Pakistan Program Update

Independent Monitoring Board
31 October – 1 November 2017
Epidemiological update: WPV cases
Overall progress made but transmission persists in hotspots

Status of circulation
• Continued progress towards zero; only 5 WPV1 cases reported so far this year (down from 18 at a similar point in time).
• Circulation in common reservoirs of Afghanistan and Pakistan → 3 zones of ongoing circulation.
• Progress in Peshawar-Khyber Agency, transmission in the twin-cities of Islamabad & Rawalpindi
• Southern corridor of Quetta block/Greater Kandahar remains active
• Circulation re-established in Karachi after imports from Southern Corridor and South Sindh; many towns now infected.
• Most recent polio case from Lakki Marwat with date of paralysis onset 21 August likely linked to circulation in the central corridor
Epidemiological update: Environmental surveillance
Persistent transmission in the hotspots of Quetta Block and Karachi

* As of 17-10-2017
Improved and sustained SIAs quality: 3rd party PCM
Pockets of suboptimal performance still persist in Balochistan

NID April 2017
NID May 2017
NID* Sept 2017

*Widespread finger mark quality issues reported
Improved and sustained SIAs quality: LQAS
Progress in the last 6 months but gaps in Balochistan

Proportion of UCs passing* LQAS
Sep 2016 – Feb 2017

Proportion of UCs passing* LQAS
Mar – Sep 2017

*a lot ‘passes’ if 3 or less of the 60 children assessed are finger marked.
Improved and sustained SIAs quality
Missed children estimates decline, but areas with persistent gaps

<table>
<thead>
<tr>
<th>Reason</th>
<th>Pakistan 2016-2017</th>
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<tbody>
<tr>
<td>No team</td>
<td>1.2%</td>
</tr>
<tr>
<td>Not available</td>
<td>3.7%</td>
</tr>
<tr>
<td>Refusal</td>
<td>1.1%</td>
</tr>
<tr>
<td>Child missed by team</td>
<td>0.4%</td>
</tr>
<tr>
<td>Asleep</td>
<td>0.7%</td>
</tr>
<tr>
<td>New born</td>
<td>0.5%</td>
</tr>
<tr>
<td>Migrant</td>
<td>1.9%</td>
</tr>
<tr>
<td>Other</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

*Reas for missed children, Pakistan, PCM data, 2017*
SIAs quality in tier 1/hotspots: LQAS/PCM
Peak performance in Khyber and Peshawar, inconsistent in Islamabad

* a lot ‘passes’ if 3 or less of the 60 children assessed are fingermarked.
Routine immunization quality: Sustained in Punjab but sub-optimal performance in Balochistan, FATA and tier-1 districts

Impact on population immunity: serosurvey
Gains everywhere but heterogeneity persists in some districts

*some results pending*
PROVINCIAL SUMMARIES: ROAD TO ZERO
**Punjab: current status, road to zero**

**WPV1 epi-curve**

- **2015**
- **2016**
- **2017**

**Proportion of ES**

*Data as of Oct 17, 2017*

- **Virus:** WPV case in Lodhran district, and the isolation of a distinct WPV cluster in Multan and Rawalpindi indicate the possible survival of remnant chains in Punjab. Local WPV circulation also observed in RWP/ISB. Killing these chains and ensuring no new outbreak a priority. Extended investigations and data mining hint at potential association with linguistic minorities (Bravi, Balochi, and Siraiki speaking groups) and high-risk mobile population.

- **Operations:** High background routine immunization and good SIA performance keeping most districts polio-free. Operational gaps in Rawalpindi and to a greater extent in neighbouring Islamabad sustaining transmission in the twin cities.

- **Outside Rawalpindi:** South Punjab districts of D G Khan, Muzaffargarh, RY Khan and Rajanpur especially riverine Union Councils and areas bordering Balochistan receiving special attention. Programme has conducted intensive field investigations, high-risk mobile population assessment. Punjab government has further accelerated investment in routine immunization.

- **Obstacles to eradication:** potentially missing sub-population groups in Central and South Punjab. Mitigation measures underway.
Sindh: current status, road to zero

**WPV1 epi-curve**

- **Virus:** Evidence from AFP surveillance (1 WPV case), environmental surveillance (multiple sites positive) and healthy-children sampling (4 WPV positives) point towards intensification of circulation in Karachi starting the 2017Q2.

- **Operations:** High performance resulting in high overall population immunity. However, operational gaps in some high-risk Union Councils, challenges with community acceptance among some social groups, extremely favourable transmission conditions in the city and continued circulation elsewhere (strong evidence of WPV re-importation from South Sindh and South Corridor after a lull in local circulation in 2016) conspired to keep Karachi infected.

- **Outside Karachi:** SIA quality improved in North Sindh, however, gaps persist some districts in Central and South Sindh. Programme responded aggressively to recent detections of WPV in environmental surveillance sites in Kambar and Jacobabad.

- **Obstacles to eradication:** Resurgence of WPV in Karachi a threat to the programme. More than Karachi itself, the city’s capacity to reinfecr multiple previously polio-free areas a major concern. Multi-pronged effort to address management and oversight shortfalls (both government and partnership), tackle operational gaps, and re-engage community underway.

*Data as of Oct 17, 2017*
Balochistan: current status, road to zero

Virus: 2 WPV cases reported in the last 12 months, both in Chaman tehsil, Killa Abdullah. ES sites positive across Quetta block; transmission extends across the Southern Corridor extending from Quetta city into Helmand river basin.

Operations: in Quetta block transition to CBV achieved in all but 4 Union Councils in 2016; operational unification achieved through conversion of all FCV Union Councils to CHV in July 2017. SIA performance data, serosurveys, monitors feedback, and surveillance data all point towards a positive outlook for Quetta and Pishin, however, Killa Abdullah remains a challenge.

Outside Quetta block: chronic sub-optimal performance in interior Balochistan continues to present outbreak risks; border areas (with Afghanistan, other provinces, and between districts of special concern; EOC Balochistan and DTFs addressing these challenges

Obstacles to eradication: clear evidence of a highly intertwined transmission across the Southern Corridor; high population movement between QB and South Afghanistan and variations in community acceptance of vaccines key contributors to persisting immunity gaps; full and coordinated implementation of Southern Corridor action plan a must. The plan includes mechanisms for joint risk assessment, joint event responses, joint monitoring of HRMP groups, community engagement, and sharing of demographic data.

* Data as of Oct 17, 2017
Khyber Pakhtunkhwa: current status, road to zero

- **Virus**: only 1 case reported in Lakki Marwat in 2017, case linked to circulation in central Pakistan; major progress in Peshawar in 2017, transmission intensity decreased to low levels in Peshawar in the first half of 2017, however, new risk posed by circulation in neighbouring RWP/Islamabad and remnant circulation in Nangarhar, Afghanistan.

- **Operations**: performance in Peshawar has been consistently high throughout 2017; sustaining it through this low season critical.

- **Outside Peshawar**: gaps in performance in South and Central KP a concern. Programme conducted multiple investigations and interventions in South KP districts especially Tank, DI Khan, Lakki Marwat and Bannu to avoid conditions for prolonged outbreak.

- Operational gaps mainly arising from having a higher than average male-only teams a challenge in South KP. Refusal fractions also higher especially in Bannu and Lakkimarwat.

- **Obstacles to eradication**: there’s evidence of multiple reintroductions of new virus to Peshawar from elsewhere in Pakistan and Nangarhar province, Afghanistan. Considering the difficulty in sustaining performance for extended period, stopping circulation elsewhere as important as finishing off any remaining local virus in Peshawar.

* Data as of Oct 17, 2017
**FATA: current status, road to zero**

- **Virus:** No WPV cases reported in FATA in 2017, however the detections of cases in the Central corridor in the last 12 months (Paktika, Afghanistan, and Lakki Marwat, Khyber Pakhtunkhwa), the Northern corridor (Nangarhar, Afghanistan), circulation in RWP/Islamabad, and the increasing intensity of transmission in Karachi present risks to FATA. Khyber Agency, previously classified as a core-reservoir has not reported a case since 2015.

- **Operations:** Small pockets of difficult access remain. Programme still heavily reliant on “male-only” teams. While performance indicators are good, considering the difficult security situation that hampers external monitoring, immunity gaps especially in under 1 year-olds can’t be ruled out. A serosurvey of infants between 6 and 11 months concluded in Khyber agency, results are awaited.

- **Outside Khyber Agency:** Performance improvements in North and South Waziristan and adjoining FRs observed in last low season. Sub-optimal coverage in areas adjoining SWA and FR DI Khan in Balochistan, and operational hiccups in Bajuar Agency a challenge.

- **Obstacles to eradication:** Performance within FATA good enough to ensure no new large scale outbreaks, however, FATA continues to face a geographical and security challenge. High-risk and mobile populations a primary threat.

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**WPV1 epi-curve**

<table>
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<th>Year</th>
<th>Jan</th>
<th>Mar</th>
<th>May</th>
<th>Jul</th>
<th>Sep</th>
<th>Nov</th>
</tr>
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<tbody>
<tr>
<td>2015</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
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<td>2017</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
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**NPAFP rates, by tehsil**

*Data as of Oct 17, 2017*
NEAP 2017/2018
NEAP 2017/2018:
Identifies issues, provides strategies to address gaps

NEAP 2017/18 priorities
- Implement 9 high-quality supplementary immunization activities – 5 NIDs, 4 SNIDs with focus on UCs and districts with operations gaps
- Align strategies with Afghanistan and ensure close coordination paying special attention to the Southern Corridor.
- Continue focus on hotspots (Karachi, Islamabad, Rawalpindi, Quetta, Killa Abdullah and Pishin) and keep Khyber and Peshawar clean.
- Ensure aggressive response plans to outbreaks in polio-free areas.
- Minimize risk of outbreak by working on operational improvement in Tiers 3 and Tier 4 districts especially in Balochistan. Institute a mechanism for the external validation of operational plans.
- Review risk from HRMPs, ensure they are not systematically missed by the system.
- Build on the progress made in surveillance the past 2 years; ‘zero’ must be ‘zero’ and ‘green’ must be ‘green’.
- Improve routine immunizations service delivery in Union Councils conducting Community-Based Vaccination.
NEAP 2017/18: Priority actions already taken since July
Clearing the hotspots, keeping elsewhere clean

- **Oversight and accountability**
  - National - Reinvigorated National Task Force – August 2017
  - Karachi, Chief Minister leadership driving urgency to clear Karachi via Commissioners, Deputy Commissioners
  - Quetta Block – Coordination with military, law enforcement agencies to provide safe and secure environment for frontline health workers in Chaman tehsil, Killa Abdullah.
  - Islamabad-Rawalpindi Coordination Committee established by Prime Minister on 14 September 2017.
  - Peshawar-Khyber -....

- **Management actions**
  - **Staff deployment to hotspots** - partner staff redeployed (Karachi, Islamabad, Quetta Block)
  - **Additional HR/resources** where support required
    - Karachi
    - Quetta Block
    - Islamabad

- **Operational actions**
  - Updating of microplans roll-out focus on HRMP at national level
  - HRMP risk assessments conducted in Balochistan, FATA, KP in July/Aug and ongoing in South Punjab
  - Operational shift FCV to CHW-CBV July Quetta Block
  - Updated communication strategy and campaign “I too am a Sehat Mufaiz’; Strengthened District level coordination on missed/refusals; Refusal conversion teams at district level –
  - Strengthen IPC Skills – updated module with added negotiation skills etc rolled out for NEAP 2017-18 all hotspots – special focus on Karachi Gadap, Tank and Khyber.

- **Routine Immunization**
  - Comprehensive bottleneck analysis done and road map developed and implementation initiated together with EPI in the lead (NISP)

- **Event response**
  - In addition to addressing immunity gaps in hotspots, aggressive response to events a priority; since July CR rounds implemented in Karachi, North Sindh, Zhob division, South KP/FATA, RWP/ISB and neighbouring districts.
NEAP 2017/18: High-risk and mobile populations
Finding and vaccinating missed groups a priority

Who are the HRMP?

- **High-risk populations versus high-risk and mobile populations**
  - most aspects of risk assessment in NEAP revolve around identifying and reaching high-risk settled populations
- High-risk and mobile populations are a special group; require special mechanisms to identify them, and ensure vaccination
- HRMP groups in Pakistan include nomads, seasonal migrants, brick kiln workers, agricultural migrant labour, displaced populations
- Travellers from ‘infected zones’, ‘consistently low-performing districts’, core reservoirs, and/or Afghanistan also considered HRMP

Actions since July 2017

- **Microplans**: revamped microplans and training of frontline workers; HRMP group identification and inclusion in MP a key plank of AIC training
- **External microplan desk and field validations** mechanisms introduced; HRMP component assessment a major component
- **Targeted mop-up vaccinations**: conducted in Hyderabad, Zhob, Quetta, Hazara, Malakand divisions, and South KP/FATA.
- **Transit vaccinations**: enhanced vaccination activities during the months of major movements (Ramadhan, Eid celebrations).
- **Border villages assessment**: reviewed program operational reach along the Pak/Afghan border in South FATA and Zhob division.
- **Targeted HRMP assessment**: began an extensive exercise to understand and map HRMP groups travelling long distances; exercise completed in Quetta block and Zhob division in Balochistan, South FATA and South KP. Groups identified as having low vaccination coverage targeted for mop-vaccination. Data used to update microplans and microplanning processes.
HRMP Survey, July – Aug 2017
Where they were, who they are, where they belong, where they are going next

[Maps and charts showing locations and types of HRMP groups]

Self-reported nationality

- Pakistani: 78%
- Afghan: 22%

HRMP type

- Nomads: 42%
- Seasonal migrant: 31%
- Brick-kiln worker: 8%
- Agricultural labourer: 5%
- Economic migrant: 4%
- Afghan refugee: 7%
- IDP: 3%
- Returnee: 0%
HRMP Survey, July – Aug 2017, main outcomes
Most vaccinated, some missed groups observed

Reasons child missed vaccination in previous campaign
(Of the 14,042 children, 690 [4.9%] were missed)

- Team missed group: 52%
- Team missed child: 9%
- Child away: 14%
- Refusal: 6%
- Child asleep: 2%
- Other: 17%

Of the 5,826 HRMP groups reviewed, 116 (2%) were reported as missed completely during previous SIA. Most (80) were clustered in Sharani and Zhob districts. All vaccinated after exercise.

30.6% of HRMP groups reported being stopped and vaccinated at a transit-point vaccination site. Among the nomads, 36.3% reported vaccination.
HRMP survey Jul/Aug 17: vaccination status by nationality & group
Afghans, nomads more likely to be missed

By self-reported nationality

By HRMP group type

By linguistic group

*Number children assessed (n) indicated within the bar
HRMP survey Jul/Aug 17: vaccination status by nationality & group

Afghans, nomads more likely to be missed

*Number children assessed (n) indicated within the bar
NEAP 2017/18: Program communications
Strategies achieving high awareness of campaigns

Mass media coverage 2017
Targeted Social Mobilization 2017
Awareness of Campaigns, April 2017

NIDs
Mainstream TV, radio, cable channels, print and outdoor media, ensuring coverage across Pakistan

SNIDs
Bigger share of regional media with focus on core reservoir areas and select areas of Tier 2 districts

Special SIAs/Case Response
Local radio, cable, print media and outdoor visibility options for localized coverage

Mass media survey April 2017; High risk districts (2000 parents; 10 FGDs; 40 key informants)
Key Focus Areas

- Reinvigorated campaign for maintenance of overall acceptance in general population and address fatigue
- District level to focus on engagement and not punitive measures for refusals
- Localised approaches to geographic variations KAP/other data (key areas Tank, Karachi Baldia, Karachi Gadap; Pishin, Killa Abduallah, Quetta)

Main themes to address—
- Maintain risk perception as cases go down; vaccinating missed children especially under two years
- Campaign fatigue/Repeated vaccination
- Misconceptions and rumors
- Efficacy and safety of vaccines
- High risk mobile populations
- Localised programme
- Focus on strengthening IPC skills

Actions since July 2017

Updated 2017/18 communications strategy embedding different operations and communications activities
- **New campaign** “I too am a Guardian of Health” keeping central theme; gives every individual of the community the ownership of the programme; gives pride to the Sehat Muhafiz frontline workers; address focus areas with 360 touchpoints across operations and communications.
- **National/Provincial Task Teams** - undertook COMnet and CBV review/trainings; PSTF review; RSP trainings. NIAG meeting Sept. Realignment of COMNet staff ongoing to high risk areas
- **Strengthened IPC training** - updated trainings and roll-out pre sept campaign;
- **Community engagement** tools and reporting updated, focus on use of multiple influencers/ female team hiring.
- **Strengthened district level coordination** - In high refusal areas strengthening district level coordination on communications and feedback/reporting tools
- **Targeted focus group discussion** in specific high refusal UCs planned Nov-Dec 2017
NEAP 2017/18: Surveillance
Investments in HR, training, field support paying dividends

2016

2017^
Surveillance
Implementation of NEAP priorities making the difference

- **Human resources**: both government and partnership has invested in the hiring, training and deployment of dedicated surveillance staff. Of the 171 expected District Surveillance Coordinator government positions, 162 are now filled. Of the 76 Partner Surveillance Officers, 69 are filled. Impact of these staff seen in increasing AFP cases reported, and the better supervision of environmental surveillance collection.

- **Training, capacity building** of partner and government staff, and sensitization of healthcare providers (informal and formal) and community prioritized and closely monitored.

- Expansion of **active site and zero-reporting network**, and engagement of community increasing the proportion of cases reported by their first contact.

- National EOC-driven **targeted external desk and field surveillance reviews** complemented by supportive visits helping improving surveillance in “districts-of-interest” supervision.

- **Surveillance system stress testing** through the use of federal surveillance team OR Rapid Response Units to conduct assessments in areas with good standard indicators to ensure “green” is “green”.

- Expansion of **environmental surveillance sites**, review and where necessary modifications of locations of existing sites, enhancement of supervision of ES sample collection, judicious use of other strategies e.g. healthy children sampling, contact sampling has increased frequency of detection of transmission chains.

- Investment in data management infrastructure: new IFA, active site visits, zero reporting, AFP notification via SMS.

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<th>Province/Region</th>
<th>Surveillance Officers (Partner staff)</th>
<th>District Surveillance Coordinators (government)</th>
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<tr>
<td></td>
<td>Expected</td>
<td>Deployed</td>
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<tr>
<td>Punjab</td>
<td>9</td>
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<tr>
<td>Pakistan</td>
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NEAP 2017/18: Common reservoir coordination
Joint risk mitigation, coordinated response to events

• Coordination
  – Two face-to-face meetings by country teams in Amman and Islamabad, multiple local interactions between provincial/regional EOCs
  – Joint risk analysis and update on risk mitigation measures with special focus on the Southern Corridor
  –Reviewed progress in assessing risks and taking actions associated with four risk scenarios identified by the TAG
  – Discussed effectiveness of current coordination mechanisms in addressing common challenges
  – Identified additional actions to be taken to ensure effective coordination

• Outcomes
  – Improved communication following detection of WPV with implications for both sides
  – Discussions and deliberations on joint response to WPV events along the three transmission corridors
  – Closer collaboration on the identification of high-risk mobile sub-populations or missed areas along the borders
Summary
Progress? Yes. Continued commitment needed to finish the job

- Pakistan has made tremendous progress in the last 2 low seasons, however, goal of interrupting transmission is yet to be achieved.
- Re-establishment of transmission in Karachi and the ongoing presence of WPV across the Southern Corridor is the biggest challenge - How quickly we clean these zones will determine our long-term outlook. Pakistan will do her part in getting Karachi back on track, and achieving high immunity in Quetta block.
- GoP remains highly committed to polio eradication - new Prime Minister fully briefed – 3 dedicated interactions with the national Polio leadership since taking office.
- The National Task Force convened in August – PM approved and vocally endorsed the NEAP 2017-18. Personally following up with Chief Ministers especially in the remaining hotspots.
- Programme operations re-geared to address emerging challenges.
- Investments in improving both the AFP and supplementary surveillance paying dividends; field reviews, process indicators, standard indicators, genetic sequencing all point towards a very sensitive overall system.
- Communication systems take into account local sensitivities and has prepared the ground for sustained high-level activity.
- Sustaining GPEI support – funds and staff – at all levels critical to finishing the job.
Thank You
NEAP 2017/18 upcoming planned SIAs

Sep 18, 2017
NID

Oct 23, 2017
SNID

Nov 20, 2017
NID

Dec 18, 2017
SNID

Jan 15, 2018
NID

Feb 12, 2018
NID

Mar 12, 2018
SNID

Apr 9, 2018
NID

May 7, 2018
SNID

Support needed for ALL of 2018
Communications Interventions in Hotspots

**Key Issues**

- **Karachi**: Still missed 114,963 on av. Refusals approx. 33,896 on average; ‘Posh’ refusals and chronic (PMC refusals). Interventions focused on 26 UCs. Key issues – misconceptions, religious, repeated campaigns. Vaccinator trust is low in Gadap; and Baldia has lower intent to vaccinate each time; lower metrics on local embedness.

- **Quetta Block**: Still missed children 35,000 av. Refusals (8-10%). Focus areas: Chaman Tehsil, Pishin Tehsil and drainage UCs of Quetta. Key issues - religious, followed by misconception and direct refusals. Emerging reason of refusal is repeated campaigns. Tribes internally deeply segregated. Syed and Achakzai tribes and subtribes tend to refuse vaccine more than any other group. Killa Abdollah issue of recruitment of female teams. Lower metrics on local embedness.

- **Khyber Phaktunkwa** - Still missed range 20,000 – still refusals 4,000-4,500. Focus areas: select UCs Peshwar, Bannu, Lakki Marwat & Tank. Pockets of misconceptions related to vaccine safety & multiple doses. Focus on Wazir & Mehsood tribe in southern region & Afridi, Mohamand, & Banuchi tribes in central region.

- **FATA** - Still missed: average of 4,630. Still refusals 1,800 with largest concentration in SWA due to demand refusals (demand for jobs/access to basic services). Movement to and from FATA remains a key challenge Focus area: SWA, NWA, FR Bannu, FR Tank and Khyber who traditionally move seasonally to different parts of the country. Predominantly male teams low metrics on vaccinator trust Khyber.

**Actions since July 2017**

- **Enabling environment** – “I too am a Sehat Mufaiz’ messaging focused /localized via specific pediatrician PSAs etc – repeated campaigns; Misconceptions and rumors ;Efficacy and safety of vaccines; PMA and PPA endorsement.

- **Strengthened District level coordination** on missed/refusals recalibrating focus on persuasion/conversion; Karachi - focus on ‘posh’ refusals, post campaign coverage and ongoing engagement with caregivers of PMC.

- **Refusal conversion teams at district level** - Karachi and Quetta Block (Chaman) biggest success has been with Akakheil, Mehsud and Afridi tribes and Nurzai respectively – positive engagement will help other provinces.

- **Community engagement** – updated refusal mapping focus on multiple key influencers; FATA and Quetta Block activities have also focused on hiring of female teams. Peshawar ‘Young Sehat Muhafiz’ school pilot finalizing.

- **Strengthen IPC Skills** – updated module with added negotiation skills etc rolled out for NEAP 2017-18 all hotspots – special focus on Karachi Gadap, Tank and Khyber.