Pakistan Polio Program Update

Independent Monitoring Board

April 2015
Polio cases reported from Pakistan, 1994–2015*

* Data as of April 22, 2015
Polio cases by province and onset month, 2014–2015

- Reduction of WPV cases in Karachi, Quetta, and FATA (South and North Wazirstan) reservoirs
- Challenges in Peshawar and Khyber reservoirs
- Outbreak in North Sindh (Central Pakistan)

* Data as of April 21, 2015
Results of environmental surveillance, 2012–2015

- Increased the number of ES from 28 in 2013 to 38 in 2015
- Initial ES results encouraging in Karachi and Quetta reservoirs
- Repeated introduction of WPV into areas with high population immunity by high-risk mobile population
Genetic clusters and population movement, 2014

- Karachi, a reservoir and amplifier; now progress in Karachi
- WPV Cases decreased in the epicenter of 2014 outbreak-- FATA
High NPAFP rate but low stool adequacy in key reservoirs i.e. Peshawar and Gadap
Conducted external surveillance reviews in KPK, Karachi, and Central Pakistan-March-April 2015
Develop surveillance strengthening plan by mid-June 2015
Pakistan high risk areas and populations

- Vulnerability created by militancy and ban
- High population mobility driving the polio epidemic across Pakistan

* Data as of April 22, 2015
Closing population immunity gap

2014–15 proportion of Non-Polio AFP cases aged 6-59 months with 3+ doses OPV in key reservoirs

IDM model: either 9 SIAs with 85% coverage or 5 SIAs with 92% coverage; >9 SIAs per year has a marginal impact on immunity

- Bhurban plan implemented aggressively
- Immunity profile back on track but a long way to go
- Rationalization of SIA schedule needed to drive quality and target missed children
LQAS results, January 14–March 15

- Progressive increase in the lots assessed but more to be done; standardized LQAS
- Balochistan implements LQAS only in poor performing areas
Third-party post-campaign monitoring, March 15

- Implemented 3rd party monitoring for the first time since 2012 across all districts across Pakistan apart from FATA agencies
- 2-stage cluster sampling (20 clusters*15 households) using Pakistan Bureau of Statists sampling frame
- 20% districts (28 out of 138 with enough clusters) had finger-marking coverage less than 90%
FATA: progress and challenges

- Progress in epidemiology in Wazir-N, and Wazir-S challenges in Khyber
- Reaching inaccessible children in FATA for the first time since 2012 (Pakistan Army-UPAP)
- Pocket of Khyber remains inaccessible are being addressing through ongoing military operation; community vaccinators recruitment; PTPs
Sindh: progress and challenges

Karachi virus trying to find new home in North Sindh

WPV cases

Case Count


KARACHI

NORTHERN SINDH

Upsurge in community health volunteers uprooting virus from its notorious sanctuary in Gadap, Karachi

Karachi Community Health Volunteers (FCV/FCM)

Progressive reduction in missed children in Karachi

Gadap's virus seems under control but Iqbal and Baldia, Karachi viruses is still present in environmental samples

WPV cases

264,549

25,000

75,000

100,000

125,000

150,000

175,000

n

50%

0%

100%

40%

50%

60%

70%

80%

90%

100%

Lab result

Positive

Negative

Environmental Samples

Balochistan: progress and challenges

WPV outbreaks outside Quetta reservoir: Loralai

Sequential negative Env sample in Quetta reservoir

Fatal security incidents impacting campaigns leading to delays and staggered campaigns; military operation and FCV

Implementation status of Bhurban SIAs plan

<table>
<thead>
<tr>
<th>Districts</th>
<th>1st Nov</th>
<th>7th Nov</th>
<th>8-10 Nov</th>
<th>14-15 Nov</th>
<th>1st Dec</th>
<th>15-17 Dec</th>
<th>3rd Jan</th>
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<th>11th Mar</th>
<th>24-26 Mar</th>
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Note: 9-10-2020 campaigns were cancelled from the federal.
KPK: progress and challenges

Peshawar is still a challenge, Tank needs attention, Bannu improving

Sehat ka Ittehad: strong political commitment and platform for synchronized implementation

FATA

Peshawar’s persistent positive Env sample; merging with Bara, FATA

Reducing hard-to-reach children in Peshawar through special teams, operational challenges persists
Punjab: progress and challenges

Strength
- Stringent accountability framework
  - 3 district-level senior health officers removed on performance ground
- Strong RI program including E-Monitoring and tracking of vaccinators and their supervisors through Android phones

Threats
- Mobile & migrant population
- Interruption of repeated environmental infection in Lahore & Rawalpindi
- Increase vulnerability of Southern Punjab from neighboring

No WPV cases in 2015

Interrupted the continuous transmission in Lahore, new introduction from Karachi

Implemented high quality SIAs as shown by LQAS results
Despite decrease in cVDPV cases however significant geographic risk remain based on type 2 immunity

- September 14 and March NIDs used tOPV, plan targeted tOPV selectively in high risk Ucs in May 15
- IPV in high risk districts to close type 2 immunity gap
A whole of Pakistan effort to eradicate polio

• Pakistan Government regularly monitors progress
  – PM Focus Group
  – National Task Force (includes Provincial Chief Ministers)
  – Committee for Immunization (Ministers Interior, Defence and National Health Services)
  – National Health Services: resource mobilisation and monitoring

• Civil-Military: Reduction in the number of hard to reach children, Pakistan Army-UPAP, DG National Crisis Management Cell

• Cross-Party Engagement and Commitment: all party manifesto support, Kehat Se Ittihad for unified approach in FATA and KP

• Cross-sectoral support: National Islamic Advisory Group, Survey Pakistan, predominantly positive media
Reinvigorated EOCs operational leadership

- National and provincial coordinators in place providing strong national and provincial leadership-
- Effective platform for coordination of operations, security and communications
  - “One team” under “one roof” led by the GoP at all levels
  - All the polio partners including Pakistan Army represented
- National EOC leads on program policy and oversight while provincial EOCs lead on operation implementation
- National EOC coordinates all programmatic decision-making with provincial EOCs
  - Strategic -- National Emergency Action Plan
  - Operations -- SIAs
  - Communications
  - Access and security
  - Innovations (technology and training)
National Emergency Action Plan 2015-16

Goal

• The overall goal of the NEAP is to stop all WPV and cVDPV transmission by May 2016

The strategic approach endorsed:

• **Stop poliovirus transmission in all reservoirs and prevent establishment** of poliovirus circulation in the **rest of the country**
• Detect, contain and eliminate poliovirus from **newly infected areas**
• Maintain and increase **population immunity** against polio throughout **Pakistan** by implementing high quality campaigns
• Sustain polio interruption through increased **routine immunization coverage**

Quarterly milestones to evaluate results against target
The success of eradication depends on clearing the remaining 11 core reservoirs districts.

<table>
<thead>
<tr>
<th>No.</th>
<th>Province</th>
<th>District</th>
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<tbody>
<tr>
<td>1</td>
<td>SINDH</td>
<td>KHI BALDIA</td>
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<td>KHI GADAP</td>
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<td>KHI GIQBAL</td>
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<td>4</td>
<td>KP</td>
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<td>BANNU</td>
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<td>6</td>
<td>BALOCHISTAN</td>
<td>QUETTA</td>
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<td>KABDULAH</td>
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<td>9</td>
<td>FATA</td>
<td>KHYBER</td>
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<td>10</td>
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<td>WAZIR-N</td>
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<td>11</td>
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<td>WAZIR-S</td>
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</tbody>
</table>
NEAP targets for reservoirs

• Conduct high quality, well planned SIAs reaching 90% coverage verified by third party monitoring or minimum 80% of all LQAS lots assessed at 90% coverage

• Implement continuous community-protected vaccination reaching 95% coverage verified by third party monitoring and/or 100% of all LQAS lots assessed

• Achieve annualized AFP Rate ≥2/100,000 and ≥80% of AFP cases with adequate stool specimens across all reservoirs districts

• Reduce the number of children missed from all sources to ZERO
SIAs’ Schedule: 2nd Half of 2015

In reservoir districts and insecure areas the program will implement continuous monthly community-protected vaccination passages.
Renewed focus on campaign quality

- Challenges in micro plan review and field validation
  - Out of total the 56 UC micro plans 3rd party monitors validated on ground before March NIDs; only 45% were found updated
  - 45% microplans checked in FATA in April SNIDs were updated (17 out of 38)
- Integrated planning and preparation at the Union Council level
- Expanded supportive supervision at all levels
- Rationalizing SIAs schedule to allow time for planning
- Use of new technology and tools facilitate better planning
- Enhanced and expanded monitoring
  - NEOC deploys federal monitors (UNICEF, WHO, Rotary, BMGF, and NSTOP)
  - Standardized LQAS
  - Introduced independent 3rd party post-campaign monitoring
Putting front line workers first

• Challenges
  • selection, training, supervision, motivation and timely payment

• Solutions
  • Enhancing selection – from the community they serve
  • Providing quality training (master training- innovation labs)
  • Enhancing supportive supervision
  • Providing security through community and police
  • Ensure efficient and timely payment mechanism

• The role of the front line workers is central to the communication strategy
Revised and integrated training

- **Curriculum Design:** January and February 2015
  - A collaborative effort among the EOC, WHO, UNICEF, and InnovationLabs
- **Karachi, 40 Participants, Sindh-- March 9 – 10, 2015**
  - Primarily UC Medical Officers
- **Peshawar, March 12 – 13, 2015**
  - 80 Participants (in 2 groups)
  - Primarily Area-in-charge AIC from KP and FATA
- **Rollout training to remaining High risk districts**
Expanding community-protected vaccination

- Number of Community Health Volunteers (FCVs and FCM) increased from 426 to 1188 covering all 8 super-high risk UCs in Karachi
- Training, micro planning review of target population for all FCVs areas – March 24-30
- Recruitment of Community Health Vaccinators being finalized for northern Sindh (650) riverine area, Khyber agency (120) and Quetta block (671)
Accelerating Health camps, PolioPlus

• **Basic Health Camps**
  - Started 1 April in 12 high risk districts of KPK district and 3 agencies of FATA
  - 9,212 < children and 15,606 adults
  - 4969 children vaccinated with RI
  - 2184 children OPV; 540 with zero doses

• **Comprehensive health camps**
  - Started in Feb 15 in the 8 High risk Ucs
  - 35 comprehensive health camps across all the 49 high risk UCs
  - 14,335 beneficiaries
  - 383 children vaccinated with RI
  - IPV 976 children
  - 1,043 OPV
Field tested 3 radio public service announcements in Karachi in April SNID based on the 'we are interwoven' community norm concept

The pilot brands and the 'stranger no more' and 'we are interwoven' concepts will be further tested during focus group discussions in June

The products - TV, radio and materials for frontline workers - will then finalised for the next low season starting with the September SNID.
Tracking and vaccinating continuously missed children

- Paradigm shift from ‘covered children” towards ‘continuously missed children’
- Developed online database where detailed information on each missed child in the high risk UCs is entered at 11 data centers strategically located across Pakistan
  - Database accessed by district and provincial teams
  - Line list of missed children printed and each missed child is systematically followed up
  - The number of children still missed in March NIDs is 89,701 (50% of missed children recorded)
  - Database also captures data of zero-dose children from AFP, LQAS, Market Survey and post-campaign monitoring

<table>
<thead>
<tr>
<th>Province</th>
<th># UCs</th>
<th># HH Visited</th>
<th># of children vaccinated</th>
<th># of recorded children missed</th>
<th># of children covered from missed</th>
<th>% children covered from missed</th>
<th># of children still missed</th>
</tr>
</thead>
<tbody>
<tr>
<td>BALOCHISTAN</td>
<td>48</td>
<td>206 745</td>
<td>531 594</td>
<td>28 001</td>
<td>7 049</td>
<td>25%</td>
<td>20 952</td>
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<tr>
<td>FATA</td>
<td>154</td>
<td>123 229</td>
<td>398 819</td>
<td>23 196</td>
<td>11 410</td>
<td>49%</td>
<td>11 786</td>
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<tr>
<td>KP</td>
<td>110</td>
<td>901 297</td>
<td>1 558 747</td>
<td>86 880</td>
<td>49 757</td>
<td>57%</td>
<td>37 123</td>
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<tr>
<td>PUNJAB</td>
<td>49</td>
<td>340 740</td>
<td>503 179</td>
<td>26 325</td>
<td>11 188</td>
<td>42%</td>
<td>15 137</td>
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<tr>
<td>SINDH</td>
<td>48</td>
<td>188 486</td>
<td>186 250</td>
<td>17 790</td>
<td>13 087</td>
<td>74%</td>
<td>4 703</td>
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<tr>
<td>Total</td>
<td>409</td>
<td>1 760 497</td>
<td>3 178 589</td>
<td>182 192</td>
<td>92 491</td>
<td>51%</td>
<td>89 701</td>
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Initiating IPV-OPV SIAs

Conducted IPV-OPV SIAs
- Karachi: 57,876 (57%)
- Quetta: 133,761 (90%)
- Peshawar: 213,099 (88%)
- Bannu: 54,563 (97%)

Planned IPV-OPV SIAs
- Riverine areas of Central Pakistan- May 2015
- FATA- May 2015
- Remaining High risk UC Karachi –June 2015
- High risk Uns in Lahore and Rawalpindi - June

IPV in routine immunization
- Currently used in private sector as part of hexavalent vaccine
- GAVI, IPV is being included in the routine immunization schedule 2nd half 2015
Preventing spread of WPV within and outside Pakistan

- June 14–Mar 15 vaccinated 3,622,564 departing travelers
  - 3,239,995 vaccinated at the health facilities
  - 382,569 individuals found unvaccinated; stopped and vaccinated at the 13 exit points
- Resumed SIAs in FATA for first time since June 2012
- Enhanced campaign quality in Karachi reducing global risk
- Regular coordination and collaboration with Afghanistan
- A total of 675 Transit Vaccination Posts are functional which vaccinated 19,244,574 children in 2014 and 3,706,869 in 2015 so far
Other programmatic challenges

• Funding
  – 2015 funding gap $ 22 Million for 2015 and $ 331 Million for the next 3 years
  – GoP and GPEI working together closing the gap and proposed donor conference

• Weak routine immunization in key reservoirs and outbreak risk zones
  – Include RI antigen comprehensive health camps
  – Expand districts that implement PEI-EPI synergy from 16 to 30
  – Integration of EPI-PEI at national and provincial EOC

• Limited Emergency Response Team (ERT) capacity
  – Building on Central Pakistan response to expand ERT in low risk areas

• Continued civil societies engagement in polio eradication
  – Ongoing engagement of Pakistani diaspora communities, NGOs, and Pakistan Pediatrics Association

• Sustaining long term technical support and constructive dialogue with international partners
  – Using EOCs as common platform for planning and operations
  – Commitment of senior technical staff through and beyond eradication
Conclusion

• Pakistan has made a major shift in its commitment and strategic approach
  – Critical strategies, management structures, leadership and coordination mechanisms to achieve success
  – Continue to make significant progress in accessing and vaccinating continuously missed children

• Significant challenges, most of which can be managed effectively by ourselves with our partners

• Pakistan is committed to the fully implement the NEAP 2015/16 with
  – IMB constructive engagement
  – Support of the international community
Thanks