

WHO-EM/POL/424/E

Report on the

17th meeting of the Technical Advisory Group for the Eradication of Poliomyelitis in Pakistan

Islamabad, Pakistan
28–29 January 2016



World Health
Organization

Regional Office for the Eastern Mediterranean

Report on the

**17th meeting of the Technical Advisory
Group for the Eradication of Poliomyelitis in
Pakistan**

Islamabad, Pakistan
28–29 January 2016

© World Health Organization 2016

All rights reserved.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.

Publications of the World Health Organization can be obtained from Knowledge Sharing and Production, World Health Organization, Regional Office for the Eastern Mediterranean, PO Box 7608, Nasr City, Cairo 11371, Egypt (tel: +202 2670 2535, fax: +202 2670 2492; email: emrgoksp@who.int). Requests for permission to reproduce, in part or in whole, or to translate publications of WHO Regional Office for the Eastern Mediterranean – whether for sale or for noncommercial distribution – should be addressed to WHO Regional Office for the Eastern Mediterranean, at the above address: email: emrgoegp@who.int.

Document WHO-EM/POL/424/E

CONTENTS

ABBREVIATIONS.....	1
1. INTRODUCTION.....	2
2. FINDINGS	2
3. CONCLUSIONS.....	6
4. RECOMMENDATIONS.....	10
Annexes	
1. LIST OF PARTICIPANTS.....	16

ABBREVIATIONS

AFP	Acute flaccid paralysis
AJK	Azad Jammu and Kashmir
BMGF	Bill and Melinda Gates Foundation
bOPV	Bivalent oral poliovirus vaccine
CCPV	Continuous community protected vaccination
CDC	Centers for Disease Control and Prevention
cVDPV	Circulating vaccine-derived poliovirus
EMRO	Regional Office for the Eastern Mediterranean (WHO)
EOC	Polio emergency operations centre
EPI	Expanded Programme on Immunization
FATA	Federally Administered Tribal Areas
FCV	Female community volunteer
GB	Gilgit Baltistan
IPV	Inactivated poliovirus vaccine
KP	Khyber Pakhtunkhwa province
MoNHSRC	Ministry of National Health Services Regulation and Coordination
mOPV	Monovalent oral poliovirus vaccine
NEAP	National emergency action plan
NID	National immunization days
OPV	Oral poliovirus vaccine
SIA	Supplementary immunization activities
SNID	Subnational immunization days
TAG	Technical Advisory Group
tOPV	Trivalent oral poliovirus vaccine
UC	Union Council
UNICEF	United Nations Children's Fund
VDPV	Vaccine-derived poliovirus
WHO	World Health Organization
WPV	Wild poliovirus

1. INTRODUCTION

The seventeenth meeting of the Technical Advisory Group (TAG) on Polio Eradication in Pakistan was held on 28–29 January in Islamabad. The meeting was attended by TAG members, and supported by the Pakistan polio eradication team led by Senator Ayesha Raza Farooq, the Prime Minister’s Focal Person for Polio Eradication. Local and international partners and donors also participated in the meeting. The list of participants is attached as Annex 1.

The year 2015 saw the lowest number of polio in endemic countries and the fewest number of cases of confirmed wild poliovirus (WPV) in recorded history. In July 2015, Nigeria celebrated one year without any WPV. By August, all of Africa had remained polio-free for one year. As the last remaining two countries with indigenous transmission, all eyes are now on Pakistan and Afghanistan: of the 73 WPV cases reported in 2015, 54 (74%) were from Pakistan. The world is tantalizingly close to permanently defeating the poliovirus and Pakistan can make humanity reach that goal.

The management of the polio eradication programme in Pakistan evolved significantly during 2015. The programme is currently coordinated from national and provincial emergency operations centres (EOCs) and is fully supported by international and local staff from partner agencies. To a great extent, the concept of a “one team” approach has been successfully executed. The EOCs now provide strategic direction and guidance to the District Polio Control Rooms.

The TAG took place halfway through the 2015–2016 low transmission season in an environment of improving programme performance. The TAG was asked to review progress towards the interruption of transmission of poliovirus in Pakistan by May 2016 – the current goal of the national emergency action plan (NEAP).

The objectives of the meeting were:

- to assess progress made since the last meeting;
- to identify and develop consensus on remaining gaps and challenges; and
- to advise on measures the programme can take to keep the country on track to interrupt transmission by May 2016.

The meeting was chaired by Dr Jean-Marc Olivé. It was closed by H.E. Saira Afzal Tarar, Minister of National Health Services Regulation and Coordination, Pakistan.

2. FINDINGS

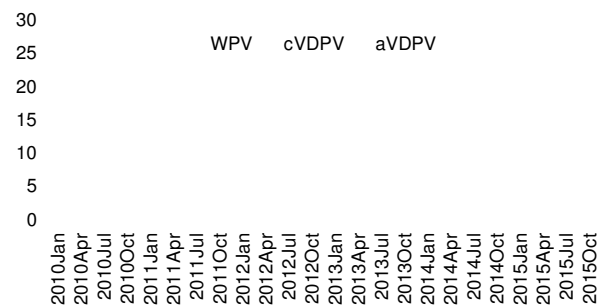
Of the 54 cases reported in 2015, 38 (70%) were reported from tier 1 districts (Fig. 1). The proportion of environmental samples positive for WPV decreased from 35% in 2014 to 20% in 2015. The number of circulating clusters declined from 16 in 2014 to 8 in 2015 and for the first time, WPV1 genetic diversity decreased during a high season (Fig. 2 and 3).

Despite the overall positive progress, surveillance data – including genetic sequencing results – indicate persistent WPV circulation in the three remaining core reservoirs: the city of Karachi, Khyber-Peshawar Corridor and Quetta block. Transmission in the second and third reservoir is heavily intertwined with transmission in the neighbouring Greater Nangarhar and Greater Kandahar areas of Afghanistan respectively.

Data from acute flaccid paralysis (AFP) surveillance indicates the risk of polio is highest for children <2 years. While the overall proportion of children <2 years among reported non-polio AFP cases was 30%, the proportion with confirmed WPV was 78%. Compared to non-Pashto speakers, children from Pashto-speaking families were 3 times more likely to be positive for WPV. Among non-polio AFP cases in tier 1 districts, the proportion of children who have never received at least one dose of oral polio vaccine (OPV) decreased from 24% in 2014 to 4% in 2015.

Tier 1 (core reservoirs*)

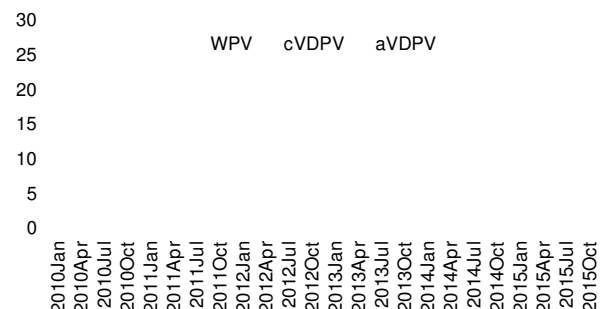
Tier 2 districts



Tier 1 (other)



Tier 3 and Tier 4 districts



*core reservoir areas as of January 2016 are Karachi city, Khyber-Peshawar corridor, and Quetta block

Fig. 1. Epidemic curves by tier classification showing confirmed polioviruses, Pakistan, 2010–2015

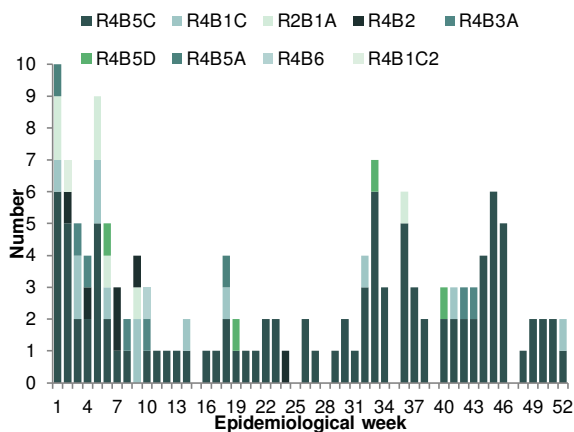


Fig. 2. Wild poliovirus type 1 clusters isolated from both cases presenting with acute flaccid paralysis and environmental surveillance, Pakistan 2015

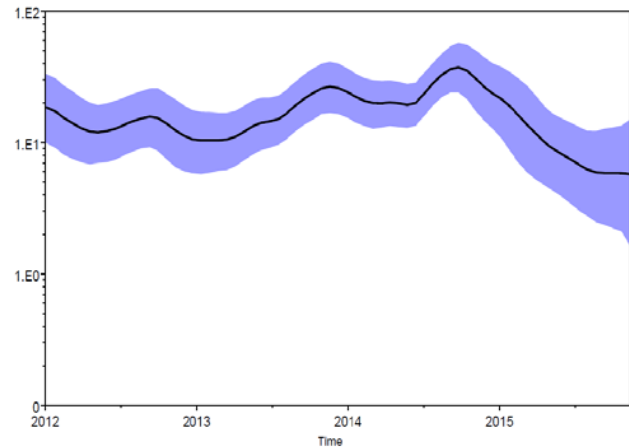


Fig. 3. Genetic diversity plot, Pakistan, 2012–2015

Balochistan

While the immunity gap has decreased and overall risk reduced, persistent transmission in Quetta block continues to pose risks to many districts. Since September 2015, there has been steady improvement in the quality of supplementary immunization activities in Quetta and satisfactory performance in Pishin (Fig. 4). However, the results in Killa Abdullah have been profoundly substandard. While there has been some movement to correct the poor performance in Killa Abdullah, much more work is needed in this district

In addition to the Quetta block, Loralai and the districts neighbouring North Sindh and South Punjab remain at risk from imported cases. To avoid potential outbreaks, more aggressive work is needed to further close the immunity gap.

Federally Administered Tribal Areas

Enormous progress has been observed in the Federally Administered Tribal Areas (FATA) in the past 6 months. Access in the last two remaining agencies with pockets of inaccessible populations (Khyber and North Waziristan) has improved (Fig. 5). The uncontrolled outbreak of 2014 has given way to transmission that is now centred in and around Khyber agency and the neighbouring district of Peshawar in Khyber Pakhtunkhwa (KP). In 2015, agencies and federal regions reporting cases were Khyber (11 cases), FR Peshawar (2), North Waziristan (1), and South Waziristan (2). Since the last meeting, one major success story has been the implementation of continuous community protected vaccination (CCPV). This has been very critical in improving overall quality of campaigns by ensuring door-to-door vaccinations replace ineffective *hujra* vaccinations. Stringent monitoring, as measured by proportion of areas assessed by lot quality assurance sampling, has been lacking.

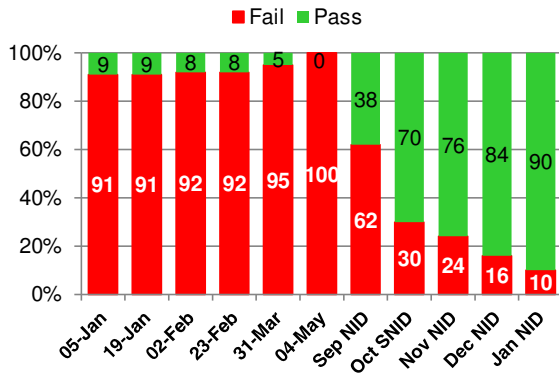


Fig. 4. Outcomes of LQAS assessments of high risk union councils in Quetta, Balochistan, 2015/2016

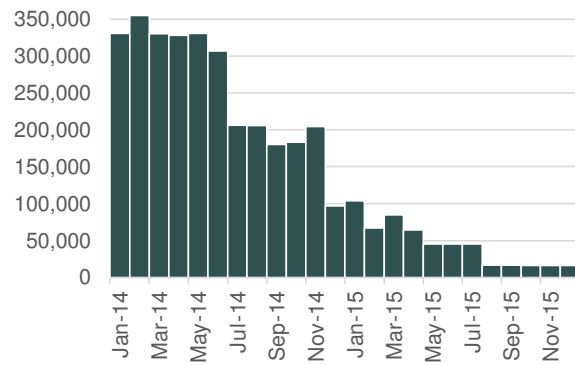


Fig. 5. Number of inaccessible children in FATA, 2014-2015

Khyber Pakhtunkhwa

The city of Peshawar and the neighbouring *tehsil* of Khyber (Jamrud and Bara) comprise the epicentre of transmission that now spans the Khyber-Peshawar corridor to Greater Nangarhar in Afghanistan. That said, the programme has made progress (Fig. 6). Campaign quality has shown improvement in most union councils of tier 1 districts. In contrast, especially in non-CCPV union councils, quality has been inconsistent and mostly suboptimal. More needs to be done to overcome the middling performance observed in these union councils.

Sindh

Despite the good preparatory work throughout the summer, the programme in Sindh province was unable to perform to expectations by September. Going into the low season, poor campaign quality was especially critical in Karachi. In terms of quickly closing the underlying immunity gap, this put the programme off track (Fig. 7).

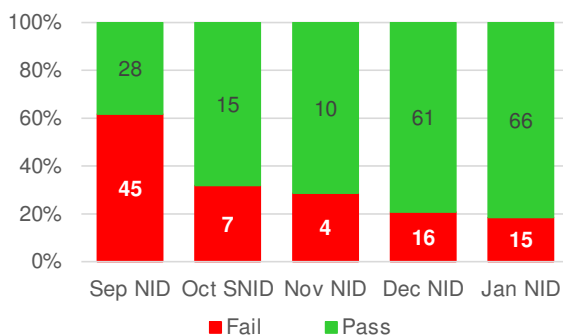


Fig. 6. Outcomes of LQAS assessments of high risk union councils in Peshawar, Khyber Pakhtunkhwa, 2015/2016

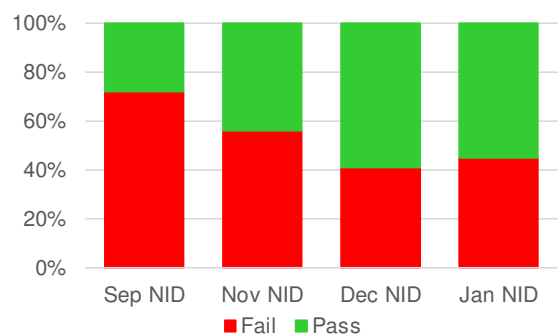


Fig. 7. Outcomes of LQAS assessments of high risk union councils in Karachi, Sindh, 2015/2016

To the credit of the programme, the deficiencies were recognized. To tackle the underlying issues that led to poor performance, the Karachi Task Force under the leadership of the Karachi Commissioner was established. The task force made major programmatic adjustments that led to improved performance for December and January rounds. Provided high-level commitment under the leadership of the Commissioner continues, improvements in quality are expected. However, the full results of this mid-season course correction can only be assessed after the first quarter of 2016.

Outside Karachi, in interior Sindh, there are indications of ongoing local transmission of WPV. The circulation of a unique genetic cluster for much of 2015 (environmental surveillance data) together with poor campaign quality in many districts (especially Sukkur) hint at an underlying programmatic problem.

Punjab

The province has successfully maintained high population immunity through the implementation of good quality supplementary immunization activities and the execution of a strong routine immunization programme. In the past 6 months, there were sporadic WPV cases in Chakwal and RY Khan districts. The aggressive response to these outbreaks highlighted the readiness of Punjab to tackle importations from core reservoirs.

Islamabad

Even though no case has been detected in the capital in 2015, there is evidence from environmental surveillance of WPV presence in the twin cities of Islamabad and Rawalpindi. Of the 22 lots assessed in Islamabad over the last three supplementary immunization activities, only 9 (41%) passed indicating consistent below par performance.

Gilgit-Baltistan and Azad Jammu Kashmir

Both Gilgit-Baltistan and Azad Jammu Kashmir have maintained high quality performance in supplementary immunization activities throughout 2015. This has reduced the risk of large scale outbreaks following importation. However, like Punjab, as long as there is poliovirus anywhere in Afghanistan and Pakistan, the risk of an outbreak remains high. The gaps in surveillance in some districts, especially in Gilgit-Baltistan, is of concern.

3. CONCLUSIONS

Progress

There has been significant progress made by the programme since the last meeting in June 2015. The TAG strongly commends the commitment and determination of the security forces in ensuring that campaigns are conducted in a safe and secure environment. It is now clear that access is no longer an obstacle to the interruption of WPV type 1 transmission in Pakistan.

The improvement of the security environment, a prerequisite for good programmatic outcomes, would not have been possible without the leadership of the Pakistani government. The TAG deeply regrets the loss of life incurred among polio programme security support workers in Quetta City in January 2016, and notes the remarkable levels of commitment that saw vaccinators working again within hours of the incident. In addition, strong management, oversight and accountability across all government levels have contributed to the observed progress. The clearly palpable positive atmosphere, the result of the 'one-team' approach, is encouraging.

This performance improvement would not have been possible without the dedication and commitment of frontline workers, to whom the TAG pays tribute. The TAG is also pleased to note that major strides have been made towards addressing the payment issues identified in the previous meeting. The 'paradigm shift' towards finding and vaccinating missed children has now fully been embedded into programme planning and delivery.

The global eradication efforts cannot afford delays in Pakistan due to lack of financial resources. The TAG commends the Government of Pakistan, together with international partners, for tackling this issue and ensuring that most of the financial gaps identified in the previous meeting have been closed.

The TAG appreciates the substantial integration of communication and social mobilization into all aspects of the programme and its focus on building community acceptance and demand. Full integration of operations and communications is critical to achieving the 'zero missed children' goal.

Risks

The goal of interruption of transmission by May 2016 is achievable, but at risk unless there is further reduction in the immunity gaps. The virus is still successfully seeking out unprotected children especially in the core reservoirs. At this stage of the eradication effort, timely detection of transmission is critical and poor surveillance, especially in parts of Karachi and Quetta block, is unacceptable. The risk of virus dissemination from core reservoirs increases with increasing movement from core reservoir areas. The annual migration (at the beginning of spring) of populations wintering in Karachi and other southern districts to FATA, KP and Balochistan provinces, and Afghanistan is both a risk and an opportunity.

In the next few months, further increasing the population immunity in all areas is the path to timely interruption of transmission. Any failure to sustain the commitment to polio eradication by government and partners, or any reduction in the provision of adequate protection for polio teams, will likely cause the eradication effort to fail. Similarly, poor quality campaigns due to problems of access, security or operational delivery in the core reservoirs will cause the failure to meet its target. In some tier 1 districts, low or stagnant numbers of female vaccinators is a critical risk that is leading to poor performance in non-CCPV areas.

Federally Administered Tribal Areas

The TAG congratulates the FATA team on significantly improving access to children in South Waziristan, FR Bannu and parts of Khyber Agency and commends the collaborative role played by the political, administrative and military leadership at all levels. However, the TAG notes the threat represented by continued WPV transmission in pockets of unreached populations and among consistently missed children.

The TAG congratulates the FATA team for their focused implementation of a successful supplementary immunization activity with inactivated polio vaccine (IPV) in Khyber and other agencies. The TAG notes with satisfaction the sense of urgency that has been fully inculcated throughout the FATA polio eradication teams and commends the EOC for the improving quality of campaigns. The TAG is pleased to see the complete shift away from *hujra* vaccination to house-to-house vaccination across FATA.

The TAG appreciates the close coordination under the leadership of the Commissioner of Peshawar between Khyber and Peshawar teams including micro-synchronization efforts along the common boundary. However, the TAG notes with concern the low proportion of females (<10%) among frontline workers and the low levels of lot quality assurance sampling (6% in CCPV areas) in the agencies.

Khyber Pakhtunkhwa

During its last meeting, the TAG observed the lack of truly synchronized supplementary immunization activities between Peshawar and neighbouring Khyber Agency. The TAG commends both FATA and KP for fully addressing this concern. TAG commends the province for improvements made in campaign quality since the last meeting, in particular the successful implementation of CCPVs in tier 1 districts. However, gaps remain especially in the non-CCPV union councils of Peshawar.

Considering the need for well-motivated, local female frontline workers, the TAG notes with concern the lack of improvement in the proportion of females in mobile teams which has remained at 60% since March 2015. The TAG is troubled that gaps identified by the findings of the external surveillance review are yet to be fully addressed.

Balochistan

During their last meeting, the TAG was very concerned over the postponement of more than half of the planned supplementary immunization activities, and the fluctuating quality of the implemented campaigns in Quetta. Now the TAG has observed noticeable improvements: all campaigns in Quetta since September 2015 have been implemented on time and the quality of each campaign has steadily improved. While the TAG congratulates Balochistan for this positive development, it would like to remind the team that sustained political commitment and the continuous provision of a secure environment will be needed to maintain and improve on this performance and achieve polio-free Balochistan by May 2016.

The TAG is inspired by the resolve of government and the resilience of the frontline workers in the face of the recent serious security incidents. TAG congratulates the Balochistan government for its intense oversight of the programme and for ensuring well-secured single phase campaigns in Quetta.

Notwithstanding recent improvements in Killa Abdullah, TAG remains concerned that the current performance in Killa Abdullah district will prevent getting Balochistan to 'zero'-polio by May 2016.

Sindh

Karachi is a hub for population interactions across Pakistan and Afghanistan, and as of January 2016, remains an amplifier of imported and indigenous virus. Following poor quality campaigns at the beginning of the low season, the TAG appreciates the efforts taken to turn around the situation by the Sindh team with support of national EOC. Specifically, the TAG commends the creation of the Karachi Task Force and the Karachi Action Plan, which enabled better campaign performance in December and resulted in a single phase campaign for the first time in four-years with outstanding security protection.

Continued surveillance gaps in areas with ongoing transmission are a major worry. The TAG notes with concern the poor surveillance in many areas of Karachi, and the continuous evidence of local poliovirus transmission.

Notwithstanding recent gains, TAG concludes that Karachi remains the biggest threat to the aim of interrupting transmission by May 2016.

The continued isolation of a unique genetic cluster in North Sindh, combined with poor campaign quality in Sukkur, signals operational and/or surveillance gaps that require urgent attention. The TAG notes the attempts at establishing parameters of a successful response plan. However, these response efforts are haphazard and unlikely to succeed without concerted leadership from the Commissioners, the Deputy Commissioners and the whole government machinery. The worst-case scenario for Sindh and Pakistan is re-established transmission in the Central Pakistan riverine heartland straddling the three provinces. The primary risks in this area are inadequate surveillance, poor management and lack of a coordinated high quality response.

Punjab

The TAG is appreciative of the tremendous work done by Punjab. As the most populous province, the sustained high performance by Punjab has ensured any imported poliovirus does not lead to entrenched transmission within the province. The TAG recognizes the continued commitment of the Punjab provincial government towards the eradication of polio and the improvement of childhood immunization. Through robust monitoring and accountability frameworks, Punjab has ensured high quality immunization activities are available to all children in Punjab. The main risk to Punjab is ongoing transmission in core reservoirs outside Punjab. The threat of polio to Punjab will cease only after the last

transmission chain in Pakistan and Afghanistan is broken. High risk migrant populations especially those connected socio-linguistically with populations in areas of ongoing transmission, pose a particular threat.

Islamabad

The TAG is concerned by the poor quality of supplementary immunization activities in Islamabad. Considering that there are high risk populations socially connected to core reservoir areas and living in crowded neighbourhoods with poor sanitation, the potential for an outbreak in the capital of the nation is increasing.

Gilgit-Baltistan and Azad Jammu Kashmir

The TAG commends the governments of Gilgit-Baltistan and Azad Jammu Kashmir for maintaining high population immunity thus ensuring no sustained transmission is re-established in the two areas. The TAG however is concerned about substandard surveillance especially in parts of Gilgit-Baltistan.

4. RECOMMENDATIONS

Management, oversight, and political engagement

The TAG recommends that the national authorities at all levels: 1) maintain and further improve political commitment; and 2) continue to implement the accountability framework (with associated measurement) for sustained performance improvements. The TAG also encourages sustaining the performance of national and provincial task forces and enhancing the role of Commissioners and Deputy Commissioners, for effective implementation of the NEAP.

The TAG also noted that members of the Pakistan polio management team, i.e. the coordinators of the EOCs at both national and provincial levels, are appointed to positions outside the normal civil service structure. These individuals have served, and continue to serve, with tremendous zeal and exceptional commitment to deliver a polio-free Pakistan. The national authorities should take steps to ensure that this service is recognized in the long run, within the Pakistan civil service structure. Similar steps should be taken for other government staff assigned to the EOCs, who perform exceptionally in their duties.

Considering the importance of translating accountability to positive outcomes at the local level, the EOCs should engage local governments in the monitoring and supervision of union council level staff. Over the past 6 months, a number of very committed and competent government officers have delivered on the promise of moving the programme to new levels of performance. The TAG recommends that the government avoid transfers of high-performing key staff especially in the core reservoir areas until the job is done, and continuously rewards outstanding performance. The TAG also recommends that disciplinary removal of poor-performing programme personnel (as per accountability framework) only be pursued where clear analysis shows potential benefit of removal vis-à-vis risk of disruption to programme.

The TAG values the good work done by the EOCs in conducting a quarterly review of the NEAP in November 2015 and recommends the full implementation of the supplementary action plan outlined in the quarterly report.

The TAG remains very concerned with the poor quality of campaigns in Karachi in the last quarter of 2015. Noting the enormous effort to turn around the Karachi situation, the TAG urges the Karachi Task Force to ensure the full implementation of the Karachi Action Plan.

As the programme continues to make progress, it is important that no ground is lost in areas that have successfully kept the virus at bay. In line with the outcomes of the NEAP review, the TAG recommends that integrated rapid response units be established at the national and provincial EOCs. These units should be tasked with supporting local teams in responding to poliovirus events whenever needed.

Reaching every child

As the programme intensifies focus on the core reservoirs, there is need to make course corrections speedily if deficiencies are identified. For districts showing consistent poor performance, the TAG recommends that the programme develop and implement district-specific action plans.

The implementation of continuous community protected vaccination (CCPV) in high risk union councils within tier 1 districts has been a major success story for the programme. With special focus on improving microplanning and enhancing supportive supervision, the TAG recommends the utilization of lessons learnt from the CCPV experience to improve performance in non-CCPV areas. The programme should continue targeted utilization of the CCPV strategy, to the extent that it can be achieved without compromising CCPV quality.

In order to sustain and further improve the gains made in the quality of supplementary immunization activities in the past 6 months, there is a need to maintain access to all children by ensuring effective and sustained security support for all supplementary immunization operations. Outside the tier 1 districts, the programme should pay particular attention to areas with evidence of poliovirus transmission, especially in North Sindh, Islamabad and Rawalpindi. Continued poor campaign quality in Sukkur and Islamabad is of particular concern.

The TAG endorses the ongoing realignment of lot quality assurance sampling and third-party monitoring to high risk union councils, and to other poorly performing union councils in core reservoir areas. The TAG recommends that special attention be given to FATA where the proportion of lots assessed in CCPV union councils remains low. At all times, the TAG emphasizes the need to take remedial action using the programme's own response algorithm whenever a poorly performing union council is identified.

Integrated communication strategies are critical to ensuring that demand and acceptance remain high. The TAG recommends the continued adaptation and localisation of mass media messaging together with an intensified focus on community engagement for the purpose of reaching and vaccinating all remaining missed children. The programme also needs to ensure the consistent presence of frontline workers with an appropriate profile (defined as local, female, well-trained, supported and supervised) on the doorstep to sustain community and household acceptance and trust.

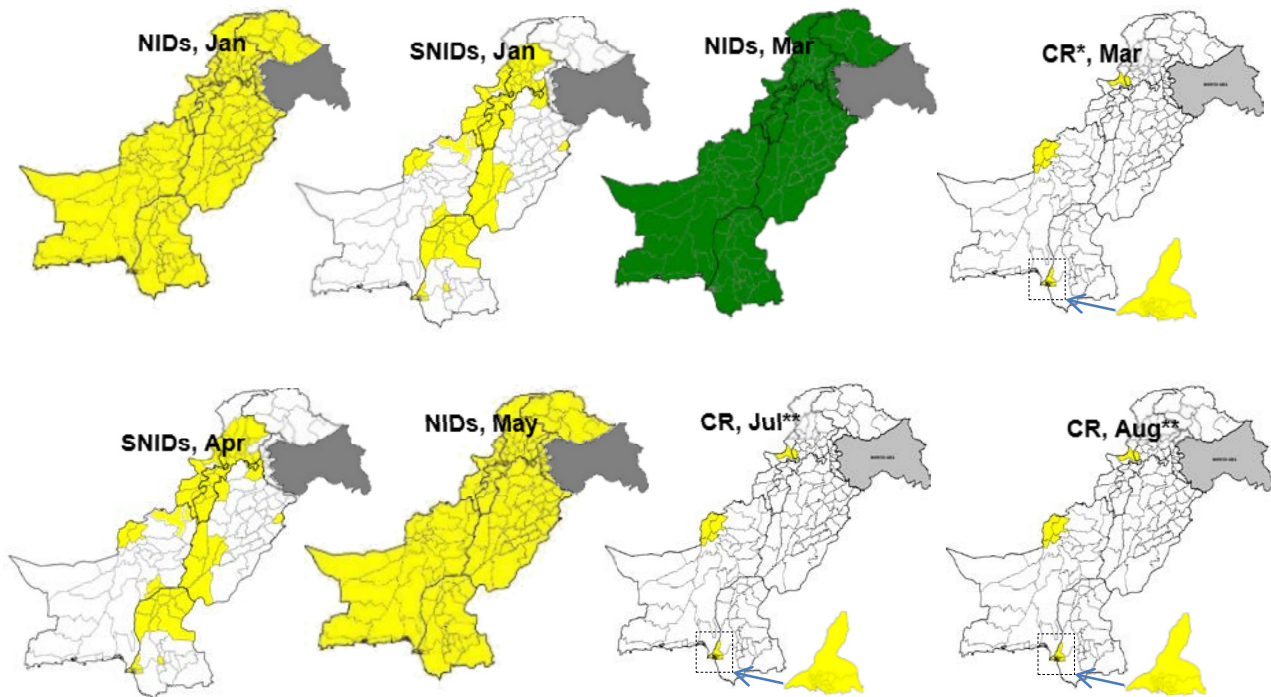
Enhancing impact of vaccination activities

The TAG endorses the revisions to the schedule and vaccine-type proposed by the programme which includes (Fig. 8):

- conversion of the February subnational immunization campaign from a trivalent OPV to a bivalent OPV round and the May subnational campaign to an national campaign;
- implementation of a bivalent OPV/IPV supplementary round before the end of April in core reservoirs;
- conduct a mop-up bOPV campaign targeting <5 year children for seasonal migrant population in temporary settlements before departure. Preparations to extend vaccination activities to high-risk mobile populations must be made at as granular level as possible. These preparations must be fully and demonstrably incorporated in revalidated microplans prior to each campaign round;
- implementation of targeted bOPV rounds in July and August in core reservoir areas.

The TAG encourages the programme to review the need for additional supplementary IPV use beyond the end of the low season, by the end of April.

The TAG recommends rationalization of permanent transit points by focusing vaccinations to high risk mobile populations at international and inter-provincial crossings. Whenever possible, special attention should be given to pre-departure vaccinations.



*CR: core reservoir areas i.e. Karachi city, Khyber-Peshawar corridor, and Quetta block; **Additional districts will be recommended for inclusion after May NEAP review

Fig. 8. Schedule of supplementary immunizations activities for January to August 2016. Yellow colour indicates a bOPV, and green a tOPV campaign.

Detecting transmission

The surveillance gaps identified in Karachi, North Sindh, parts of Balochistan, Khyber Pakhtunkhwa, FATA and parts of Gilgit-Baltistan are of concern. In all areas with evidence of transmission, the programme should now go beyond the surveillance indicators and ensure sensitivity is improved to a level where any ongoing transmission is detectable in a timely fashion. Any identification of the circulation of indigenous orphan viruses should be considered a major programmatic surveillance failure. The TAG recommends the full implementation of the recommendations made by the external surveillance review, and the comprehensive surveillance strengthening plans. All gaps should be comprehensively addressed by end of May. The TAG restates its earlier recommendation on enhancing community surveillance (fully integrated with the existing system) especially in areas with poor health infrastructure and in union councils covered by CCPVs.

Environmental surveillance is not considered a replacement of high quality AFP surveillance, however as an adjunct to AFP surveillance, it has assisted the programme to detect circulation in critical areas. The TAG recommends careful review of the number and locations of environmental surveillance sites with the aim of maximizing the coverage of high risk populations without unduly overburdening the laboratory capacity. In Quetta, Karachi, Pishin and North Sindh, in that order, the TAG recommends the expansion of the number of sites to cover additional high risk populations.

Tackling cross-border shared reservoirs

To end the back-and-forth transmission between Afghanistan and Pakistan, the TAG urges both countries (Fig. 9):

- to continue holding regular regional- and national-level cross-border meetings and monitor the implementations of agreed actions;
- to improve coordination, information sharing and joint risk management at the micro-level especially between KP/FATA provinces of Pakistan and Eastern/South-eastern regions of Afghanistan and continue combined analysis of data for these areas;
- to continue reviewing the supplementary immunization calendar together and ensuring full synchronization;
- to treat tier 1 and 2 districts of Pakistan contiguous to low performing priority 1 and 2 districts of Afghanistan as a single entity for high focus interventions. This should also include coordination of subdistrict level staff and communication strategies.

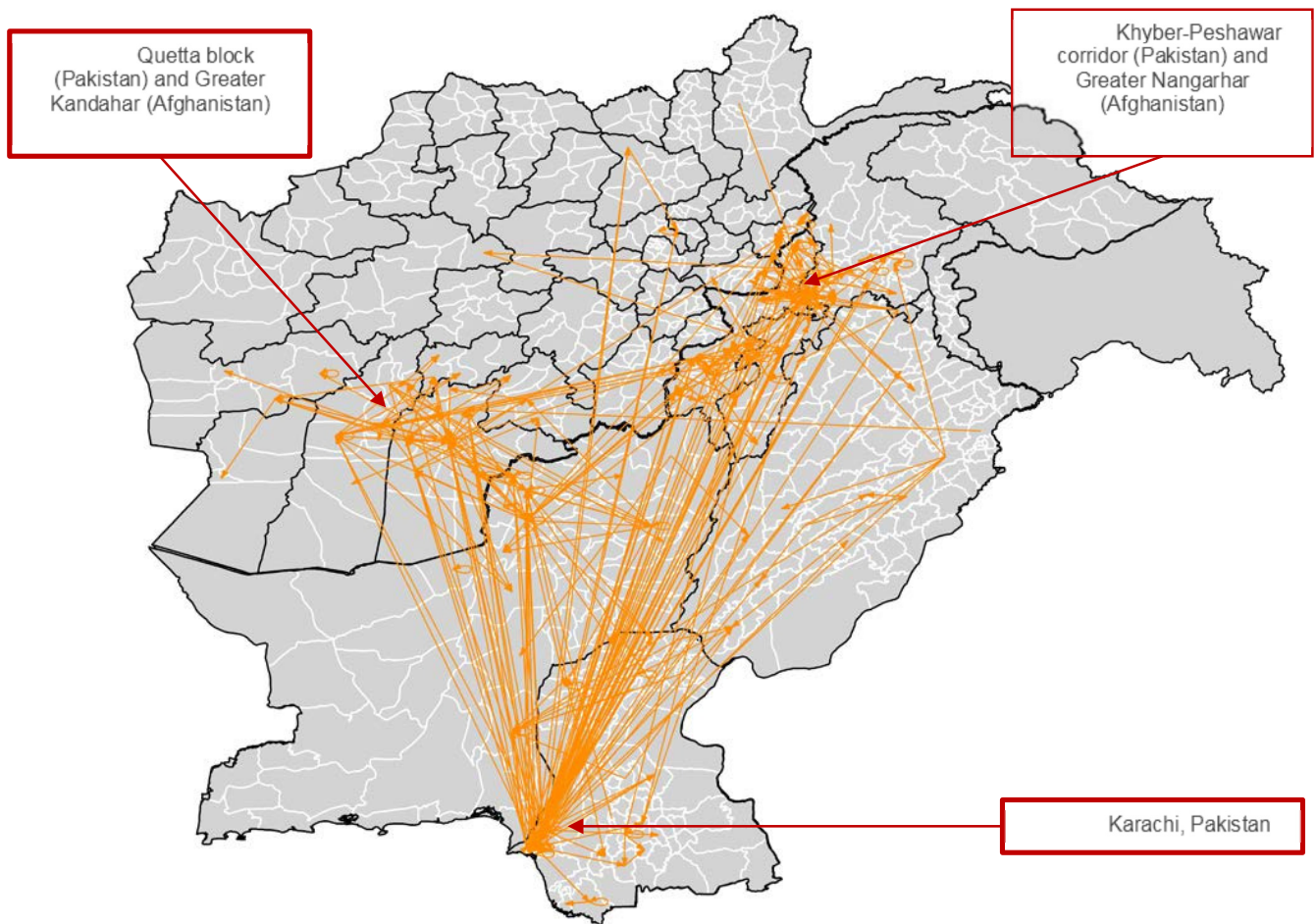


Fig. 9. Map of Pakistan and Afghanistan highlighting the close linkages of transmission across the two countries. The remaining common core reservoirs across the two countries are the Khyber-Peshawar corridor (Pakistan) and Greater Nangarhar (Afghanistan), and Quetta block (Pakistan) and Greater Kandahar (Afghanistan). Karachi continues to be well connected to transmission in both countries.

OPV switch, laboratory containment, and vaccine management

The switch from tOPV to bOPV in Pakistan is slated for 25 April 2016. The TAG recommends the programme closely monitor the preparation for the switch and synchronize the switch date with Afghanistan. Given the recommendations on maximizing the use of bOPV, the programme must develop plans by end of March to timely detect and aggressively respond to any type 2 event after the switch. Following the switch plan, the programme must ensure that two weeks after the switch no tOPV remains in the field. Programme must adhere to laboratory containment requirements under Global Action Plan to minimize poliovirus-associated risk after type-specific eradication of wild polioviruses and sequential cessation of oral polio vaccine use.

In the post-switch era, any response to a type 2 event will require the use of mOPV2. The TAG requests the Government of Pakistan to urgently facilitate the acceptance and emergency utilization of prequalified mOPV2 in the country. This will ensure speedy release of vaccines if ever needed. To efficiently implement a post-switch response, and assist in the swift removal of unutilized mOPV2 vials, the global programme should explore options of using distinctive labels for mOPV2 vials different from bOPV.

Repeated re-introduction of WPV in previously polio-free areas highlights the need for high quality campaigns and strong routine immunization. Without compromising the thrust of polio eradication efforts, the TAG recommends that government and international partners continue refining the synergy plans for the Polio Eradication Initiative (PEI) and Expanded Programme on Immunization (EPI) and accelerate their implementation across the country. Recommendations of the last TAG meeting about PEI–EPI synergy and vaccine management are still valid.

Preparations for 2016–2017

The NEAP expires in May 2016. Adequate preparations for the next season should start in earnest by the end of March and a new NEAP for 2016–2017 should be presented to the TAG in their next meeting. The TAG should hold a consultative teleconference in April 2016 following the subnational immunization campaign. The next full TAG meeting is proposed for mid-2016.

Annex 1

LIST OF PARTICIPANTS

Members of the Technical Advisory Group

Jean-Marc Olivé, Chairman
Chris Morry, TAG Member
Nasr El Sayed, TAG Member
Sebastian Taylor, TAG Member
Abdel Majeed Siddiqi, TAG Member
Bijan Sadrizadeh, TAG Member
Anita Kaniz Mehdi Zaidi, TAG Member
Erma Manoncourt, TAG Member
Iqbal Ahmad Memon, TAG Member

Special Adviser

Hussein A. Gezairy

Technical Advisers

Michel Zafran, WHO/HQ
Arshad Quddus, WHO/HQ
Naveed Sadozai, WHO/HQ
Vachagan Harutyunyan, WHO/HQ
Zubair Mufti, WHO/HQ
Christopher Maher, WHO/EMRO
Michael Ryan, WHO/EMRO
Abdirahman Mahamud, WHO/EMRO
Philip Smith, WHO/EMRO
Reza Hossaini, UNICEF/HQ
Jalaa Abdelwahab, UNICEF/HQ
Andisheh Ghazieh, UNICEF/HQ
Rod Curtis, UNICEF/ROSA
Tim Petersen, BMGF/HQ
Waqar Ajmal, BMGF/HQ
Sue Gerber, BMGF/HQ
John Vertefeuille, CDC/HQ
Derek Ehrhardt, CDC/HQ

Government of Pakistan

Saira Afzal Tarar, Minister of State, MoNHSRC
Ayesha Raza Farooq, Senator, Prime Minister's Focal Person for Polio Eradication
Muhammad Ayub Sheikh, Secretary, MoNHSRC
Assed Hafeez, Director General, MoNHSRC
Mazhar Nisar Sheikh, MoNHSRC

Pakistan Army

Brig. Dr Bashir, Engineer-in-Chief Branch, GHQ
Brig. Tariq Mehmood, Engineer-in-Chief Branch, GHQ

UNICEF and WHO Representatives

Aidan O’Leary (for Angela Kearney), UNICEF
Michel Thieren, WHO

Federal and Provincial PEI Teams

Federal

Rana Muhammad Safdar, Coordinator, National EOC
Saqlain Gilani, EPI
Sohail Zaidi, National Institute of Health
Rana Jawwad Asghar, N-STOP (FELTP)
Kamaluddin Soomro, N-STOP (FELTP)
Mumtaz Laghari, N-STOP (FELTP)
Salah Al Haithami, WHO
Keith Feldon, WHO
Muhammad Azam, WHO
Salah Tumsah, WHO
Raoul Bonifacio, WHO
Jalpa Ratna, UNICEF
Raabya Amjad, UNICEF
Attiya Qazi, UNICEF
Anahita Shirzad, UNICEF
Altaf Bosan, BMGF
Jamal Ahmed, CDC
Ashir Ali, Rotary International

Balochistan

Saif ur Rehman, Coordinator, EOC
Aftab Kakar, N-STOP (FELTP)
Abdi Nasir Adem, WHO
Jawahir Habib, UNICEF
Masood Khan Jogazai, BMGF
Hanif Khilji, Rotary International

Khyber Pakhtunkhwa and FATA

Jamal Yousaf, Secretary Health, KPK
Muhammad Akbar Khan, Coordinator EOC, KPK
Ayub Rose, Programme Manager, EPI, KPK
Akram Shah, KPK
Shakeel Qadir Khan, Secretary, Law and Order / Coordinator EOC, FATA
Waqar ul Hasan, Secretary Social Sector, FATA
Zafeer Hussain, Director Health Services, FATA
Ikhtiar Ali, Assistant Director, EPI, FATA
Qasim Afridi, N-STOP (FELTP)
Ibrahim Yalahow, WHO
Hamid Mohmand, WHO
Irfan Ellahi, WHO

Israr ul Haq, WHO
Abdul Qayum Khan, UNICEF
Muhammad J. Khan, UNICEF
Imtiaz Ali Shah, BMGF
Nadeem Jan, BMGF
Abdul Rauf Rohaila, Rotary International

Punjab

Ali Jaan Khan, Secretary Health
Khawaja Salman Rafique, Advisor to Chief Minister on Health
Jawwad Rafiq Malik, Secretary Health
Zahid Pervaiz, Coordinator EOC
Munir Ahmed, Programme Manager, EPI
Muhammad Younas, N-STOP (FELTP)
Fayyaz Sarwar, WHO
Rana Mushtaq, UNICEF
Aslam Chaudhary, BMGF
Mohammed Shamsi, Rotary International

Sindh

Azra Pechuho, Chairperson, Provincial Oversight Committee
Shereen Mustafa, Special Secretary, Health Department
Usman Chachar, Coordinator, EOC
Manzoor Memon, N-STOP (FELTP)
Temesgen Demeke, WHO
Thomas Grein, WHO
Huma Arif Khan, UNICEF
Shoukat Ali, UNICEF
Ahmed Ali Sheikh, BMGF
Masood Ahmed Bhali, Rotary International

Gilgit-Baltistan

Raja Rasheed Ali, Secretary of Health
Muhammad Iqbal, Programme Manager, EPI

Islamabad

Hasan Orooj, Director Health Services, CDA
Muhammad Tahir, District Health Officer, ICT

Azad Jammu and Kashmir

Sardar Mahmood, DG Health
Sardar Shabbir Khan, Programme Manager EPI



World Health Organization
Regional Office for the Eastern Mediterranean
P.O. Box 7608, Nasr City 11371
Cairo, Egypt
www.emro.who.int