

GPEI Responses (May 2023) to IMB's 21st Report Recommendations (April 2022)

# **OUTLINE**

- 1. Context—Progress towards interruption of WPV1 in Pakistan-Afghanistan
- 2. GPEI responses to IMB recommendations 1-5, Endemic Related
- 3. GPEI responses to IMB recommendations 6-10, Nigeria and Outbreak Response related
- 4. Annex:
  - Brief Narrative Update from Pakistan, May 2023
  - Brief Narrative Update from Afghanistan, May 2023

#### **Introduction note**

This update serves as a response plan back to the IMB and to the POB for their June 2023 meeting, as a written update. This document was first drafted in June 2022, revised in September 2022, and final update collected in May 2023. This is the second updated response to the most recent/ April 2022 IMB report.

#### Context—Progress towards interruption of WPV1 in Pakistan-Afghanistan

Goal 1 of the strategic plan 2022-26 aims at interruption of WPV1 transmission by end of 2023. Current epidemiology of poliovirus in single epidemiological block of the two endemic countries—Pakistan and Afghanistan, continues to show significant progress: As of April 2023, one case of wild poliovirus polio of type 1(WPV1) is reported from each of these two countries, percentage of WPV1 positive environmental samples in Pakistan has gone down from 8% in 2021 to 4% in 2022 and 1% in 2023. The diversity of transmission chains has also gone down from 11 genetic clusters to only one (YB3C) in Pakistan and has reduced from 8 clusters to 1 (YB3A) in Afghanistan. The transmission of virus is very localized geographically and primarily restricted to few districts of Nangarhar and Kunar provinces of eastern Afghanistan and Southern Khyber Pakhtunkhwa (South KP), Pakistan, where periodic detection of wild poliovirus type-1 from environmental samples indicates localized but ongoing transmission of WPV1. In 2022, WPV1 also detected from multiple environmental sites outside the endemic zone of South KP. These detections were genetically linked with South KP virus, however all the subsequent sample of sewage water outside South KP tested negative indicating no evidence of establishment of circulation following these importations from South KP. The recent detections of WPV1 in 2023 from Peshawar and Hangu are genetically linked with the virus circulating in Eastern region. This underscores the fact that transmission in East Afghanistan and South KP not only poses risk of geographic spread to neighbouring areas, but the situation remains a public health emergency of international concern.

In Pakistan the political instability, complex security in South KP, high risk mobile population, refusals, boycotts of polio vaccination in Mehsud area of South Waziristan and inconsistent quality of campaigns in few pockets are main challenges in reaching all children in South KP of Pakistan. No campaign has been held in South Waziristan Upper (Mehsud belt) for the past 10 months due to a boycott and reluctance of frontline workers because of security concerns, remains a challenge to overcome. A special response plan that adopts a whole-of-government approach, adapted to local context with shift in vaccination strategy to Directly Observed Polio Vaccination with pluses to cater few community needs, special mobile teams for nomads and seasonal migrants, extended outreach immunization activities, intensification of surveillance and communication plans to address refusals has been rolled out to rapidly interrupt transmission in the southern Khyber Pakhtunkhwa province of Pakistan.

Based on vulnerability assessments and TAG recommendations, the Programme has classified districts into four categories – Endemic, Outbreak Response, Risk Reduction and Maintenance – to prioritize immunization responses. Seven districts of south KP are now classified endemic with nearly 1.1 million target population. Outbreak response categorization includes districts with virus detection – in human or the environment, risk reduction are historic core reservoirs and districts adjacent to outbreak districts, while maintenance districts are any that do not fall in earlier categories. A well-defined strategy has been developed and implemented to improve outcomes in each risk categorization district.

Complicated humanitarian crisis, political instability, restriction on house-to-house vaccination campaigns in Southern and North-East Afghanistan, recent decree to suspend female staff from national and international organizations and issues of campaign quality in parts of eastern region are the main

challenges. Eastern Region action plan is updated and being rolled including local level advocacy efforts that allowed frontline female workers in east to continue to serve during house-to-house vaccination campaigns, intensification of monitoring, plan for fIPV campaign along with OPV and pluses, focus on areas along border with Pakistan and intensification of surveillance is rolled out.

#### **GPEI Responses to IMB Recommendations**

#### **Pakistan**

#### Recommendation #1

The recent change of national government in Pakistan risks loss of continuity in the cross-party support for polio eradication in the country and disruption to the political and technical alignment and solidarity between the federal and the four provincial polio programmes. The runup to the national election in 2023 is an added dimension to this risk. The IMB recommends that the new Prime Minister of Pakistan gives his strong and public commitment to, and directly involves himself in, finishing polio eradication in this endemic country and that he works to maintain and sustain a political consensus to this end. It is also recommended that continuity of polio leadership is maintained, together with the collegiate style of working that has enabled federal and provincial programmes to share information, learn from each other's experience and plan and prioritize action together. This needs to maintain continuity should extend to trying to reduce the turnover of provincial secretaries, district commissioners and provincial emergency operations center coordinators.

#### ► GPEI May 2023 Response:

Political Transition at National Level:

After the political transition in mid-April 2022, the NEOC developed a resilient advocacy plan to ensure sustaining political commitment during phase of political transition. As per the plan, the NEOC initiated high-level advocacy meetings and briefings with the Ministry of NHSRC and the incoming Minister NHSR&C to sustain the momentum of the polio eradication activities.

The Federal Minister NHSR&C extended direct oversight to Polio, remained in regular contact with NEOC, visited outbreak zone, and met the tribal elders, local administration, and health stakeholders in the field. He also visited Sindh and Balochistan. Furthermore, the new Federal Health Secretary, Parliamentary Health Secretary, and the Special Secretary of Health have been engaged.

As part of the advocacy plan, with the support of the Federal Secretary of Health, the NEOC arranged a special meeting of the Prime Minister and the Deputy Commissioners of 25 high risk districts in which the outbreak response efforts were thoroughly reviewed. The PM directed the districts administration and Health departments to take urgent and focused steps / measures to stop the transmission and showed zero tolerance on the occurrence of paralysis to children in the presence of vaccine.

The PM also chaired the National Task Force meetings in May and August and inaugurated May NIDs, Aug SNIDs, and the year's first NID in January 2023. The inauguration ceremonies were broadcast widely through mass media channels.

The PM of Pakistan also met with the GPEI leadership / Polio Oversight Board twice in 2022 to reiterate the political commitment and resolve of the Government to eradicate Polio. A POB delegation is expected to visit Pakistan in July 2023.

The advocacy efforts of National EOC leadership along with GPEI partners with national and provincial political leadership have been going on continuously which include advocacy meetings with Provincial chief secretaries and participation in Provincial Task Force meetings ahead of every campaign.

#### Provincial Level:

After the dissolution of Punjab and KP assemblies, a polio resilience political transition plan has been developed by the NEOC and shared with PEOCs for implementation. The program is well prepared to initiate advocacy efforts with the upcoming interim set up at the national level once the national legislature is dissolved before elections.

The PEOC coordinators of Punjab, KP and Balochistan changed. The new coordinators are deeply committed to the program. The new KP coordinator was ex ADC Islamabad and has vast experience being the focal person of Islamabad Polio control room in 2020. Moreover, very few DCs changed, and the new ones had Polio experience while working elsewhere in the country, i.e., the new DC Islamabad was transferred from the post of DC Quetta.

In line with the IMB advise, the Program will continue:

- High level advocacy with the political leadership for un-interrupted support
- Engaging with DCs and DHOs through joint planning and review workshops
- Utilizing the upcoming low season to conduct sufficient SIAs before election.
- Proactive advocacy for program momentum / sustenance ahead of election with the interim set up and top bureaucracy (federal and provincial secretaries) in 2023.

#### Recommendation #2

The southern part of the Khyber Pakhtunkhwa province of Pakistan is the biggest source of concern of the Polio Programme and was the site of two new wild poliovirus cases in April 2022 after the country had not reported such a case for 14 months. Despite apparently reassuring reviews of the quality of surveillance, it is likely that there are "blind spots" in the detection of poliovirus and cases in areas of this province that are security-compromised or where there is antigovernment sentiment. The IMB recommends that the national and provincial polio teams work together to set up a confidential incident reporting network in Khyber Pakhtunkhwa to supplement and triangulate traditional surveillance reporting. Any systemic element of fake finger marking in vaccination delivery, detected through this process, should be recognized, and dealt with as a priority. Such an additional channel of reporting was used in Nigeria to identify pockets of polio in remote and insecurity-affected areas in the north of that country and was one of a number of innovations that proved decisive in the eradication effort there.

#### **➢ GPEI May 2023 Response:**

Overall, AFP surveillance indicators have shown improvement in South KP districts as well as in outbreak districts except Nowshera and Peshawar as compared to 2022.

During the recently concluded surveillance reviews in 2022, some security compromised areas in Upper and Lower South Waziristan districts identified with partial access issues (Bobar, Spin

kamar, Shaktoi, Toormandi, Gomal dam, Zalwanay, Mantol, Swai, Shenikhaw, Tormandi) with an approximate <15 population ~19100. Similarly, some areas in North Waziristan (Doga, Lattaka 1, Smalkhel) have been identified that show possibility of existence of blind spots due to compromised situation of security or access with a total under 15 population of ~3300.

Major interventions initiated in SKP districts include strengthening of districts and South KP hub level staff to improve coordination with field staff as well to enhance oversight from divisional level.

Monthly meeting with provincial surveillance focal persons initiated to improve coordination and working relationship for a robust and sensitive surveillance system in place.

Security compromised and access compromised areas were addressed through community-based surveillance (CBS) approach. Community members are engaged to report AFP cases (based on the simple case definition). Key Community Informants (Informal health care providers, pharmacists, bone healers, traditional healers, quacks, spiritual healers etc.) identified, trained, and linked to government health facilities to increase the AFP case reporting from areas of high concern. These key informants are prioritized and selected from the catchment area of Basic Health Unit (BHU) or govt dispensary (GD). On average, 8-10 key informants per BHU/GD have been identified and linked to government health facilities. A total of 376 AFP focal persons identified at government health facilities and trained on AFP surveillance in SKP districts. 2865 Key community informants trained in AFP surveillance in SKP districts. Overall, 10% AFP cases reported through CBS in 2022 as compared to 9% in 2023.

Environmental surveillance increased by 26% across the country. In SKP, 3 ES sites started in 2022 (Lakki Marwat, DI Khan, Waziristan-N) to supplement AFP surveillance in the high priority districts. To increase the scope of poliovirus detection, contact sampling of all AFP cases initiated from high-risk population and geographies (hard to reach area, HRMP, IDPs, repatriated families, access compromised areas) in SKP districts (9 AFP cases reported and contact sampling collected). 19 random ES collection (one time) was carried out in SKP districts, and 450 healthy children sampling collected from high-risk population, IDPs, AR and nomads. It is important to mention that the most recent WPV1 isolate is reported from the sample collected in April 2023, from one of these random—one-time, sites in Lower South Waziristan. This is the first WPV1 positive sample from South Waziristan in 2023 but is genetically linked to virus detected from the same district in September 2022. To enhance the capacity and skills of the surveillance staff, comprehensive training of DSO's and IO's was conducted in Sep 2022 and April 2023.

Furthermore, enhanced oversight from federal and provincial surveillance levels was ensured by periodic field support visits to SKP districts (Bannu 5, Tank 3, DIK 3, Lakkimarwat 2, Wazir-N 2 and Wazir-S 2) in 2022-2023. Monitoring of the ES samples was strengthened in all districts involving DSO's, DSC's, IO's and NSTOP officers.

Field surveillance reviews were conducted in 141 districts of Pakistan (out of total 157) to identify the gaps and to improve the quality of the surveillance across the country.

Inclusion of BMFS method of ES collection in 26 existing ES sites and then training of ES focal persons on Grab as well as BMFS methods, was carried out in Dec 2022 and April 2023 respectively.

Various measures were taken to establish a confidential incident reporting mechanism for reporting fake vaccination by frontline workers or community. These measures included enhancing social intelligence through frontline workers and influencers through organizing motivation sessions for frontline workers, training COMNet staff on curbing fake vaccination, strengthening refusal conversion committees, issuing fatwas on fake finger marking, launching a social media campaign, and conducting community-based inaugurations. These steps aimed to encourage reporting of fake vaccinations and prevent their occurrence, ultimately helping in eradicating polio.

- Enhancing the Social Intelligence: The actions listed below improved social intelligence through frontline workers and influencers, which resulted in the reporting of six instances of fake vaccination in Bannu, Lakki Marwat, and Tank districts during 2022-23. These instances involved 246 children who were finger-marked but not vaccinated. Additionally, the promotion of the Polio Helpline 1166 on social media encouraged the reporting of fake vaccinations and other issues related to the polio program.
- Motivation Sessions for Frontline Workers: Sessions to motivate frontline workers were arranged in the Union Councils where there was a high possibility of fake vaccination or reporting of such incidents. The aim was to urge the workers to reveal hidden refusals and avoid carrying out fake vaccinations. Prominent medical practitioners and religious scholars keeping in view local context and norms were invited in these activities. In addition, polioaffected children and their parents were also invited to these sessions to educate participants about the hazards of fake vaccination.
- Training of COMNet Staff on curbing fake vaccination: In 2022, all 672 COMNet UCCSOs and Social Mobilizers in South KP were trained on the etiology, prevention, and reporting of fake finger marking incidents. Furthermore, they were given the knowledge and skills necessary to make the best use of influencers, CBOs, and RCCs in enhancing the social intelligence and combating the threat of fake vaccination.
- Strengthening of Refusal Conversion Committees: The existing list of 2,402 influencers at the
  area and union council levels was reviewed and revised, and the 486 refusal conversion
  committees were revamped to be more effective. The influencers, such as Maliks (Mashars),
  political and religious leaders, journalists, social activists, and religious scholars, were
  provided with refresher training that highlighted the problem of fake finger marking and its
  adverse effects on polio eradication. Furthermore, appreciation sessions were arranged by
  the district administration to give the influencers certificates of recognition.
- Fatwas (verdicts) on FFM: With the help of district administration and the existing 298
   Religious Support Persons, the local religious scholars and madrassahs were taken onboard.
   220 religious scholars were also identified besides the RSPs. COMNet staff held corner

meetings and organized sensitization and awareness sessions for them in all districts of South KP. The ulema were asked to issue a Fatwa declaring fake vaccination a grave sin and Haram. They also participated in community engagement sessions before each campaign and urged workers and communities to vaccinate their children and avoid FFM, which may cause lifelong paralysis.

- Video Massages & Social Media Campaign: Video messages were recorded from famous pediatricians and religious scholars and these video messages were widely circulated through social media in the local community utilizing the social media influencers and journalists.
- Community Based Inaugurations: To develop community trust and highlight the necessity of
  polio vaccine while avoiding fake vaccination, it was mandated that COMNet workers
  vaccinate children (their own or influencers) in all community engagement sessions and
  gatherings prior to each campaign. For instance, 292 community-based inaugurations were
  conducted during October 2022 to March 2023.

Multiple rounds of case response including fIPV (fractional dose IPV) conducted in South KP; program maximizing all possible efforts to contain outbreak. Program established a regional hub for Bannu-DIK divisions, a senior government officer was deputed as Deputy Coordinator of South KP Hub, partner staff was deputed at the Hub, and a security officer (colonel) was also deputed at the Hub to coordinate with LEAs on real time basis.

Since April 2022, 10 rounds of OPV campaigns have been conducted in the outbreak zone and surroundings including two fIPV rounds, program initiated differentiated strategies in terms of enhanced household vaccinations under direct supervisory observations (directly observed vaccination strategy), due to fake finger marking. Program also conducted quality trainings to encourage realistic record of data and discourage fake markings. At the end of each campaign, all finger markers were retrieved. Pluses (soaps) were provided to communities during SIAs vaccination. District officers of other districts of KP pooled to support outbreak responses in South KP. In line with IMB advise, a WHO Polio expert (a Nigerian national) was deployed to support the south KP outbreak from preparation phase to campaign implementation, applying best practices from the Nigeria Polio eradication program. Third party independent monitors were also deployed during SIAs in South KP, still missed children percentage drastically increased (since teams started to realistically record refusals). Ring-fencing transit vaccination was done at the SKP entry/exit points and special nomads immunization teams were deployed.

#### **Recommendation #3**

Despite a great deal of good, committed work, none of the four Pakistan provincial polio programmes is yet achieving an eradication standard of performance and there are four weaknesses in particular: suboptimal and variable campaign quality, high numbers of persistently missed children, failure to adequately reach high-risk and other highly mobile populations, and low essential immunization rates together with too many zero-dose children. Improvements have tended to be incremental, and it is difficult to see how "more of the same" will produce the great leaps forward that are so necessary. The IMB is conscious that other global health programmes, experts and researchers will have had experience in dealing with very similar barriers to progress and thus recommends that the GPEI leadership convenes

a facilitated high-level meeting, with diverse non-Polio Programme attendance, soon to explore ideas and opportunities for transformational improvements in these key areas.

#### **▶** GPEI May 2023 Response:

Identifying the dire need for improving campaign quality particularly in terms of reaching all areas, the program has taken the following steps.

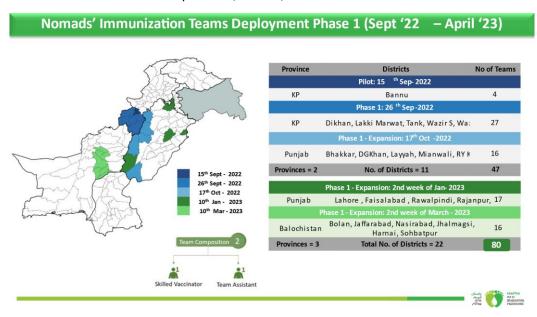
- South KP hub was restrengthened and relocated to Bannu to closely work with SKP districts.
- Rationalization of workload to ensure no children are missed due to the inability of the team
  to reach all houses due to overload of work. The rationalization process not only included
  addition of new teams and consequently area in charges but also workload adjustment within
  the teams. In areas where raising quality HR is an issue, the campaign modality has also been
  modified like in the case of North Sindh, where certain UCs have resorted to a 4+1 campaign
  instead of 3+2 to compensate for the high workload.
- Focus on team training through continual use of stall methodology focusing on hands on interactive training instead of lecture-based training. Training tools at the level of the union council have been provided by the program.
- The program has also continued with intra-campaign monitoring triggers, where sweeping by the team is required after identification of a missed area and poorly covered areas. The control room continuously follows up with DEOCs on sweeping reports which are reflected on the EOC dashboard.
- For the operational aspects of the PMCs (Not available children), the program has focused on the same day catch up during campaign days. Districts give out unique same day catch up codes for the teams to mark on the door marking when they visit the missing children on the same day.
- Technology (Geographic Coverage Support System) was utilized to identify missed houses / areas through tracking of vaccination teams.

Extensive measures were taken to reach high-risk and other highly mobile populations. Overall, 8.4 million exclusive HRMPs were vaccinated in planned SIAs (March 2022 to April 2023) (on average 0.85 and 1.2 million in SNIDs and NIDs respectively).

The program updates the mapping and profiling of high-risk mobile populations (HRMPs) across the country on a regular basis and focuses on mapping the movement patterns of HRMPs to ensure the timely planning and operational preparedness for the vaccination of these groups.

The HRMP unit conducted a survey to improve their understanding of HRMPs and identify links to tribal and nomadic populations. This allows for targeted and timely interventions to be made, ensuring appropriate preparation and response.

The Pakistan Polio program has launched a new intervention by deploying nomad immunization teams to ensure that children in mobile population settlements receive essential immunization, including Polio, in between campaigns. Based on the movement pattern, the activity has been implemented in prioritized districts, including South KP and bordering districts of Punjab. In 2023, the activity was further expanded in Punjab outbreak districts and Baluchistan prioritized districts based on the potential HRMP nomads during the same period. As a result, 131,529 children have received bOPV doses in multiple visits, and 82,402 children have received IPV.



In selected convergence points across South KP, Punjab, and Baluchistan, a seasonal vaccination strategy was implemented that resulted in the vaccination of 153,044 children at exit convergence points during the 2022-2023 season. Specifically, 72,911 children were vaccinated from March to May 2022, followed by 23,561 children in September to November 2022, and finally, 56,572 children from March to April 2023 at the entry points of seasonal migration hubs.

To reduce the risk of transmission by travelers, transit vaccination teams have been deployed in strategic locations (entry / exist points of SKP). A ring-fencing strategy has been established around South KP from May 2022 - April 2023, with 24 transit vaccination teams covering up to 10 years of age **340,668**.

A second layer of Punjab border fencing with SKP has been implemented, with 10 teams targeting children up to 10 years of age at different routes in bordering districts with South KP. (May-Oct 2022).

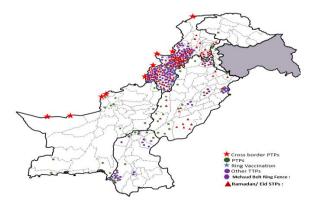
Keeping in view the current complex situation in the Mahsud belt, where SIAs were not implemented since August 2022, a new or additional Ring-fencing strategy is deployed at suitable locations around the Mehsud belt where OPV is given to all age groups. A total of 24 teams have been vaccinating all age groups with a vaccination of 162,335 individuals, under the supervision of 12 supervisors (10<sup>th</sup> Dec 2022- April 2023).



Other seasonal or temporary transit vaccination activities have been organized at critical locations during religious events and nomadic movements across the country with the Vaccination of 4.1 million children from Mar 2022 – April 2023.

Eid Vaccination: The Program decided to take a strategic step in the fight against polio by deploying special teams during the Eid. The program deployed special teams to administer polio vaccines during the Ramzan and Eid days and 209,673 children have been vaccinated.

In addition to STPs, Program have deployed 66 PTPs at critical locations with vaccination coverage of 10 million from March 2022 – April 2023.



HRMP - Externally displaced population vaccination: The special activity for the HRMP externally displaced population was implemented. Overall, 35,321 children / Adults have been vaccinated (bOPV) and 5,259 children from 4M to 59M age group have been vaccinated (IPV) from Dec 21 - April 2022 and September 2022 to December 2022. The repatriation process has been stopped in December 2022.

Synergy being part of NEAP, emphasizes that with the ultimate common goal of disease prevention and better health in children, both EPI and PEI should work to synergize and complement each other for efficient use of resources and expertise. It is evident from the current outbreak in South KP, that that the target population clusters with polio cases have a substantial number of un/under-immunized children,

leading to a high risk of outbreaks and continued circulation. In this regard it was also felt that PEI and EPI existing as two independent programs, a complex interplay of relationships, processes, and outcomes is observed. Keeping this in mind, in the current situation and to prepare the country for transition for posteradication period it is imperative to expedite the synergistic activities with EPI to gain maximum form both programmes.

The EPI PEI Synergy framework implementation at all levels has been the focus. Regular meetings with the EPI team on a weekly basis to review updates of activities have improved the coordination at Federal level. In addition to this. Technical Working Group (TWG) for Synergy has been onboard with participation from all the relevant stakeholders from both EPI and PEI and led by senior management. Regular meetings have been conducted since inception and provide technical guidance to both programs after deliberations on the required interventions and planning.

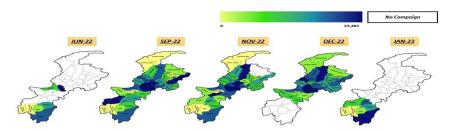
Third Party Verification Immunization Coverage Survey (TPVICS) 2022 highlighted an overall improvement compared to last TPVICS analysis 2020. However, a granular look at the district level showed inconsistent results, specifically in zones critical to Polio program. In response to this, Extended Outreach Activities (EOAs) were conducted with special focus on outbreak zones.

Several EOAs were planned and conducted in 2022 to reach Zero dose children and Due/Defaulters. PEI team was involved in all the steps, i.e., microplanning, Joint EPI/PEI monitoring and supervision activities at all levels (Federal/Provincial/district/UC), engagement of CBV staff (where available) for the social mobilization before and during EOAs and support in data collection through NEOC mobile app and analysis on daily basis. Daily review meetings were conducted at provincial and district level where both PEI and EPI staff discussed the progress, challenges and took timely actions.

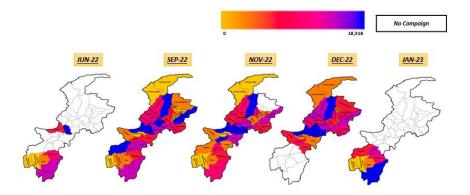
In September 2022, EOAs were planned and conducted in the whole KP and districts in ES positive districts at that time.

KP continued conducting extensive Intensified outreach activities across with special focus on South KP.

Prime focus had been on identifying unregistered Zero Dose children, reaching all Zero Dose and any Due defaulters (specifically for IPV). Overall, 76,378 IPV (1+2) was administered in June 2022, followed by 414,058 in Sep, 400,303 in November, 282,855 in December and January (staggered approach).



*IPV 1+2 Vaccination in 2022 – 2023:* Overall OPV (0+1+2+3) given was 147,591 in June followed by 681,610 in September, 668,481 in November, while 509,350 were doses administered in Dec-Jan.



*OPV 0+1+2+3 Vaccination in 2022 – 2023:* Joint planning at federal, provincial and district level for monitoring and supervision of all activities like SIAs, EOAs, Multi-antigen campaigns like MR-campaign, TCV campaign etc. Support provided by PEI in the data collection through tools in NEOC app has helped in the easier access to the bigger data sets by both PEI and EPI staff, that can be used for timely action taking in field.

In addition to this, in the current epidemiological scenario, Polio program has planned a 'Big Catch up' in zones where we are missing children due operational and community challenges. To keep the laser focus, a small number of critical UCs have been selected for three rounds. Program has planned RI antigens to be given to up to 2 years of age, while OPV to be given to all, along with the pluses, at outreach sites.

#### **Recommendation #4**

A forceful and inspiring commitment by the Polio Oversight Board at its 2018 meeting, following representations by the IMB, led to a plan for sanitary reform to improve water and waste disposal to strike at the heart of the poliovirus's fecal—oral mode of transmission in the superhigh-risk union councils in Pakistan. Progress has been small-scale and fragmented, falling well short of the transformational potential of the original idea to take action on this. The IMB recommends that the Polio Oversight Board uses the full weight of its oversight and accountability governance powers to correct the limp trajectory that its plan has fallen into.

#### **➢ GPEI May 2023 Response:**

Regarding Water and sanitation interventions, the progress in Super High-risk Union Councils (SHRUCs) by provinces is described below, through December 2022.

*Karachi:* Over 440,000 reached with access to safe drinking water through installation of 37 water filtration plants. Twenty-nine schools also reached with improved WASH infrastructure, 55 schools with soft interventions. Rehabilitation of WASH facilities in 29 Health Care Facilities done. Lifting of 19,200 tons of garbage cleared from 45 locations in Karachi.

**Peshawar:** Approximately 80,000 people benefitted from improved access to water through work on 23 water systems in Peshawar. Interventions included work on boreholes, rehabilitation of pumping systems, retrofitting of pipe network and water quality monitoring. More than 270,000 people benefited from drain cleaning activities. Around 12,000 square feet of drains rehabilitated for covering and lining as required. Moreover around 175 Household directly benefitting from the solid waste collection through involvement of private sector with the objective to introduce public private partnership in the context. WASH minimum package for SHRUCs provided to 29 Health

Care Facilities. Ten schools also reached with improved WASH infrastructure. Currently work is being scaled up in southern KP.

**Baluchistan:** 62,000 people benefitted from 12 drinking water systems, 58,385 people benefitted from 04 HCFs and 33 schools benefitted from the provision of WASH services in district Quetta.

It is worth noting that estimates for funding required to improve WASH in the 25 high risk districts in PAK are of the order of 40 million USD, but the GPEI allocation for ISD in PAK was only 5 million, of which 250k has been realized, and mostly targeted towards nutrition services as defined by the donor agreements. UNICEF is working to better synergies its wider WASH investments with the GPEI focus areas, but the needs for WASH improvements in PAK extend beyond the GPEI high risk districts and are frequently defined by other donor agreements.

The new GPEI strategy focuses ISD priorities on improving EPI outcomes in the endemic countries. The issues raised by the IMB on the sanitation ambition of then polio program (and their) resulting level of investment requires further discussions and steer from the POB level.

#### Afghanistan

#### **Recommendation #5**

Poliovirus circulation could almost certainly be eliminated quickly in Afghanistan if house-to-house vaccination campaigns were authorized and carried out in all parts of the country immediately. A mosque-to-mosque based approach, even in part, does not create an eradication-standard Polio Programme for the country and persisting with it risks more cases when the high season starts. The IMB recommends that the new Afghanistan administration and the GPEI move out of negotiation mode in discussing these matters and resolve to work jointly and supportively to launch a new and comprehensive programme to bring the polio vaccine to every house in the country before polio takes hold again and starts paralyzing the country's children.

#### GPEI May 2023 Response:

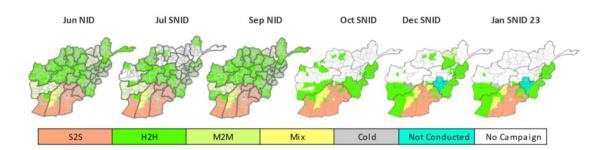
The GPEI team in Afghanistan in close coordination with the de facto authorities have systematically increased the number of children reached through house-to-house modality in each successive campaign. In the last nationwide campaign held in March 2023 in Afghanistan, the targeted children reached through house-to-house modality was 72% while geographically in terms of total number of districts covered through the house-to-house modality it was 78% (282/360 districts). 39 districts all with house-to-house modality, could not be reached due to cold weather in March and will be covered in the upcoming May SNID.

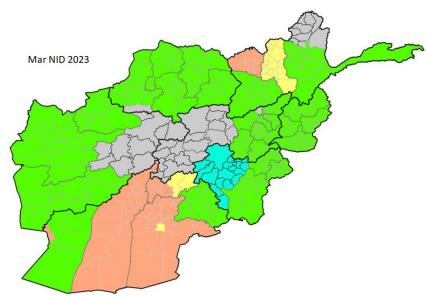
The decrease from September NID 2022 can be explained below:

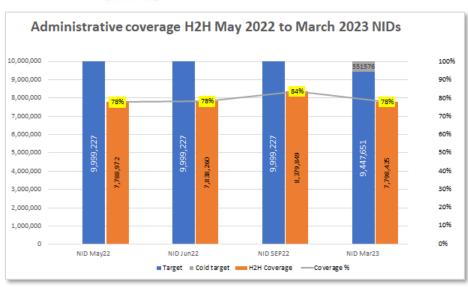
Southeast region: the entire Ghazni province (19 districts, target children: 341,859) with house-to-house (H2H) modality reverted to mosque-to-mosque modality in December 2022 and based on the decision of NEOC the campaign was postponed in the province. Owing to local negotiations Ghazni province will implement the campaign with H2H modality in upcoming May SNID 2023.

South region: the entire Zabul province gained house-to-house access in March NID 2023. However, 382/484 clusters (79%) in Helmand province that were being covered by H2H modality reverted to site-to-site modality in March NID 2023 owing to the decision by the local authorities.

## Modality of campaign implementation Jun 2022 to Mar 2023







The decrease in percentage coverage in March NID 2023 is due to the fact that 39 snow bound districts (cold districts) (target: 551,576) constituting 5.5% of the national target did not implement the campaign due to cold weather. These districts will implement the campaign in the upcoming May SNID 2023 with house-to-house modality. However, some critical geographies like Kandahar, Uruzgan (58%, 71/122 clusters), Helmand provinces in the Southern region are not conducting house to house campaign modality. In addition, Kunduz and Takhar provinces in the North-eastern region are implementing site-to-site modality due to the security incident that occurred during the February NID (as of 28<sup>th</sup> Sep 2022). There has been further progress in the last nationwide campaign conducted in March 2023 with the entire Farah province and Zabul province and 4/5 districts with 95% of the total target of Nimroz province implemented house-to-house campaign modality as compared to September NID 2022. The advocacy initiatives are continuing at all levels leading to successive gains in house-to-house modality in the entire country.

#### Nigeria

#### **Recommendation #6**

In the aftermath of eradicating wild poliovirus in its country, the Nigeria Government and its public health programmes have failed to deal with, and recognize the emergency they are in, with vaccine derived poliovirus producing large numbers of cases affecting its population and triggering international spread. The Polio Programme has become degraded in a number of very important respects. The importance and urgency of addressing vaccine-derived poliovirus has slipped off the political radar. Given the deterioration of the situation in Nigeria, and noting the case of wild poliovirus in Malawi, the country is now also at risk from a re-importation Nigeria and senior GPEI leadership should work together strategically and urgently to rebuild the capacity and capability of the Polio Programme in the country to include all the previous innovations that were key success factors in interrupting wild poliovirus circulation in 2016. It is vital also, as part of this rebuilding, to re-energize the process of boosting levels of essential immunization, particularly at the subnational level, that was such a strong government commitment five years ago.

#### **➢ GPEI May 2023 Response:**

Surge work force has been provided for a 12-month period by GPEI, and additional surge is being provided for northern Nigeria. Support to in-between round activities (aiming to boost immunization) is being provided for Sokoto, Zamfara and Kebbi States. The HR and programmatic needs for Nigeria will be reviewed during the outbreak response planning meeting planned for early June in Brazzaville with all outbreak affected countries in the AFRO region.

#### **Recommendation #7**

In Nigeria, 2022 is a pre-election year. More than two thirds of the state governors' posts are affected. The governors were key players for polio eradication and remain so for stopping vaccine-derived poliovirus and boosting essential immunization coverage. There will also be change at the Federal level in the 2023 elections due to term limits. Past changes in government have brought a serious break in continuity of the country's performance on polio. The IMB recommends high-level advocacy action from the GPEI leadership and Nigeria senior public health officials to maintain full political attention and engagement, specifically in the context of forthcoming elections. This recommendation is synergistic with recommendation 6.

#### **➢ GPEI May 2023 Response:**

This recommendation is accepted; GPEI continues to ramp up high level engagement with the Nigerian government, including side meetings at the WHA and letters to the transition government. The re-engagement of the presidential taskforce will be critical to sustain polio eradication efforts.

#### **Recommendation #8**

The outbreak vaccination strategy in Nigeria has not been well thought through and has been poorly executed in respect of timing of response, planning, choice of vaccine, campaign quality and geographical scale and coordination. The IMB recommends that the GPEI global leadership at senior level works with the Nigeria Government to plan and manage its vaccination strategy (in respect of both oral and inactivated polio vaccine) for the next two years, crucially taking account of projected vaccine supplies and matching them to the required scale of response.

#### **➢ GPEI May 2023 Response:**

Nigeria immunization plans are reviewed by GPEI's Strategy Committee (SC) and Regional Rapid Response Team (RRT) as part of the monthly regional risk assessment. Also, when needed three level calls are being held with the Nigeria country team. SIA readiness dashboard are periodically reviewed jointly by RRT and GPEI's outbreak response and preparedness group (ORPG). GPEI provided support including nOPV2 vaccine for the nOPV2/fIPV co-administration campaign being implemented on May 13<sup>th</sup>, 2023.

An outbreak response assessment is being planned to take place before the end of the third quarter to assess effectiveness of the outbreak response strategies in place and work with the country to address any bottlenecks and challenges to stop transmission in Nigeria.

#### In countries with polio outbreaks or vulnerable to outbreaks

#### **Recommendation #9**

Beyond the situation in Nigeria, it is likely that the remainder of 2022 will see continuing negative impacts to the Polio Programme's ability to respond quickly and effectively to outbreaks of vaccine-derived poliovirus as country capacities and programme capabilities continue to be challenged and difficult prioritization decisions need to be made. In the last two years, this, together with national government preferences on vaccine policy, has led to delayed, small scale, fragmented responses to outbreaks and, thus, to some substantial avoidable spread of infection. The IMB recommends that the GPEI leadership should focus heavily on trying to instill a collective emergency culture; formal re-adoption of common protocols for outbreak prevention and response; and commitment on the part of country governments to accept expert advice on vaccine choice and deployment. The continuity of GPEI funding streams, vaccine supplies, external technical support and the International Health Regulations should be part of discussions to engender greater global solidarity on this.

#### **➢ GPEI May 2023 Response:**

Political advocacy recommendation partly accepted- for variant type 1 & type 2 poliovirus outbreaks given multiple emergencies in countries, the advocacy emphasis focused on a timely and, quality response, while continuing to encourage countries to declare public health emergencies on outbreak detection

End of 2022 and first half of 2023 brought continued challenges for responding quickly and effectively to outbreaks of vaccine derived poliovirus – these challenges include nOPV2 vaccine supply shortage and preference for use of nOPV2 over mOPV2 to respond to type 2 outbreaks; rising budget gaps to meet demand for campaign implementation; and, other challenges (political will, instability, etc.). These challenges will continue the requirement to prioritize vaccine (especially nOPV2) and budget (all countries) through the remainder of 2023.

GPEI will continue to work with countries and regional offices for resources prioritization to make sure that resources will go where they are most needed. Weekly calls are being held with affected regions through to align resource allocation with the immunization calendar

#### **Recommendation #10**

The pandemic-related cancellation or delays in vaccination rounds, as well as the negative impact on the delivery of essential immunization services because of the pandemic, has led to an accumulation of unvaccinated and under vaccinated children. This is on top of already lower than required essential immunization coverage rates in countries with outbreaks, those vulnerable to outbreaks, and the endemic (or recently endemic) populations of Nigeria, Pakistan, and Afghanistan. Important strategic shifts in polio transition planning and implementation are driving the necessity of programmatic integration to address the need to rapidly strengthen essential immunization programmes, particularly in countries that will transition completely out of Gavi and GPEI support at the end of 2022. The IMB recommends that reactive and outbreak response activities, as well as preventive vaccination activities, are implemented in a multiantigen format where possible, signaling the importance to communities that polio immunization is a mainstream children's health necessity and not some sort of West-driven special project.

#### **➢ GPEI May 2023 Response:**

With the decline in cases, the program is now focusing on integrated activities while moving towards transition. The strengthening of RI remains an important pillar among the four pillars of polio eradication initiative. Moreover, coordination with the EPI for joint activities at all levels i.e., monitoring and supervision, planning, communication, surveillance, and microplanning is our regular practice.

However, in an outbreak the program keeps its laser focus on the firefighting to ensure good quality polio campaigns to control the outbreak and break transmission, particularly in the polio consequential geographies. Strengthening of essential immunization remains an important focus in outbreak response activities, among other components like surveillance, communication, high-risk mobile populations (HRMP), and vaccine management.

In addition to this, any campaign of the other antigens by EPI is taken as an opportunity to provide an additional dose of OPV, in addition to the PEI planned Polio campaigns.

#### ANNEX

#### **Brief Narrative Update from Pakistan, May 2023**

- Ten rounds of vaccination campaigns have been held in Pakistan since April 2022. In 2023 alone,
  Pakistan conducted one national (targeted over 43 million children) and one subnational campaign.
  The third subnational campaign of 2023 is planned for mid-May. There are 3 more rounds planned in
  the second half of 2023 (1NID and 2SNIDs). The calendar will be reviewed by TAG in early June.
- Only one polio case (from AFP) has been reported so far in 2023 in Pakistan. The child belongs to
  Bannu district of South KP. All cases from 2022 and most of the positive ES have been reported from
  the block of seven districts of South KP—the only block endemic for WPV1, in Pakistan. No Polio case
  has been reported outside of the endemic region since January 2021. All 20 children paralyzed by
  WPV1 in 2022 were reported from just three districts in the endemic region of southern Khyber
  Pakhtunkhwa.
- In 2023, six WPV1 positive ES have been reported. These include three isolates that are genetically linked to virus in Nangarhar, Afghanistan and three are genetically linked to virus from the 2022 Pakistan outbreak. Genetic sequencing of the most recent WPV1 isolate from an-hoc environmental site of South Waziristan shows its linkage with earlier virus detected in September 2022 from the same districts. This points towards the possibility of sustained low-level transmission in pockets/subgroup of populations in this district South Waziristan where surveillance and vaccination reach are affected due to inaccessibility.
- A VDPV3 was isolated from an ES sample from Ghotki, Sindh, however, preliminary field investigation and subsequent results of AFP cases from this district didn't show evidence of VDPV3 circulation.
- Pakistan has made remarkable progress in eliminating the diverse genetic clusters of circulating wild polioviruses. Only one virus cluster remains in circulation in Pakistan in 2023 compared to four in 2021 and 11 in 2020.
- The Polio Programmes of Afghanistan and Pakistan are working in close coordination to mitigate
  the ever-present risk of cross-border transmission. Pakistan hosted a cross-border coordination
  meeting facilitated by the GPEI Hub in March in Islamabad with leadership from both countries
  present to strategize on frameworks and mechanisms to interrupt transmission in the three corridors
   northern, central, and southern, which have historically remained a hotbed of circulation. This
  coordination continues at all levels national and provincial.
- Environmental surveillance sites increased by 26% since mid-2022 and remains highly sensitive, testing 114 sites and maintaining the highest global standards.
- The Programme finds itself better equipped to deal with any outbreak than it was in April 2022
  when polio cases emerged after a gap of 14 months. It continues to introduce new strategies to reach
  every child:
  - For the Mehsud Belt, a ring-fencing strategy is in place with 7 transit teams at 7 strategic points, ensuring that everyone entering and exiting will be vaccinated.

- Directly observed vaccination (DOV) in southern Khyber Pakhtunkhwa (3 days fixed sites+ 2 days H2H).
- o fIPV campaigns held in endemic districts to address vaccine hesitancy and boost immunity, and health camps conducted to provide other health services.
- Special mobile teams (using motorbikes) deployed under the Nomads Immunization Initiative have reached over 130,000 nomadic children with OPV since Sept.
- In the high-travel season of Ramadan and Eid, house-to-house campaign was held in KP in the last week of Ramadan. Over 280 new transit teams were deployed at crucial points such as bus terminals, train stations and toll plazas.
- A regional hub for Bannu-DIK divisions of South KP has been established to control the outbreak.

### Despite the political transition of 2022, the Polio Programme enjoys unprecedented support from across the political spectrum and military leadership:

- The PM has inaugurated three NIDs since assuming office in April 2022, chaired two meetings of the National Task Force, held meetings with DCs of 25 very high-risk districts, and met with high-level POB delegations and UNICEF and WHO RDs twice in 2022. The federal health minister maintains regular liaison with NEOC, visited the outbreak zone last year, advocated for Pakistan at the World Health Summit in Berlin in October and WHO's Regional Subcommittee on Polio Eradication and Outbreaks in February. He also met with the Grand Imam of the Al-Azhar University of Cairo to garner support for vaccination.
- Law enforcement agencies work closely with the Programme in each campaign to ensure full security for polio teams and have enabled the Programme to reach previously inaccessible children across the country.

# • The Pakistan Programme finds itself well-positioned to achieve the goal of interrupting transmission this year; however, some challenges persist, and it is working hard to address them:

- Refusals and demands-based boycotts, particularly in high-risk areas, are one of the major challenges. Extensive outreach and community engagement activities are being conducted in these areas through local religious and social influencers and tribals elders to change vaccine perceptions.
- Over 19,000 children remain inaccessible in the Mehsud Belt. Outreach efforts are ongoing to reach these children. In the meantime, a ring-fencing strategy has been implemented around the area for all age vaccination to reduce the risk of transmission to other districts.
- Security remains a challenge, particularly in KP where security incidents have taken place recently. Security challenges also result in changes to campaign duration, particularly in endemic districts such as Tank and DI Khan, which can affect campaign quality. The Programme is working closely with law-enforcement agencies to ensure full security for polio workers and maintain access to vulnerable children.
- Upcoming general elections in 2023 could become a challenge with leadership changes at national, provincial and districts levels with the new government. The Programme has prepared a political transition plan to continue advocacy with the interim and future government to keep the momentum for polio going.

• The Programme's communications teams continue to engage with local influencers, including tribal leaders, religious and social influencers to build trust in communities, increase vaccine acceptance and discourage fake finger-marking. Additional female workers and advocates have been identified in southern KP, who are working as community influencers to cover refusals and support community sessions for mothers. Moreover, after the detection of Polio case in Bannu, a detailed communications outreach plan has also been developed aimed at increasing the risk perception of polio and its lifelong impact on the affected and adjacent communities.

#### **Brief Narrative Update from Afghanistan, May 2023**

In 2022, Polio virus circulation remained at its lowest in Afghanistan and there is an opportunity to interrupt transmission of wild poliovirus. The virus is detected in two out of 34 provinces where the transmission is continued in 2023. Throughout 2022, Afghanistan conducted six nationwide campaigns and three subnational campaigns. During each of last several national campaigns, the number of unreached children has remained around 0.6 million mainly in the south region of Afghanistan, many of whom live in the most vulnerable communities. Additionally, genetic biodiversity of wild poliovirus has also been decreased to just a single lineage. Recommendations of the 2022 surveillance review, including expanding the environmental surveillance network, are yielding important results.

The East remains the only region with endemic polio transmission. With the persistence of WPV1 in the East and the extensive population movement both within Afghanistan and across the border into Pakistan, the risk of transmission remains high especially in areas with suboptimal vaccination coverage.

The humanitarian challenges facing the people of Afghanistan right now are enormous. Given the fragility of Afghanistan's health care system and the rising risk of disease outbreaks, polio staff and health workers continue to contribute to improving overall immunization. Polio frontline workers were among the first responders following the devasting earthquake in the country's Southeast in 2022 and continue to support measles and COVID-19 vaccination campaigns, including the February 2023 COVID-19 and the nationwide measles drive in November 2022 vaccinating 5.36 million children against measles, 6.1 million children also received the polio vaccine.

#### **Epidemiology:**

- Geographic restriction of WPV1 transmission in 2022
- Absence of any WPV1 cases since Aug 2022 in AFG
- Significant decline in genetic biodiversity of WPV1 to a single lineage
- Interruption of circulation of cVDPV2

#### Risk to the gains:

- Progressive gains in areas with H2H since November 2021, from 50% to 80% in March 2023
- Restrictions on H2H campaigns resulting in immunity gap and missed opportunities particularly in vulnerable areas of South and Northeast
- Around 3 million children are reached additionally however, nearly 0.6 million children are still
  missing in NIDs.
- Immunity gap is a concern that may result in outbreaks.

- o All immunity gap indicators raise a concern in the South.
- Low coverage in M2M / S2S areas, not enough to interrupt transmission and require extra opportunities to close immunity gap.
- Gaps in campaign quality resulting in compromised immunity levels in H2H areas.

#### **Challenges:**

- Continued WPV1 detections from the environmental samples from the East Region reflecting ongoing transmission in the two provinces of the East Region (18 WPV-1 isolates in the environment in the first four months of the year)
- Outbreak in Pakistan especially in the bordering areas
  - o Risk of spill over to South, Southeast, and East
- M2M/S2S campaigns with compromised coverage warrant more opportunities to close the immunity gap.
  - Still unreached children (0.6 million) in most vulnerable areas South, Southeast, and Northeast
- Interference in the selection of frontline workers at local level impacting the quality.
- Suboptimal commitment at local level resulting in lack of ownership and urgency to achieve eradication.
- Low routine immunization coverage in polio-endemic areas
- Presence of an environment of fear and uncertainty at the field level due to security incidents in 2021 (East) and early 2022 (Northeast)

#### Way Forward:

- Improve the quality in H2H areas.
  - Micro-plan field validation
  - o Improving female participation.
  - Improved training of FLWs by programme staff in high-risk areas and capacity building of programme staff
    - Improved monitoring and evaluation to enable the programme to make informed decisions and continuously improve.
  - Rapid Response Team and surge support in areas of epidemiological concern from non SNID areas
- Firewalling on the border with Pakistan improvement of coordination (for surveillance and SIA), complementary vaccination activities
- Change to H2H modality in South, Southeast and Northeast
- Community engagement:
  - o Expansion of ICN deployment with enhanced involvement of influencers
  - Leverage new Radio Drama series.
- Expand APMIS based on learnings of APMIS pilot in East with strengthened data clerk cadre.
- Implement recommendations of international AFP surveillance review to further improve surveillance efficiency.