



**World Health
Organization**

Weekly AFP Surveillance Update Pakistan

Week 43 (*Ended on 28th October, 2017*)

National Surveillance Cell

World Health Organization Country Office,
Chak Shahzad, Park Road,
Islamabad, Pakistan

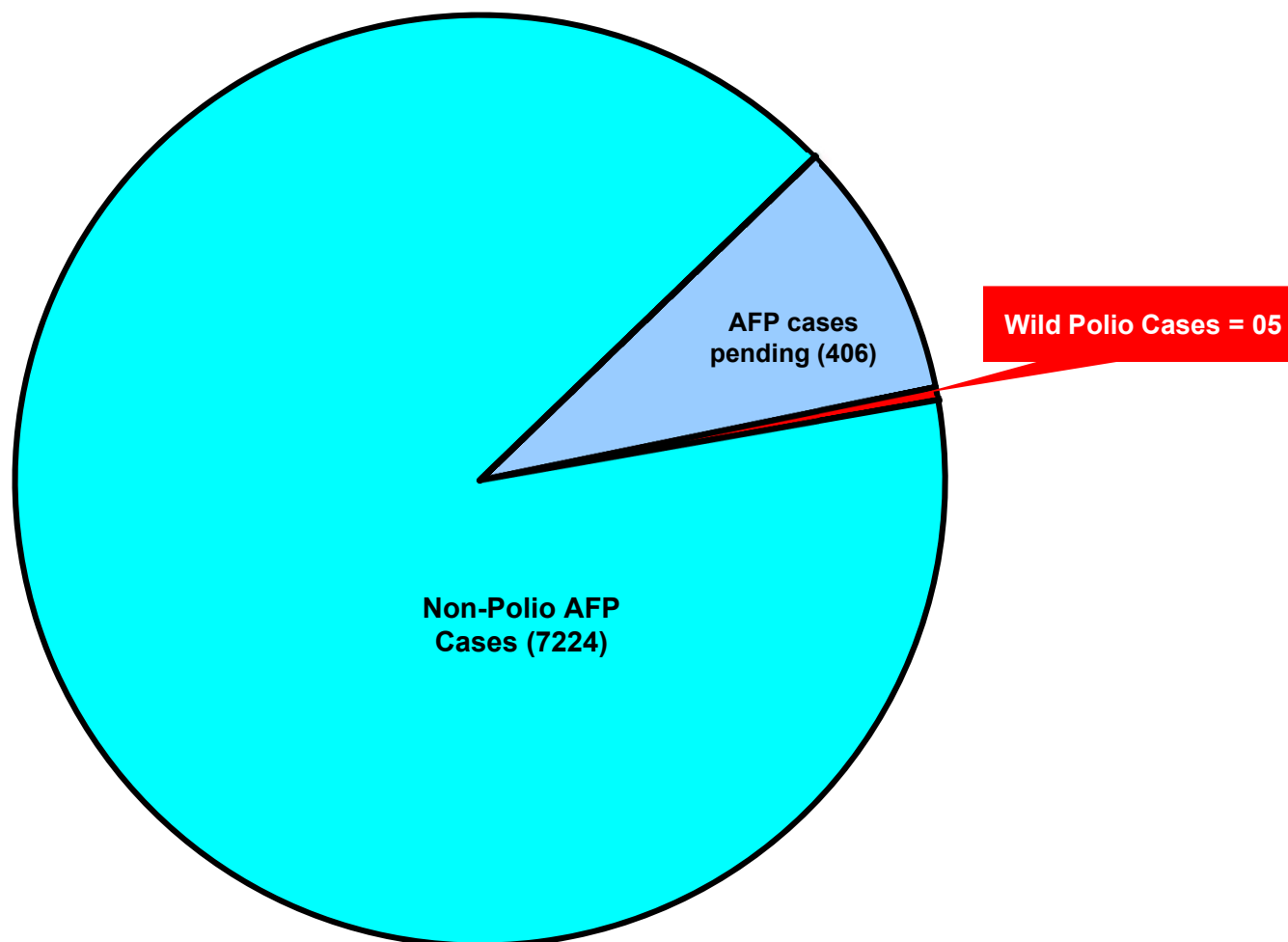
Tel: +92-51 9255123 / 9255282 /9255184

AFP Surveillance



<http://www.emro.who.int/pak/information-resources>

AFP Case Profile, 2017*



Total AFP Cases Reported = 7635

^ 198 Inadequate cases not due for FUP

^ 208 cases Pending in the Lab

^ 64 AFP Cases pending for classification by ERC

* Afp.rec Data as of 30-10-2017

Point in time comparison of Polio Cases by Province/Region 2016 - 2017*

Region/ Province	No. of polio cases		No. of infected districts/towns		Most recent polio case
	2016	2017	2016	2017	
Khyber Pakhtunkhwa	08	01	06	01	21-Aug-17
Sindh	07	01	05	01	11-Aug-17
Balochistan	01	01	01	01	11-June-17
G-Baltistan	0	01	0	01	13-Feb-17
Punjab	0	01	0	01	28-Jan-17
FATA / FR Areas	02	0	01	0	27-Jul -16
Pakistan	18	05	13	05	21-Aug-17

Fourteen additional district / town declared infected based on environmental samples in 2017

* Afp.rec Data as of 30-10-2017

Table 1.1: List of Confirmed Polio Cases, Pakistan 2017* (1/1)

S.NO.	PROVINCE/ REGION	DISTRICT	TEHSIL	EPID NO.	SEX	AGE (m)	DATE ONSET OF PARALYSIS	NO. OPV DOSES (based on parents recall)		FEVER	Asymetric Paralysis	Rapid Progression	REFUSAL	WPV TYPE	GENETICS
								Routine	SIA's						Cluster
01	PUNJAB	LODHRAN	DUNYAPUR	PB/64/17/008	M	4	28-Jan-17	2	5	Y	Y	Y	N	NSL1	R4B1C2
02	GBALTISTAN	DIAMIR	THORE HUDUR	GB/31/17/002	M	12	13-Feb-17	0	0	Y	Y	Y	N	NSL1	R4B5C4
03	BALUCHISTAN	KABDULAH	CHAMAN	BN/14/17/024	M	18	11-June-17	0	3	Y	Y	Y	N	NSL1	R4B5C3
04	SINDH	KHGIQBAL	G-IQBAL	SD/65/17/018	M	7	11-Aug-17	3	1	Y	N	Y	N	NSL1	R4B5C4
05	KPAKHTUNKHWA	LAKKIMRWT	LAKKIMRWT	KP/62/17/025	F	24	21-Aug-17	3	7+	Y	Y	Y	N	NSL1	R4B1C1

* Afp.rec Data as of 30-10-2017

Table 3: Urgent/ITD Pending Cases (1/1)

Basic information											OPV doses				Urgent		Prov Diagnosis	Lab update			Remarks
S. #	District	Tier	Tehsil	Union council	Epid number	Date of Onset	Age (M)	Sex	Date of 1st stool	Stool Adeq	RI	SIA s	Last 6 SIA s	Last dose	Field	NSC %		Lab No.	Days Inoc	Culture update	
Isolates pending for ITSD																					
1	JACOBABAD	2	GARHI KHAIRO	MIRANPUR	SD/53/17/064	02-Oct-17	108	M	10-Oct-17	Y	1	7+	0		N		RF/JRA	10682	11	L20B+	
Reported urgent (by field / NSC% criteria)																					
2	PISHIN	1	KAREZAT	POTI NASARAN	BN/12/17/028	24-Sep-17	5	F	16-Oct-17	N	1	5	5	19-Sep-17	Y	Y	INJECTION NEURITIS	10922	10	UP	
3	KHIGADAP	1	GADAP	GUJRO -4	SD/63/17/046	04-Oct-17	3	M	21-Oct-17	N	1	1	1	16-Oct-17	N	Y	INJECTION NEURITIS	11034	6	UP	
4	KASHMORE	4	KANDHKOT	GHOUSPUR	SD/54/17/035	05-Oct-17	6	F	16-Oct-17	Y	0	2	2	18-Sep-17	N	Y	HEMIPLEGIA	10940	8	UP	
5	KHINORTH	4	NORTH	#	SD/73/17/029	02-Oct-17	6	F	16-Oct-17	N	0	4	4	23-Sep-17	N	Y	MEINGITIS	10830	11	UP	
6	KHISADDAR	4	SADDAR	GARDEN - 2	SD/77/17/027	12-Oct-17	3	F	14-Oct-17	Y	1	4	4	23-Sep-17	N	Y	AGE HYPOKALEMIA	10759	16	UP	

* New addition

§ New results

#Data not available

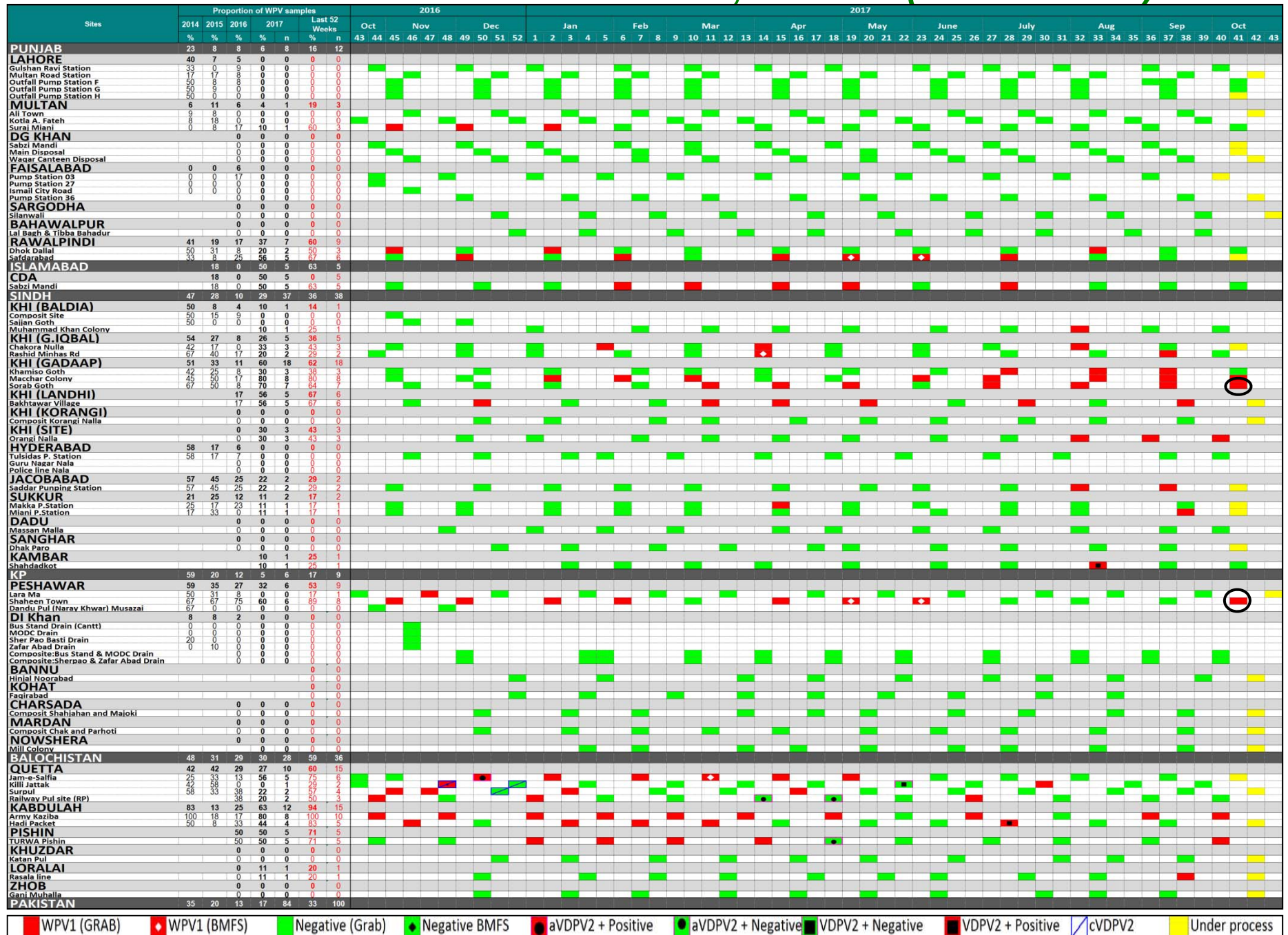
% NSC Criteria = Fever , Rapid Progress, Age < 48 months and OPV Doses <7

UP = Under process

Urgent (Field/NSC) / Inadequate specimens / Age 12-35 months / Zero OPV dose

OPending for genomic sequencing

Environmental Surveillance Results, Pakistan (last 52 weeks)



■ WPV1 (GRAB)
 ● WPV1 (BMFS)
 ■ Negative (Grab)
 ● Negative BMFS
 ■ aVDPV2 + Positive
 ● aVDPV2 + Negative
 ■ VDPV2 + Negative
 ■ VDPV2 + Positive
 ▨ cVDPV2
 ■ Under process

Table 2: LAB Update 2017*

Month of Onset	AFP Cases	No virus isolated	Cases Under Process		Isolated Viruses from stools						
			Culture	ITD	Vaccine viruses		NPEV		Wild	Results within 14 days	
			n	n	n	%	n	%	n	n	%
January	751	595	0	0	56	7	99	13%	1	750	100%
February	774	621	0	0	44	6	108	14%	1	773	100%
March	831	643	0	0	53	6	135	16%	0	831	100%
April	819	585	0	0	47	6	187	23%	0	819	100%
May	912	687	0	0	50	5	175	19%	0	912	100%
June	672	460	0	0	17	3	194	29%	1	671	100%
July	895	574	1	0	23	3	297	33%	0	894	100%
August	854	540	2	0	20	2	290	34%	2	850	100%
September	830	471	23	0	63	8	274	33%	0	808	97%
October	462	165	236	1	11	2	54	12%	0	230	50%
Pakistan	7800	5341	262	1	384	5	1813	23%	05	7538	97%

*Data as of 30-10-2017

Comparison of Environmental Sampling Results, 2016-17*

DISTRICT	2016					2017					Last
	TOTAL	WILD				TOTAL	WILD				
		GRAB	BMFS	TOTAL			GRAB	BMFS	TOTAL		
				n	%				n	%	
LAHORE	51	2	1	3	6%	49			0	0%	18-Oct-16
MULTAN	30			0	0%	27	1		1	4%	9-Jan-17
DGKHAN	27	1		1	4%	27			0	0%	12-May-16
RAWALPINDI	21	1	1	2	10%	21	5	2	7	33%	15-Aug-17
FAISALABAD	31	1	1	2	6%	19			0	0%	2-Jul-16
SARGODHA *				0		9			0	0%	
BAHAWALPUR *				0		9			0	0%	
CDA	10			0	0%	10	5		5	50%	10-Jul-17
KHIGIQBAL	21	1	1	2	10%	21	4	1	5	24%	11-Sep-17
KHIGADAP	30	4		4	13%	30	18		18	60%	12-Oct-17
KHIBALDIA	20	1		1	5%	10	1		1	10%	8-Aug-17
KHILANDHI	4			0		9	5		5	56%	19-Sep-17
KHIKORANGI *				0		9			0	0%	
KHISITE *				0		10	3		3	30%	3-Oct-17
SUKKUR	23	2	1	3	13%	23	1	1	2	9%	19-Sep-17
HYDERABAD	14	1		1	7%	10			0	0%	5-Jan-16
JACOBABAD	14		3	3	21%	11	1	1	2	18%	11-Sep-17
SANGHAR *				0		9			0	0%	
DADU *				0		10			0	0%	
KAMBAR *				0		10	1		1	10%	15-Aug-17
PESHAWAR	33	6	1	7	21%	22	4	2	6	27%	10-Oct-17
DIKHAN	40	1		1	3%	19			0	0%	16-Jul-16
BANNU *				0		8			0	0%	
KOHAT *				0		8			0	0%	
CHARSADA *				0		9			0	0%	
MARDAN *				0		9			0	0%	
NOWSHERA *				0		9			0	0%	
KABDULAH	20	3		3	15%	19	12		12	63%	2-Oct-17
QUETTA	47	9		9	19%	38	9	1	10	26%	28-Jul-17
PISHIN	6	4		4	67%	10	5		5	50%	2-Oct-17
KHUZDAR *				0		9			0	0%	
LORALAI *				0		9	1		1	11%	17-Sep-17
ZHOB *				0		9			0	0%	
PAKISTAN	442	37	9	46	10%	511	76	8	84	16%	12-Oct-17

* New addition in Env Surveillance Network

2017 – 32 Environmental samples are under process)

New Env Positive Samples

* Data as of October 23, 2017

WPV and cVDPV Cases by District in 2017

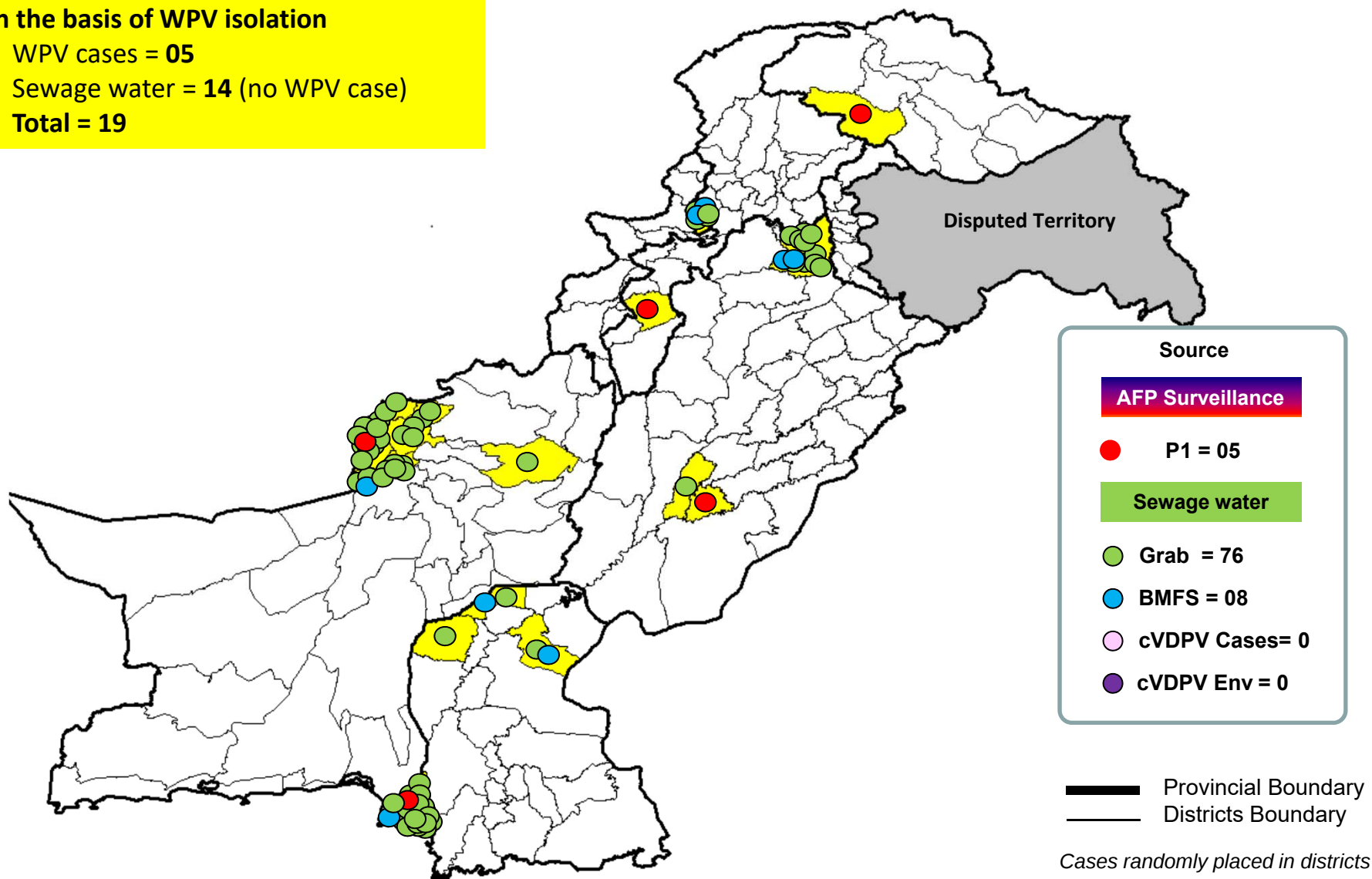
PROVINCE	DISTRICT	WPV Cases		cVDPV Cases	
		Onset of Last Case	Cases	Onset of Last Case	Cases
KPAKHTUNKHWA	LAKKIMRWT	21-Aug	1		
Total		21-Aug	01		
SINDH	KHIGIQBAL	11-Aug	1		
Total		11-Aug	01		
BALUCHISTAN	KABDULAH	11-June	1		
Total		11-June	01		
G-Baltistan	DIAMIR	13-Feb	1		
Total		13-Feb	01		
PUNJAB	LODHRAN	28-Jan	1		
Total		28-Jan	01		
PAKISTAN		21-Aug	05		

Map 2: Wild Polio virus isolates and cVDPV, 2017*

Infected districts/Towns/Agencies/Areas

On the basis of WPV isolation

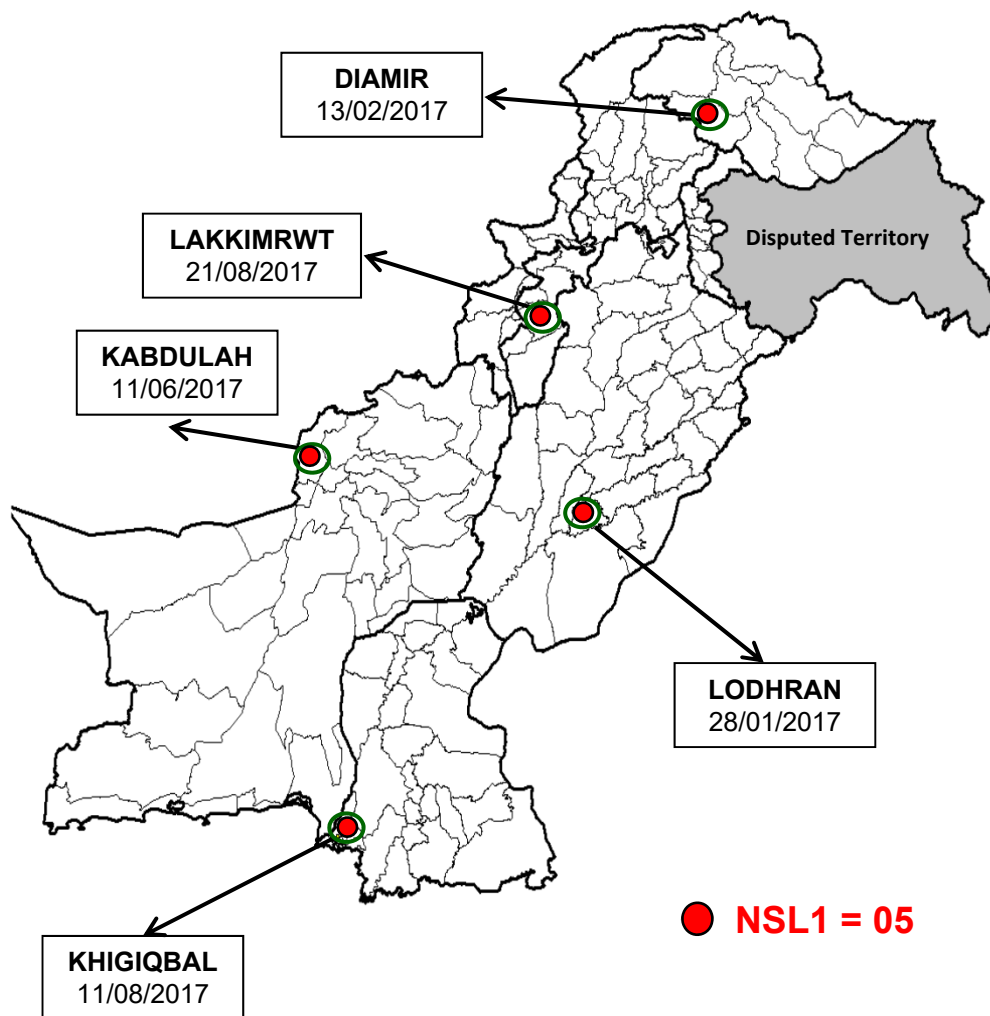
- WPV cases = 05
- Sewage water = 14 (no WPV case)
- Total = 19



* Afp.rec Data as of 30-10-2017

Map1: Distribution of Wild Polio Cases Pakistan 2017*

Districts/Towns with Wild Polio Cases = 05



Province/ Country	Date of Last Case		Number of cases 2017	
	P1	P3	P1	P3
FATA	Jul, 2016	Apr, 2012	-	-
KHYBER-PAKHTUNKHWA	Aug, 2017	Oct, 2010	01	-
SINDH	Aug, 2017	Jan, 2010	01	-
BALUCHISTAN	Jun, 2017	Apr, 2010	01	-
PUNJAB	Jan, 2017	Jun, 2010	01	-
AJK	Jun, 2000	Jun, 2000	-	-
GILGIT-BALTISTAN	Feb, 2017	-	01	-
ISLAMABAD	Sep, 2008	Sep, 2008	-	-
PAKISTAN	Aug, 2017	Apr, 2012	05	-

○ District with last polio case in province

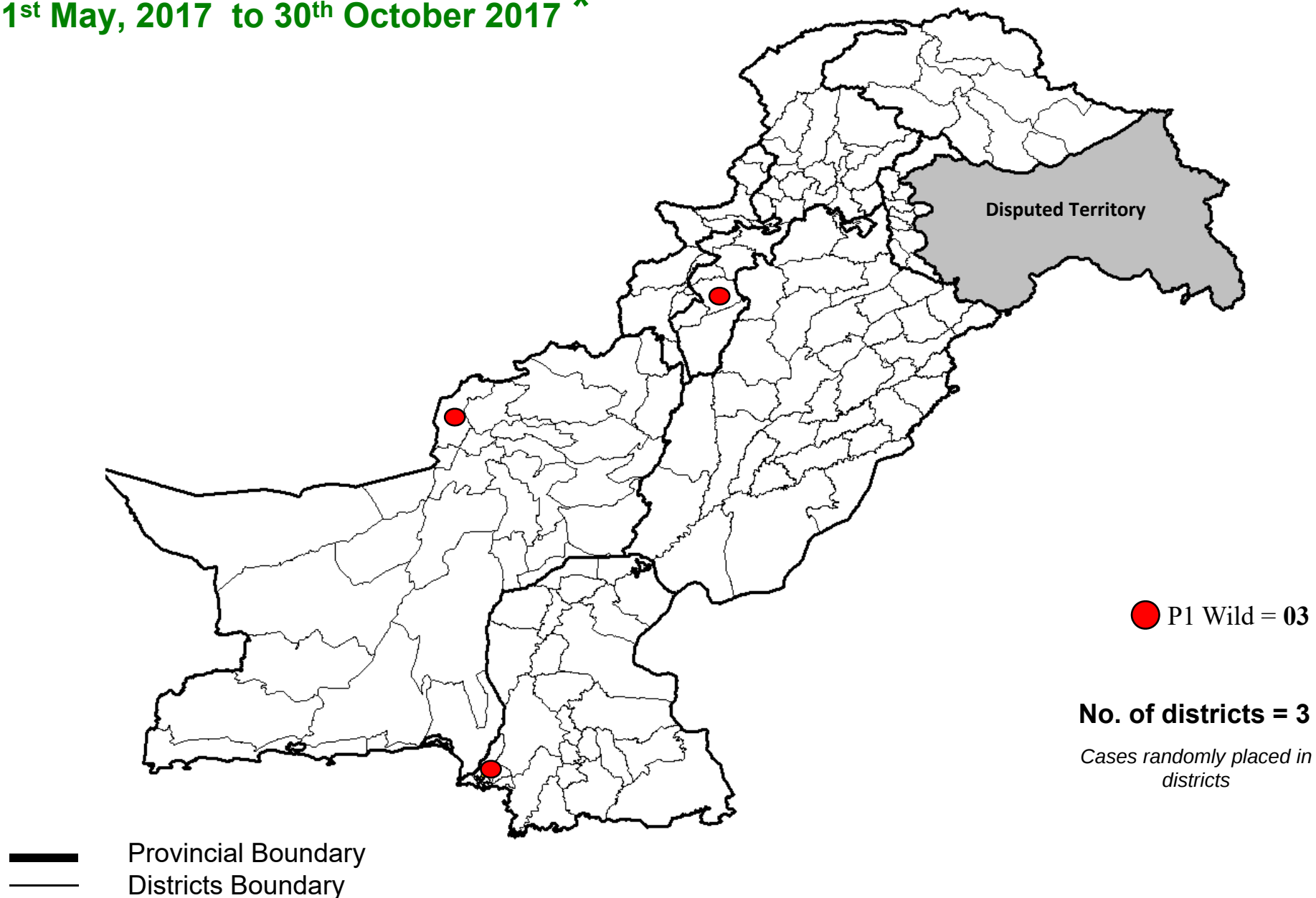
— Provincial Boundary
— Districts Boundary

Cases randomly placed in districts

* Afp.rec Data as of 30-10-2017

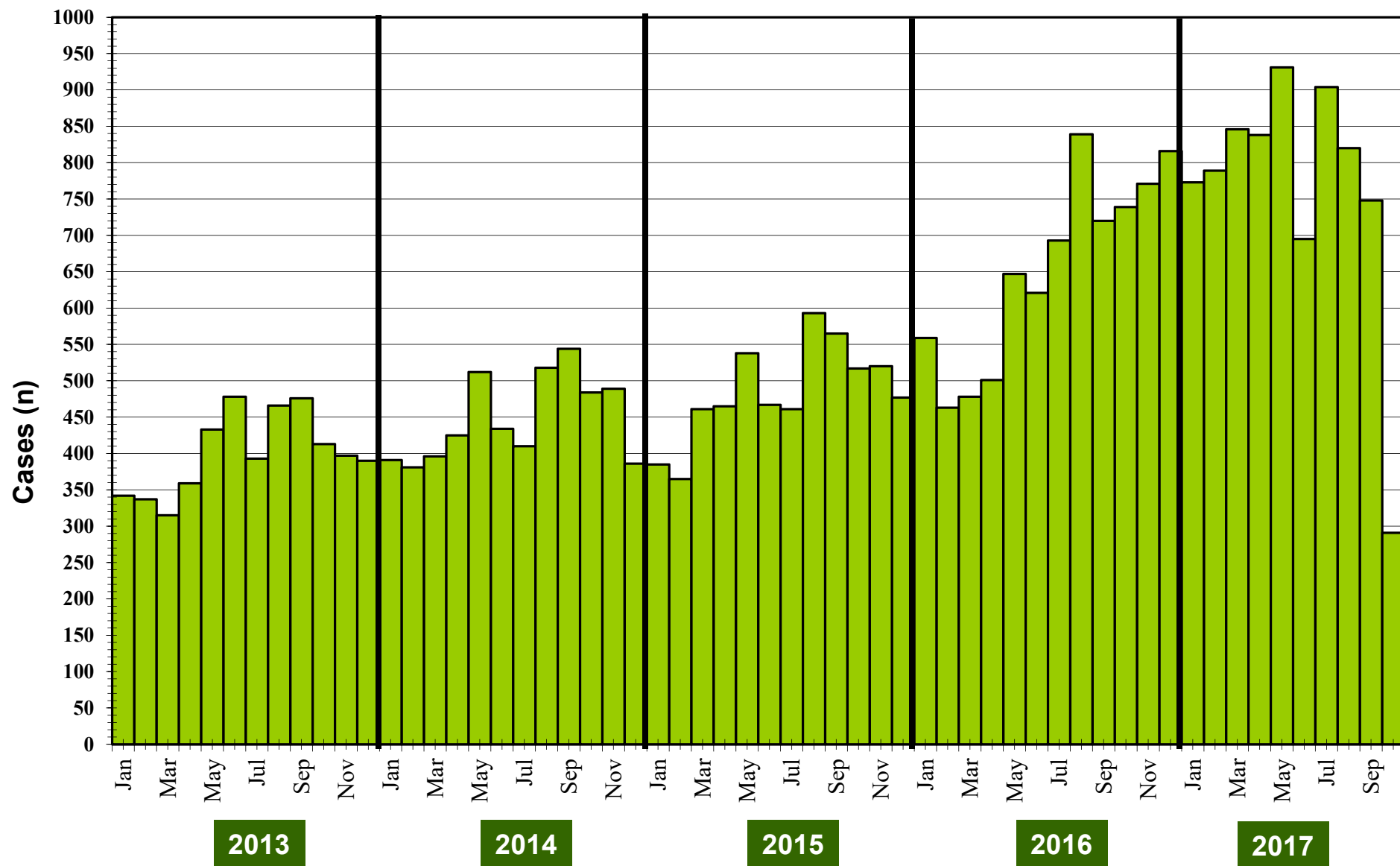
Map 3: Wild Polio cases in the last 6 months

1st May, 2017 to 30th October 2017 *



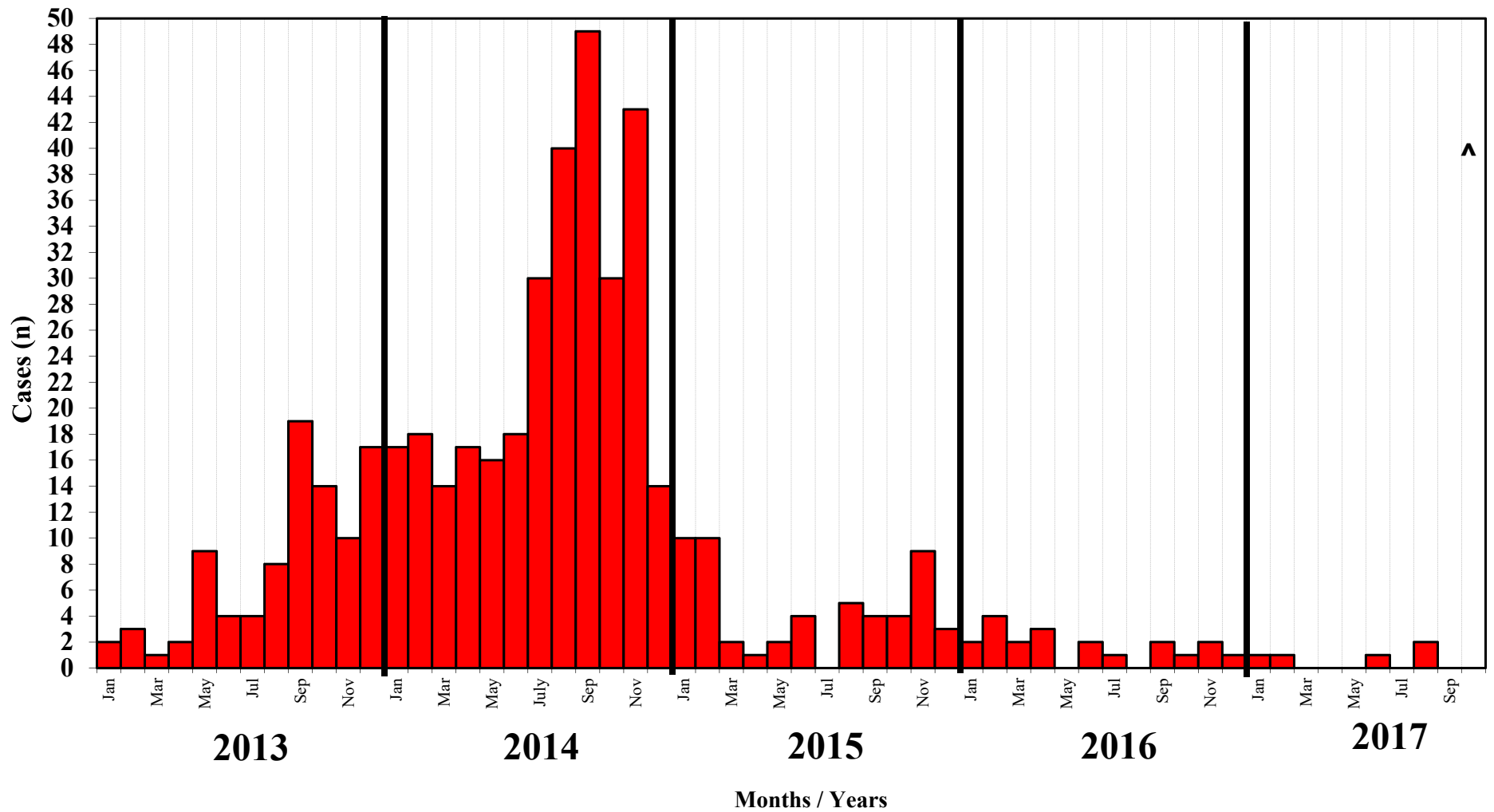
* Afp.rec Data as of 30-10-2017

Graph 1: Distribution of AFP Cases by Month, Pakistan 2013-2017*



* Afp.rec Data as of 30-10-2017

Confirmed Polio Cases 2013-2017*



■ NSL1

^ Data incomplete

* Afp.rec Data as of 30-10-2017

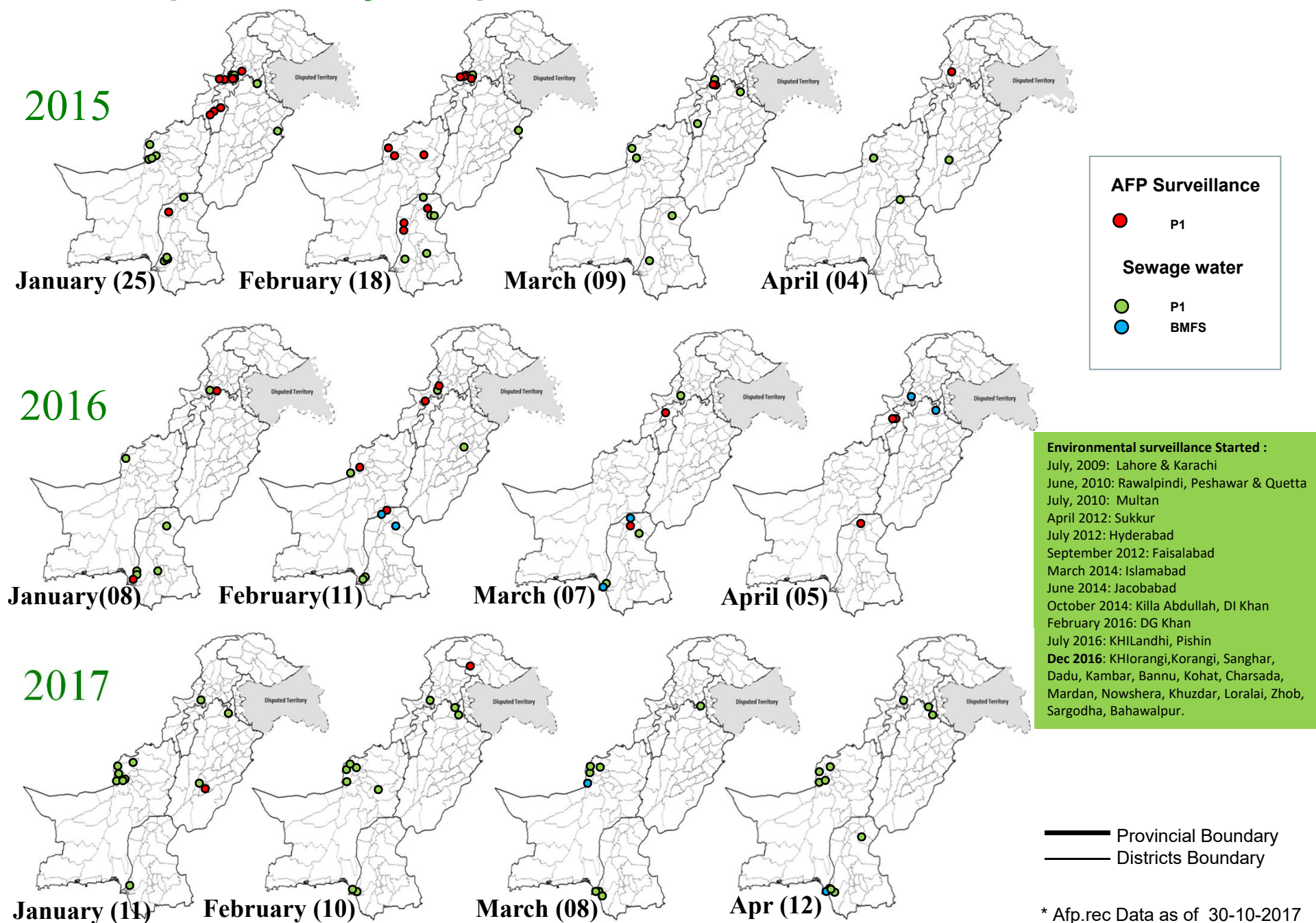
**Table 4: Distribution of AFP Cases By Week of Onset ^
Pakistan- 2017* [Week number / Ending on]**

PROVINCE	W 28 15 Jul 2017	W 29 22 Jul 2017	W 30 29 Jul 2017	W 31 05 Aug 2017	W 32 12 Aug 2017	W 33 19 Aug 2017	W 34 26 Aug 2017	W 35 02 Sep 2017	W 36 09 Sep 2017	W 37 16 Sep 2017	W 38 23 Sep 2017	W 39 30 Sep 2017	W 40 07 Oct 2017	W 41 14 Oct 2017	W 42 21 Oct 2017
PUNJAB	96	101	115	103	78	85	87	72	85	74	72	74	72	50	18
SINDH	46	47	45	43	46	37	40	23	46	42	49	26	58	31	8
FATA	15	16	9	9	13	11	15	11	7	21	18	9	14	9	6
BALUCHISTAN	8	13	13	9	11	16	11	9	14	18	13	10	13	5	5
AJK	10	3	4	2	2	3	2	2	2	2	1	5	8	4	1
GILGIT BILTISTAN	0	0	1	1	5	3	2	0	1	5	2	2	1	3	0
ISLAMABAD	2	1	2	1	4	2	3	2	5	2	2	0	3	5	2
KPAKHTUNKHWA	26	35	39	42	40	36	39	38	52	53	47	44	47	38	12
PAKISTAN	203	216	228	210	199	193	199	157	212	217	204	170	216	145	52

* Afp.rec & Afplab.rec: Data as of 30-10-2017

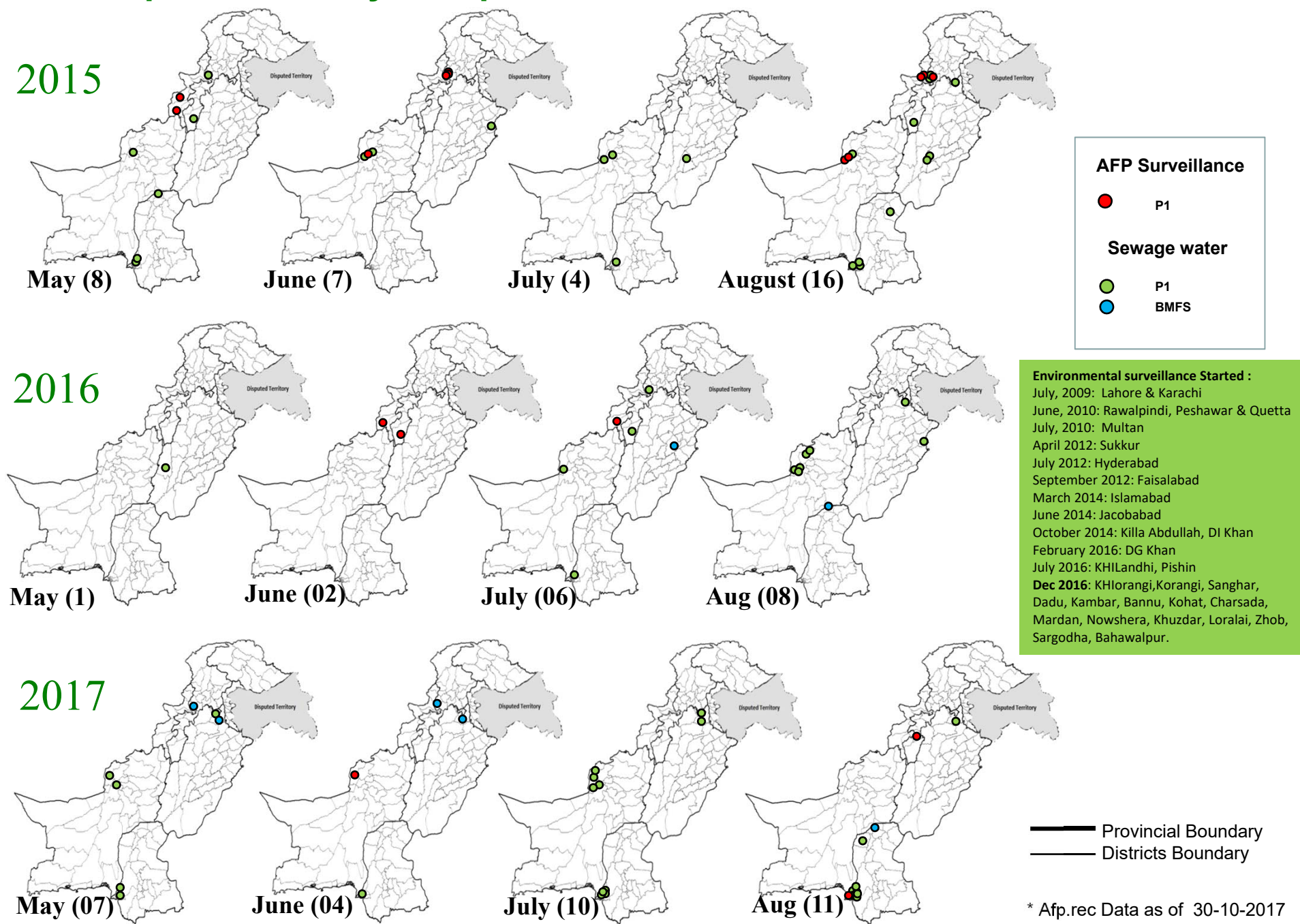
^ MMWR Epidemiological Weeks

Map 4: Monthly Comparison of Polio Cases/Isolates 2015-2017*



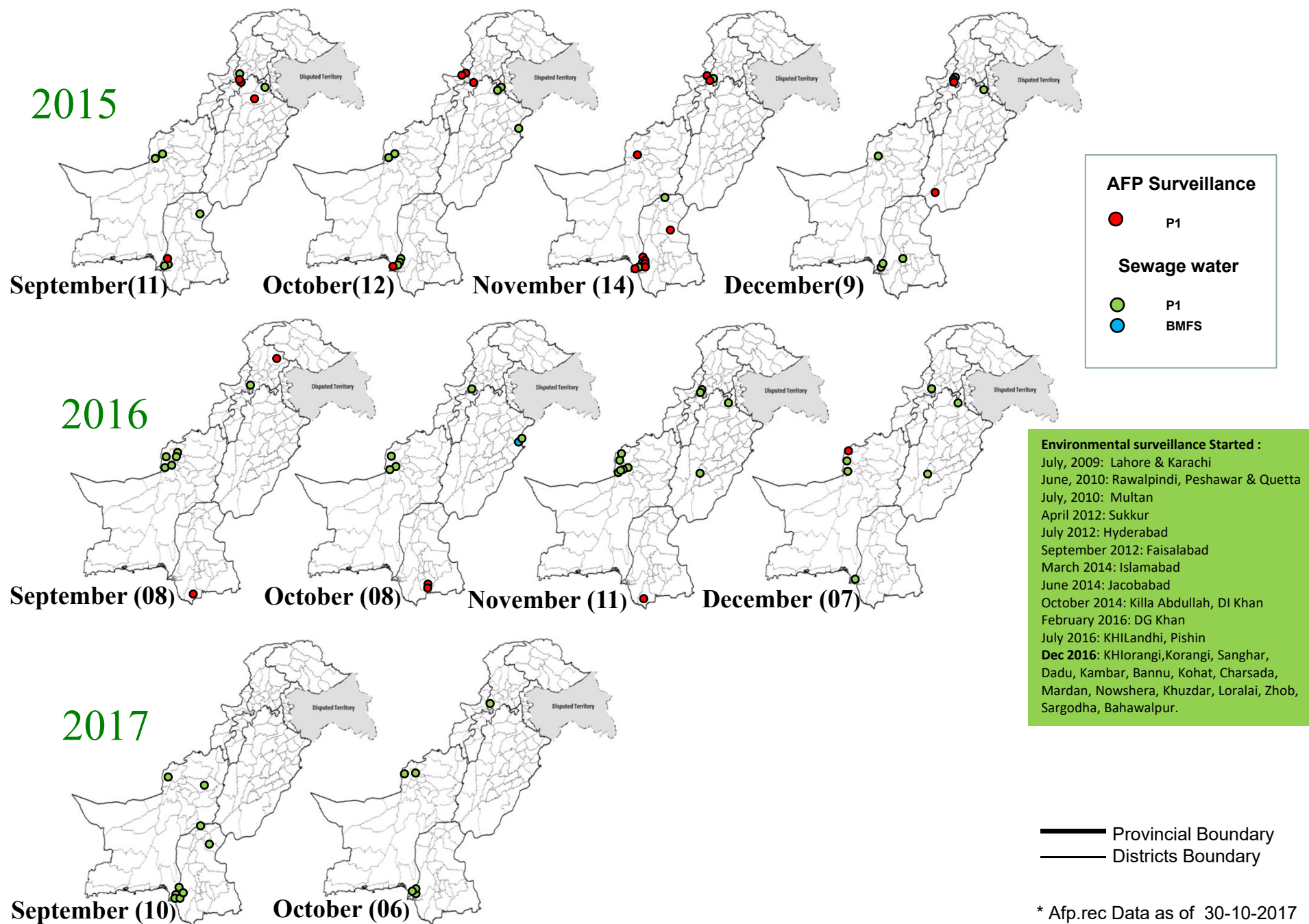
* Afp.rec Data as of 30-10-2017

Map 4.1: Monthly Comparison of Polio Cases/Isolates 2015-2017*



* Afp.rec Data as of 30-10-2017

Map 4.2: Monthly Comparison of Polio Cases/Isolates 2015-2017*



* Afp.rec Data as of 30-10-2017