



صحت محافظ

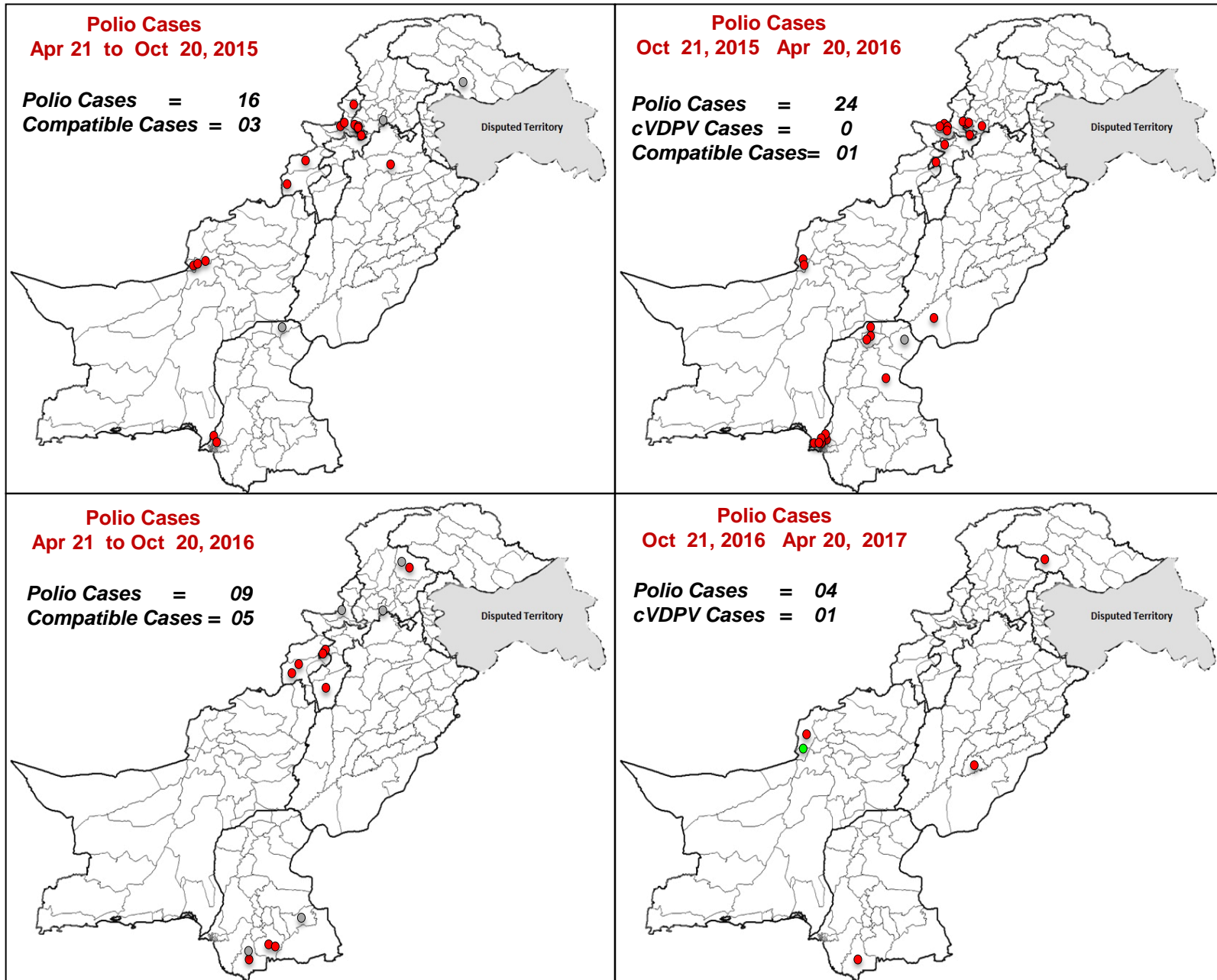


# Pakistan Polio Program Update

Independent Monitoring Board, May 2017



# Temporal - Spatial Distribution of Polio Cases, 2015–2017\*



\* Data as of April 21, 2017



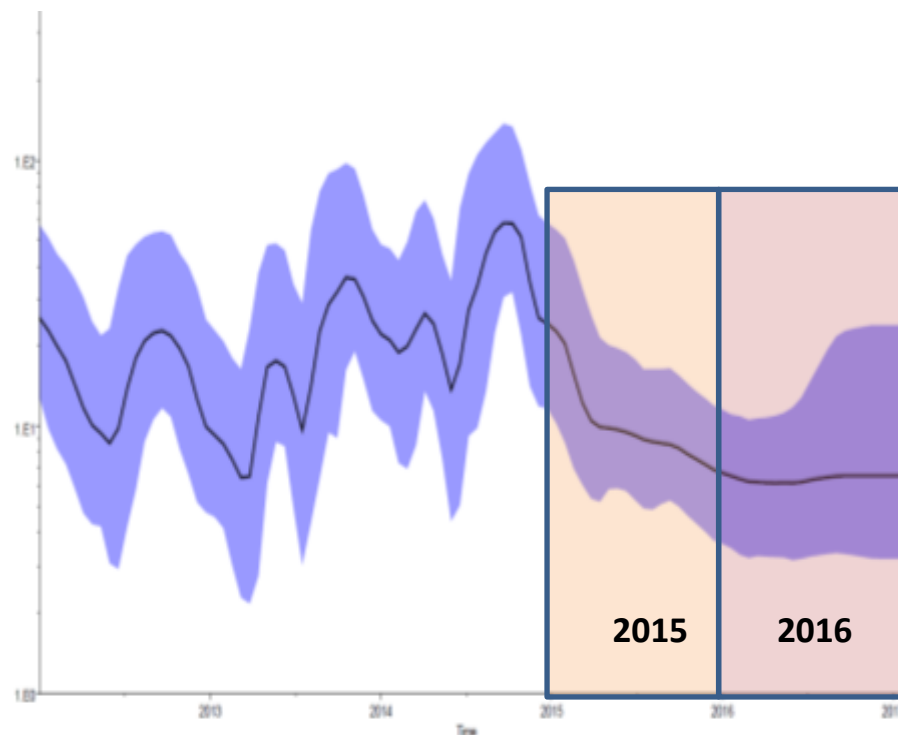
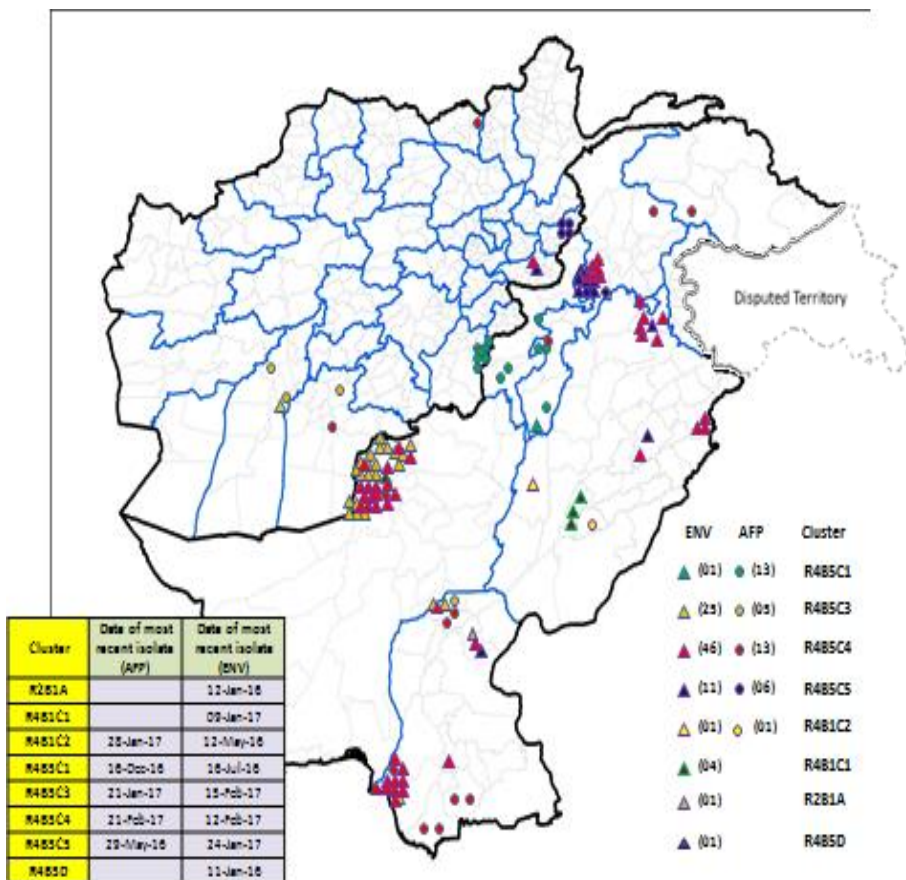


# Molecular Epidemiology of WPV in the AFPAK EPI Block

**Median genetic diversity remains at low levels**

*One Epidemiologic Block –AFG – PAK : Polio isolates by Genetic Clusters, 2016-2017*

*Median genetic diversity, Jan 12–Jan17*

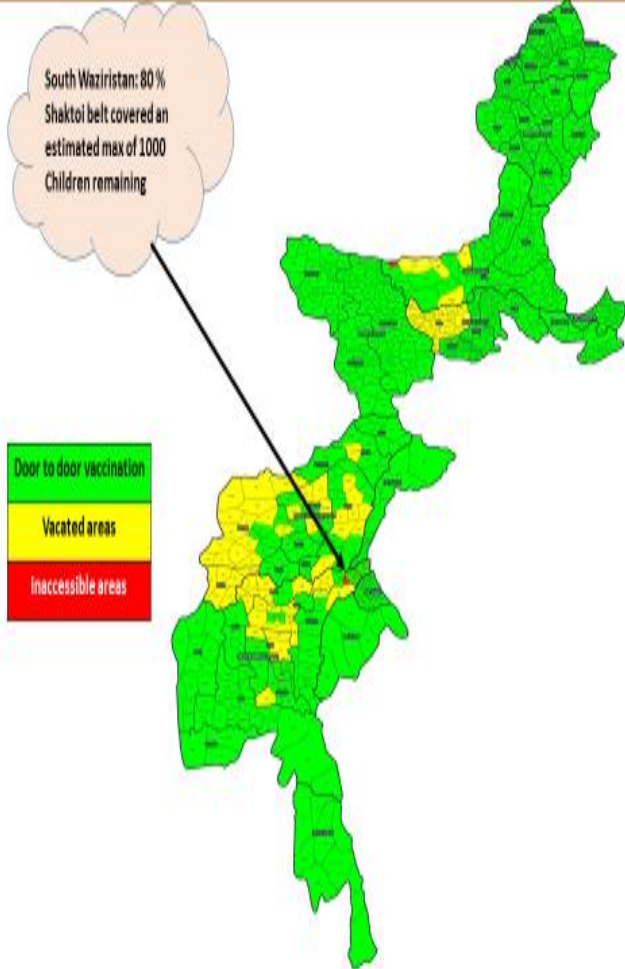


Estimates of genetic diversity using different approaches, indicate a shrinkage across the 2015-2016 low season and reaching an all-time low.

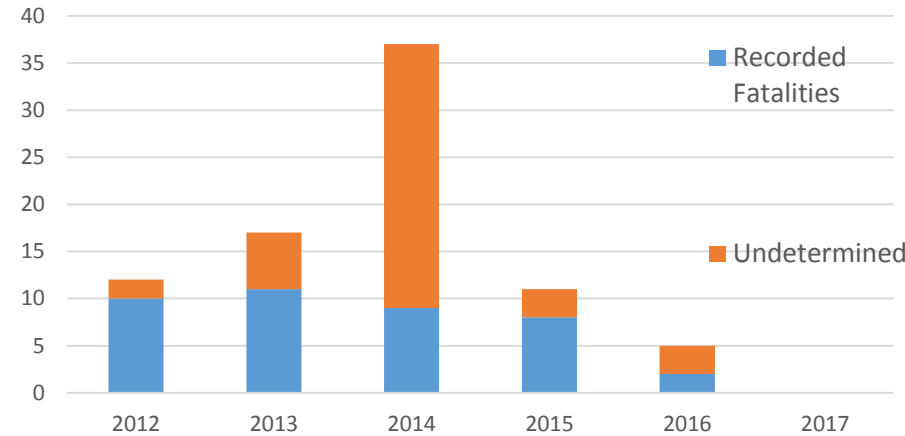
# Program Operations: Access and Security

**Access and security are not barriers to progress but robust security support remains critical**

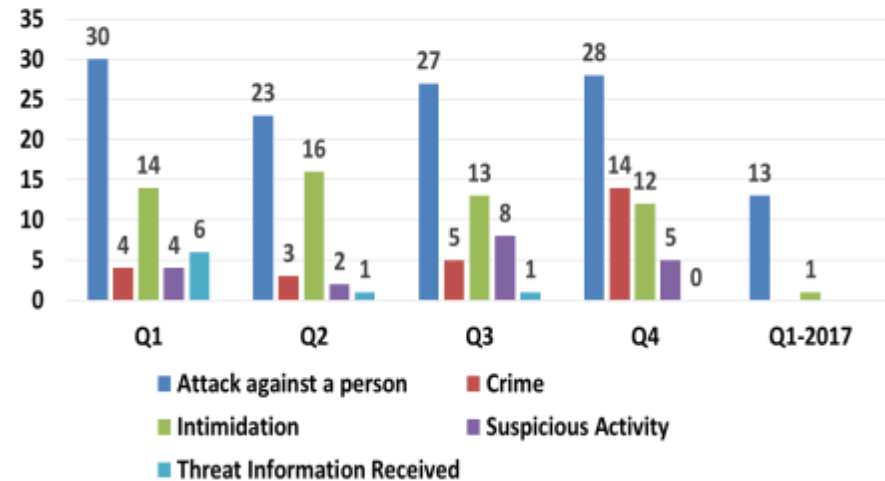
## FATA Accessibility situation April 2017



## 2012-16 Reported Fatal Security Incidents

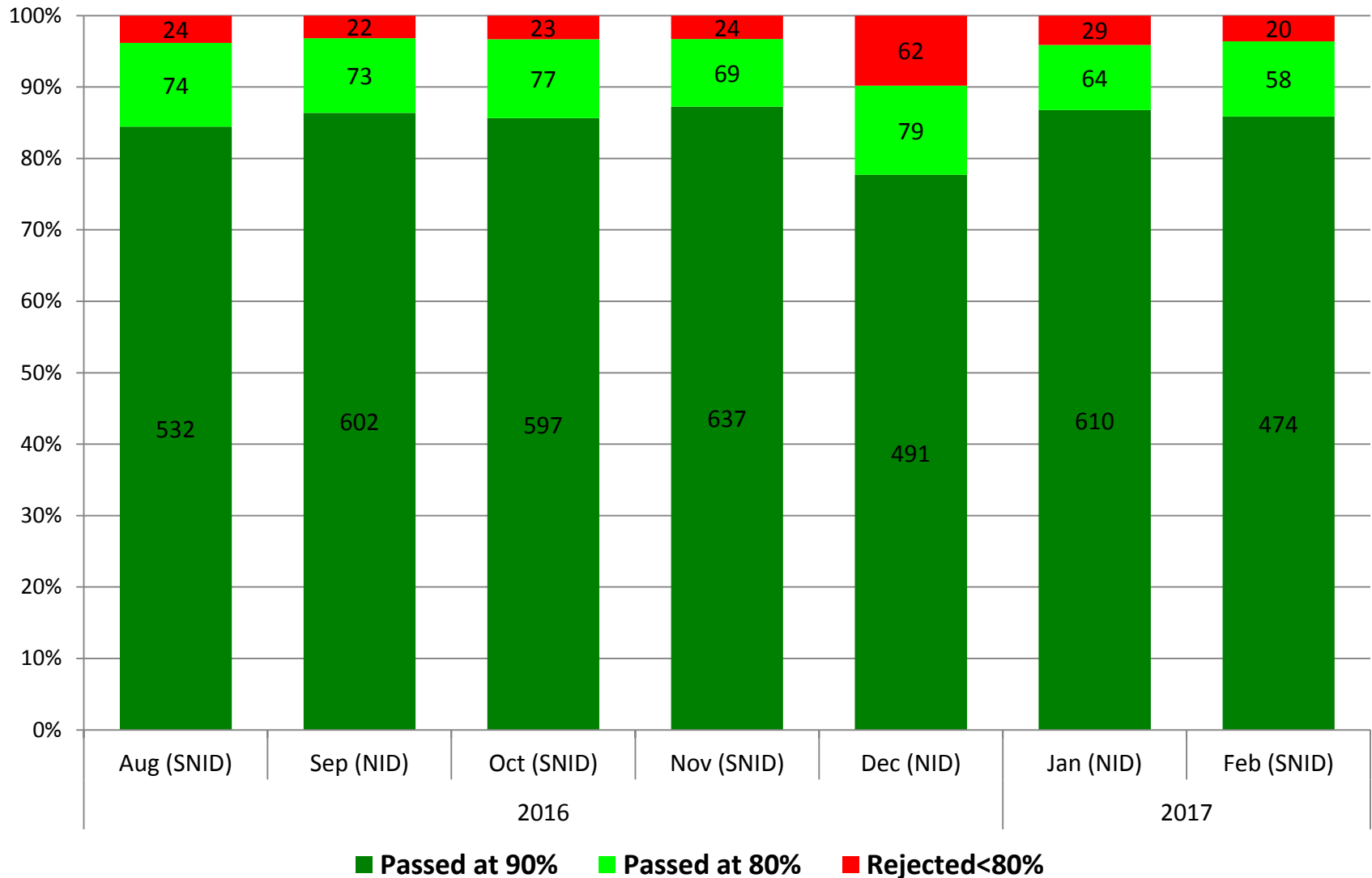


## Type of Incident by Quarter 2016 - 2017



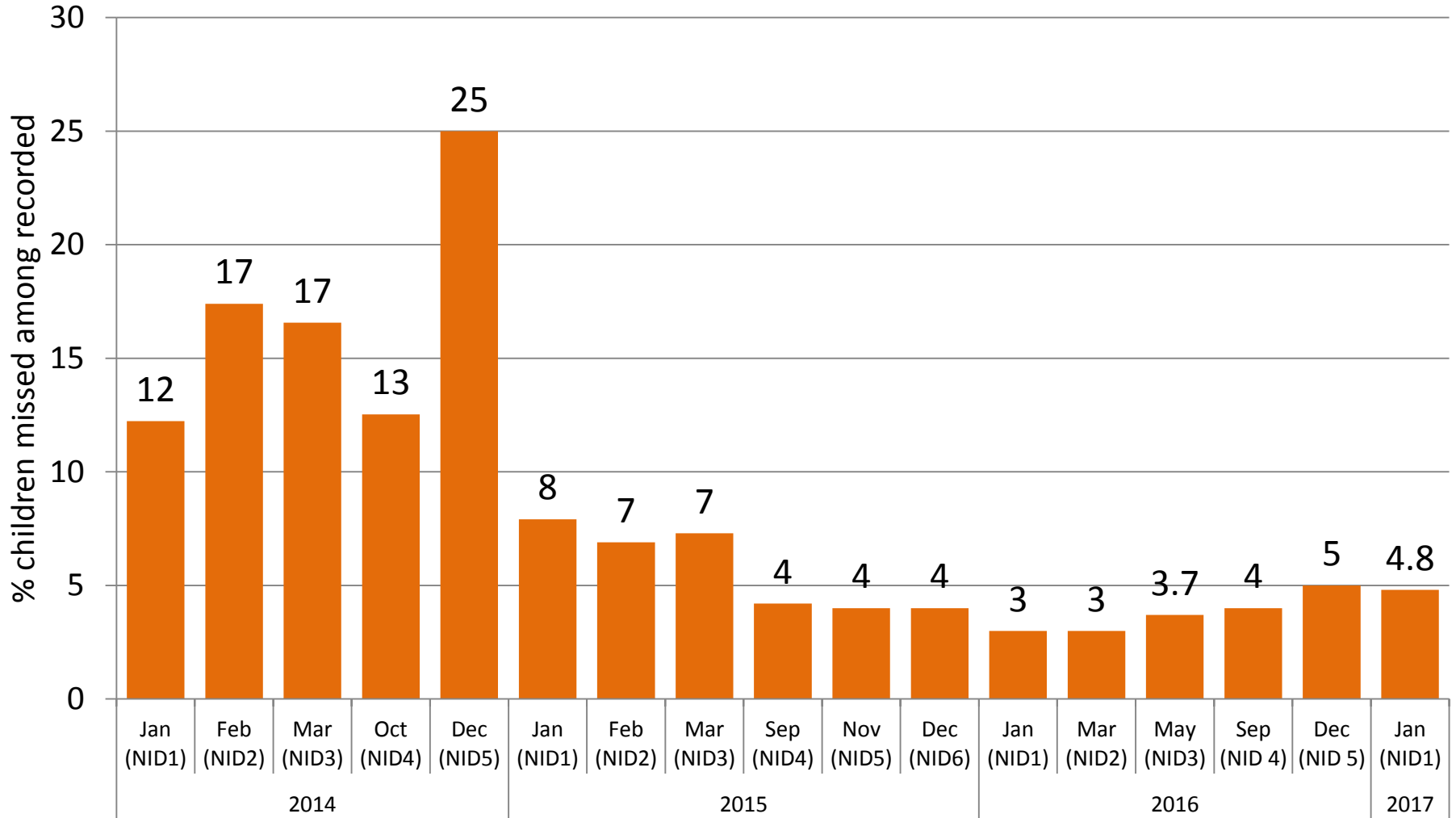
# Programme Operations: SIA Performance

LQAS focusing on Tier 1 and Tier 2 as well as Low performing Union Councils allows the programme to identify and close gaps



# Program Operations: SIAs performance

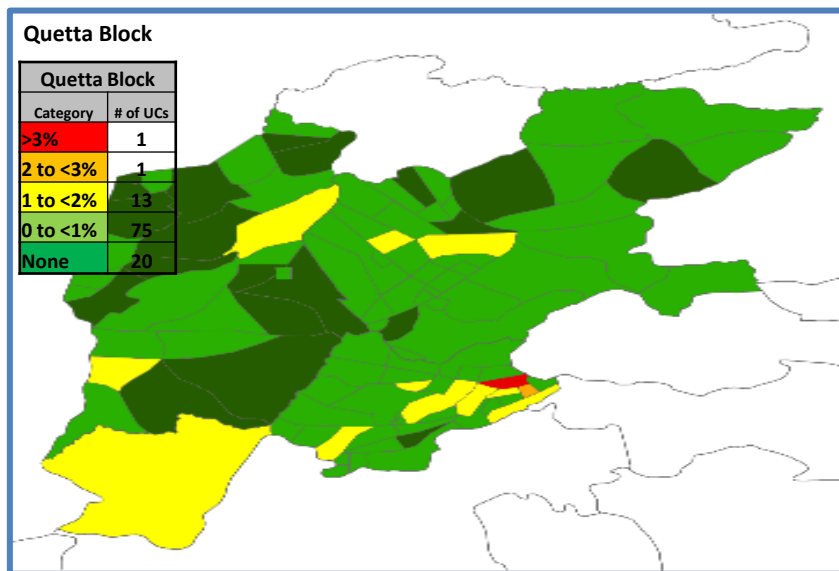
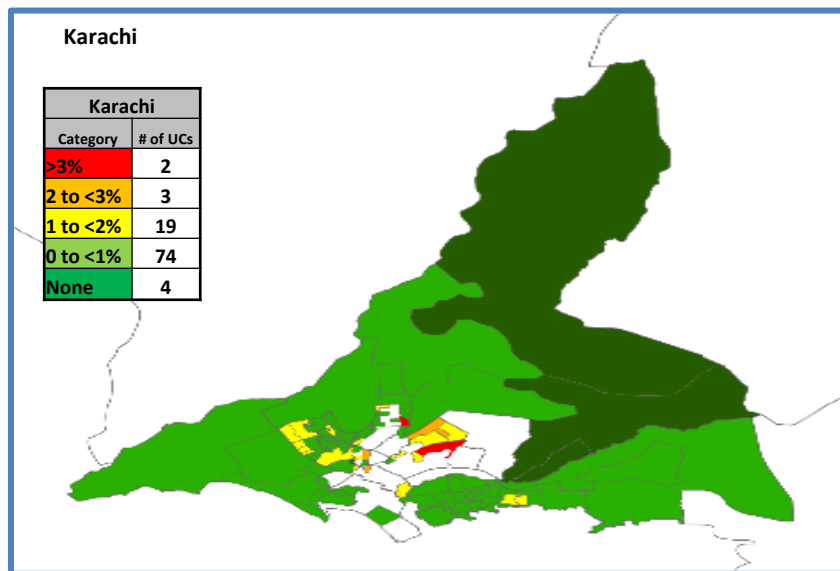
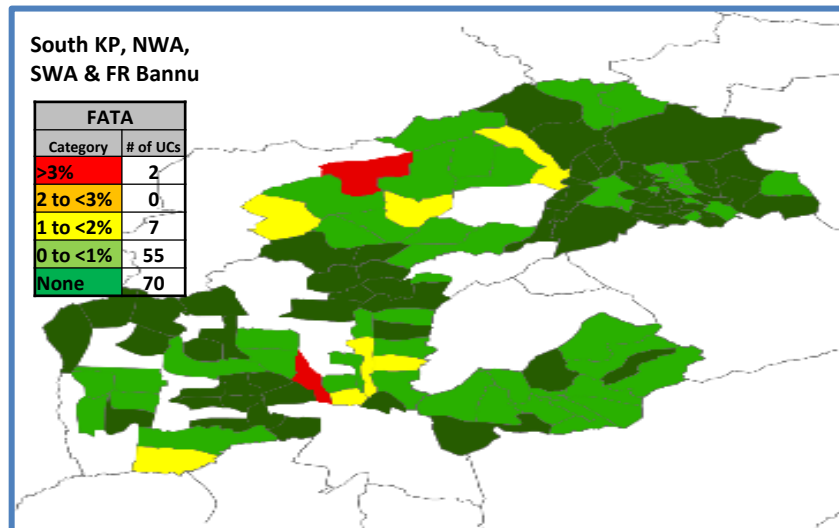
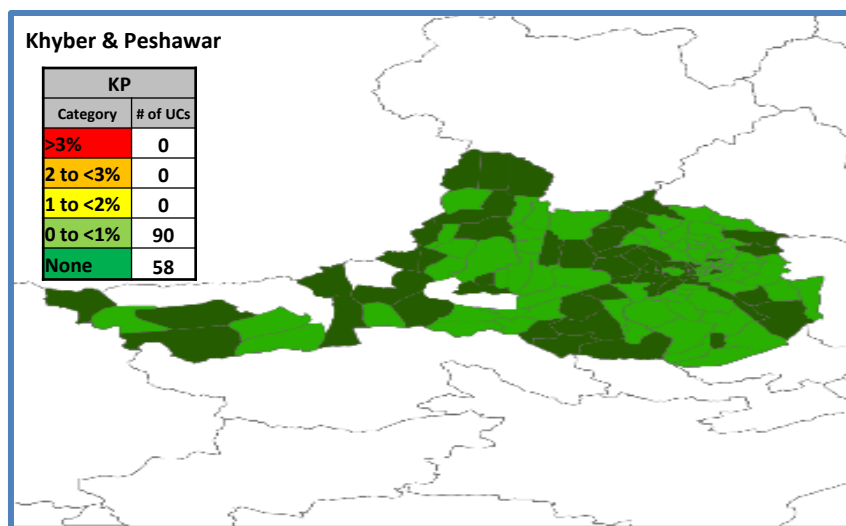
Tracking missed children: % missed among recorded missed children





# Programme Operations: Vaccinating Persistently Missed Children

**On track - intense focus in tier 1 continues: special attention given to missed children missed in the prior round**



≥3% of Target population

2 to <3% of Target population

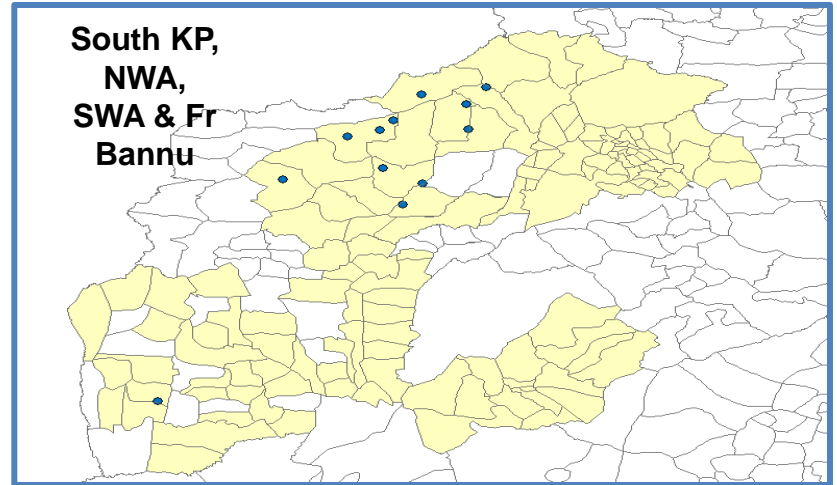
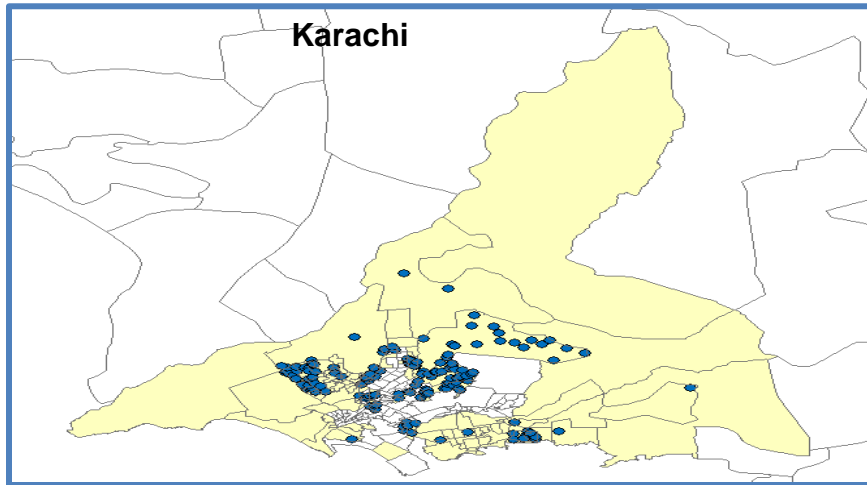
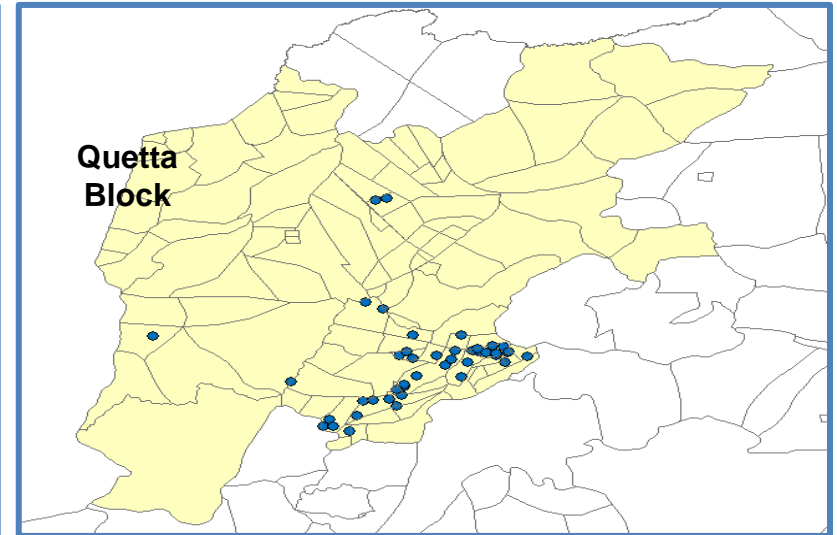
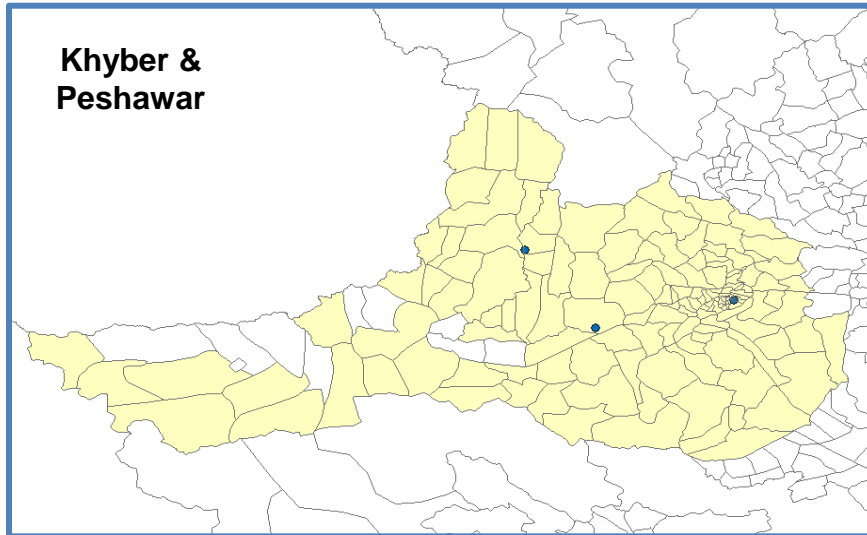
1 to <2% of Target population

0 to <1% of Target population

None

# Programme Operations: Vaccinating Persistently Missed Children

Focus is on the Area Supervisor level through successive campaigns



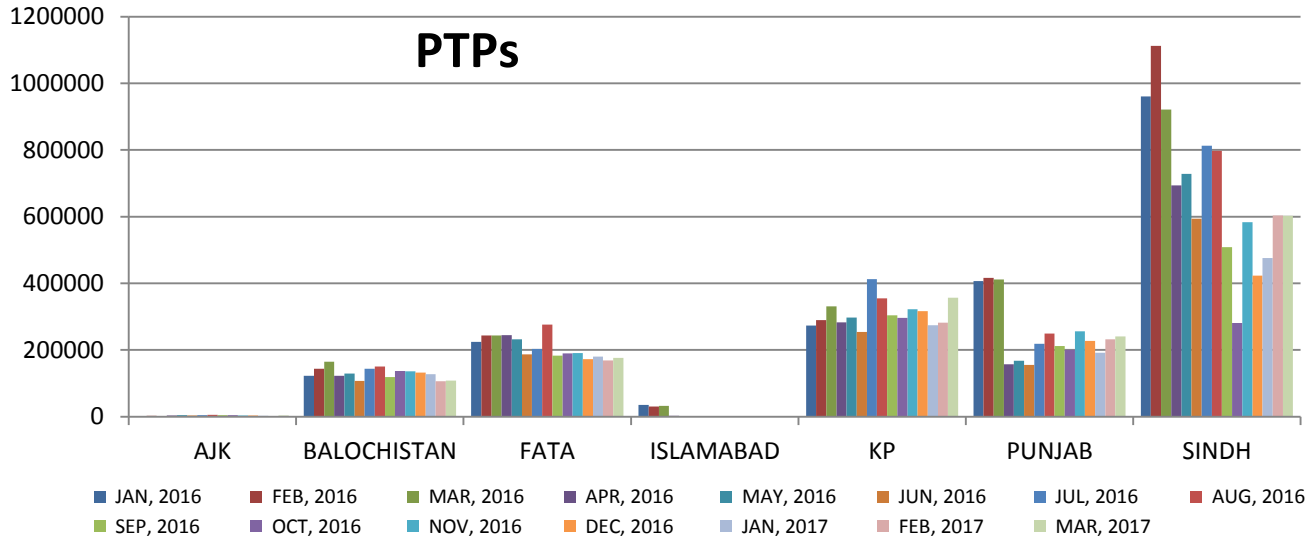
● Area Supervisor with more than 20 Persistently Missed Children

■ Areas Covered by CBV/Data Support Centre

# Program Operations: HRMP

Highly mobile populations covered in all provinces

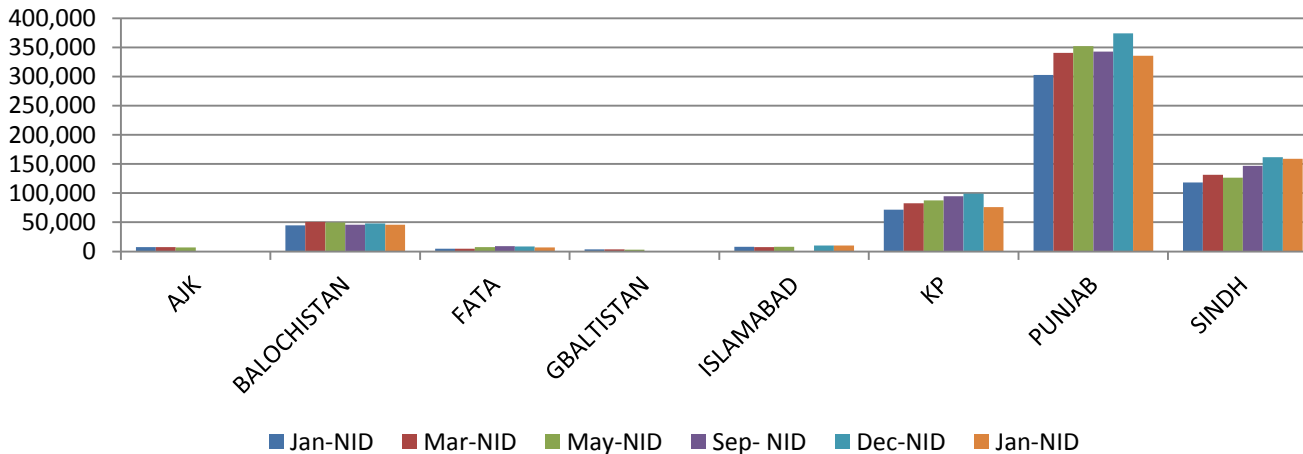
## PTPs



## Monthly PTP vaccination

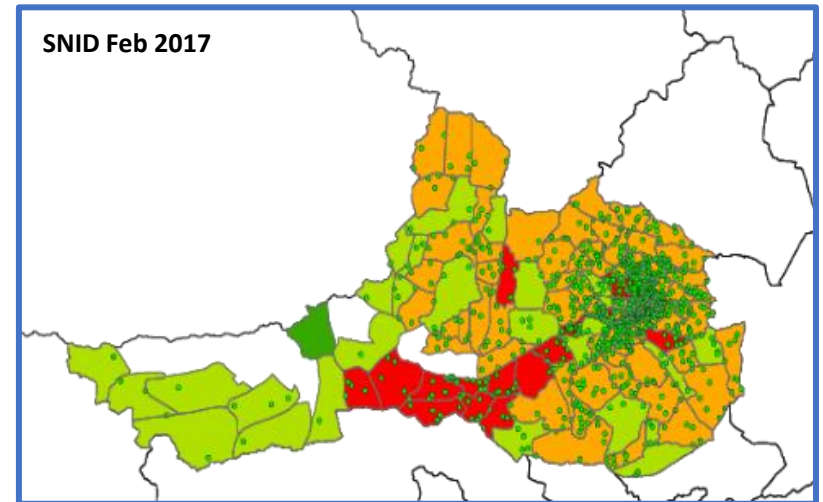
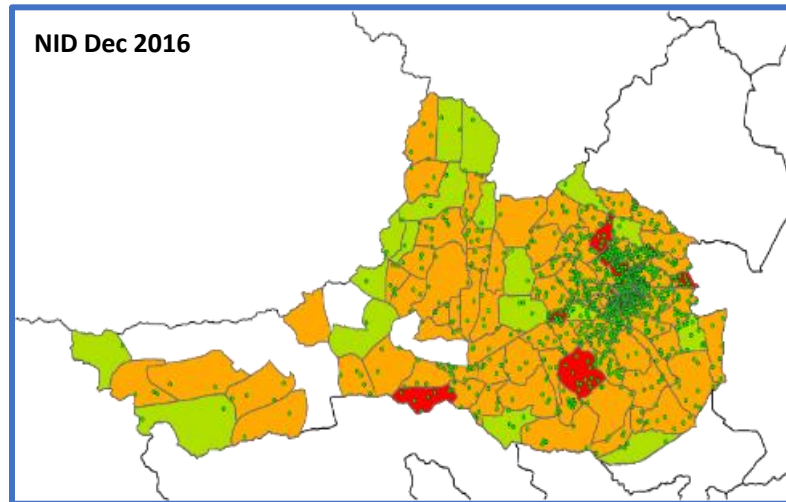
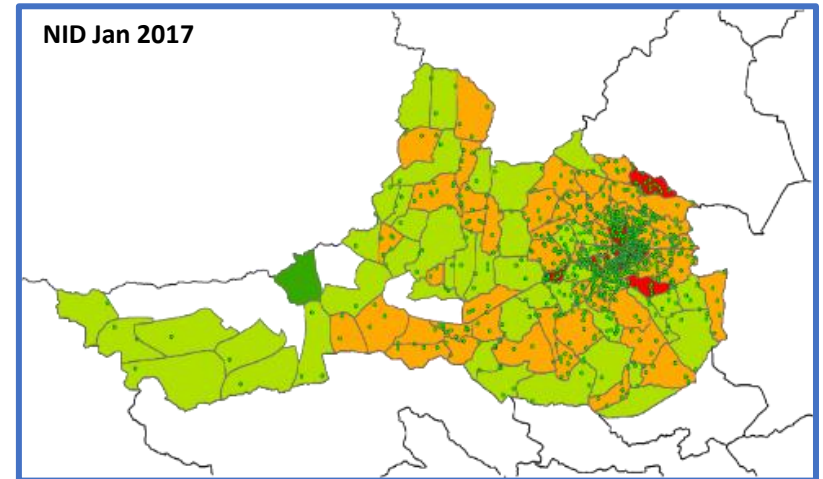
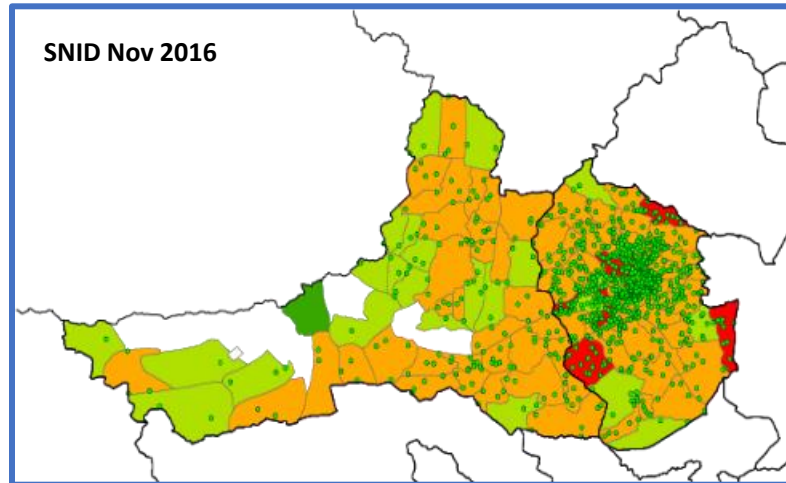
	Vaccinated	% zero-dose
Apr-16	1,506,534	0.6%
May-16	1,558,505	1.0%
Jun-16	1,300,980	1.0%
Jul-16	1,795,267	0.6%
Aug-16	1,833,973	1.0%
Sep-16	1,330,046	0.9%
Oct-16	1,108,332	0.5%
Nov-16	1,492,099	0.5%
Dec-16	1,274,765	0.8%
Jan-17	1,253,155	0.5%
Feb-17	1,392,999	0.6%
Mar-17	1,488,670	0.6%

## Transit vaccination, SIAs



# (Example) Programme Operations: Tracking and Vaccinating Guests and Nomads Tier 1

## Khyber Peshawar - Guest/Nomads Trend



One green dot= 30 Guests/Nomads

% of Guest with Target Population

0%

0-2%

2 -5%

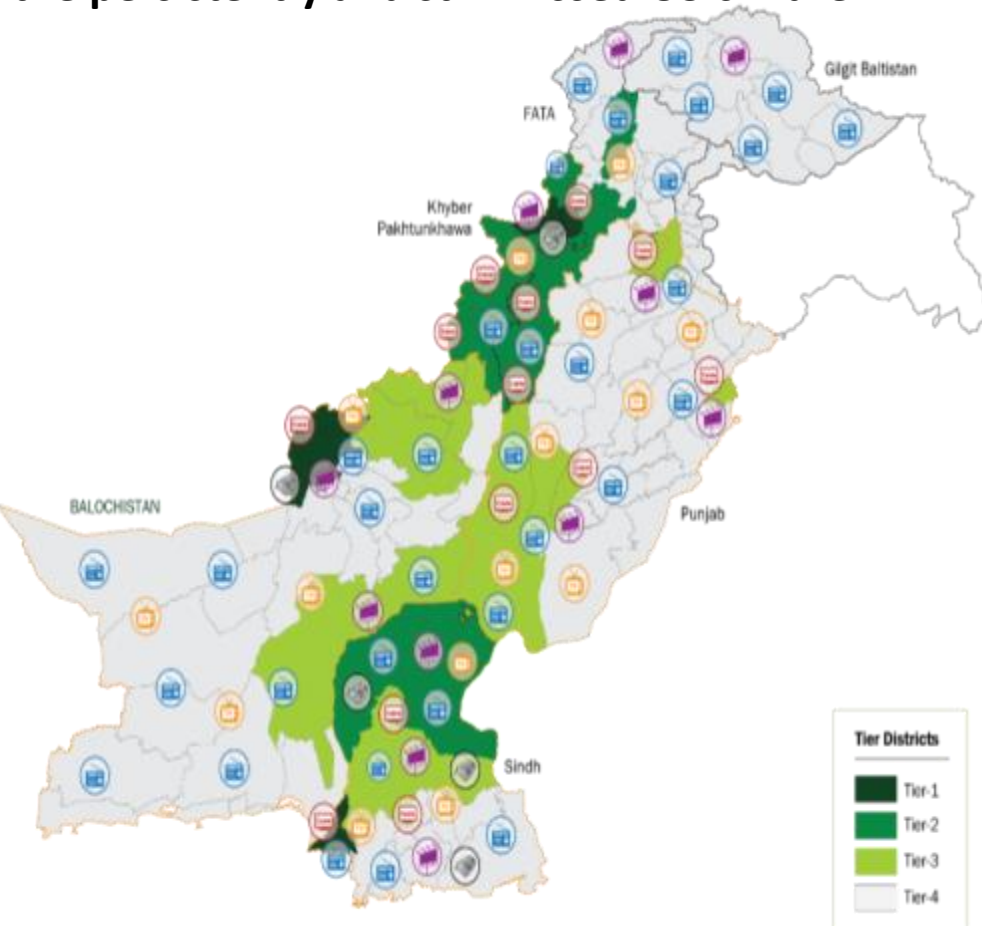
> 5%

# Program Operations

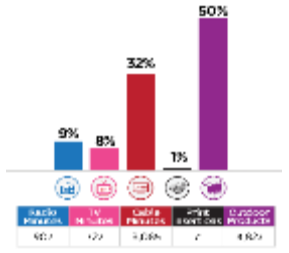
## Enabling Vaccinator Success on the doorstep

### Mass media

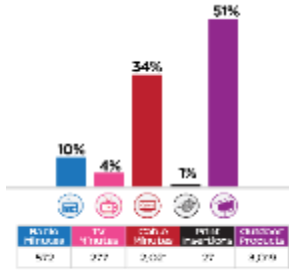
Localized approach through targeted channel selection and messaging with primary focus on Tier 1 and Tier 2 districts reaching out to caregivers of the persistently and still missed U5 children



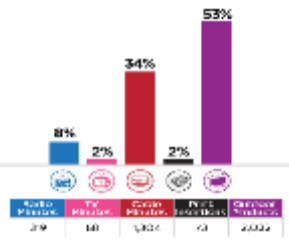
**NIDs**  
Mainstream TV, radio, cable channels, print and outdoor media, ensuring coverage across Pakistan



**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



Awareness of Polio campaigns	Have you seen/heard messages about Polio vaccination?		
	Yes	No	Sample Size
KARACHI	1029	571	1600
KHYBER	1373	227	1600
PESHAWAR	1266	334	1600
QUETTA	1375	225	1600
RAHIMYAR KHAN	1017	583	1600

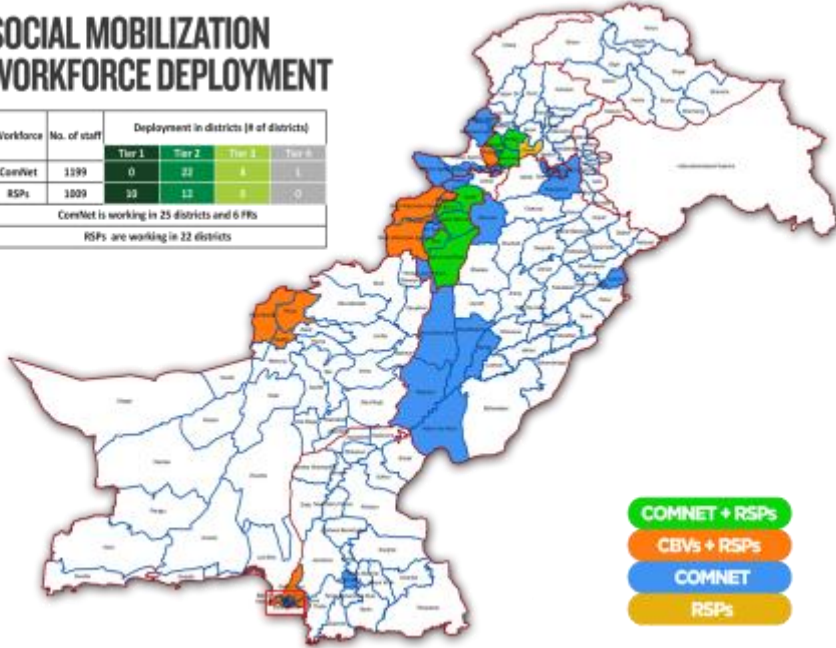
# Program Operations

Community engagement focused on caregivers of missed children

## SOCIAL MOBILIZATION WORKFORCE DEPLOYMENT

Workforce	No. of staff	Deployment in districts (# of districts)			
		Tier 1	Tier 2	Tier 3	Tier 4
ComNet	1599	0	22	4	1
RSPs	1009	30	12	8	0

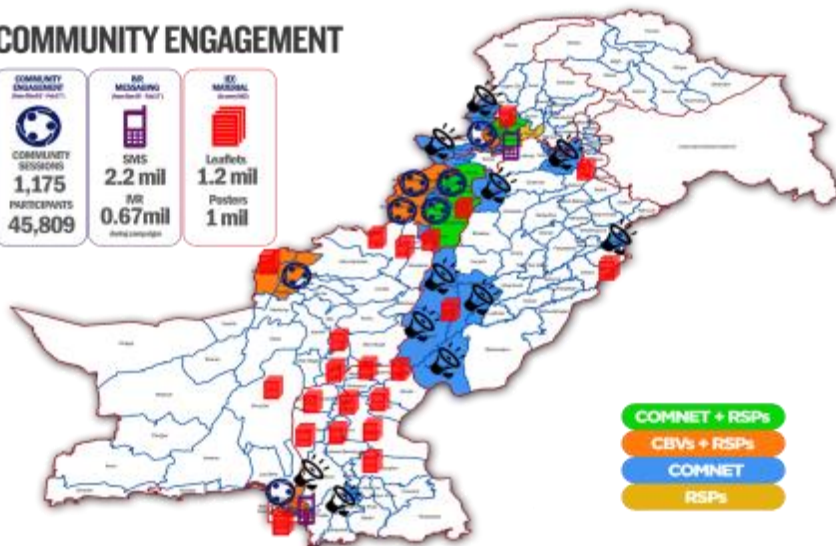
ComNet is working in 25 districts and 6 FBs  
RSPs are working in 22 districts



- COMNET + RSPs
- CBVs + RSPs
- COMNET
- RSPs

## COMMUNITY ENGAGEMENT

<b>COMMUNITY ENGAGEMENT</b>  COMMUNITY SESSIONS <b>1,175</b> PARTICIPANTS <b>45,809</b>	<b>SMS MESSAGING</b>  SMS <b>2.2 mil</b> IVR <b>0.67mil</b> (SMS coverage)	<b>IEC MATERIAL</b>  Leaflets <b>1.2 mil</b> Posters <b>1 mil</b>
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- COMNET + RSPs
- CBVs + RSPs
- COMNET
- RSPs

## IEC Material to support the IPC



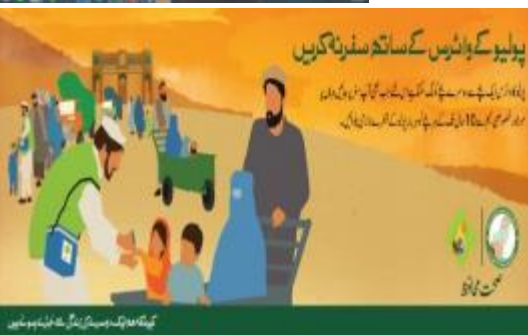
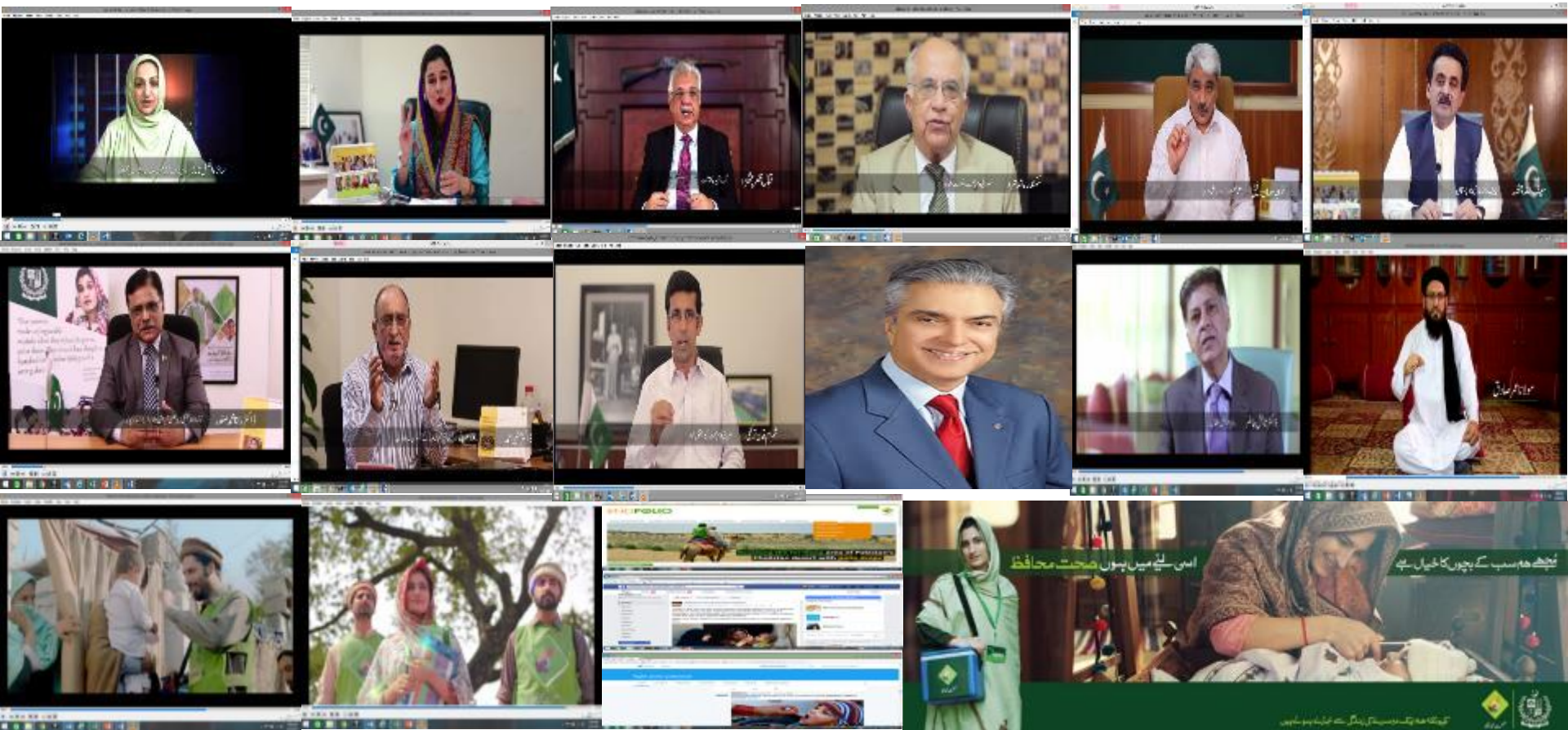
## Who are we engaging with?

Based on mapping of the religious refusals Key religious influencers were engaged through IRCRA. 14 written endorsements and 6 video messages were obtained mainly from the Ahle Hadees group



# Program Operations

An all society approach to supporting vaccinators and reinforcing vaccination

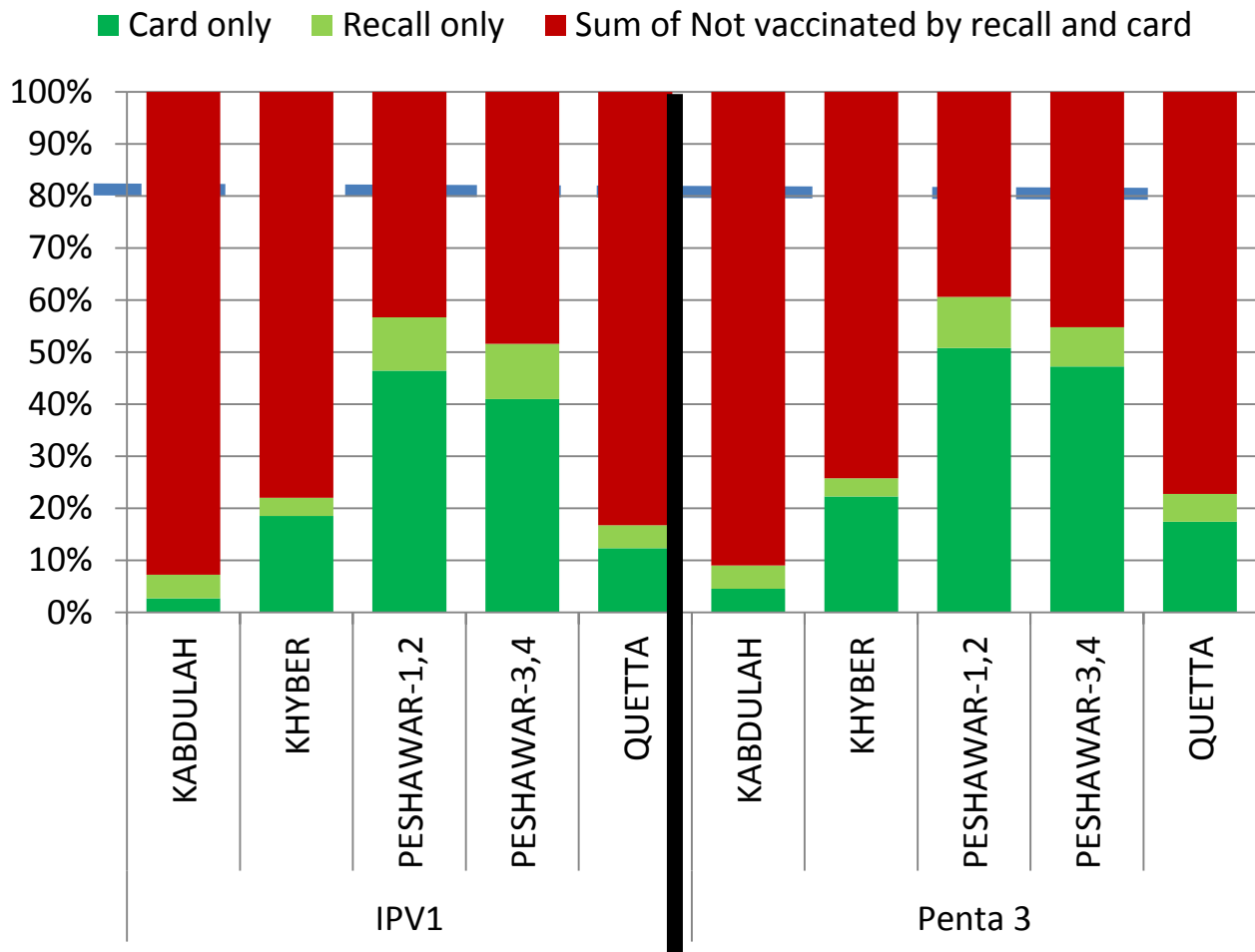


# Program Operations

## Routine Immunization in core reservoirs

### Assessment in Tier 1 districts - IPV1 and Penta 3 coverage

- Using the micro-census registers as a sampling frame, RI surveys conducted in CBV UCs of Tier 1 districts
- So far, survey completed for Quetta, Killa Abdullah, Peshawar and Khyber
- More efforts and investments still needed to revitalize EPI program to meet NEAP targets



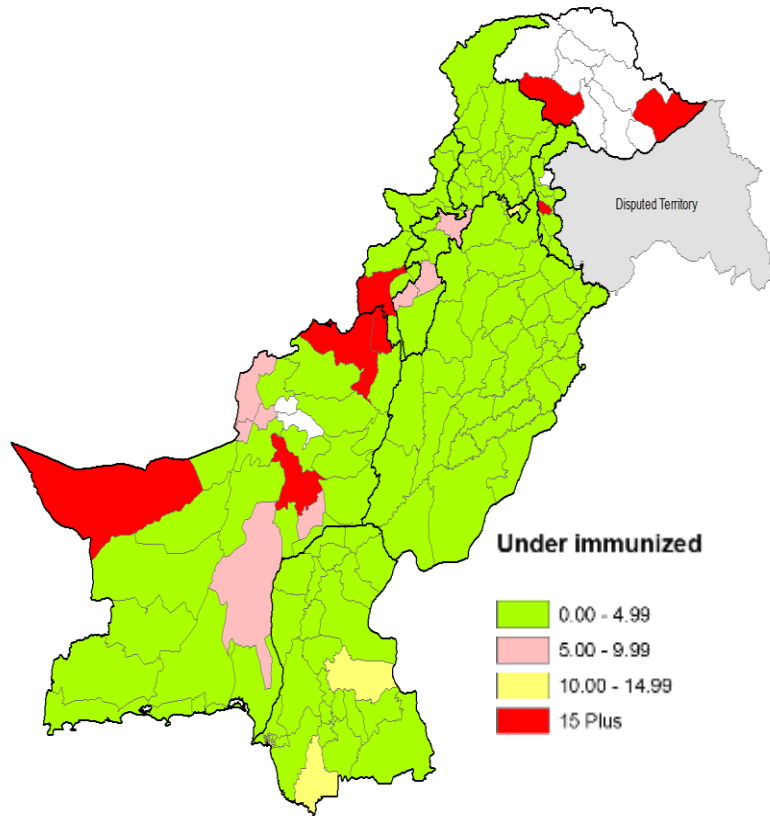
Note CBV = community-based vaccination

NEAP  
Target=80%

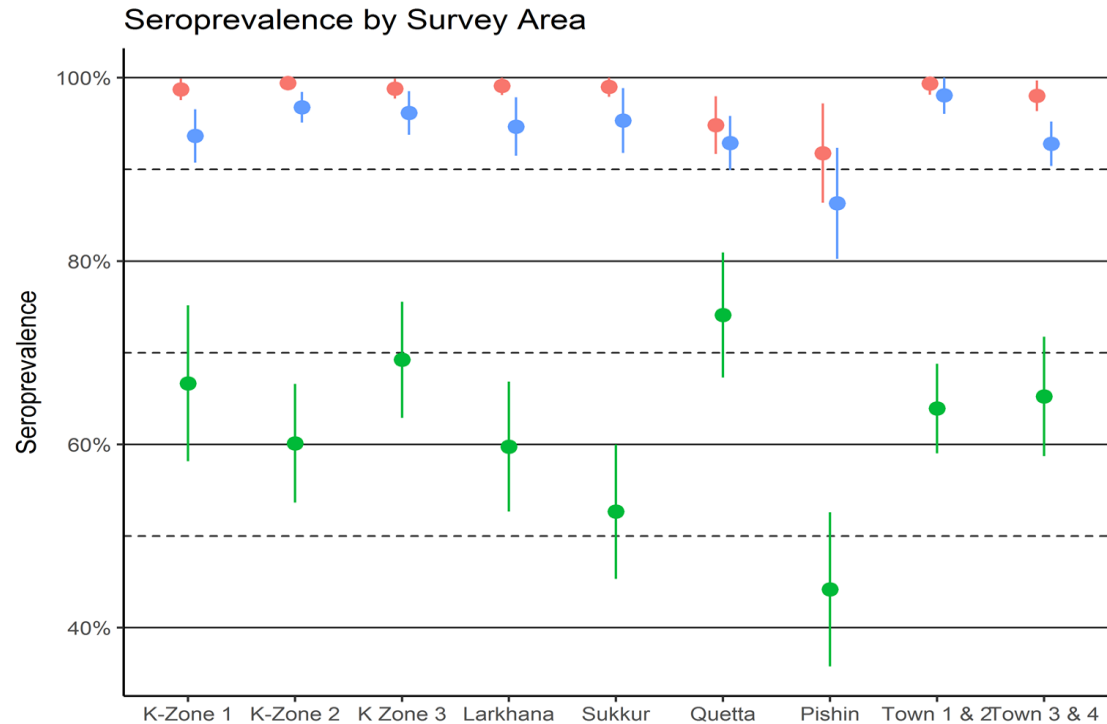


# Program Operations

**Population immunity, Seroprevalence against type 1 >90% in all areas**



**2016/17 underimmunized (<4 OPV doses [RI+SIA]) fraction by district (6-59)**



**Results of sero-survey among children 6-11 months, Nov 2016-Mar 2017**

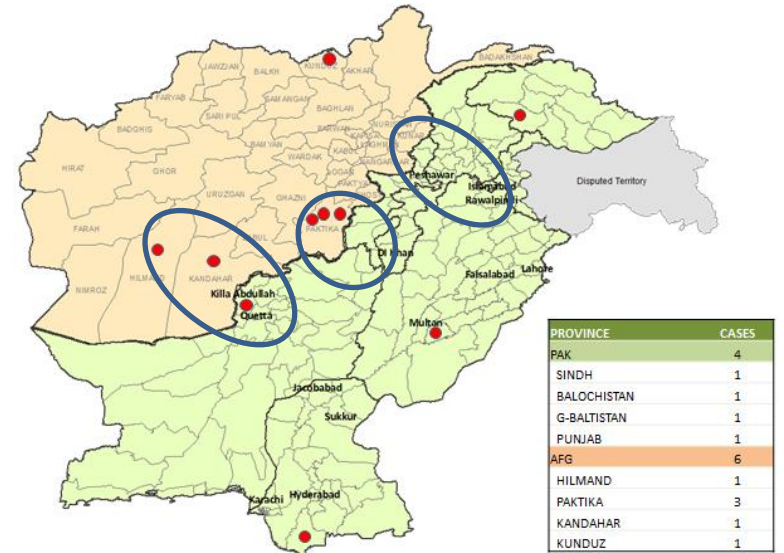
**serotype**  
● Type 1  
● Type 2  
● Type 3

- Seroprevalence is high for Type 1 and 3. Exceptions are Quetta and Pishin (driven by pockets of seronegative children. All areas though have > 90% immunity for Type 1.
- Immunity against Type 2 low in comparison (many children in the study born after tOPV to bOPV switch and RI is sub-optimal)

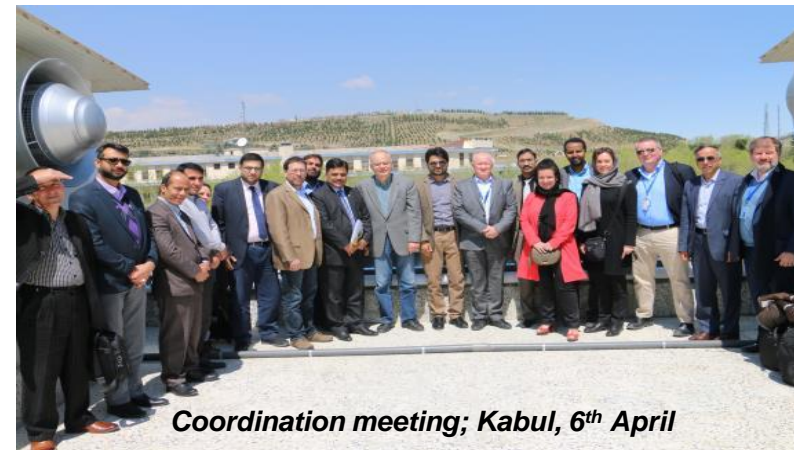
# Program Operations

## AFFPAK Common Reservoirs

- Significantly improved coordination
  - Weekly, monthly and quarterly coordination meeting and teleconferences (last meeting on 6<sup>th</sup> April, next on 1<sup>st</sup> May)
  - bordering areas' teams further enhancing the close working relationship
- Four key areas identified for further deepening the coordination in next 6 months
  - Common/shared endemic reservoirs
  - Border populations/communities outside endemic zones
  - Nomadic movement & seasonal migration
  - Repatriation of refugees
- Planned single epi-block risk assessment in preparations for NEAP 2017/18



**WPV Cases, Last 6 months (Oct 22, 2016 to Apr 25, 2017\*)**



**Coordination meeting; Kabul, 6<sup>th</sup> April**

# Risk Assessment and Decision Support (RADS)

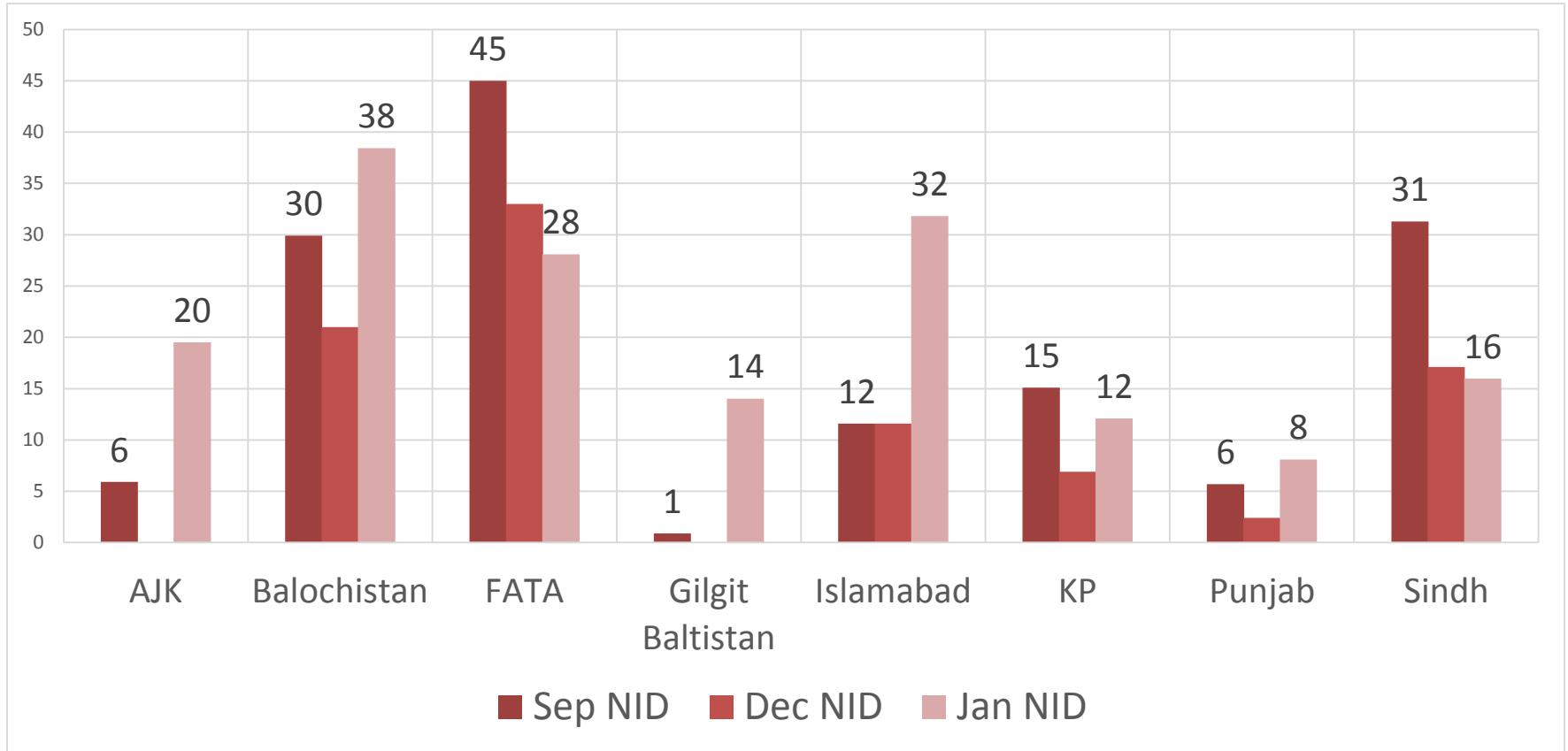
## M&E, Surveillance and RRU

### M&E

- Extensive monitoring footprint with ever more rigorous measurement (may account for apparent lower performance due to greater accuracy and rigor)
- Use of Composite Performance Index has reduced over reliance on LQAS
- Increased deployment of experienced campaign monitors is providing important ground verification
- Critical third party monitoring for the pre and intra campaign phases
- **Rapid response Unit**
  - Capacity for rapid investigation and response now present at all EOCs

# RADS: NEAP Composite index

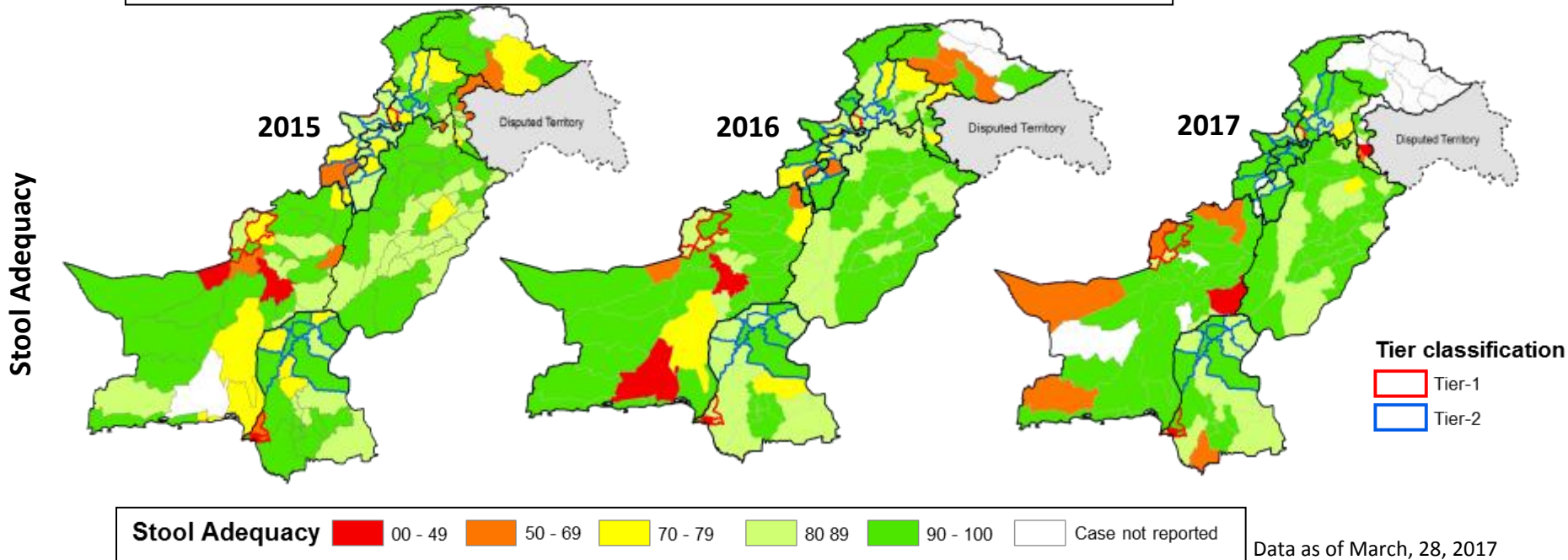
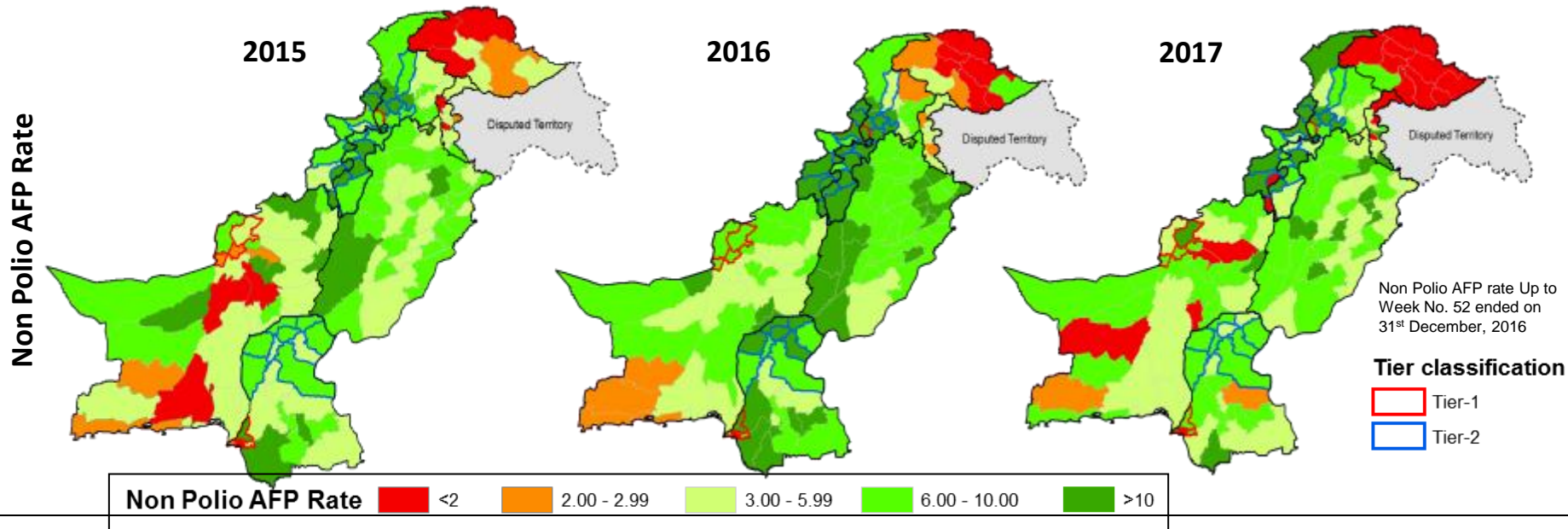
Fraction of 'potentially low performing Union Councils' by campaign



*Flagged after each campaign for an enhanced attention during the subsequent round*

# RADS: Surveillance, key indicators

Overall strong surveillance closing remaining gaps



# RADS: Strengthening Surveillance since last IMB

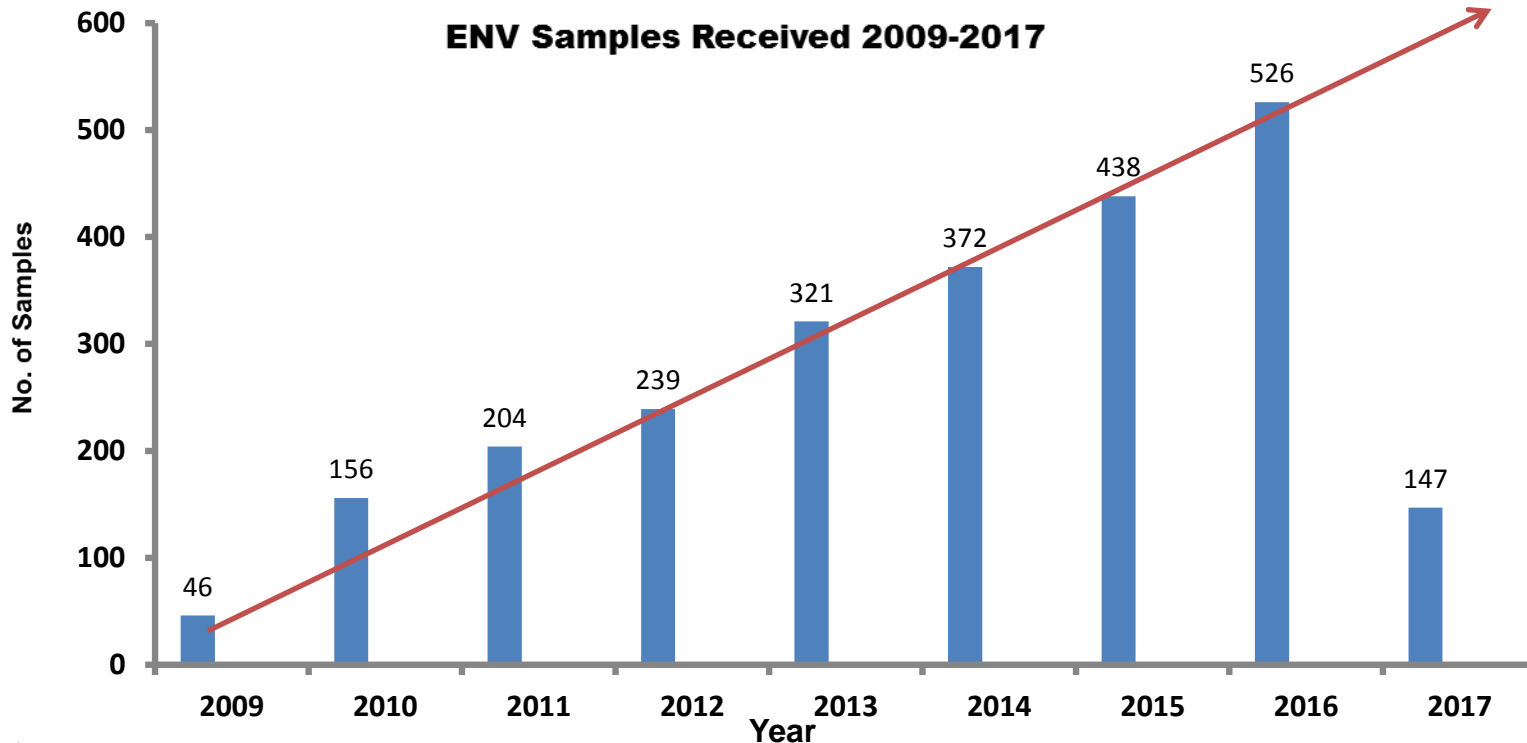
Every aspect of Surveillance sensitivity and quality enhanced

Activities	June 15 – June 16	July 16 - March 17
1. Dedicated Surveillance Officers	9	76
2. Number of Environmental Sites	43	53
3. Number of Weekly Zero Reporting Sites	6,483	7,645
4. Number of Active Sites	2,087	2,528
5. Number of persons oriented on AFP Surveillance (CBV Teams, FLHCPs, Doctors)	10,266	27,709
6. Number of AFP Cases Reported in the province	3,076	5,486
7. Number of AFP Cases reported through Community Based Surveillance	222	836

- The in-depth analysis of the cluster data providing an enhanced understanding of the transmission patterns, applying district-level analysis to Tehsils and UC level.
- Multiple reviews and indicators show clear improvement in surveillance

# RADS: Surveillance

**Largest polio environmental surveillance footprint in the world,  
53 active sites**



Till 21 April 2017

## Pakistan:

Currently **53** active sites

2009: Karachi and Lahore

2010-2011: Quetta, Peshawar, Rawalpindi and Multan

2012: Sukkur, Hyderabad, Faisalabad

2014: Jacobabad, Killa Abdullah, Dera Ismail Khan, Islamabad

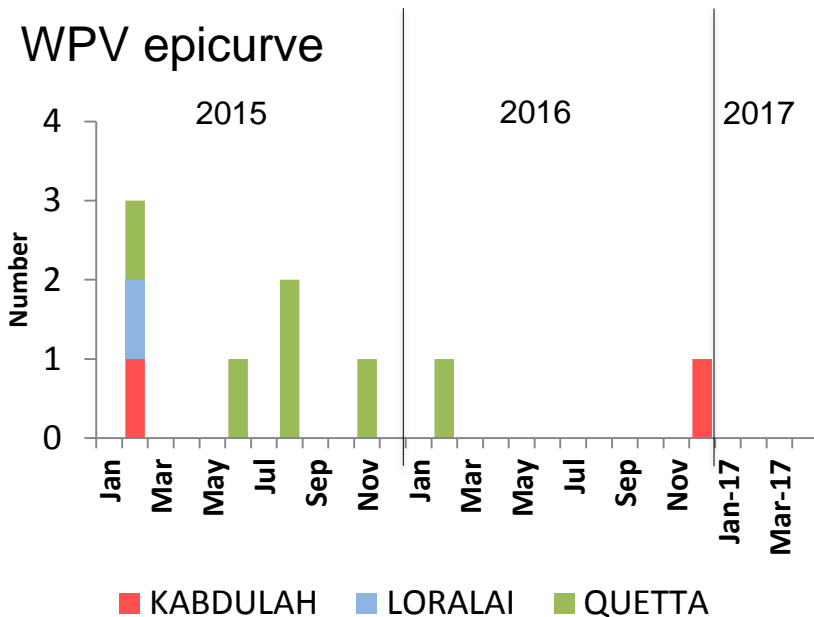
2015: Peshawar

2016: D.G. Khan, Karachi, Sanghar, Dadu, Faisalabad, Bahawalpur, Sargoda,

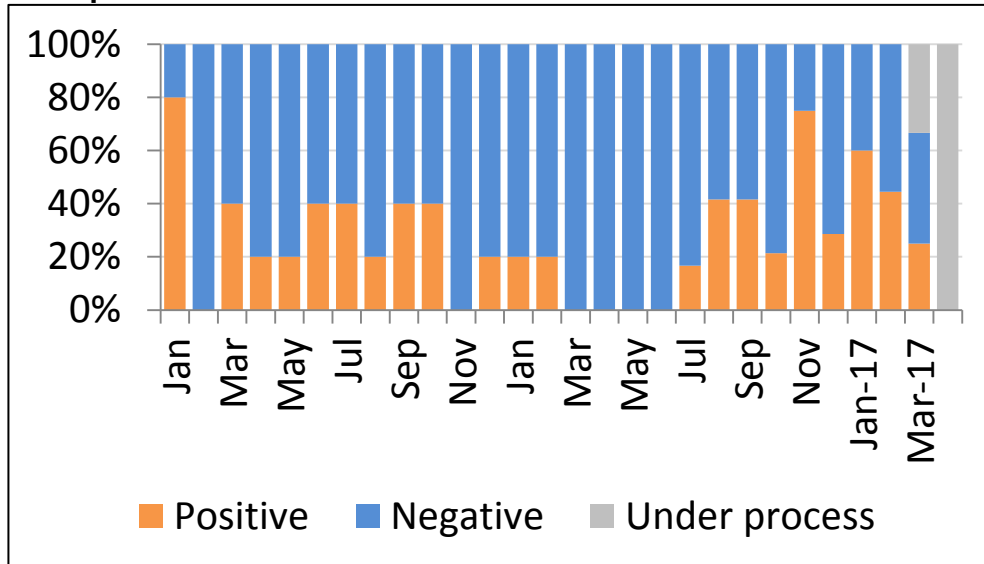
Mardan, Banu, Kohat, Charsada, Quetta, Pishin, Loralai, Zhob, Khuzdar

PAKISTAN	PUNJAB	17
	SINDH	16
	BALUCHISTAN	10
	KP	9
	ISLAMABAD	1

# Balochistan: progress and challenges



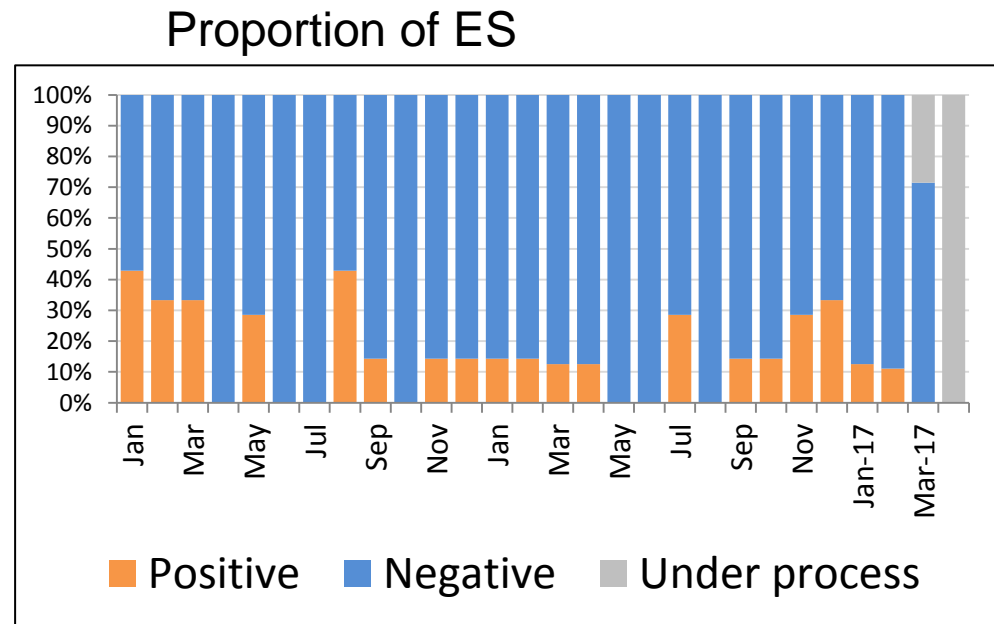
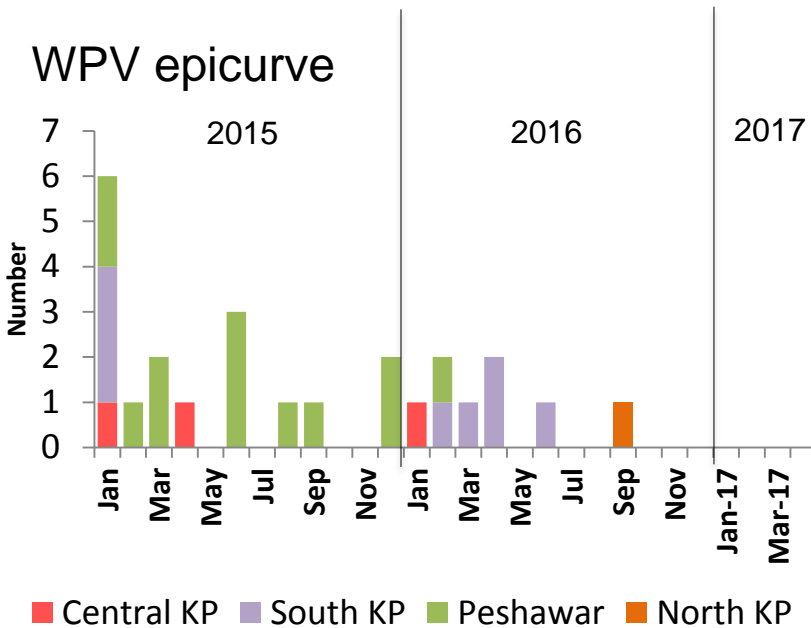
Proportion of ES



- Since Jan 2016: 2 confirmed WPV and 1 cVDPV2 cases: **battled on two fronts**
- **Persistent positive environmental samples since July 2016 indicate WPV1 transmission within Quetta Block**
- **Environmental Surveillance has been critical in the timely detection of VDPV2 circulation; facilitating a calibrated type2 response**
- **Mapping and vaccinating HRMP and supportive supervision for poor performing districts and UCs in pre-campaign and intra-campaign activities will be critical**
- **Personal leadership of Chief Secretary**

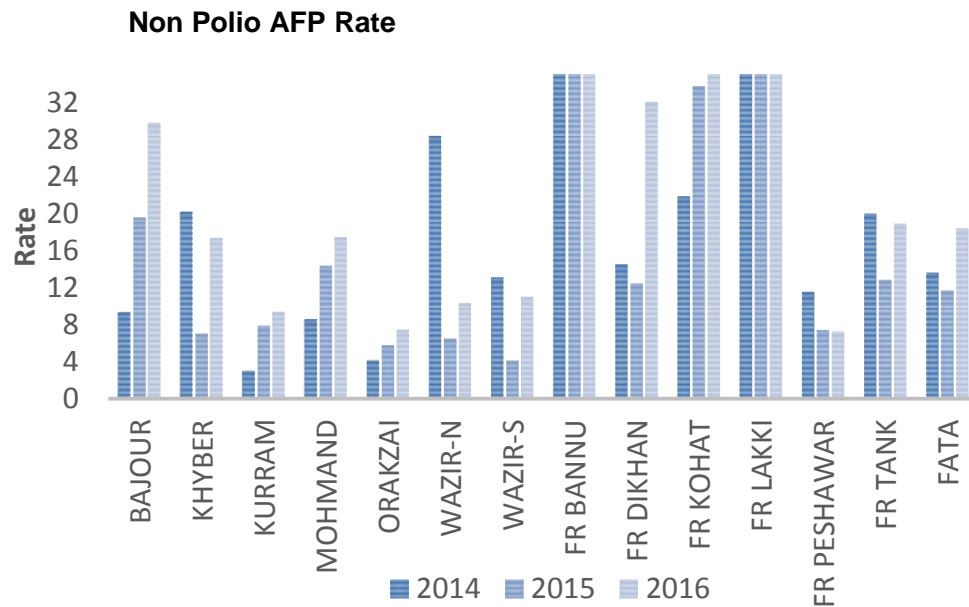
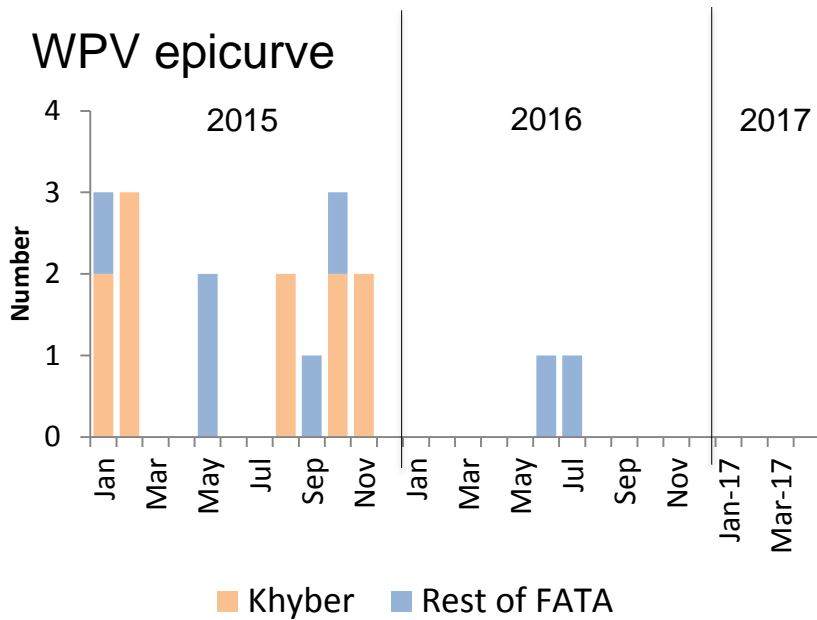


# KP: progress and challenges



- **Since Jan 2016: 8 confirmed WPV cases; only one case in the last 6 months (Sept-2016 in Kohistan)**
- **Significant progress in Peshawar (last WPV case in Feb 2016); but persistent positive ES from one site (SMT)**
- **No WPV case in South KP since June 2016, but high state of alert maintained due to continued transmission in Central Corridor (Bermal, WPV case, Dec 2016)**
- **The WPV case in Kohistan underpinned vulnerability in tier-4 districts**
- **Reaching and vaccinating migrant/mobile population and returning Afghan populations a priority**

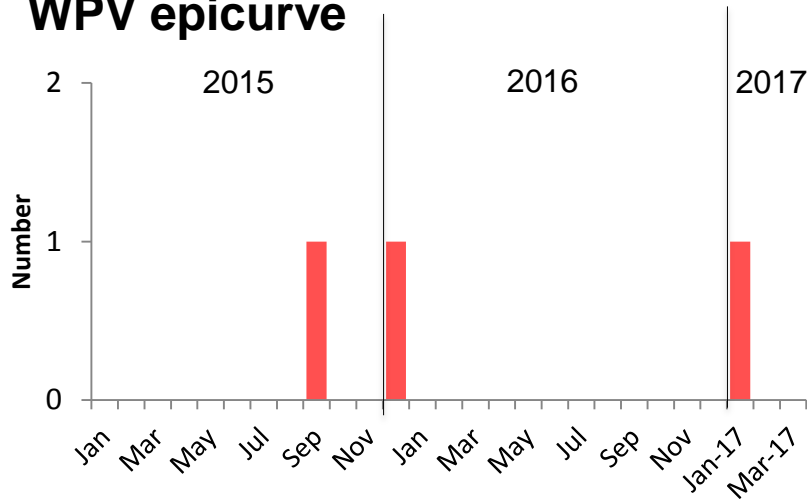
# FATA: progress and challenges



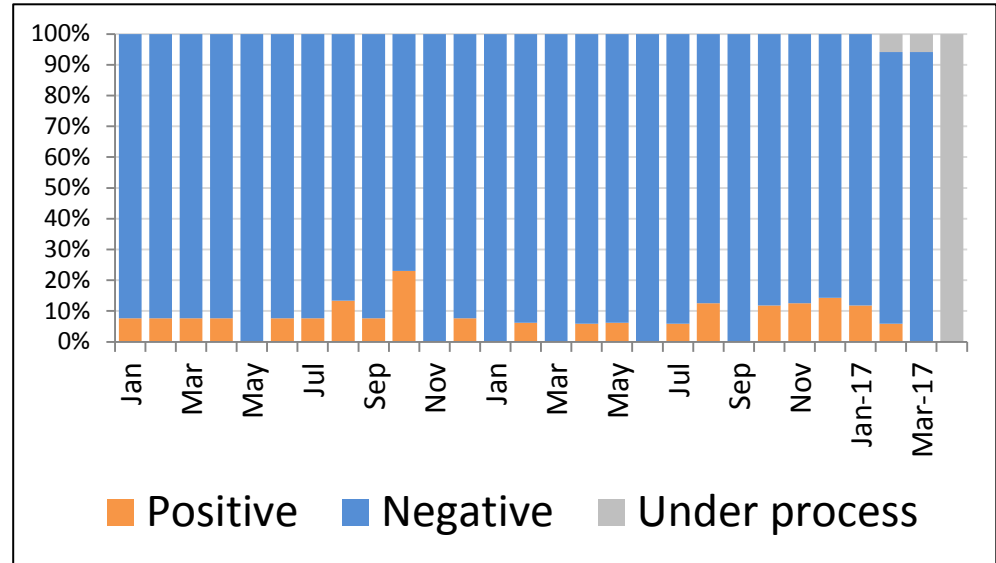
- **Since Jan 2016: Two WPV cases from South Waziristan; seven WPV cases from adjoining Bermel (Paktika) in Afghanistan**
- **Suboptimal supportive supervision and monitoring due to security challenges in Khyber, SWA, FR Tank, Mohmand and Bajour**
- **Tracking and vaccinating population moving across informal routes between SWA and Paktika – critical**
- **With support of Pakistan Army and levies campaigns being conducted in insecure /partially accessible UCs of FR DI Khan, SWA, NWA Bajour and Khyber**
- **Still small pockets of inaccessible areas in SWA and Khyber**

# Punjab: progress and challenges

## WPV epicurve

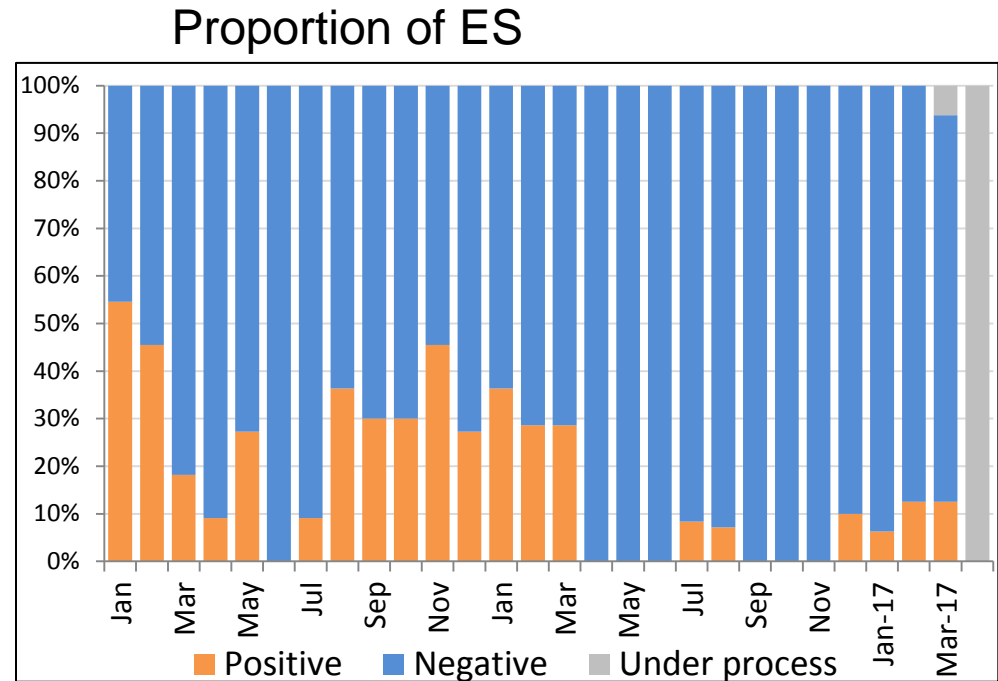
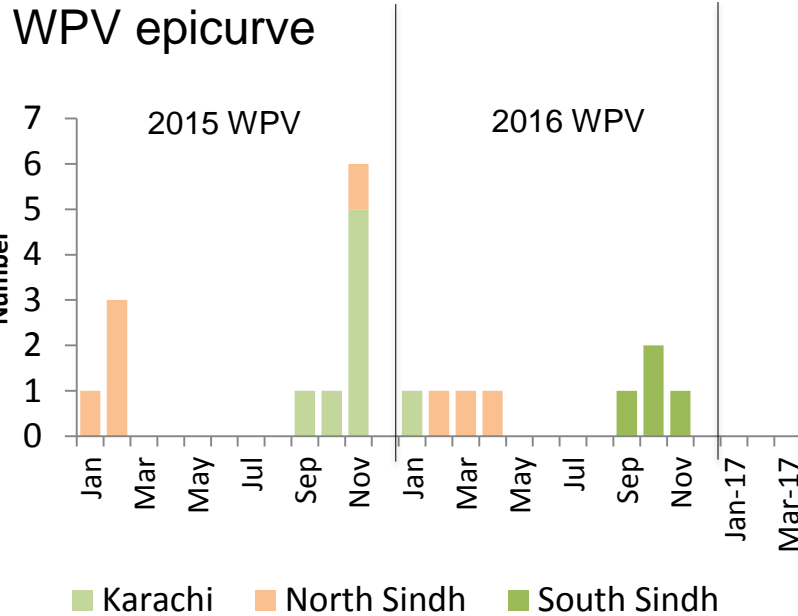


## Proportion of ES



- One WPV case in 2017 after 12-month WPV free
- Evidence of local transmission of WPV in Multan , Rawalpindi and Lahore – linked cases in Kohistan and Diامر
- Inconsistent quality of WPV campaigns in Lahore, Rawalpindi & Tier-IV districts (Sargodha, Jhang, Hafizabad) and Southern districts with concentration of HRMP
- Lodhran long chain virus investigated in detail
- Tracking, mapping, registration of HRMPs & inclusion in micro-plans to vaccinate against polio & other VPDs in host communities
- Sustaining high quality SIAs and strong RI critical to maintain immunity levels

# Sindh: progress and challenges



- **Since Jan 2016: One WPV in Karachi (Jan 16), 3 cases in North Sindh (April 16) and 4 in South Sindh (Nov 2016)**
- **Karachi showing positive epidemiology during the 14 months; 2 imports from Quetta; Program on high alert to maintain high immunity levels**
- **South Sindh posed special challenges** (male teams, otaque, difficult access in coastal areas, weak infrastructure, poor nutritional status of population)
- **Recent gains in North Sindh MUST be sustained as the risks are clear and present**
- **Personal leadership demonstrated by CM transforming the program**

# Management, Oversight and Accountability

## PM Focus Group and Task Forces driving performance

Task	Updates
<b>National Task Force and PM Focus Group meetings</b>	Two meetings of the Prime Minister's Focus Group  Monthly National Steering Committee meetings with provinces on board  <i>Prime Minister briefed regularly in person by the PM's Focus Group; PM office available full time for high level intervention</i>
<b>Provincial Task Force meetings</b>	Regular meetings chaired by CM, Governor KP or CS
<b>Divisional Task Force meetings</b>	Regular DTF meetings held by Commissioners
<b>District Polio Eradication Committee meetings</b>	Regular and timely DPECs by DC or PA
<b>Implementation of accountability frame work</b>	Disciplinary measures been taken in all provinces; more attention needed for reward process

# Conclusions and Way forward

- **Solid progress has been made overall especially in core reservoirs**
- **Key areas of focus for attaining and maintaining Zero:**
  1. Continuing intense focus on core reservoirs to maintain high immunity
  2. Improving coverage of High Risk Mobile Populations (HRMP) by effectively using collected local knowledge
  3. Furthering performance in relatively sparsely populated, and low risk districts in Tiers 3 and 4
  4. Strengthening closer collaboration with Afghanistan especially on Southern Corridor transmission
  5. Sustaining high quality Surveillance performance all across
  6. Strengthening RI in core reservoirs - improve penta 3/IPV coverage to NEAP target



Thank you

# Tracking and vaccinating missed children

## Explaining terminologies

**Recorded missed children:** children documented by teams as belonging to a household but not vaccinated. There two reasons for non-vaccination: 1) child is not available at time of visit, or parent/guardian refuses to vaccinate child. *In CBV UCs, child-level data is available, child-level vaccination status is tracked.*

**Same day coverage:** the proportion of children “recorded as missed” covered after revisit by the team on the same campaign day. As per NEAP, at least 50% of children recorded missed should be vaccinated after revisit on same day. Not achieving this target is mostly associated with poor team management, or poor team workload distribution

**“Still missed”:** children remaining unvaccinated at end of the campaign

**“Persistently Missed Children:** re-emphasized following the January National Polio Management Team meeting. It was recommended that registered children in CBV UCs who have gone unvaccinated for 2 or more campaigns are flagged as “PMC”

### Example: NID, January 2017

		Children Recorded as Unvaccinated			Still Missed Children (remaining unvaccinated)			
Province	Total Children Vaccinated	Recorded "not available children"	Recorded "refused vaccination"	Total recorded missed children	Still NA	Still Ref.	Still Missed	% Among Targeted
PUNJAB	18194336	2014438 (11%)	1950 (0%)	2016388 (11%)	27098	184	27282	0.1
SINDH	8261500	949905 (11%)	176684 (2%)	1126589 (14%)	50833	32470	83303	1
KP	5069973	583602 (12%)	32806 (1%)	616408 (12%)	19829	3572	23401	0.4
BALOCHISTAN	2212597	153262 (7%)	20631 (1%)	173893 (8%)	47814	2928	50742	2.1
ISLAMABAD	285301	35572 (12%)	1122 (0%)	36694 (13%)	3452	522	3974	1.3
FATA	907886	109495 (12%)	6289 (1%)	115784 (13%)	5076	1757	6833	0.7
Pakistan	35854531	3875607 (11%)	239490 (1%)	4115097 (11%)	154251	41436	195687	0.52

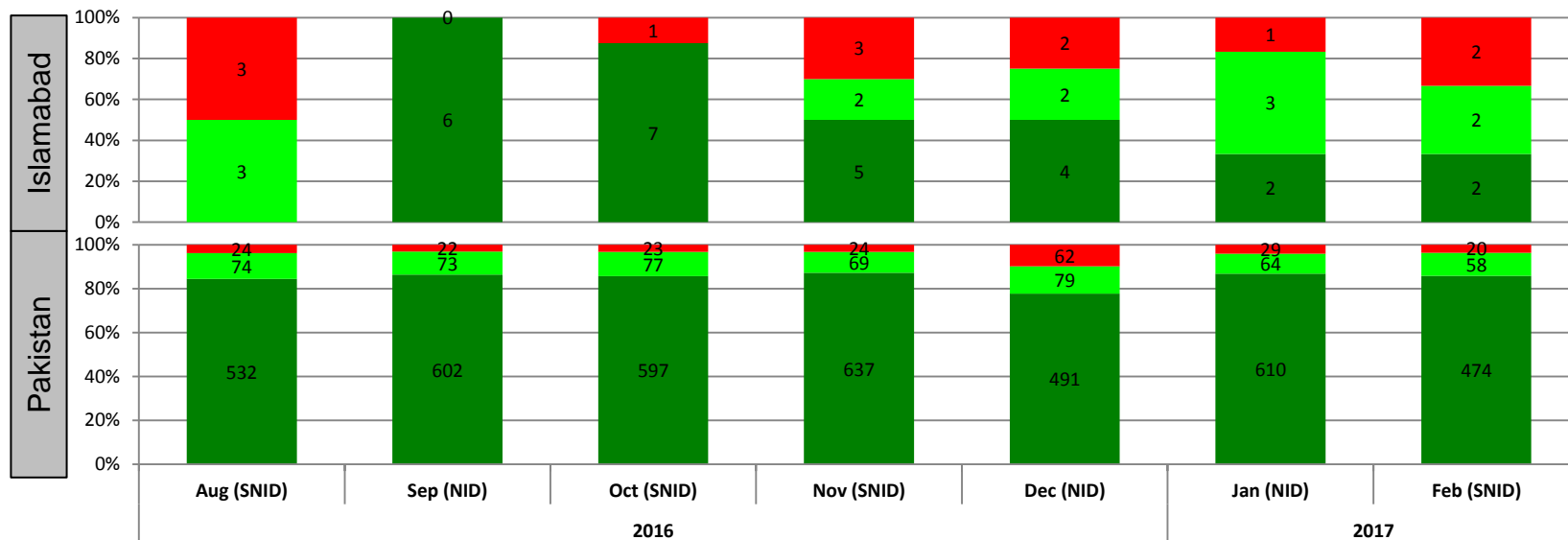


# Classification of LQAS Lots by province (proportion)



■ Passed at 90%    ■ Passed at 80%    ■ Rejected <80%

# Classification of LQAS Lots by province (proportion)



■ Passed at 90% ■ Passed at 80% ■ Rejected <80%

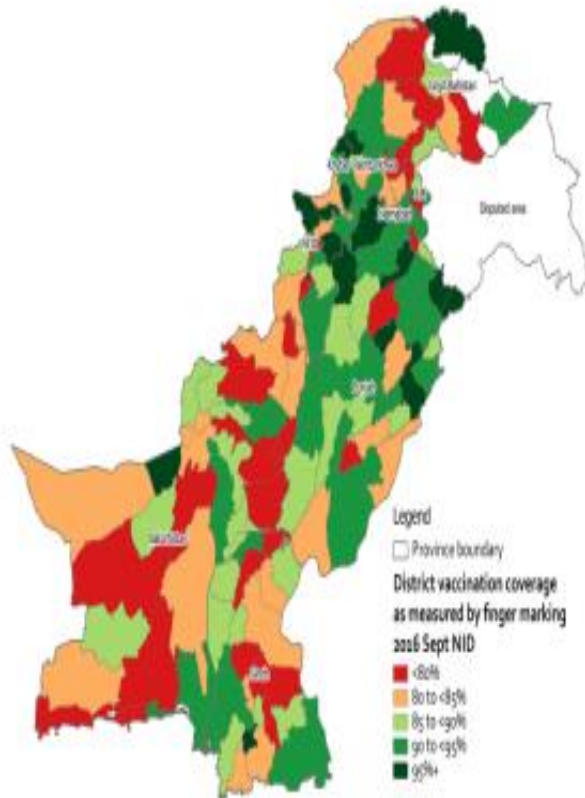
## Total Lots taken by activity

PROVINCE	AUG (SNID)	SEP (NID)	OCT (SNID)	NOV (SNID)	DEC (NID)	JAN (NID)	FEB (SNID)	Total
BALUCHISTAN	114	132	102	117	93	63	77	698
FATA	135	145	162	155	107	136	157	997
ISLAMABAD	6	6	8	10	8	6	6	50
KP	122	149	128	133	119	168	93	912
PUNJAB	118	127	103	99	104	122	102	775
SINDH	135	138	194	216	201	208	117	1209
<b>PAKISTAN</b>	<b>630</b>	<b>697</b>	<b>697</b>	<b>730</b>	<b>632</b>	<b>703</b>	<b>552</b>	<b>4641</b>

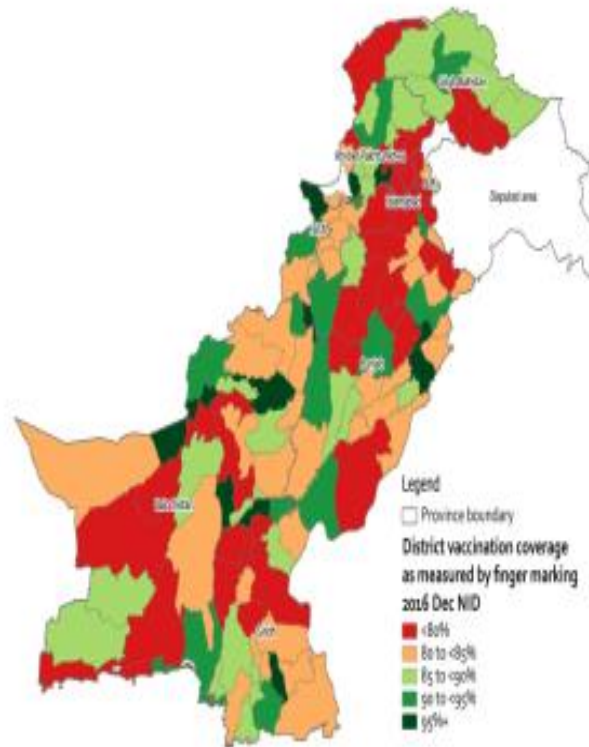
# Program Operations SIAs performance

**Post Campaign Monitoring - all three reservoirs showing consistent high coverage rates**

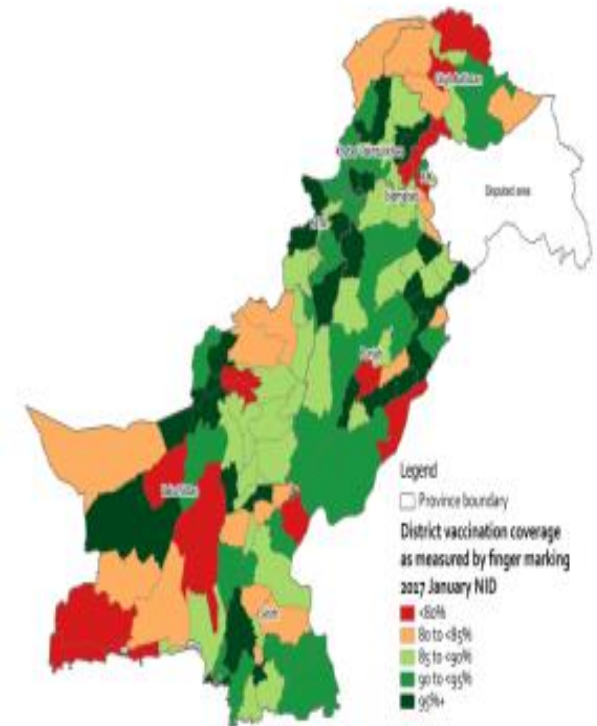
*NID PCM Sept 2016*



*NID PCM Dec 2016*

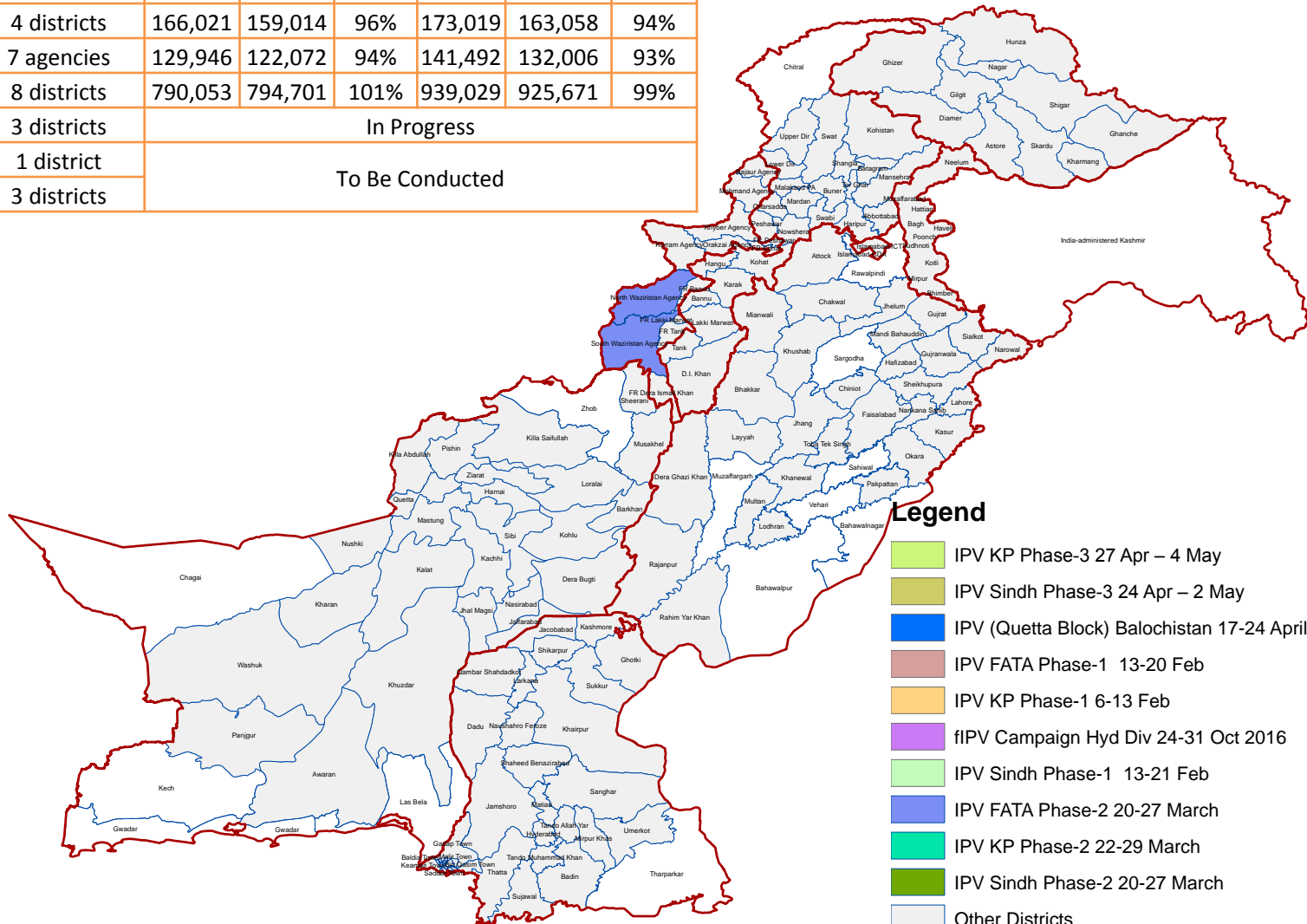


*NID PCM Jan 2017*

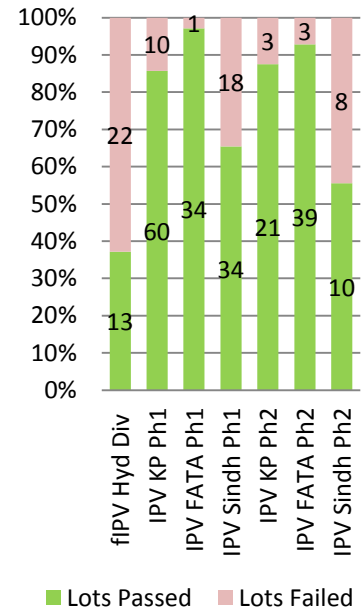


# bOPV-IPV Campaigns (Sep 2016 to April 2017)

Province / Date	No. of Districts included	IPV Target	IPV Cov	IPV Cov %	OPV Target	OPV Cov	OPV Cov %
fIPV Hyd Div 24-31 Oct	4 districts	258510	259801	100%	315180	306542	97%
IPV KP Ph-1 6-13 Feb	5 districts	552,708	499,309	90%	637,620	647,205	102%
IPV FATA Ph-1 13-20 Feb	6 agencies	161,317	153,007	95%	183,555	184,360	100%
IPV Sindh Ph-1 13-21 Feb	22 dists/towns	625,310	595,169	95%	753,710	702,368	93%
IPV KP Ph-2 22-29 Mar	4 districts	166,021	159,014	96%	173,019	163,058	94%
IPV FATA Ph-2 20-27 Mar	7 agencies	129,946	122,072	94%	141,492	132,006	93%
IPV Sindh Ph-2 20-27 Mar	8 districts	790,053	794,701	101%	939,029	925,671	99%
IPV Quetta Block 17-24 Apr	3 districts	In Progress					
IPV Sindh Ph-3 24 Apr - 2 May	1 district	To Be Conducted					
IPV KP Ph-3 27 Apr – 4 May	3 districts						



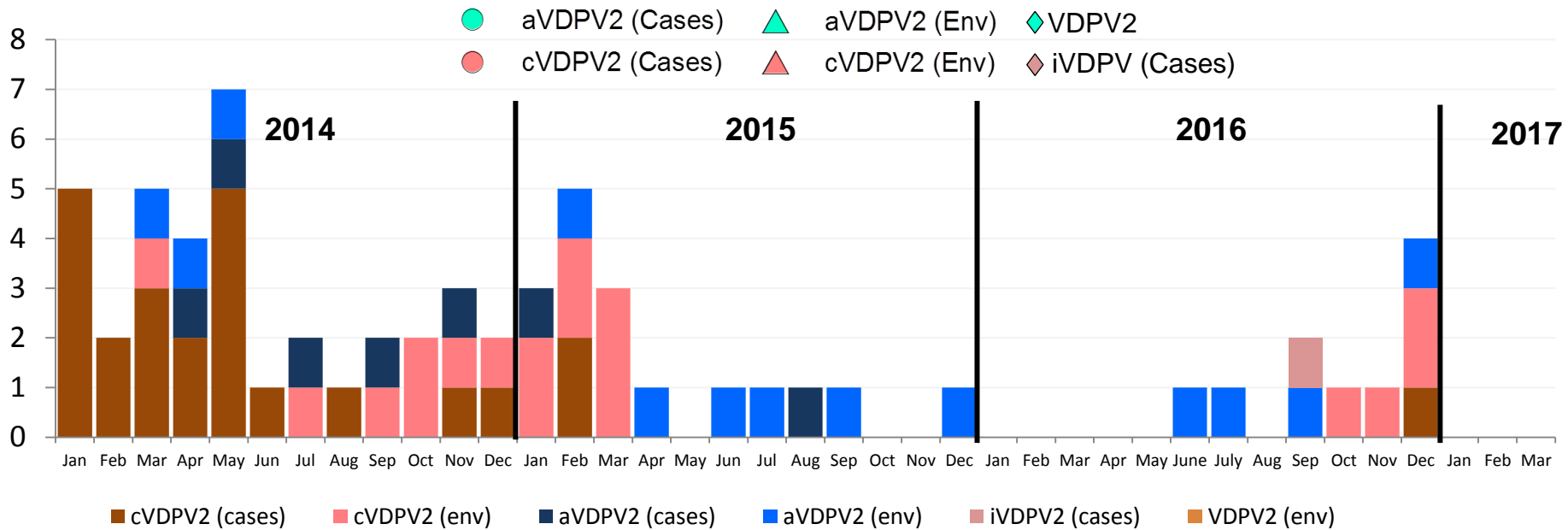
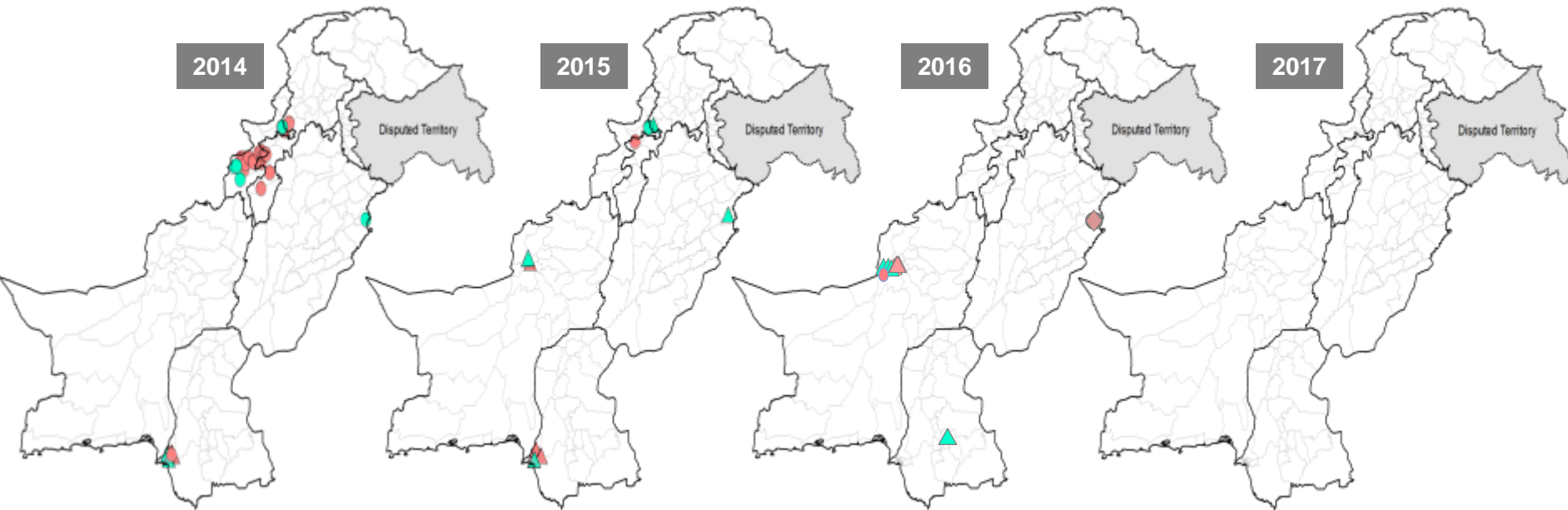
## LQAS Results



## Legend

- IPV KP Phase-3 27 Apr – 4 May
- IPV Sindh Phase-3 24 Apr – 2 May
- IPV (Quetta Block) Balochistan 17-24 April
- IPV FATA Phase-1 13-20 Feb
- IPV KP Phase-1 6-13 Feb
- fIPV Campaign Hyd Div 24-31 Oct 2016
- IPV Sindh Phase-1 13-21 Feb
- IPV FATA Phase-2 20-27 March
- IPV KP Phase-2 22-29 March
- IPV Sindh Phase-2 20-27 March
- Other Districts

# VDPV2 isolates (Cases + ES), 2014 – 2017\*



\* Afp.rec Data as of 15-03-2017




# mOPV Rounds Balochistan

**Round-2 (Quetta Block)**  
**Target = 731,370**  
**Coverage = 654,813 (90%)**

**Round-1 (Quetta)**  
**Target = 444,720**  
**Coverage = 412,266 (93%)**

**Round-3 (Rest of Balochistan)**  
**Target = 1,657,768**  
**Coverage = 1,611,048 (97%)**

## Legend

-  mOPV Balochistan (Mar 20-23)
-  mOPV Quetta (Jan 2-8)
-  mOPV Quetta Block (Feb 11-17)

