

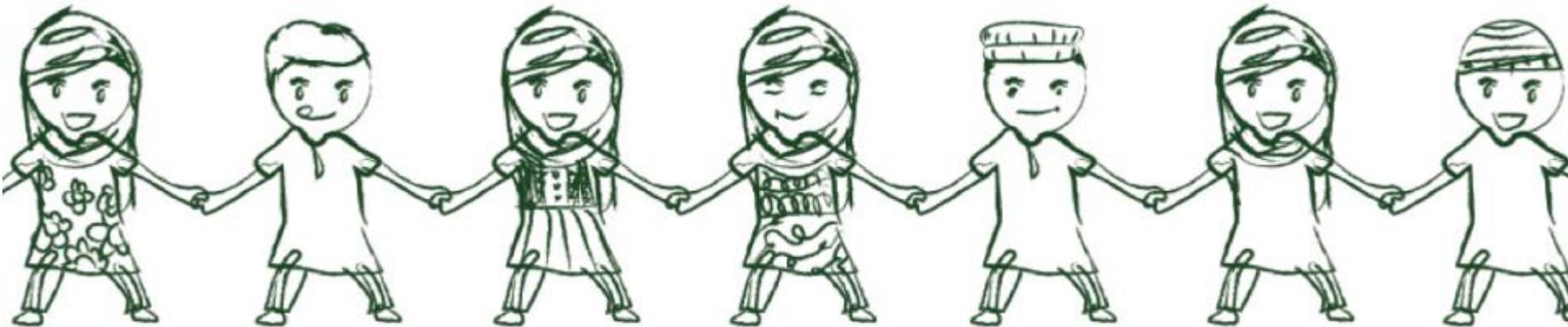


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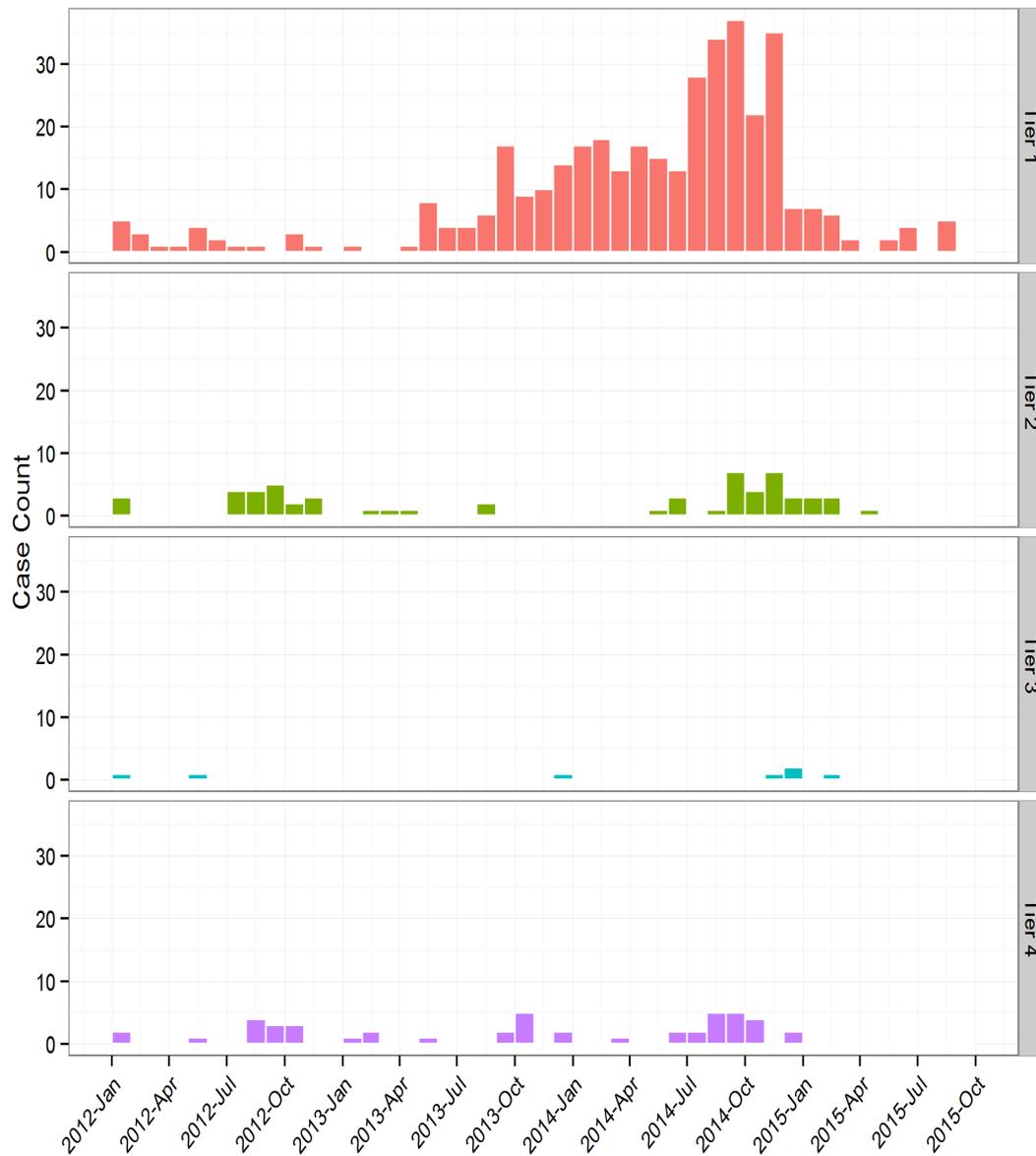


Pakistan Polio Program Update

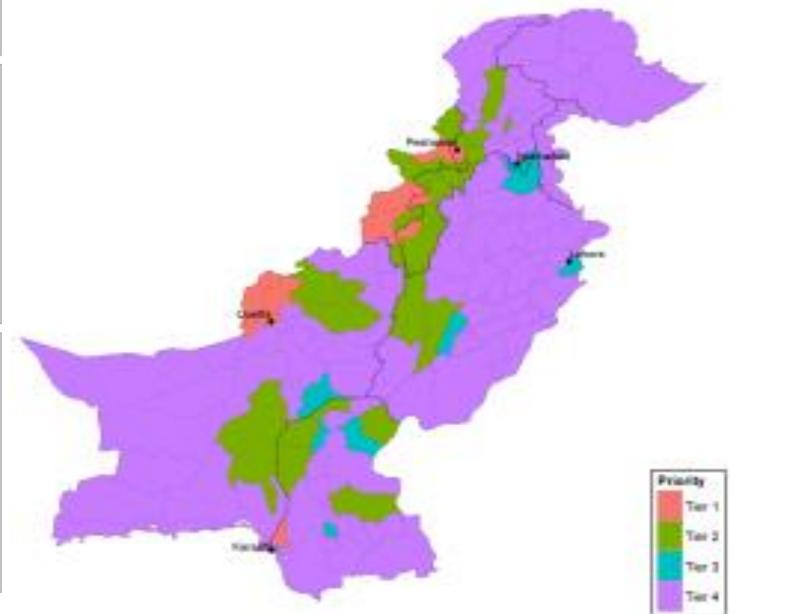
Independent Monitoring Board, October 2015



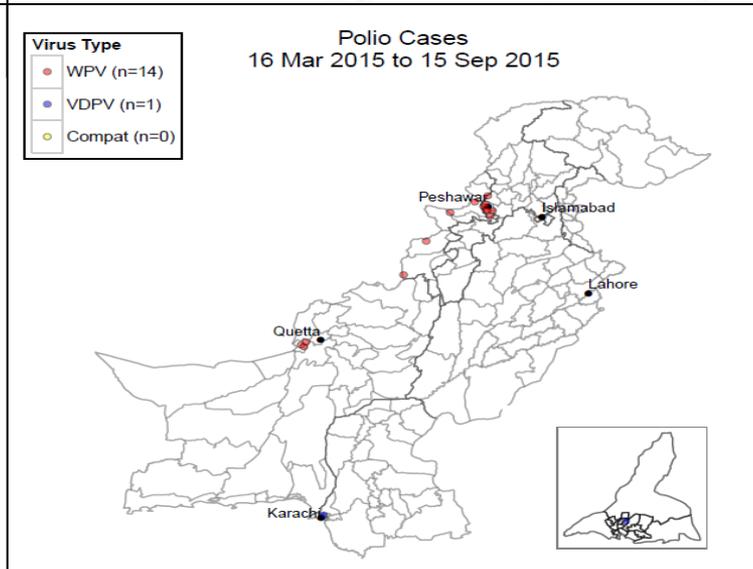
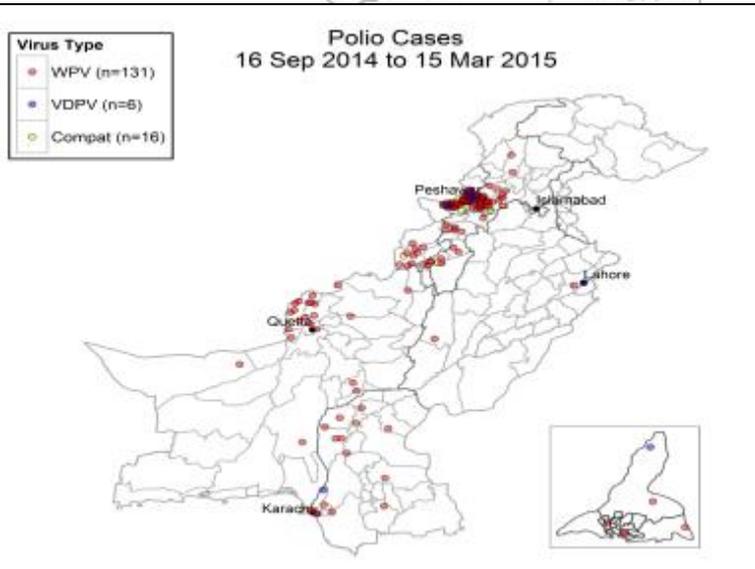
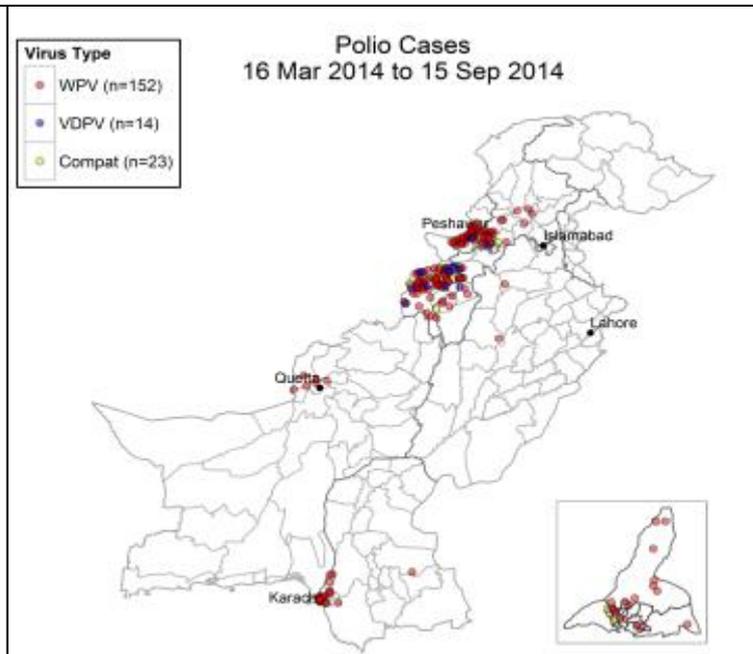
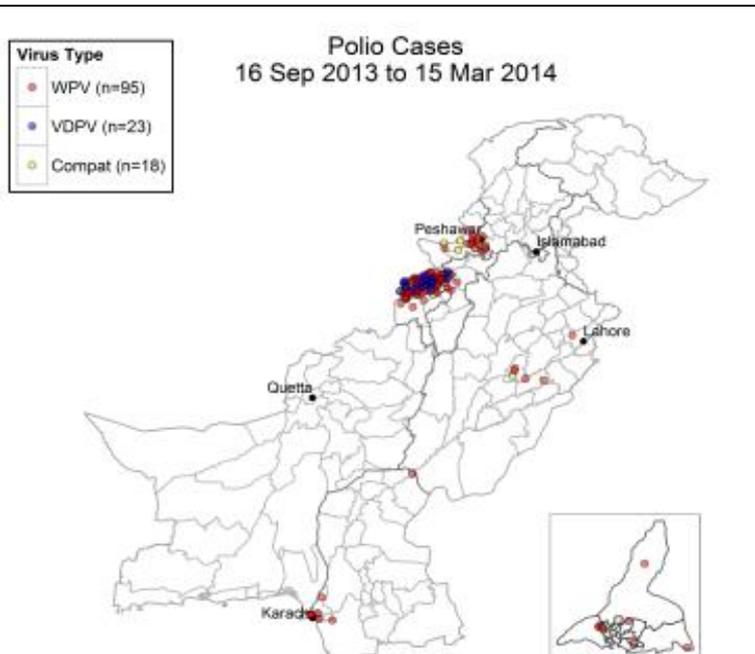
WPV1 epidemiology-1: Epicurve by risk tier



Tier	Districts	Target population	Last WPV onset date
1	12	2.7 million	26-Aug-15
2	30	6.7 million	20-Apr-15
3	11	4.7 million	13-Feb-15
4	110	22 million	21-Dec-14



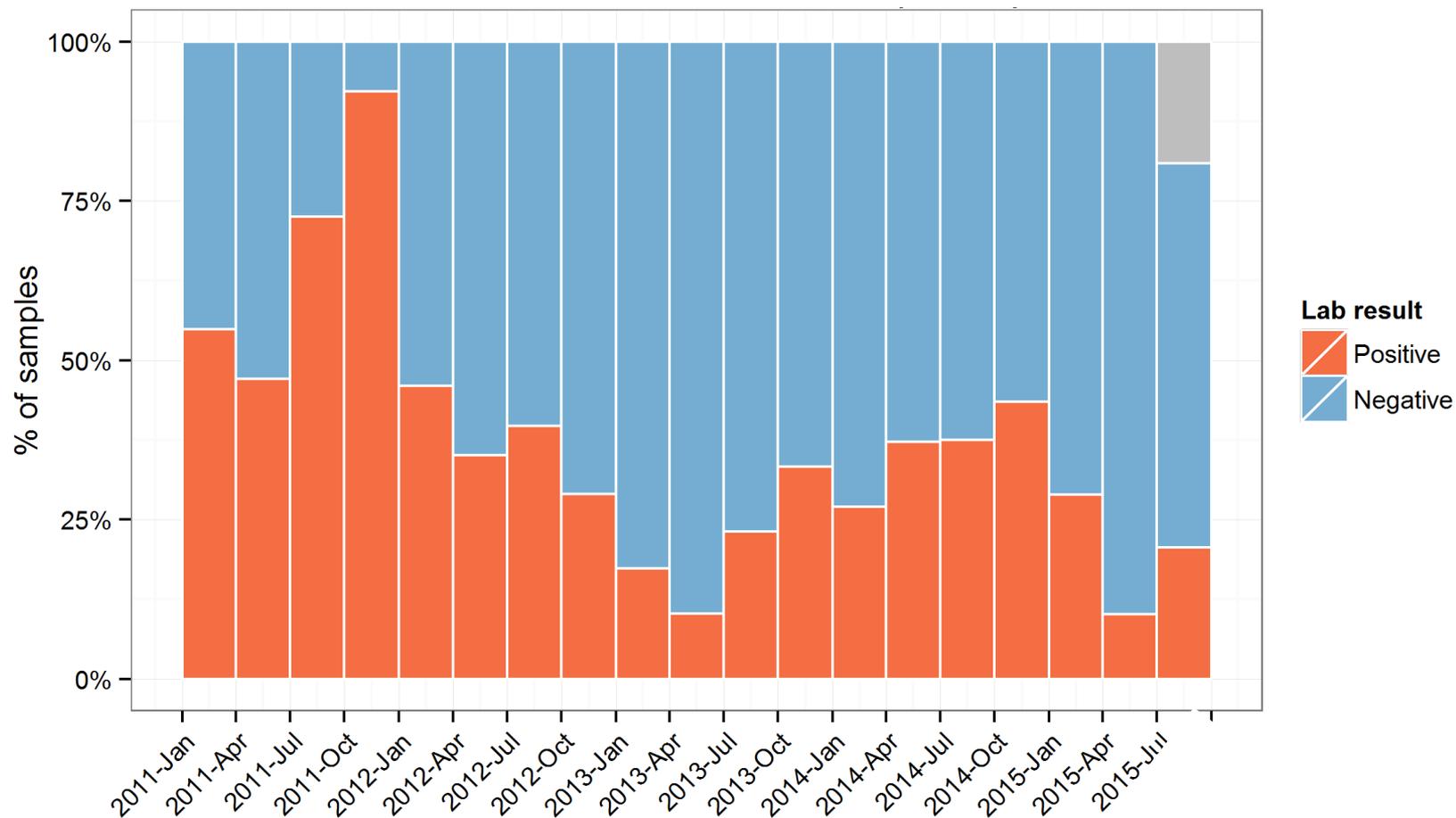
WPV1 epidemiology-2: Case time series



- **Remaining active WPV transmission**
 - Peshawar-Khyber Axis
 - Quetta
 - Karachi (ENV)
- **Further action towards eradication**
 - Maintain SIA quality strategy
 - Better micro-census and planning
 - Team planning and supervision
 - CCPV



WPV1 epidemiology-3: Fraction of positive environmental samples, by quarter, 2011–15



- Reduction in proportion of positive environmental samples from 34% to 19% (year on year)



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WPV1 epidemiology-5: WPV/AFP cases profile

		Tier 1 districts				Other districts			
AFP case	Year	'0' dose	Pashto-speaking	Child <2	Male	'0' dose	Pashto-speaking	Child <2	Male
WPV positive	2013	67%	100%	84%	60%	17%	50%	78%	50%
	2014	61%	99%	86%	57%	31%	69%	73%	55%
	2015	43%	96%	83%	70%	25%	50%	50%	63%
NPAFP*	2013	17%	90%	47%	63%	1%	20%	29%	60%
	2014	24%	95%	57%	59%	1%	20%	31%	60%
	2015	7%	93%	46%	63%	1%	21%	29%	58%

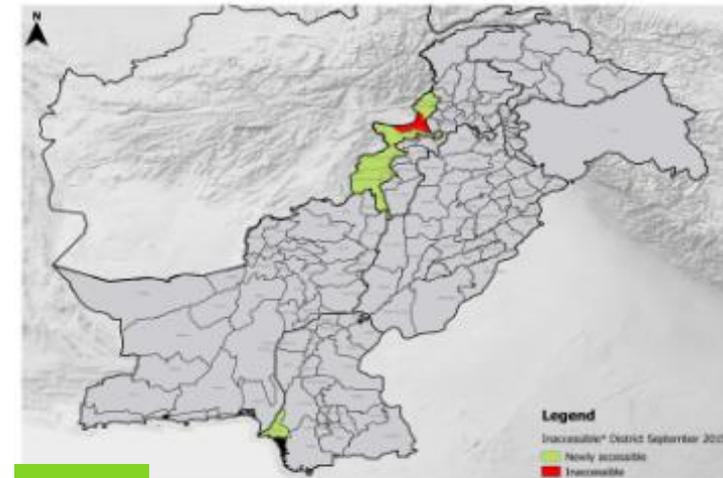
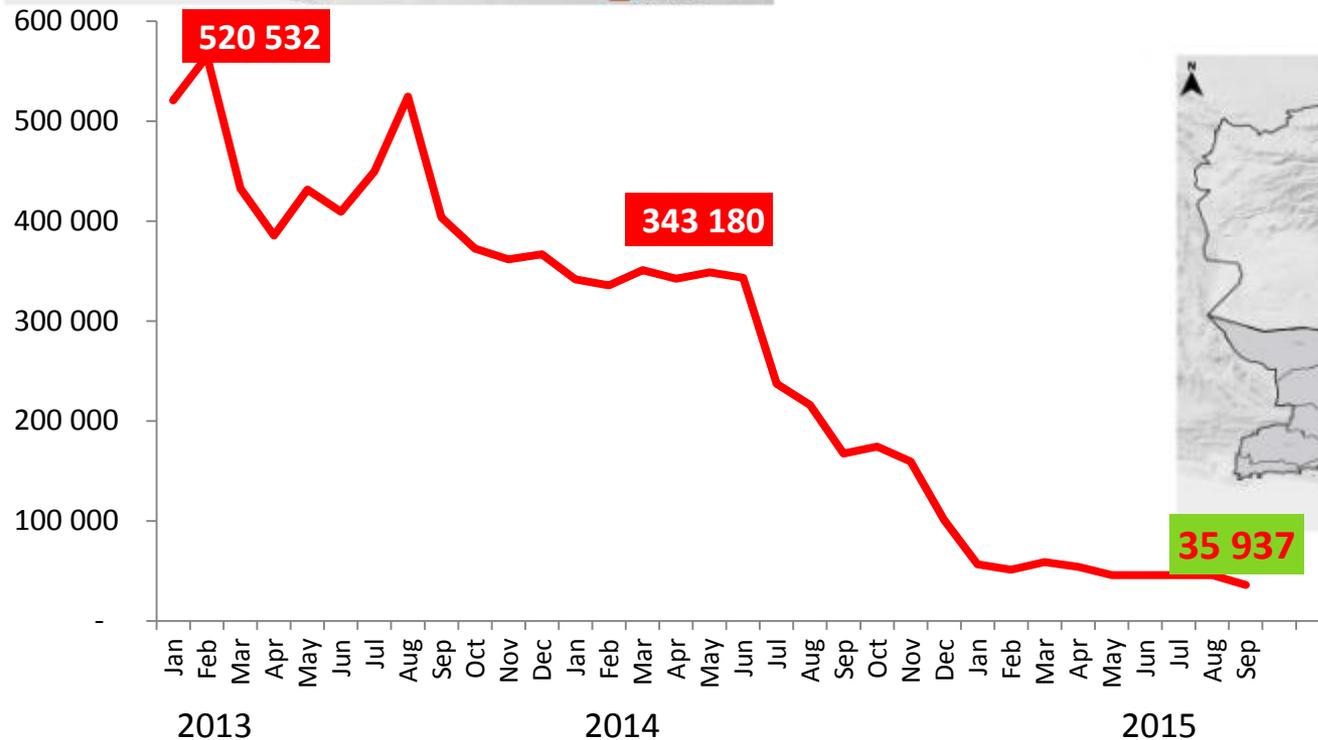
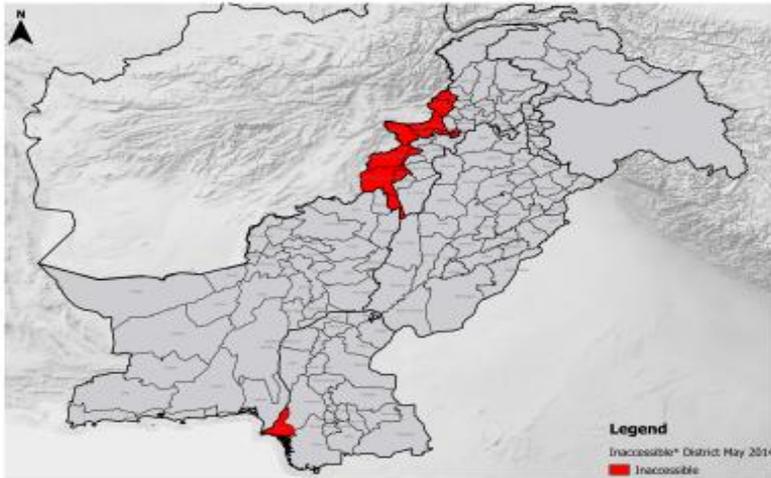
*Discarded AFP cases

- Massive immunity gap emerged focused in under 2 year old children from Pashto-speaking families (2013/14)
- Immunity gap now closing but
- The virus is still successfully seeking out unprotected children
- Finding and vaccinating these persistently missed children will leave the virus nowhere to go

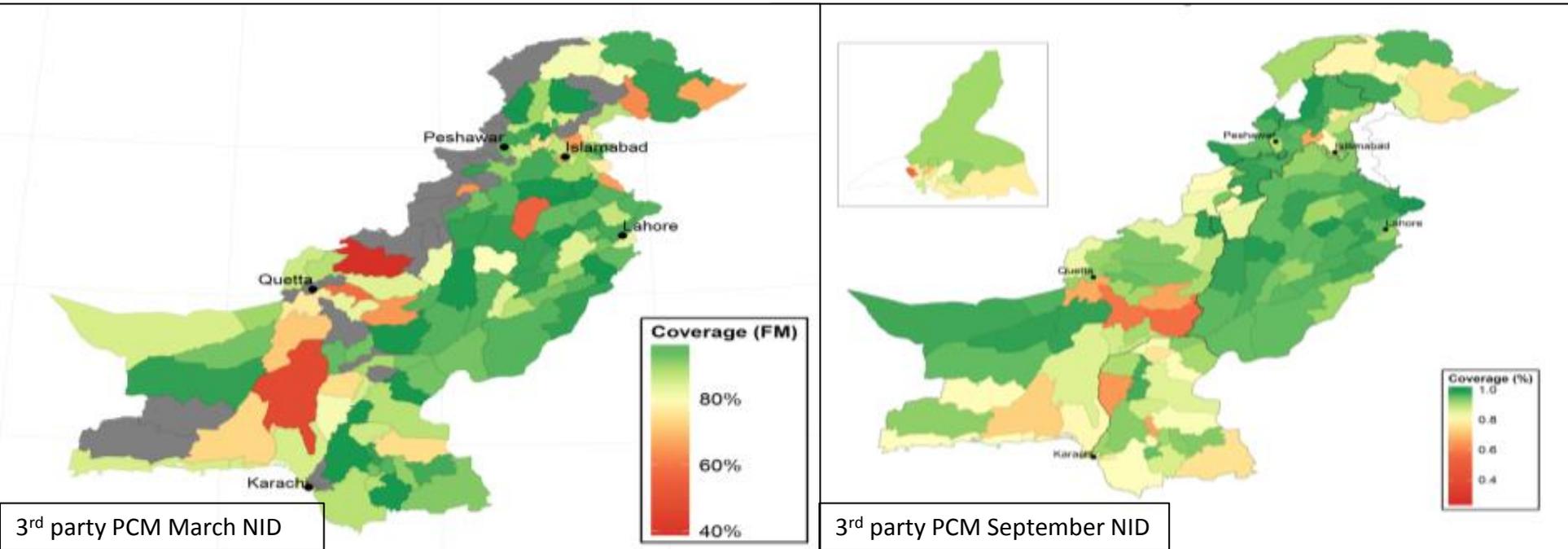


Reaching all children everywhere in Pakistan

- Number of children in inaccessible areas reduced <35k
- Priorities:
 - Accessing the remaining children
 - Maximizing the access opportunity generated (SIAs, IPV, health camps, CCPV)



Programme reach and performance improving

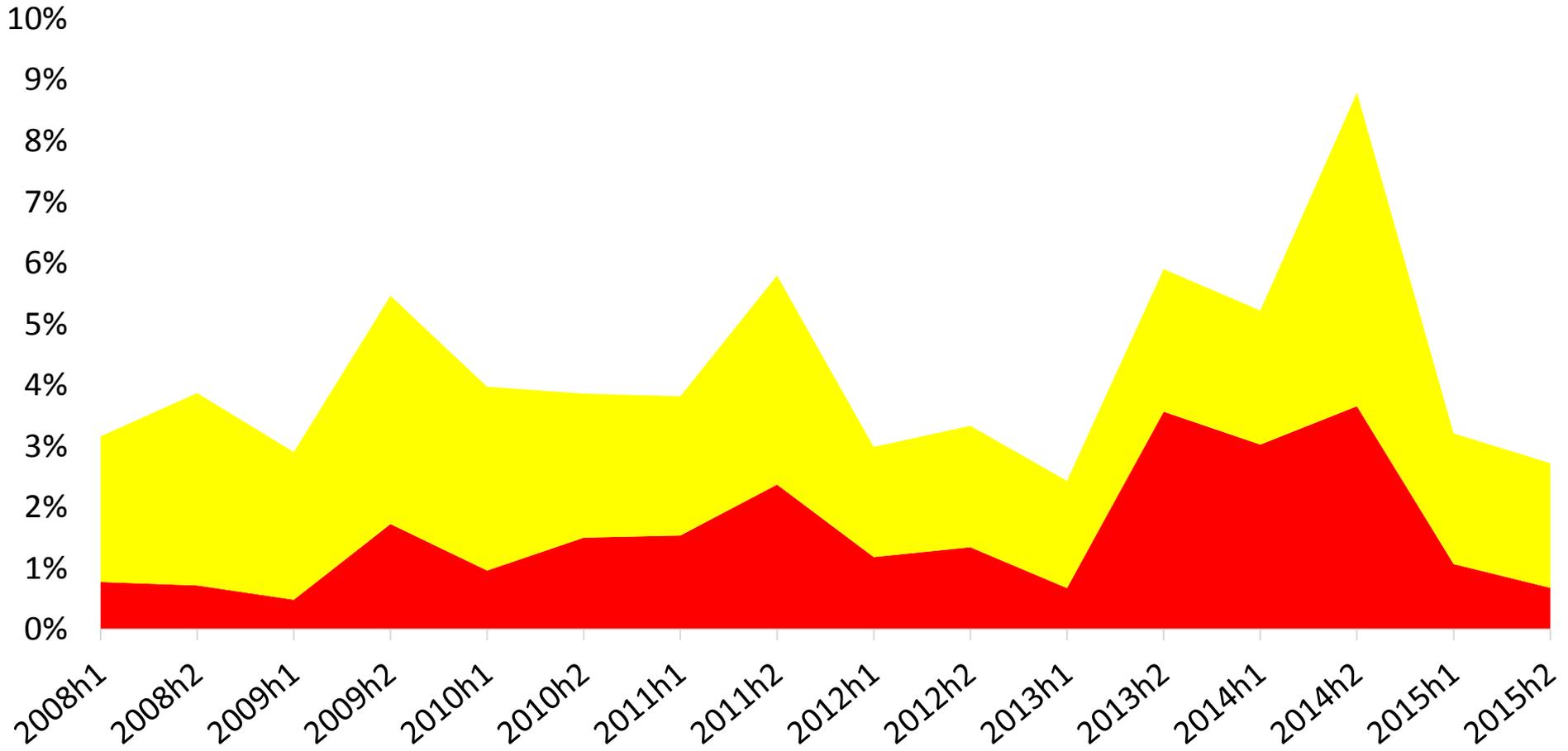


- Introduced 3rd party post-campaign monitoring (PCM) in March 2015 in 144/163 districts
- PCM in all districts (163) using smartphones to collect real-time data in September 2015
 - In tier-1 districts (>90% in 7/12 districts; 80-90% in 4/12 districts; <80% in 1/12)
- Planned gap in June, July and August 2015 to:
 - Plan and prepare better- NEAP workplans
 - Put in place systematic monitoring for all SIA
 - Train Masters Trainers, AICs and FLWs
 - Resolve specific issues such as payments of FLWs
 - Rollout CCPV
 - Revamped communication
 - Strengthening surveillance



Immunity gap closing: Half-yearly vaccination status of NP-AFP cases 6-59 months, 2008–15

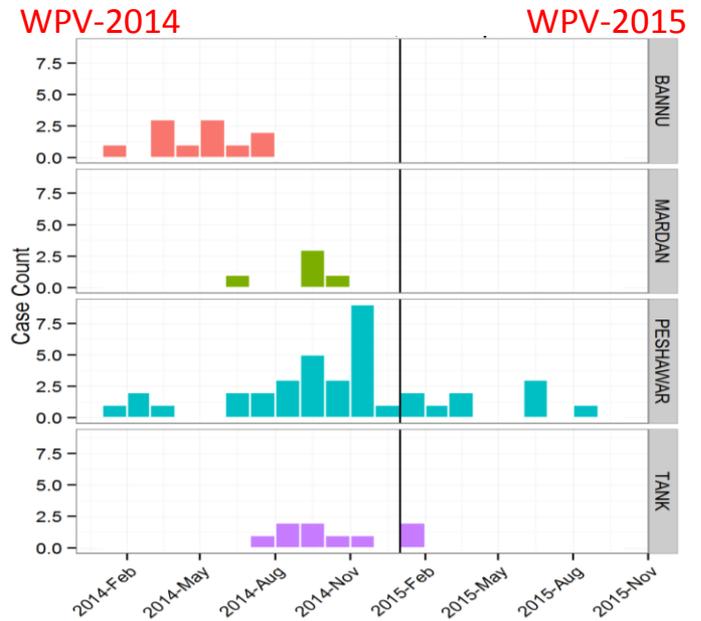
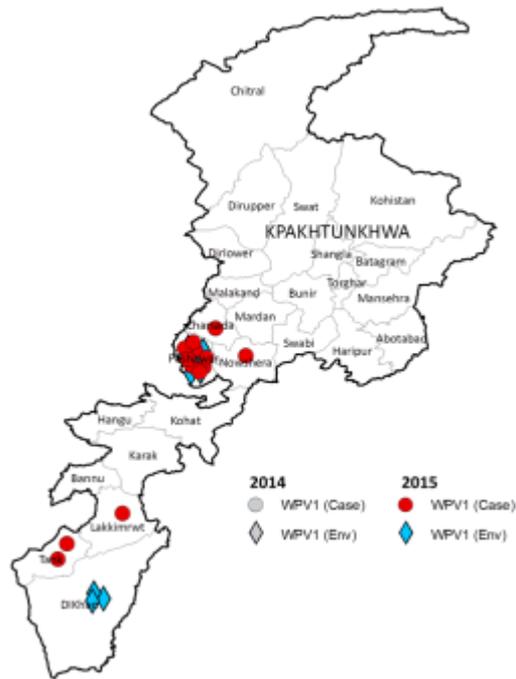
■ Zero-dose ■ 1 to 3 doses



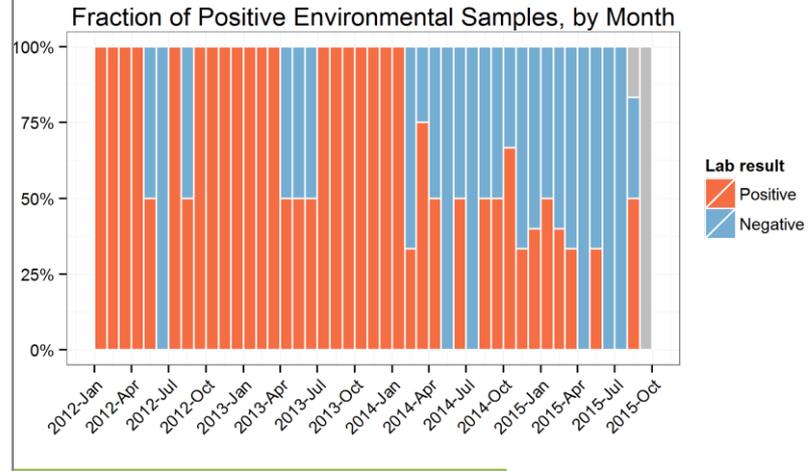
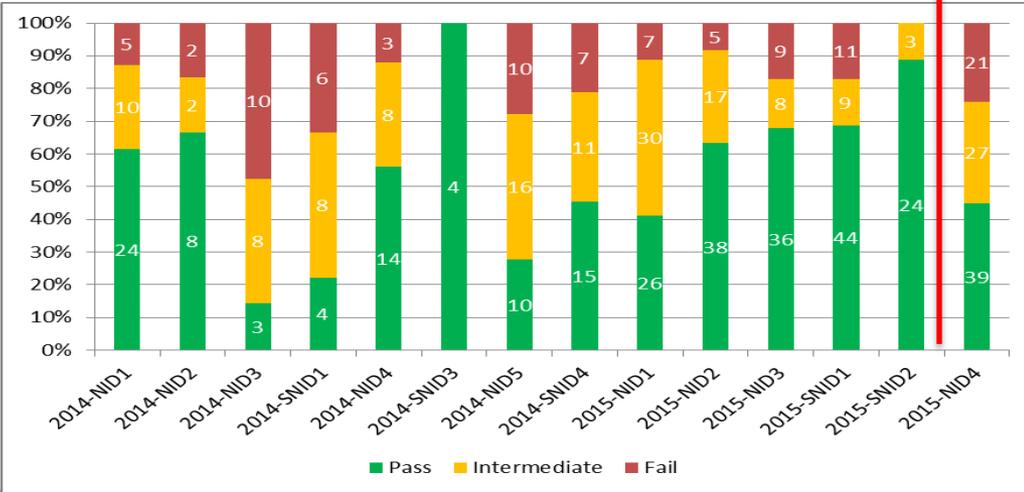
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Khyber Pakhtunkhwa profile



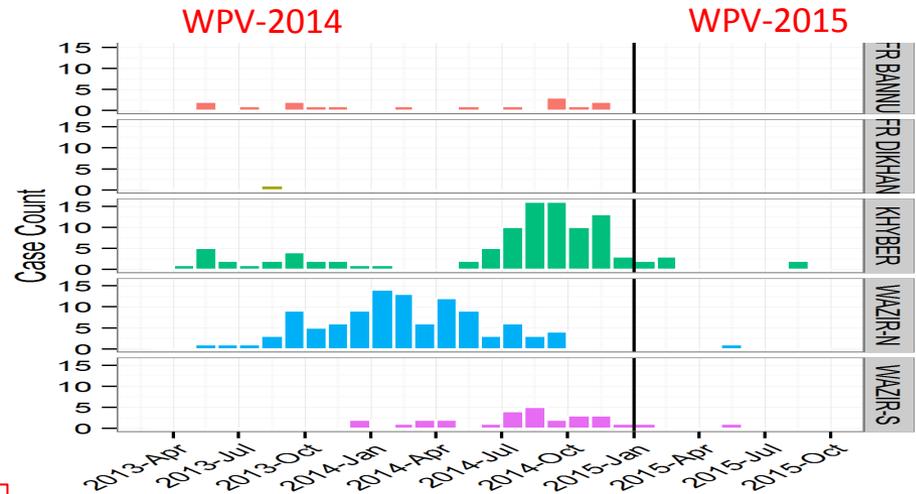
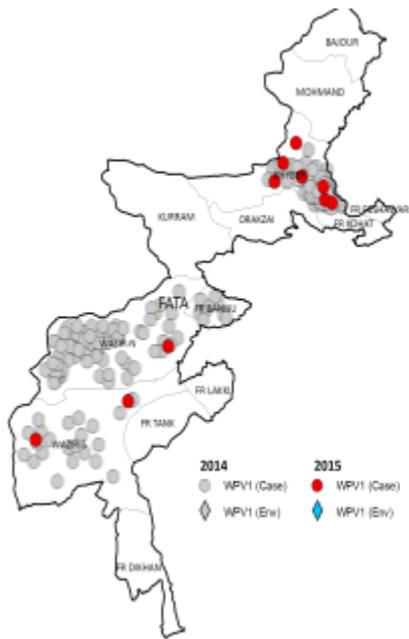
HRUCs-focused LQAS



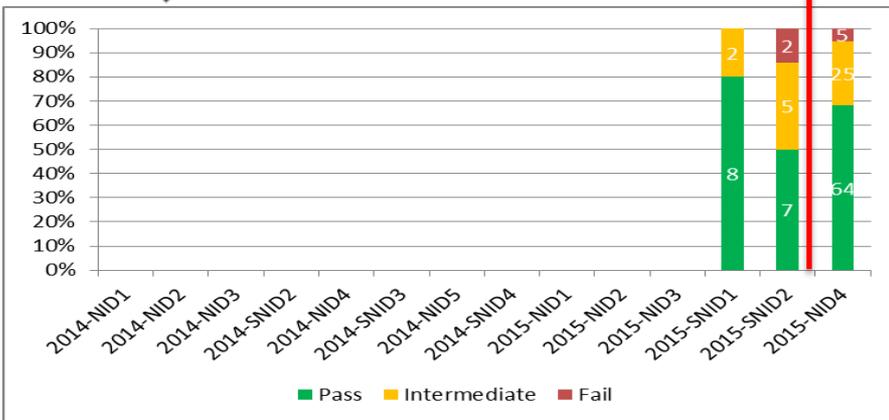
- Overall progress in KP and in Bannu (tier-1) in particular which has no recorded polio case in over 12 months
- However, continued virus circulation in the greater Peshawar valley is a major obstacle towards eradication in KP and Pakistan
- The response strategy includes CCPV and health camps targeted towards the most difficult to reach areas of Peshawar (50%), Bannu (15%) and Tank (75%)



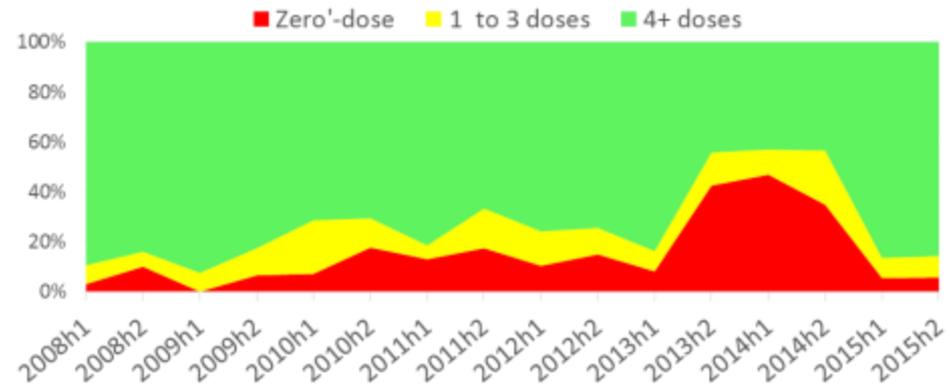
FATA profile



HRUCs-focused LQAS



Half-yearly vaccination status of NP-AFP cases 6-59 months, 2008-15



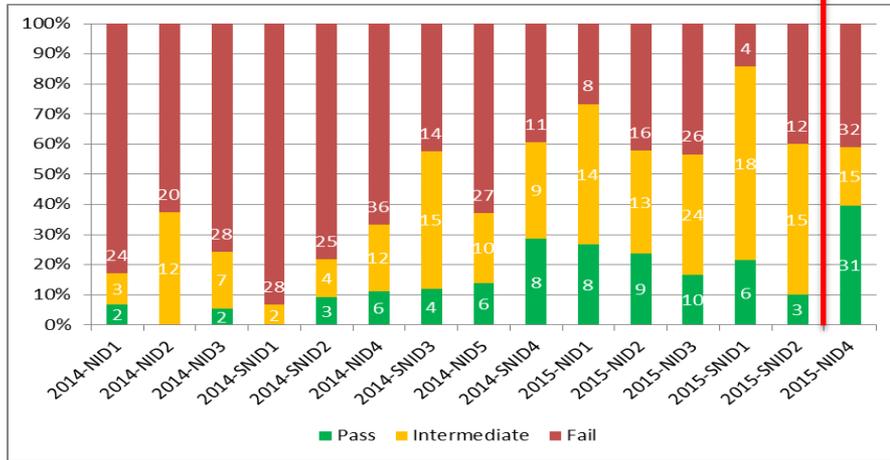
- Significant reduction in inaccessible children and settlements and shift from hujra to house-to-house campaigns for the first time since 2009 in Khyber and since 2012 in NWA
- However, pockets of inaccessible and missed children remain in Khyber, NWA and SWA
- The response strategy includes strengthened civil-military coordination, CCPV rollout including micro-census, health-camps and independent monitoring.



Balochistan profile

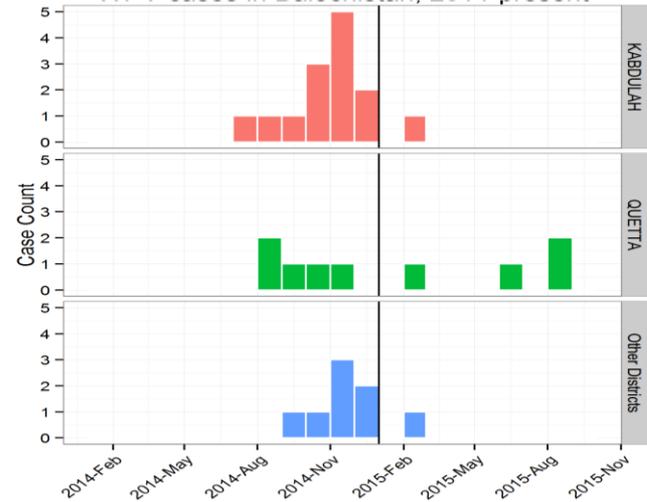


HRUCs-focused LQAS

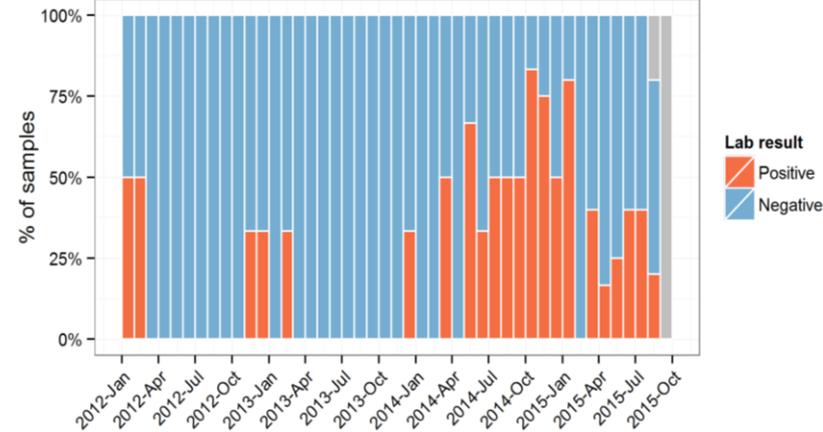


WPV-2014

WPV-2015



Fraction of Positive Environmental Samples, by Month



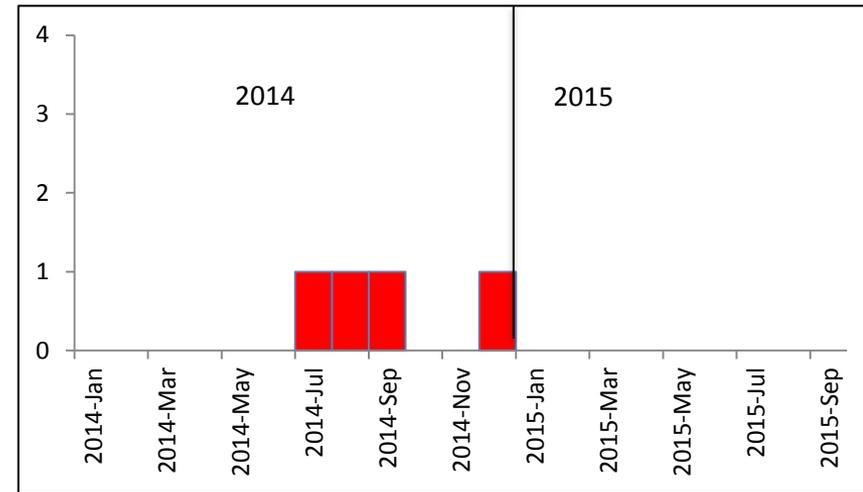
- Significant pockets of missed children coupled with campaign delays and postponements enabled continued transmission in the Quetta Block (most recent case is in August 15)
- Significant turnaround in political leadership and commitment
- Response strategy includes sustained high-level engagement, strengthened inter-provincial coordination, civil-military coordination and roll-out of CCPV / health camps targeted to difficult to reach areas in the Quetta block



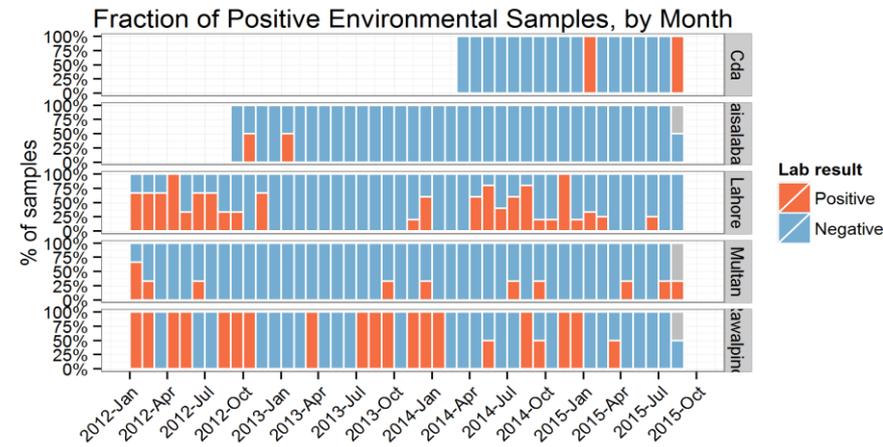
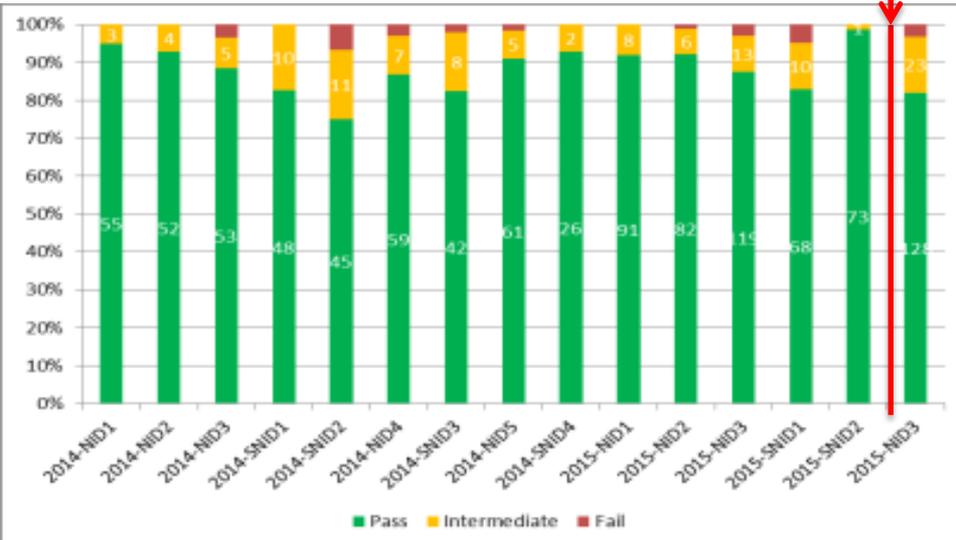
Punjab profile



WPV



HRUCs-focused LQAS



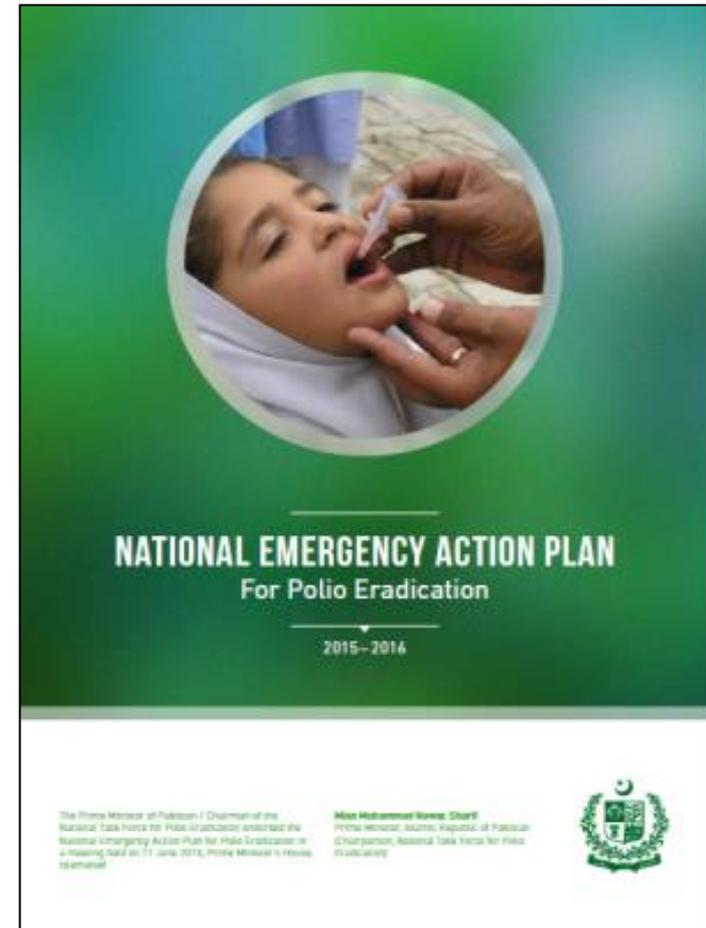
- No reported polio case since December 2014, high quality campaigns and strengthened routine immunisation
- However, environmental sampling indicates continued risk through importation and pockets of children with low immunity levels
- Response strategy includes strengthened inter-provincial coordination and transit vaccination



Grasping the opportunity to make ZERO a reality!

The ingredients....

- ✓ Right commitment and oversight at all levels
- ✓ Right strategy and implementation plan
- ✓ Right focus– tier 1
- ✓ Right teams in the right places
- ✓ Right resources at the right time



Whole of government commitment

- PMFP and EOC coordinators have daily interaction with highest government offices including PM, CM, and CS
- Prime Minister's Focus Group
- National Task Force Meetings chaired by PM attended provincial CMs and Governor KP
 - Last NTF meeting September 10
- Chief Secretaries spearheading change through Provincial Task Forces (PTFs)
- Optimal engagement and leadership of Deputy Commissioners (DC)

PM chairing NTF on Sept 10



CS Balochistan chairing NID evening meeting



KP Secretary Health field visit Sept NID



NEAP implementation: Doing things differently !

- Use of scientific evidence and data to drive planning and decision making
 - Risk modeling/prioritization
 - Real time Campaign monitoring (all phases)
- Intensive advance planning
 - Bringing forward the planning
 - Identifying key problems and defining solutions
 - Engaging key implementers at all levels
 - Task team approach (shared responsibility)
- Focused and intensive implementation
 - Priority assigned to tier-1 districts (HR, monitoring, DPCR revamping)
 - Disciplined delivery on deadlines
 - Roll out of Accountability and Performance Management Framework



The right teams in the right places

- **National EOC**

- ✓ Fully functional with a “One Team” approach.

- **Network of 5 Provincial EOCs**

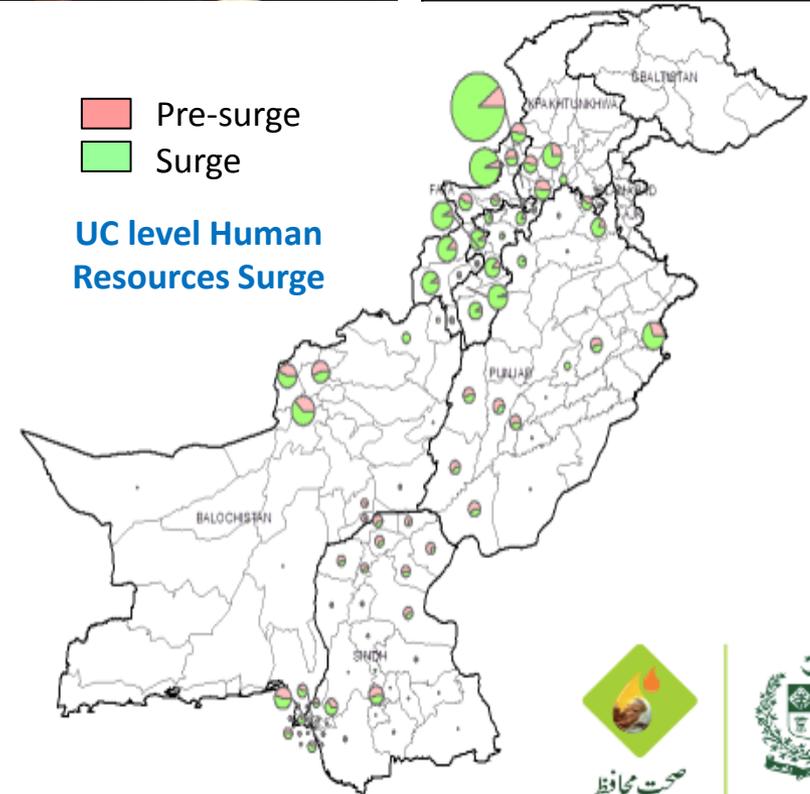
- ✓ Fully functional with designated senior leadership
 - ✓ GPEI surge underway to provide further specialist support

- **Strengthened District and Union Council Teams**

- ✓ DPCR refurbishment in priority districts
 - ✓ Focused surge of staff to high risk districts and Union Councils
 - 250+ to high risk Districts (PEOs, NSTOP, DHCSOs)
 - 3,650+ surge to 5,500+ at High Risk Union Councils (UCPWs and UCCOs)



PROVINCE	PRE-SURGE	SURGE	TOTAL
BALUCHISTAN	324	171	495
FATA	279	992	1271
ISLAMABAD	26	21	47
KP	398	2164	2562
PUNJAB	351	234	585
SINDH	484	72	556
PAKISTAN	1862	3654	5516

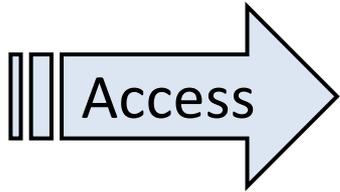


Implementing the missed children paradigm shift

Constraint

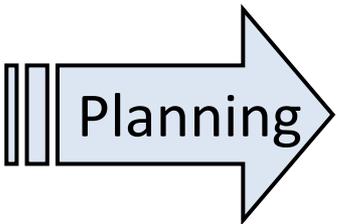
Risk

Operational & planning response



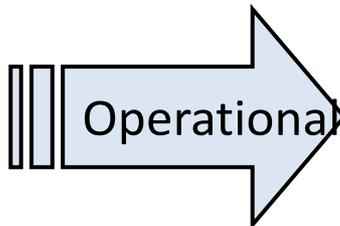
- Conflict
- Security
- Management
- Natural hazard

- Contingency plan for inaccessible areas
- Security-protected campaign
- Community protected campaign – Tier 1
- Re-schedule a pre/postponed campaign
- Special campaigns for IDPs



- Resident population missed
- Transit population missed
- Ratio of planned teams versus target

- **Microplans validation / revision**
- Monitoring - missed children
- Surveillance – under-immunized children
- Transit vaccination – zero dose children
- Health camps – zero dose children - Tier 1
- Data support centers – missed children Tier -1
- Enhanced training of FLWs – Tiers 1 and 2



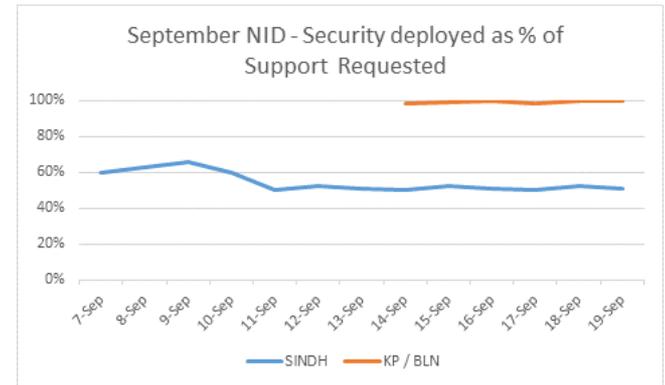
- **No Team**
 - Missed areas
 - Not enough teams
 - Inadequate supervision
- **Child unavailable**
 - Recorded
 - Unrecorded
- **Caregiver refusal**
 - Public
 - Silent

- **Microplans validation / revision**
- Catch up day – day 1-4
- COMNet catch up – days 5 – 15
- CCPV catch up – days 5 – 30
- Mop up – triggered by still missed children threshold >10% of recorded (decision support tool)

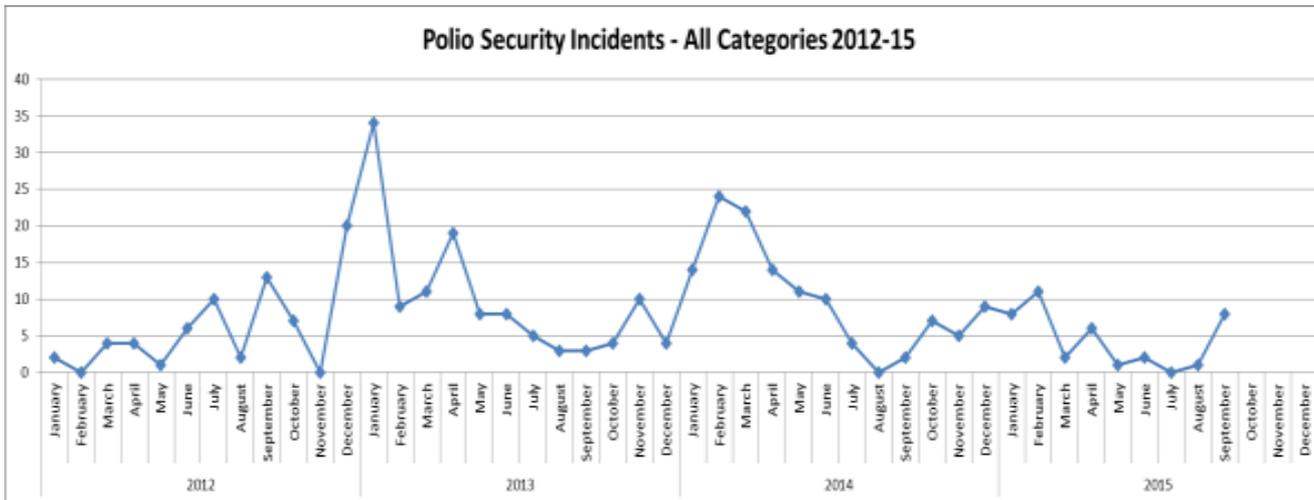


Strengthened security coordination

- The number of children in FATA inaccessible to the programme reduced to <35,000
- Security protected campaigns for September NID conducted in Balochistan, FATA, Karachi and KP
 - >200,000 security personnel deployed in support of September NID
 - 53% of requested Karachi support delivered
 - Pak Army deployed in FATA
- Incidents against FLWs continue a steady decline, each case investigated by Interior Ministry
- No serious security incident occurred during September NID



- **Overall Security Incidents – 2015**
 - Civilians killed – 349
 - LEA killed – 145
- **Polio Security Incidents – 2015**
 - Civilians killed – 5 (1.4%)
 - LEA killed – 3 (2%)



Revamped Communications

Sehat Muhafez

- Communications incorporates mass media and advocacy, sustained community engagement and door-step interaction
- No more fear campaigns – all visuals and language focused on positive, accepted Pashto social norms
- Communication campaign primarily targeted towards vaccination in the highest risk communities where distrust and cases are most prevalent
- Re-branding to re-package polio and increase community acceptance and trust
- Communications and operations centered on empowering each local health worker to succeed at every interaction with caregivers on the door-step
- Mass media (75% - tier 1 and 25% - remaining districts)
 - Radio (4,056 spots), TV (2,117 spots) and cable (6,912 spots)
 - Outdoor media placement – ~5,300 billboards/banners
 - ~16 m SMS messages to public and front-line staff
- Awareness, reach and recall to be measured for each campaign with a second KAP study to be conducted by Harvard in November / December



Supporting FLWs on the door-step

- 4,463 AiCs (95%) in all 42 tier 1 and 2 districts received enhanced 2-day training and revamped materials from 149 retrained master trainers
 - 99% agreed it helped or partially in the campaign but supervisory capacity and micro-planning remain problematic
 - 61% of 172 MT and AiC training sessions monitored
- Training for a targeted 48,899 FLWs in all tier 1 and 2 districts completed
- >12,000 applicants screened for 2,200 CCPV fixed positions in FATA and KP tier-1 agencies and districts,
 - 100% local, >90% females selected in KP
- ~ PKR 2 billion in FLW arrears cleared and revamped DDM endorsed and introduced as uniform system for timely payment
- Security incidents against FLWs continue to reduce
- Sehat Muhafez promotes and reinforces the critical role of vaccination and vaccinators as local community protectors

Turn over rate of front line polio workers, 2014-2015 (8 NIDs)

Type of workers	Percent involved							
	once	twice	thrice	four	five	Six	seven	eight
Area in charge	21	13	13	14	9	9	10	11
Polio Team member	31	17	13	10	6	7	7	9

For tier one and two districts, Peshawar not included as there was no DDM payment



Continuous Community

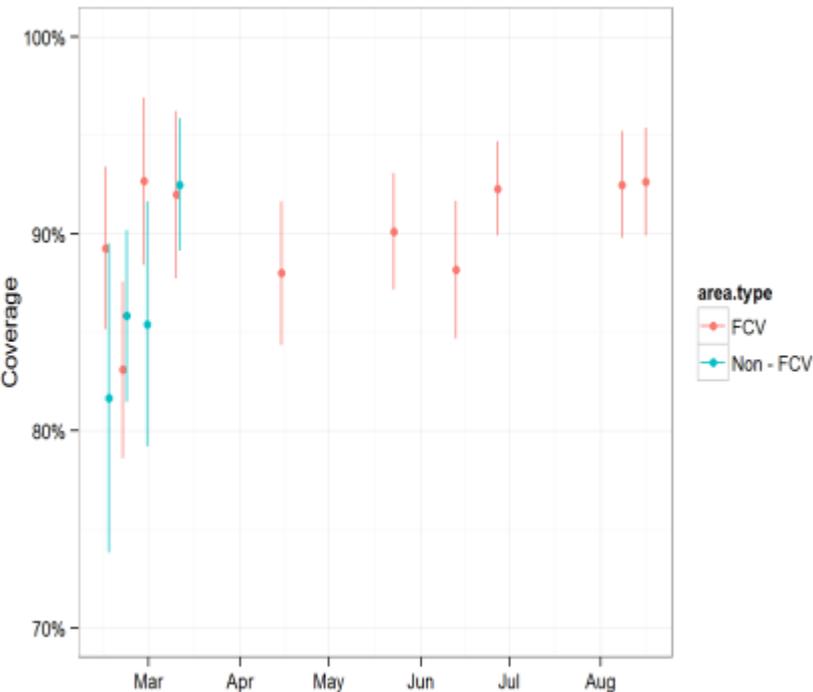
Protected Vaccination

- CCPV roll-out is targeted to the most difficult to reach populations within the highest risk tier-1 districts (< 3% of national effort but 40% of tier-1) plus the Kacha communities of North Sindh (orphan virus)
- Implemented by locally-based female vaccinators (male only as last resort in FATA) who are accepted by the communities they serve
- Vaccinators allocated a fixed list of households and work on a monthly, not campaign, cycle which allows time and space for sustained community engagement through micro-census, extended catch-up and support to strengthened RI through mobilization or referral
- The NEAP targets for this initiative are zero missed children, 95% coverage verified by third party monitoring and / or 100% of LQAS lots assessed passed

Province	District	CCPV UCs	Target population	# of CCPVs	# of AICs
KP	Peshawar	50	449 720	995	288
	Bannu	6	28 306	82	22
	Tank	11	34 549	155	37
	Total	67	512 575	1 232	347
FATA	FR Bannu	4	21 299	74	20
	North Waziristan	19	43 101	131	25
	Khyber	81	126 188	292	79
	Total	104	190 588	497	124
Sindh-Karachi	Landhi	2	34 146	150	10
	Gadap	3	143 904	672	69
	Orangi	1	13 600	92	9
	Baldia	1	25 350	114	12
	Site	1	12 723	66	6
	Gulshan	2	9 355	40	4
	Total	10	239 078	1 134	110
Sindh-North	North Sindh (12 districts)	74	126 287	566	82
Baluchistan	Kila Abdulla	9	61 923	253	33
	Pishin	5	14 803	60	11
	Quetta	8	120 652	483	57
	Total	22	197 378	796	101
Pakistan	Total	277	1 265 906	4 225	764

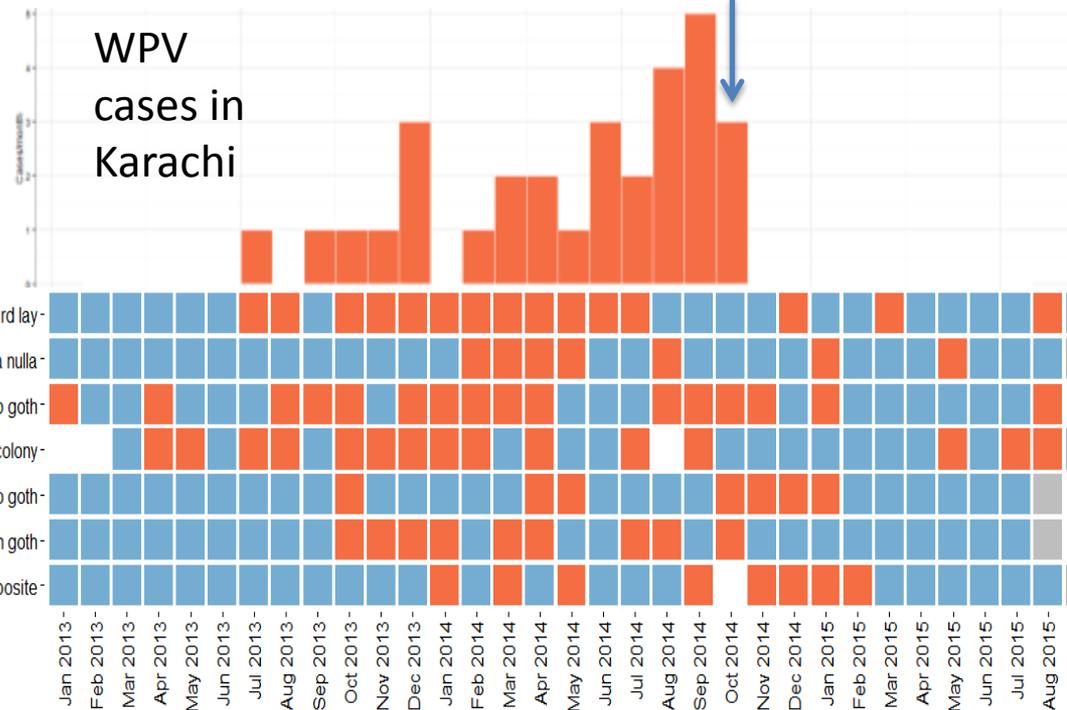


CCPV Implementation in Karachi: LQAS, AFP/Environmental Surveillance



7 Environmental sites, all of which drain from FCV areas to some extent

FCVs



- Aggregate LQAS across areas to estimate overall coverage

- Results show high (90%) coverage in FCV areas

- For Feb-April campaigns, can compare FCV areas to matched non-FCV areas

- Data suggestive of slightly better coverage



Health Camps - Polio Plus

- Reached 453,679 beneficiaries and vaccinated 80,000 <5yrs children including 10,000 zero-dose
- Exit surveys reaffirmed community demand
- The cost per zero dose child reached ranged from US\$52 in FATA to US\$417 in KP - an effective but relatively expensive intervention
 - Finding balance of core (SIAs) and complimentary/community engagement strategies (health-camps)
- Next round of health camps is planned from 19 October 2015 to 3 June 2016
 - focused on CCPV areas within tier-1 districts only with a special focus on Balochistan and FATA



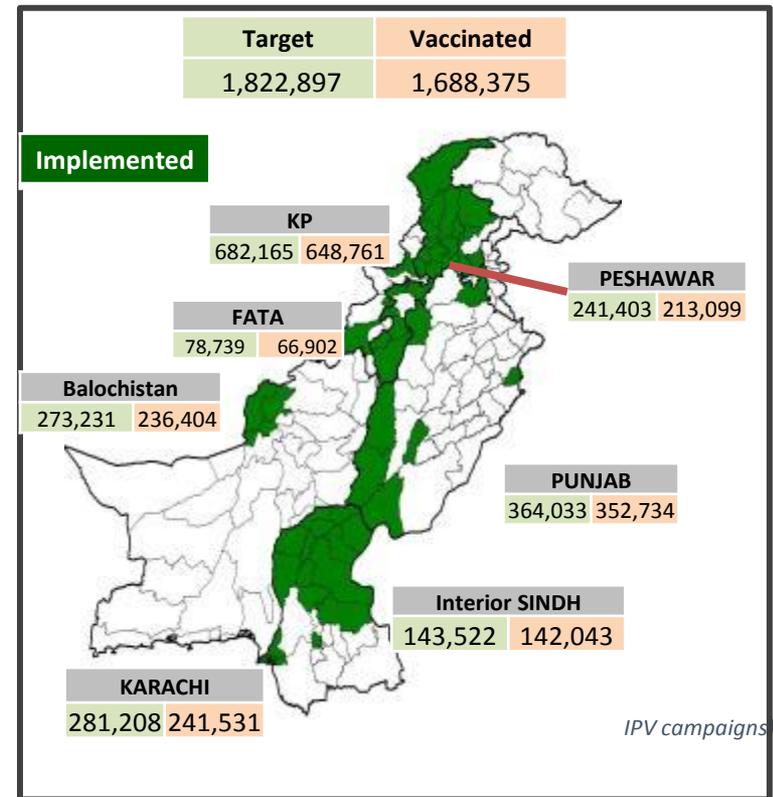
# of camps conducted	# of beneficiaries served for curative services (all ages)	# of beneficiaries <5 years old for curative services	# of OPV zero dose children <5 years old given OPV	# of RI zero dose children <2 years old vaccinated	# of women given TT	# of family/delivery kits distributed
1,878	453,679	124,793	9,911	9,172	19,216	33,418



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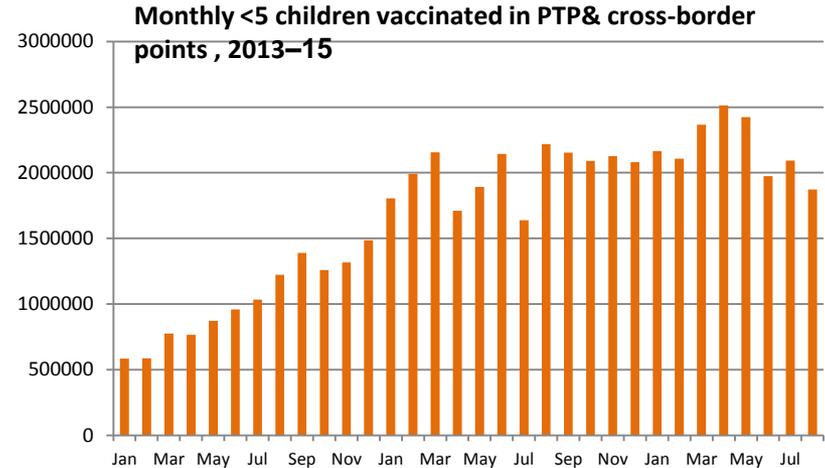
IPV/OPV used strategically to boost immunity of populations at greatest risk

- **~1.68 million children vaccinated through IPV/OPV campaigns as of June 2015**
 - Targeted Campaigns implemented in KP, Punjab, Sindh, FATA, Balochistan.
 - Remaining 230,000 doses planned for use in HRUCs FATA in October 2015
- **400,000 further doses ordered**
 - 200,000 contingency for emergency response
 - 200,000 doses for further targeted use (as per TAG guidance)
- **Phased introduction of IPV into EPI/RI**
- **One dose of IPV can close Immunity gap**
 - Study conducted in Pakistan showed seroconversion 28 days after one dose of bOPV or bOPV+IPV in Pakistan is > 98% (seroconversion or boosting in those with baseline titer < 362)



Strengthening transit and cross-border vaccination and coordination

- >12m vaccinated in 2013, ~24m in 2014 and ~17 m in 2015 to date
 - Appointed 6 transit point coordinators
 - Targeted supervision and monitoring remains an issue
- **Transit and cross-border strategy is being streamlined and refocused especially during SIAs**
 - Cross-border vaccination (Agreed SOPs and more resources– both sides)
 - Vaccination of refugees/displaced population at exit and re-entry. (re-entry now dominates !)
 - Population movement for social, economic, and religious reason from and to reservoir districts during SIAs
- **Cross-border collaboration and coordination with Afghanistan strengthened**
 - International meeting in Islamabad in June
 - Regional meetings in Peshawar and K Abdullah in August and September agreed on specific SOPs to manage crossings
 - Integration of communication strategy
 - Monthly teleconference between regions
 - Key cross-border posts
 - Campaign synchronisation
 - Shared situational awareness
 - Operational coordination – religious refusals, FLW medical evacuation

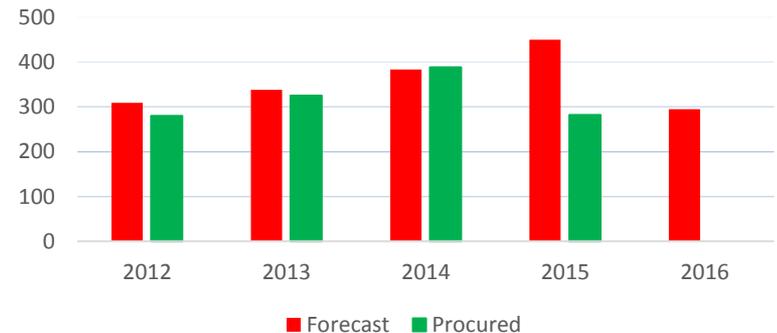


Effective Vaccine Supply

- SIA schedule to date implemented as planned without interruption
- In accordance with the rationalized SIA schedule, vaccine supply revised from an initial 450 million doses to 390 million doses in 2015 and to ~293 million doses in 2016
- Supply tightly aligned with SIA schedule with minimal buffer to minimize storage and cold chain time and space
- Weekly stock reporting initiated from district to federal level, NID wastage rates in 2015 is ~ 6% with provincial ranges of 4-11% and SNiD wastage is ~12% with provincial ranges from 10-15%.



Vaccine Supply (millions)

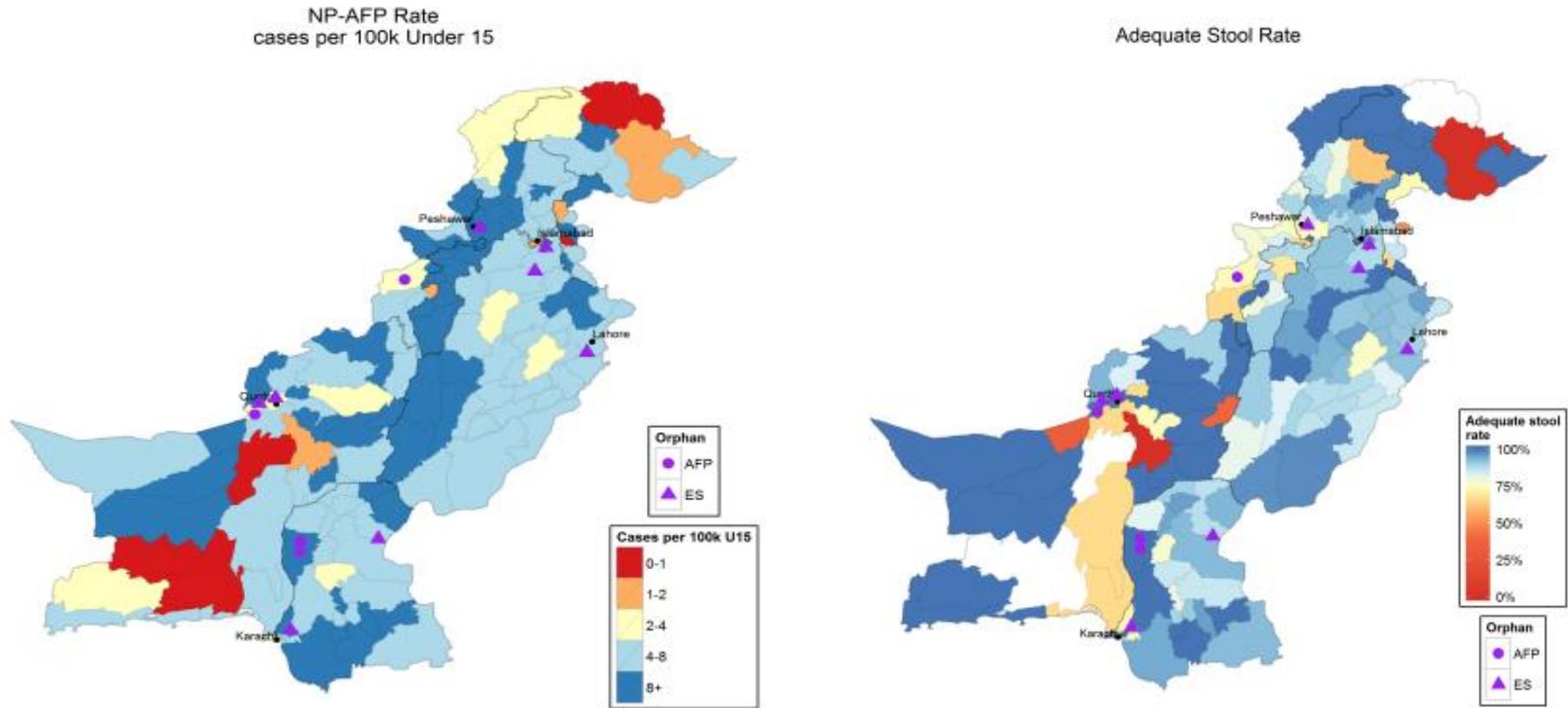


Risk Management

Risk	Mitigation Strategy
Failure to access children in insecure areas	<ul style="list-style-type: none"> • Accurate mapping of all inaccessible areas and populations • Sustained Civil-Military Co-operation at all levels
Failure to vaccinate all accessible children	<ul style="list-style-type: none"> • Sustained staff surge at all levels (N.B. District/UC level) • Comprehensive revision and validation of Micro-plans • Ensure that Polio teams are well selected, trained, supervised, protected, and timely paid • Systematic tracking and vaccination of missed children • Further rollout of proven innovations (e.g. CCPV, health camps, transit/cross border vaccination and IPV) • Enhanced programmatic monitoring at all level
Failure to timely interrupt cVDPV	<ul style="list-style-type: none"> • Sustained reduction in cVDPV cases and isolates • TAG endorsed SIAs strategy adapted to manage risk
Lapse in political commitment & oversight	<ul style="list-style-type: none"> • Focus on NTF, PTFs, DPECs and UPEC performance • Roll-out of accountability framework
Inadequate Funding	<ul style="list-style-type: none"> • Accelerated advocacy with key partners and donors • Front-loading funding for 2016



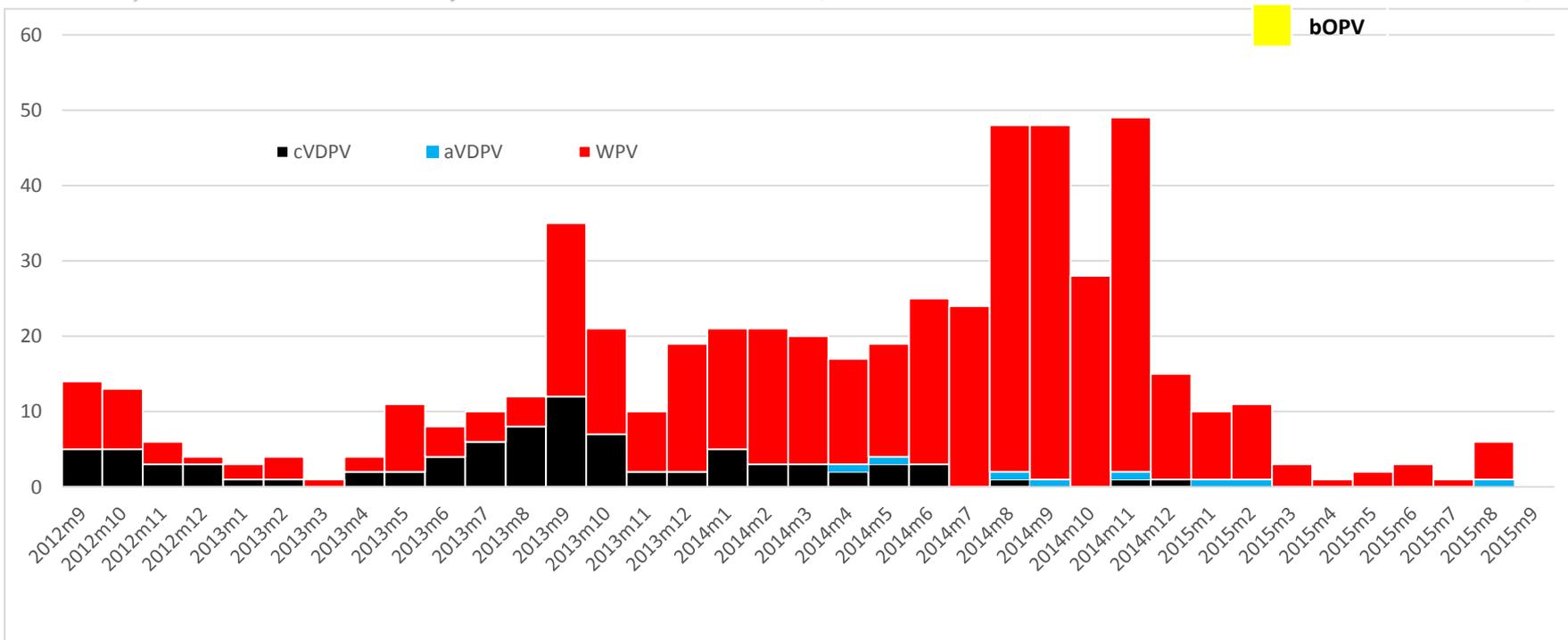
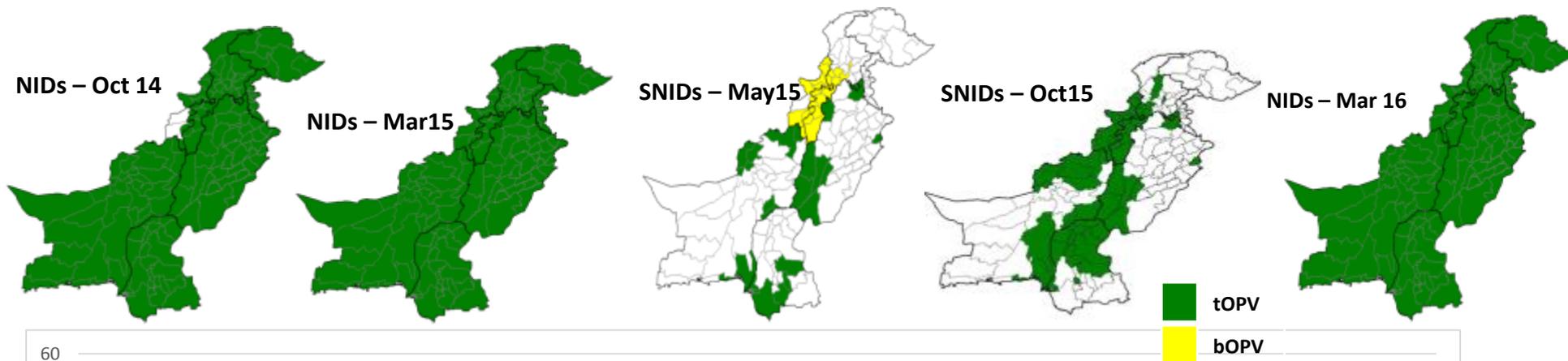
Challenge: maintaining / increasing surveillance sensitivity



- Standard surveillance indicators exceeded in majority of districts.
- The proportion of orphan viruses in 2015 increased point to point (6% to 14%);
 - Increase in orphans during the last stages of eradication has been observed in other countries
- Surveillance strengthening plan
 - GPEI-EOC surveillance coordinator appointed
 - Surveillance task team established and 5 comprehensive reviews done
 - Special Workshop on surveillance strengthening & planning conducted in July 2015
 - > 6000 qualified & informal healthcare providers oriented in 2015 to date
 - NEAP work-plan on sensitization and community-based surveillance being rolled-out



Challenge: preventing potential reemergence cVDPV2*

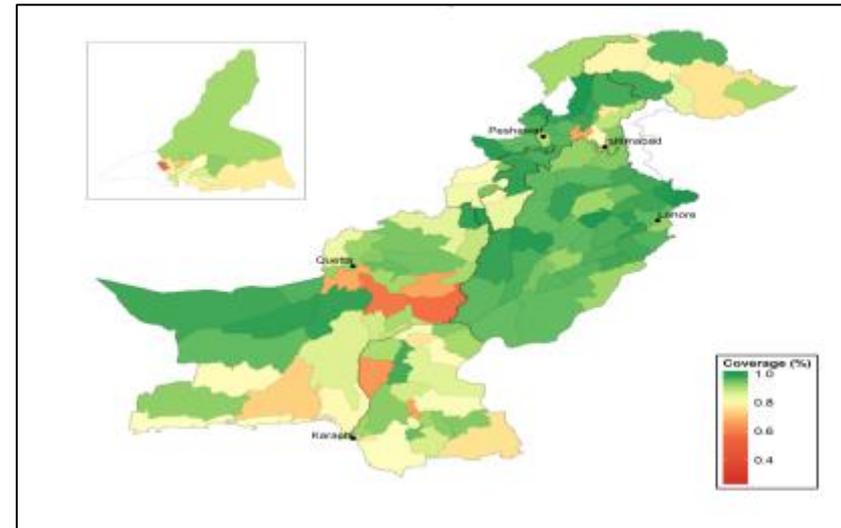


***Oct 15-March 16 tOPV rounds will be used based on the evolving epidemiology as per TAG recommendations**



September NID snapshot

September PCM



September LQAS

	Pass	Intermediate	Fail	Total
PUNJAB	129	23	4	156
KP	39	27	21	87
SINDH	47	40	19	106
BALUCHISTAN	31	15	32	78
FATA	64	25	5	94
ISLAMABAD	2	5	3	10
TOTAL	312	135	84	531



صحت محافظ

Systematic independent pre-, intra- and post campaign monitoring

- 3,000 HH Clusters (intra-campaign)
- >500 LQAS HRUCs (standardized, independent and using handheld devices)
- PCM in all districts (300 per District/approx 49,000 households)
- Real-time feedback to PEOCs and NEOC

Positive outcome

- 35 million children vaccinated
- 2.8/3.1 m missed children were tracked and vaccinated during the catch up days (Further extended catch up planned in CCPV areas)
- Access to a further 10,000 children achieved in most insecure areas (FATA)
- Scale up of CCPV
- First “door to door” in Khyber since 2009 and NWA/SWA since 2011

Key challenges

- Comprehensive microplans with supervised implementation



Thank you

