity is maintained in non-sNID districts? (Most districts still have poor RI coverage, and there is increased population movement between provinces and regions because of improved security and accessibility.)

The TAG recognizes the underlying challenge reflected in the question. Taking these and other strategic and operational aspects into consideration, the TAG advises referring to slides No. 70 and 71 which describe principles for SIAs in Afghanistan and in Pakistan. The TAG recommends reassessment of another NID in the country in the fourth quarter of 2024.

4. Should the routine EPI schedule include a booster dose of OPV at 18 months of age? (The current EPI schedule has OPV at birth, 6, 10, 14 weeks, and 9 months. At 18 months of age, children are given a Measles-2 dose. This contact can be used as an opportunity to provide a booster dose of OPV to all children.)

The TAG advises consulting the national policy-making bodies in this regard. However, the TAG is of the opinion that the programme should aim at uniformly high RI coverage for OPV using the current schedule.

5. Can the opportunity of measles-rubella (MR) vaccine introduction be utilized for wide age range OPV+ IPV campaigns? (Afghanistan is one of few countries which is yet to introduce the rubella vaccine, which is planned during 2024-25. Before the introduction, an MR campaign will be conducted followed by inclusion in the EPI schedule. OPV is generally included in such campaigns. Can this opportunity be utilized for an OPV+IPV campaign for better immunity, as MR is also an injectable campaign?)

Afghanistan now has full access for H2H campaigns across the country, barring Kandahar. At this point in time, The TAG advises the use of OPV+IPV as an add-on in a very strategic manner in epidemiologically high-priority areas with the aim of “reaching the unreached.”

6. Does scientific evidence in terms of seroprevalence in different age and population groups have scope to guide the programme on further strategy since there is continued virus transmission despite high-quality campaigns?

The TAG maintains its previous opinion and recommendation on seroprevalence studies. This is not going to bring any added value to the programme at this time in terms of impacting the programme’s operational strategies in the near future.

7. Can we be supported to implement the Strategic Advisory Group of Experts on Immunization (SAGE) recommendations to apply the IPV + OPV? (Both IPV and OPV can be administered to the child at the same time. It is in the best interests of the child to receive both vaccines at the same time to maximize protection against polio and minimize missed opportunities to fully immunize children.)

In line with the SAGE recommendations and earlier TAG recommendations, fIPV SIAs in the East Region are endorsed after ensuring the fullest implementation of the recommendations of the independent external programme audit in April/May 2024.

The TAG also supports the use of IPV in the South Region following the completion of the three planned H2H SIAs, given the existence of a large immunity gap and the benefit of a rapid immunity boost by fIPV in OPV-primed children. Please refer to slide No. 72 in the slide deck for the TAG’s findings and recommendations.

8. While all ES circulation and human cases are of type 1 poliovirus, all responses are with bivalent OPV (bOPV). Considering the importance of stopping ongoing circulation, is any effort being made to make monovalent type 1 vaccine available?

The available data reflects that the difference in immunogenicity from bOPV and monovalent OPV type 1 (mOPV1) is not statistically significant. Also, it is important to consider that the scale and frequency of responses are such that global stockpiles of mOPV1 will not be sufficient and provision of needed mOPV1 in the near future does not appear to be feasible. In view of this, the TAG advises continuing the use of bOPV in polio SIAs and in RI. The Afghanistan programme has demonstrated that WPV1 can be interrupted by using bOPV if the recommended strategies are implemented comprehensively.

POLIO GLOBAL
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INITIATIVE