



AFP SURVEILLANCE

23-Jan-17

Week 03, ending 22 January 2017

Number 955

Table 1: Acute Flaccid Paralysis (AFP) cases by week of onset

Country	Reported AFP cases by week of onset - Week (03/17) / Ending on : 22/01/2017														
	Total AFP 2015	Total AFP 2016	Total AFP to date, 2017	W44 06 Nov 16	W45 13 Nov 16	W46 20 Nov 16	W47 27 Nov 16	W48 04 Dec 16	W49 11 Dec 16	W50 18 Dec 16	W51 25 Dec 16	W52 01 Jan 17	W01 08 Jan 17	W02 15 Jan 17	W03 22 Jan 17
Afghanistan	2738	2898	93	58	68	56	51	57	56	53	50	29	50	26	4
Bahrain	19	14	0	0	0	1	1	0	0	0	0	0	0	0	0
Djibouti	3	3	0												
Egypt	1046	1092	59	41	17	33	19	27	18	25	20	30	21	21	9
Iran	780	771	0	15	20	14	17	16	14	15	7	0	0		
Iraq	520	604	23	13	11	10	13	18	12	10	9	13	11	7	
Jordan ****	90	107	5	2	3	3	3	1	3	2	2	2	1	3	0
Kuwait	32	48	2	1	0	3	0	5	3	1	1	2	0	0	2
Lebanon ****	113	111	3	2	1	5	1	0	1	0	4	2	0	3	
Libya	54	70	4	2	1	3	2	2	2	3	1	4	3	0	0
Morocco	79	83	0	1	1	1	2	3	1	2	1	0	0		
Oman	39	39	0	0	1	0	0	0	2	0	2	0	0	0	
Pakistan	5814	7694	122	148	160	196	204	158	162	190	165	115	73	31	1
Palestine ****	38	46	1	0	0	0	0	0	0	0	0	1	1	0	
Qatar	11	9	0	0	0	0	0	0	1	1	0	0	0	0	0
Saudi Arabia	254	257	0	9	8	11	4	8	10	2	4	0	0	0	0
Somalia	281	316	10	2	4	4	13	8	5	4	7	1	6	4	0
Sudan	436	509	6	11	10	9	7	9	4	4	6	1	5	0	
Syria ****	235	302	7	8	5	5	3	5	11	9	4	9	5	1	
Tunisia	64	89	0	2	3	3	1	1	1	2	0	0	0	0	
U.A.E	31	42	1	3	1	1	2	2	2	0	1	3	0	0	0
Yemen	537	714	20	4	11	10	11	18	6	7	13	12	16	4	
Total EMR	13214	15818	356	322	325	368	354	338	314	330	297	224	192	100	16

☐ No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2015	Total year 2016	22/01		Confirmed polio cases by month of onset											
			2016	2017	February 2016	March 2016	April 2016	May 2016	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	January 2017
Afghanistan	20	13	0	0	2	1	1	1	0	0	2	2	2		1	
Bahrain	0	0	0	0	0	0	0	0	0	0	0	0	0		0	
Djibouti	0	0	0	0	0	0	0	0	0	0	0					
Egypt	0	0	0	0	0	0	0	0		0	0	0	0			
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0			
Iraq	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Jordan ****	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Kuwait	0	0	0	0	0	0	0	0	0	0	0	0				
Lebanon ****	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Libya	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Morocco	0	0	0	0	0	0	0		0	0		0	0	0		
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pakistan	54	20	2	0	4	2	3		2	1		2	2	1	1	
Palestine ****	0	0	0	0	0	0		0	0	0	0	0		0		
Qatar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Saudi Arabia	0	0	0	0	0	0	0	0	0	0	0	0				
Somalia	0	0	0	0	0	0	0	0	0	0	0	0	0			
Sudan	0	0	0	0	0	0	0	0	0	0	0	0	0			
Syria ****	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Tunisia	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
U.A.E	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Yemen	0	0	0	0	0	0	0	0	0	0	0	0				
Total EMR	74	33	2	0	6	3	4	1	2	1	2	4	4	1	2	0

**** UNRWA cases are included with those of country of residence



Table 3: Investigation of AFP cases with paralysis onset in 2016 & 2017 up to Week (03/17) / Ending on : 22/01/2017)

COUNTRY	2016												2017												Latest line List Date
	AFP									Specimen	Wild cases ****		AFP									Specimen	Wild cases ****		
	Total AFP cases onset 2016	Case classification					Non polio AFP rate **	AFP cases pending classification > 90 days from onset of paralysis	AFP cases pending classification and lab > 90 days from onset of paralysis	% with *** adequate specimens	Wild P1 Poliovirus	Wild P3 Poliovirus	Total AFP cases onset 2017	Case classification					Annualized Non polio AFP rate **	AFP cases pending classification > 90 days from onset of paralysis	AFP cases pending classification and lab > 90 days from onset of paralysis	% with *** adequate specimens	Wild P1 Poliovirus	Wild P3 Poliovirus	
		Total Confirmed Polio Cases *	Polio Compatible	Pending Classification	Discarded (non polio AFP)	VDPV								Total Confirmed Polio Cases *	Polio Compatible	Pending Classification	Discarded (non polio AFP)	VDPV							
Afghanistan	2898	13	0	70	2814	1	14.6	8	0	92.4	13	0	93	0	0	86	7	0	7.8	0	0	93.5	0	0	22/01/2017
Bahrain	14	0	0	1	13	0	5.2	0	0	100.0	0	0	0	0	0	0	0	0	0.0	0	0		0	0	22/01/2017
Djibouti	3	0	0	2	1	0	1.0	2	0	33.3	0	0	0	0	0	0	0	0	0.0	0	0		0	0	10/09/2016
Egypt	1092	0	0	97	995	0	2.9	0	0	93.9	0	0	59	0	0	59	0	0	2.6	0	0	64.4	0	0	21/01/2017
Iran	771	0	0	8	763	0	4.2	0	0	95.3	0	0	0	0	0	0	0	0	0.0	0	0		0	0	11/01/2017
Iraq	604	0	0	55	548	1	4.1	24	1	80.5	0	0	23	0	0	20	3	0	2.6	0	0	95.7	0	0	21/01/2017
Jordan	107	0	0	25	82	0	3.8	4	0	100.0	0	0	5	0	0	5	0	0	3.0	0	0	80.0	0	0	22/01/2017
Kuwait	48	0	0	13	35	0	5.5	2	0	81.3	0	0	2	0	0	2	0	0	3.8	0	0	50.0	0	0	22/01/2017
Lebanon	111	0	0	14	97	0	5.8	9	0	82.9	0	0	3	0	0	3	0	0	2.6	0	0	33.3	0	0	21/01/2017
Libya	70	0	0	2	68	0	3.4	0	0	97.1	0	0	4	0	0	4	0	0	3.2	0	0	100.0	0	0	22/01/2017
Morocco	83	0	0	27	56	0	0.8	20	1	61.4	0	0	0	0	0	0	0	0	0.0	0	0		0	0	13/01/2017
Oman	39	0	0	0	39	0	4.5	0	0	87.2	0	0	0	0	0	0	0	0	0.0	0	0		0	0	16/01/2017
Pakistan	7694	20	1	269	7402	3	9.8	68	10	88.3	20	0	122	0	0	118	4	0	2.6	0	0	95.9	0	0	22/01/2017
Palestine	46	0	0	5	41	0	2.4	0	0	97.8	0	0	1	0	0	1	0	0	0.9	0	0	100.0	0	0	15/01/2017
Qatar	9	0	0	3	6	0	3.0	1	0	100.0	0	0	0	0	0	0	0	0	0.0	0	0		0	0	22/01/2017
Saudi Arabia	257	0	0	70	187	0	2.7	4	4	98.1	0	0	0	0	0	0	0	0	0.0	0	0		0	0	22/01/2017
Somalia	316	0	0	12	303	1	5.5	0	0	99.1	0	0	10	0	0	10	0	0	2.9	0	0	100.0	0	0	22/01/2017
Sudan	509	0	0	4	505	0	2.8	0	0	97.6	0	0	6	0	0	6	0	0	0.6	0	0	100.0	0	0	15/01/2017
Syria	302	0	0	12	290	0	3.9	0	0	87.7	0	0	7	0	0	7	0	0	1.5	0	0	100.0	0	0	21/01/2017
Tunisia	89	0	0	1	87	1	3.4	0	0	77.5	0	0	0	0	0	0	0	0	0.0	0	0		0	0	20/01/2017
U.A.E	42	0	0	5	37	0	4.2	0	0	100.0	0	0	1	0	0	1	0	0	1.6	0	0	100.0	0	0	22/01/2017
Yemen	714	0	0	122	591	1	5.4	19	11	90.9	0	0	20	0	0	20	0	0	2.4	0	0	90.0	0	0	21/01/2017
EMR	15818	33	1	817	14960	8	6.3	161	27	90.2	33	0	356	0	0	342	14	0	2.4	0	0	89.0	0	0	
2015	13214	74	15	1	13116	8	5.2	1	0	90.2	74	0													

* Confirmed polio cases refer to wild isolation from AFP cases or from contacts of negative index AFP cases

** Non-polio AFP per 100,000 children <15 years

*** Adequate here refers to two stool specimens collected at least 24 hours apart, within 14 days of paralysis onset

**** AFP cases co infected with P1 and P3 are counted separately as wild isolates



World Health Organization – Regional Office for Eastern Mediterranean
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Table 4 (a): Most recent wild contacts in EMRO, 01/01/2016 - 22/01/2017

Year	Country	Data	
		Count of wild contacts	Date of Most Recent stool collection
2016	Pakistan	5	25-11-16
	Afghanistan	4	07-10-16
2016 Total		9	25-11-16

Table 4 (b): Number and distribution by district of -ve index AFP cases identified as wild positive by contact in EMR, 2016-2017

YEAR	COUNTRY	PROVINCE	DISTRICT	COUNT	First case	Last case
2016	AFG	KUNAR	SHIGAL WA SHELTAN	1	26-02-16	26-02-16
		HILMAND	NAWZAD	1	23-01-16	23-01-16
		PAKTIKA	BERMEL	1	01-09-16	01-09-16
	AFG Total			3	23-01-16	01-09-16
	PAK	KHYBER PAKHTOON	KOHISTAN	1	03-09-16	03-09-16
		SINDH	BADIN	1	10-10-16	10-10-16
PAK Total			2	03-09-16	10-10-16	



Table 5: Laboratory investigation of AFP cases with paralysis onset in 2017 up to Week (03/17) / Ending on : (23/01/2017)

Country	Polio laboratories Sequencing performed by CDC and RIVM laboratories	AFP cases with specimens	Preliminary virus isolation results of AFP cases						Poliovirus intratypic differentiation results #									Indicators				Latest report Date				
			Referred for ITD		NPEV only	Negative	Pending		Type 1			Type 2			Type 3			Discordant pending sequence	NPEV by PCR	Non-EV	Pending ITD		% specimens positive for NPEV*	% AFP cases with culture results within 14 days	% AFP cases with ITD results within 7 days	% AFP cases with ITD results within 45 days of onset**
			L20B+	L20B+/NPEV			received < / = 14 days	received > 14 days ago	Wild	Sabin	VPV	Wild	Sabin	VPV	Wild	Sabin	VPV									
Afghanistan	RRL Pakistan	77			3	3	70	1														31%	100%		100%	21/01/2017
Bahrain	PNL Oman																									23/01/2017
Djibouti	NPL Kenya																									10/09/2016
Egypt***	RRL Egypt																									13/01/2017
Iran	NPL Iran	27				6	21															0%	100%		100%	21/01/2017
Iraq	RRL Egypt	23				3	20															0%	100%			19/01/2017
Jordan	RRL Tunisia	3			1	1	1															40%	100%			19/01/2017
Kuwait	RRL Kuwait	1				1																0%	100%		100%	22/01/2017
Lebanon	NPL Jordan																									19/01/2017
Libya	RRL Tunisia																									16/01/2017
Morocco	RRL Tunisia																									19/01/2017
Oman	NPL Oman																					0%				23/01/2017
Pakistan	RRL Pakistan	221	1		3	22	194	2					1			1						10%	100%	100%	100%	21/01/2017
Palestine & UNRWA		1						1																		15/01/2017
Qatar	NPL Oman																									23/01/2017
Saudi Arabia	NPL Oman	1					1																			22/01/2017
Somalia	NPL Kenya	10					8	2																		22/01/2017
Sudan	RRL Egypt	24			1	3	20															25%	100%			22/01/2017
Syria	RRL Egypt	8					7	1														0%				21/01/2017
Tunisia	RRL Tunisia	1					1																			16/01/2017
U.A.E	NPL Oman																									23/01/2017
Yemen	RRL Egypt																									13/01/2017
Total EMR 2017		397	1		8	39	343	7					1			1						11%	100%	100%	100%	
Total EMR 2016		15614	803	91	2708	11641	97	271	28	466			84	6	550	1	3	19	3	4		15%	94%	98%	95%	

* Specimens from all sources including non-AFP cases, excluding environmental samples

** This indicator reflects surveillance and laboratory activities



Table 6: Environmental isolate by year and type

Country	Status	2010	2011	2012	2013	2014	2015	2016	2017
AFG	NEGATIVE				9	78	129	183	
	PENDING								8
	WILD					17	20	2	
AFG Total					9	95	149	185	8
EGY	NEGATIVE	183	178	196	304	410	412	465	
	PENDING							51	
	WILD			2					
	VDPV1			1		1			
	VDPV2			7	3	2	3	1	
EGY Total		183	178	206	307	413	415	517	
JOR	NEGATIVE							2	
	PENDING								1
JOR Total								2	1
LEB	NEGATIVE							3	
	PENDING								2
LEB Total								3	2
PAK	NEGATIVE	77	68	151	257	237	347	462	3
	PENDING								26
	WILD	79	136	88	63	125	79	59	1
	WILD & VDPV2				2	6	5	3	
	VDPV2					4	8	5	
PAK Total		156	204	239	322	372	439	529	30
EMR	NEGATIVE	260	246	347	570	725	888	1113	3
	PENDING							51	37
	WILD	79	136	90	63	142	99	61	1
	WILD & VDPV2				2	6	5	3	
	VDPV1			1		1			
VDPV2			7	3	6	11	6		
EMR Total		339	382	445	638	880	1003	1236	41

Table 7: Environmental Wild/VDPV isolate by site

Year	Country	Status	Province	District	Count	First date	Last date	
	AFG	WILD1	HILMAND	NAHR-E-SARAJ	1	23-12-16	23-12-16	
			NANGARHAR	JALALABAD	1	26-12-16	26-12-16	
AFG Total					2	23-12-16	26-12-16	
	EGY	VDPV2	SOUTH SINAI	AL-TUR	1	15-03-16	15-03-16	
EGY Total					1	15-03-16	15-03-16	
2016	PAK	WILD1	BALOCHISTAN	KABDULLAH	6	15-01-16	02-12-16	
				PISHIN	4	02-08-16	16-09-16	
				QUETTA	11	12-02-16	20-11-16	
				KHYBER PAKHTUNKHWA	DIKHAN	1	16-07-16	16-07-16
					PESHAWAR	10	11-01-16	10-12-16
				PUNJAB	DERA GHAZI KHAN	1	12-05-16	12-05-16
			FAISALABAD		2	03-02-16	02-07-16	
			LAHORE		3	05-08-16	18-10-16	
			MULTAN		2	08-11-16	08-12-16	
			SINDH	RAWALPINDI	4	14-04-16	10-12-16	
				HYDERABAD	1	05-01-16	05-01-16	
				JACOBABAD	3	04-02-16	16-08-16	
				KHIGADAP	5	27-01-16	14-07-16	
						KHIGIQBAL	2	18-01-16
			KHILANDHI	1	14-12-16	14-12-16		
			SUKKUR	3	12-01-16	19-03-16		
		WILD1+VDPV2	BALOCHISTAN	QUETTA	3	20-10-16	12-12-16	
		VDPV2	BALOCHISTAN	QUETTA	4	20-06-16	28-12-16	
			SINDH	HYDERABAD	1	11-07-16	11-07-16	
PAK Total					67	05-01-16	28-12-16	
2016 Total					70	05-01-16	28-12-16	
2017	PAK	WILD1	BALOCHISTAN	KABDULLAH	1	01-01-17	01-01-17	
2017 Total					1	01-01-17	01-01-17	



Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2016 - 31/12/2016

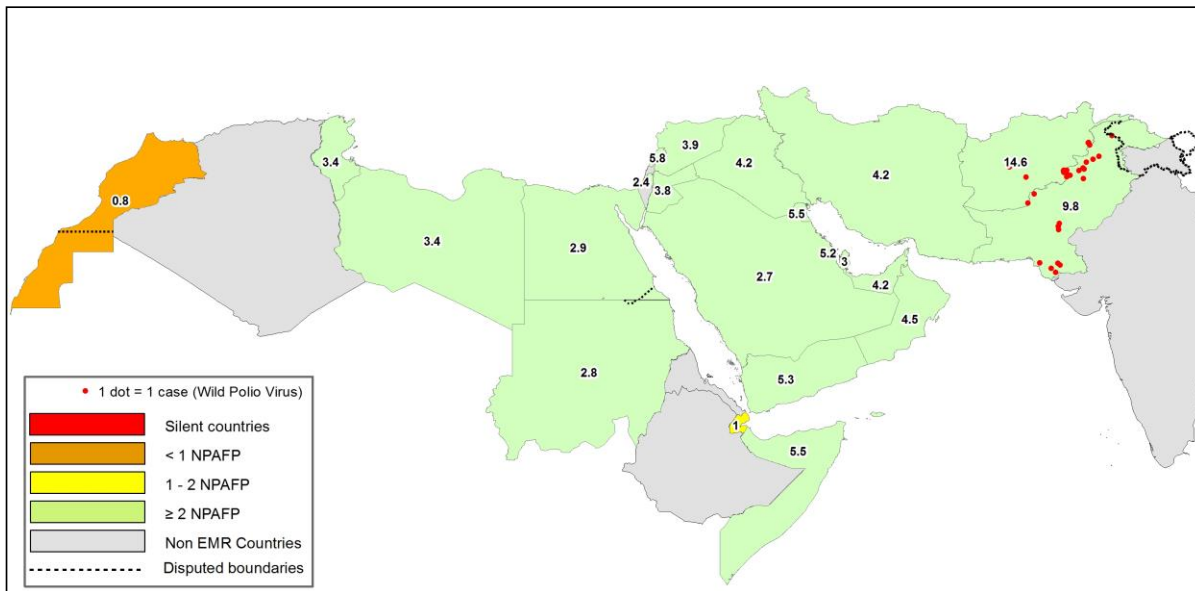


Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2016 - 31/12/2016

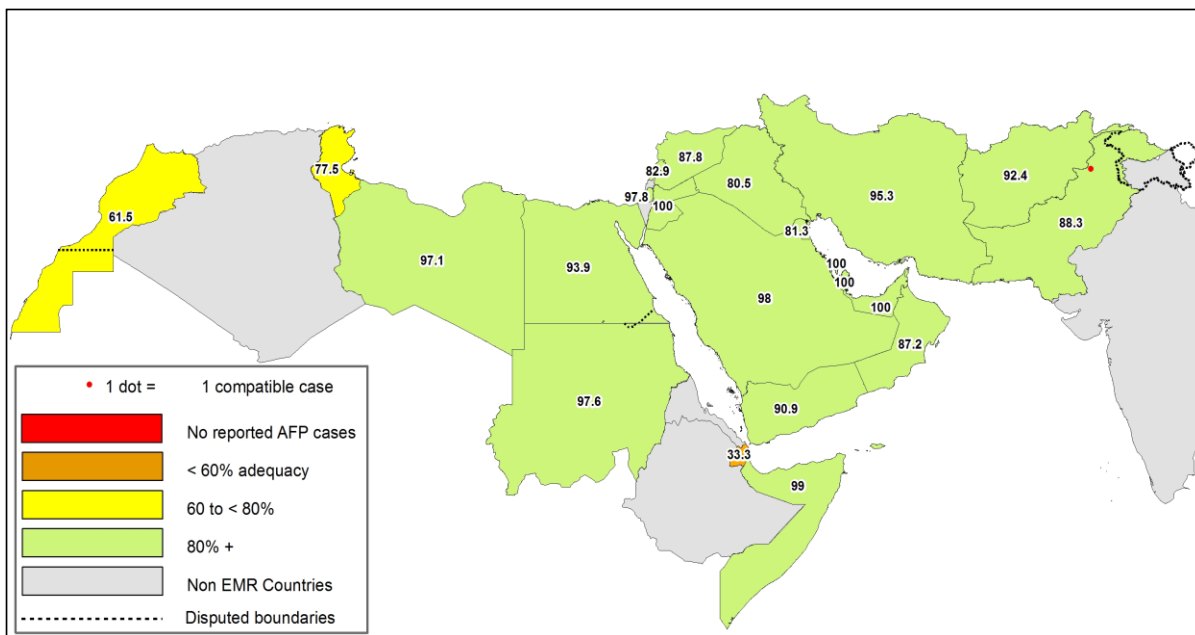


Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2016 - 2017

ONSETYR	COUNTRY	P1		
		Count	First case	Last case
2016	AFG	13	23-01-16	16-12-16
	PAK	20	17-01-16	22-12-16
2016 Total		33	17-01-16	22-12-16
Grand Total		33	17-01-16	22-12-16

Last reported wild Polio P3 from Pakistan with date of onset 18/04/2012



Figure 3: Non Polio AFP rate by District in Afghanistan & Pakistan 01/01/2016 - 31/12/2016

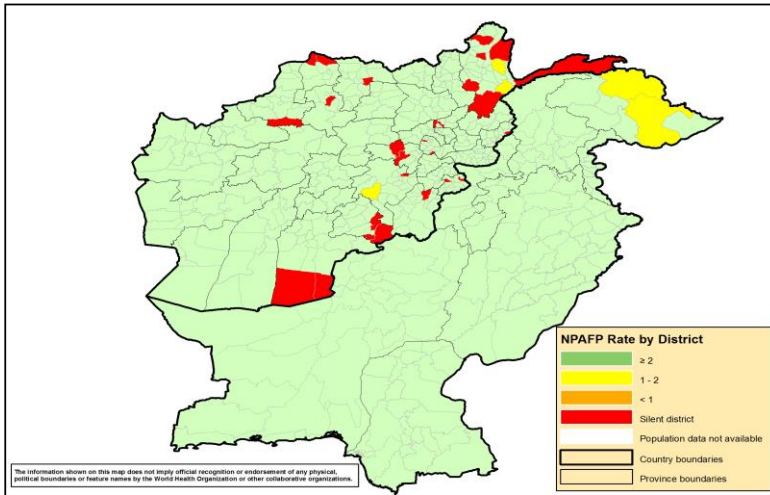


Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan & Pakistan by District 01/01/2016 - 31/12/2016

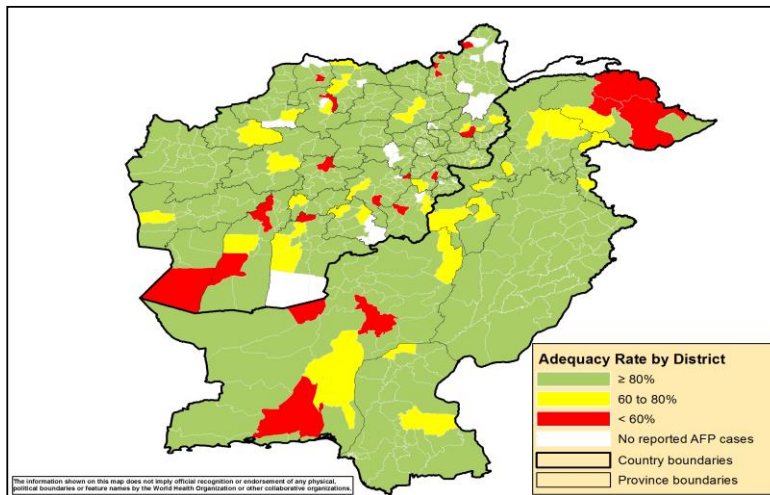


Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan 01/01/2016 - 31/12/2016

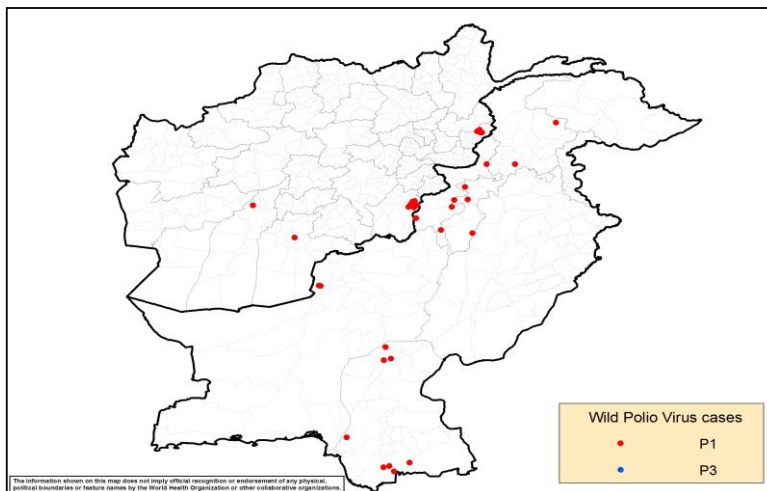




Table 9: Wild Polio cases by district and date of onset of paralysis, Afghanistan 2016-2017

ONSETYR	COUNTRY	PROVINCE	DISTRICT	Count	First case	Last case
2016	AFG	PAKTIKA	BERMEL	7	02-08-16	16-12-16
		KUNAR	SHIGAL WA SHELTA	4	01-02-16	29-05-16
		KANDAHAR	SHAHWALIKOT	1	04-04-16	04-04-16
		HILMAND	NAWZAD	1	23-01-16	23-01-16
	AFG Total			13	23-01-16	16-12-16

Table 10: Wild Polio cases by district and date of onset of paralysis, Pakistan 2016-2017

ONSETYR	COUNTRY	PROVINCE	DISTRICT	Count	First case	Last case
2016	PAK	BALUCHISTAN	KABDULAH	1	22-12-16	22-12-16
			QUETTA	1	01-02-16	01-02-16
		SINDH	SUJAWAL	2	03-09-16	03-11-16
			BADIN	2	10-10-16	16-10-16
			SHIKARPUR	2	05-03-16	12-04-16
			JACOBABAD	1	10-02-16	10-02-16
			KHIGADAP	1	17-01-16	17-01-16
		KHYBER PAKHTOON	KOHISTAN	1	03-09-16	03-09-16
			DIKHAN	1	06-06-16	06-06-16
			BANNU	3	22-03-16	26-04-16
			PESHAWAR	1	12-02-16	12-02-16
			HANGU	1	09-02-16	09-02-16
			NOWSHERA	1	22-01-16	22-01-16
		FATA	WAZIR-S	2	18-06-16	27-07-16
	PAK Total			20	17-01-16	22-12-16



Table 11: Circulating VDPV cases and date of onset of paralysis in EMR countries by districts 2016 - 2017

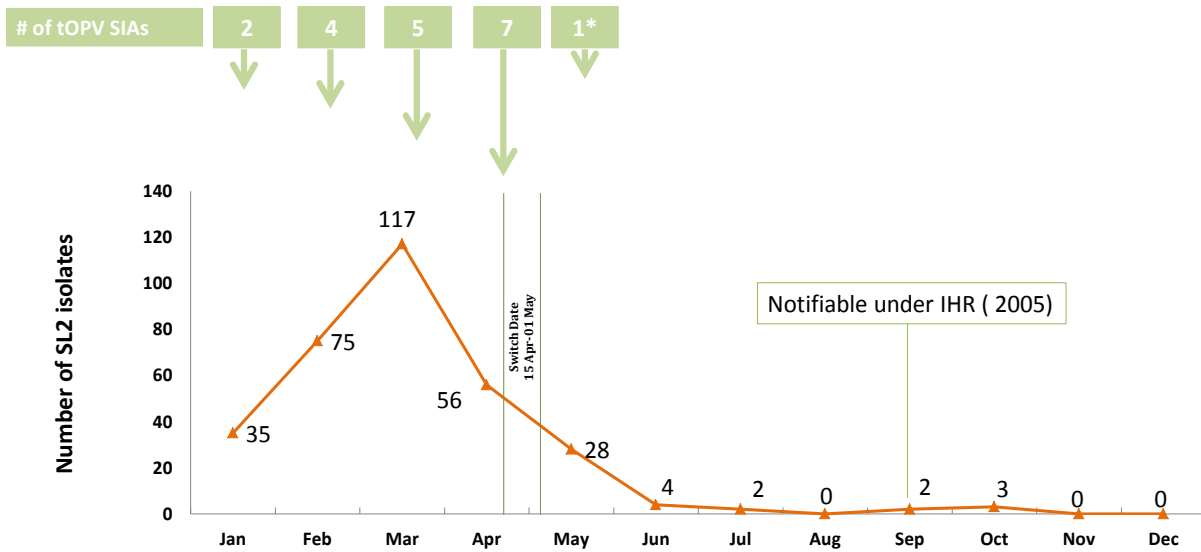
Year	COUNTRY	PROVINCE	DISTRICT	cVDPV2		
				Count	First Case	Last Case
2016	PAK	BALOCHISTAN	QUETTA	1	17-12-16	17-12-16
				1	17-12-16	17-12-16
2016 Total				1	17-12-16	17-12-16

Table 12: VDPV2 and Sabin Like 2 isolates, EMRO countries 2016 - 2017

Country	Source	VDPV2 and SL2 by month, EMR Countries 2016-2017																									
		Jan-16		Feb-16		Mar-16		Apr-16		May-16		Jun-16		Jul-16		Aug-16		Sep-16		Oct-16		Nov-16		Dec-16		Jan-17	
		VDPV2	SL2	VDPV2	SL2	VDPV2	SL2	VDPV2	SL2	VDPV2	SL2	VDPV2	SL2	VDPV2	SL2	VDPV2	SL2	VDPV2	SL2	VDPV2	SL2	VDPV2	SL2	VDPV2	SL2	VDPV2	SL2
AFG	AFP	1		2		11		3		1							1	1									
	Contact	1				6		2		1																	
	ENV	3		2		11																					
BAH	AFP																										
	Contact																										
	ENV																										
DJI	AFP																										
	Contact																										
	ENV																										
EGY	AFP	1		4		1				1																	
	Contact			3																							
	ENV	9		19	1	20		5		8																	
IRA	AFP									1																	
	Contact																										
	ENV																										
IRQ	AFP	2	1	1		5		1												1							
	Contact	3		1		7		9																			
	ENV																										
JOR	AFP																										
	Contact																										
	ENV																										
KWT	AFP																										
	Contact																										
	ENV																										
LEB	AFP																										
	Contact																										
	ENV																										
LIB	AFP																										
	Contact																										
	ENV																										
MOR	AFP																										
	Contact																										
	ENV																										
OMA	AFP																										
	Contact			1																							
	ENV																										
PAK	AFP	7		7		16				3							1							1			
	Contact			1		7		5		1																	
	ENV	7		32		27		27		9	1	3	1	1			1	1	1	2	1			3			
PAL	AFP																										
	Contact																										
	ENV																										
QAT	AFP																										
	Contact																										
	ENV																										
SAA	AFP																										
	Contact																										
	ENV																										
SUD	AFP																										
	Contact																										
	ENV																										
SOM	AFP			1		6		1			1		1							1							
	Contact																										
	ENV																										
SYR	AFP									1																	
	Contact																										
	ENV																										
TUN	AFP																										
	Contact																										
	ENV																										
UAE	AFP																										
	Contact																										
	ENV																										
YEM	AFP	1						1		1*																	
	Contact			1				2		1*																	
	ENV																										
EMR	AFP	12	1	15		39		6		8	1	1		1			2	1	1	1				1			
	Contact	4		7		20		18		3	1																
	ENV	19		53	1	58		32		17	1	3	1	1			1	1	1	2	1			3			
	VDPV2																										
	Two VDPV2 have been isolated from immune-compromised children from EGY not included in this table																										
	One SL2 has been isolated from an immune-compromised child from EGY in May 2016 but not included in this table																										
	* VDPV2 isolated from index and contact at the same time																										
	Isolation of PV2 in IRN under investigation not reflected in this table																										
	Isolation of two PV2 cases in Pak are under investigation, one of the cases had onset in 2017																										



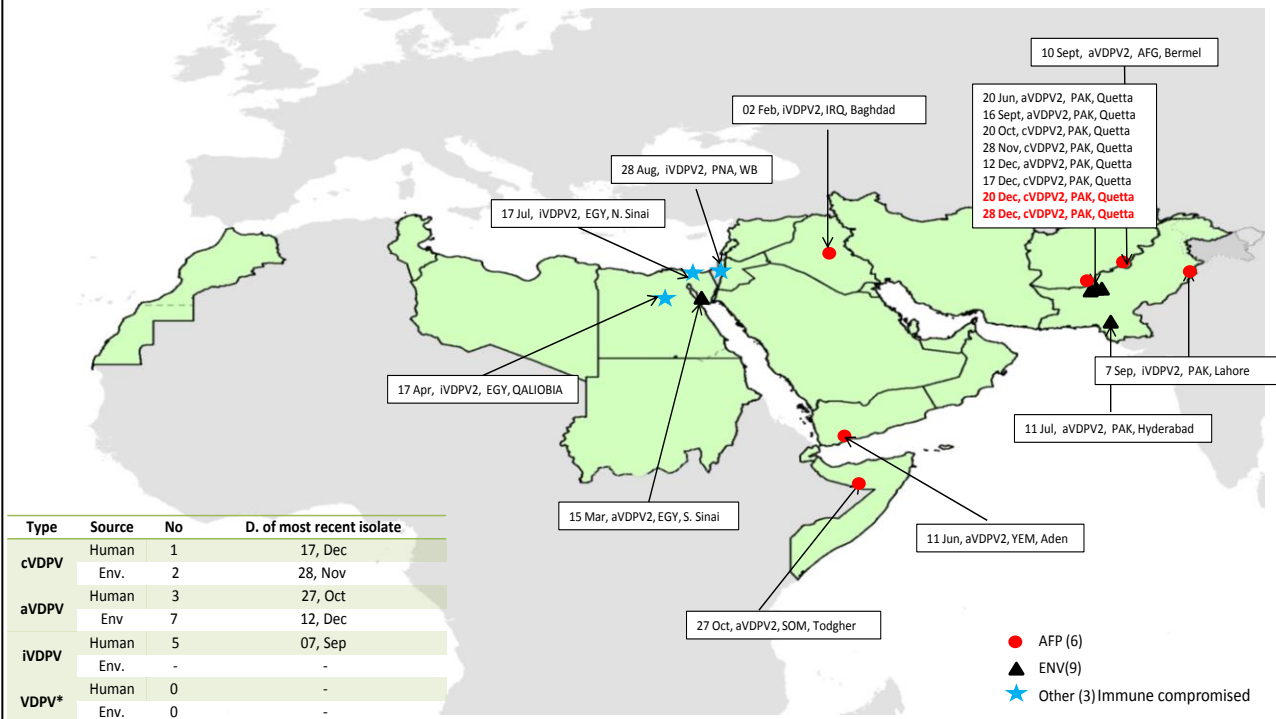
SL2 isolates, EMR countries from Human and ENV 2016



* Focused tOPV campaign in El Tur district (S. Sinai/Egy) as a response to VDPV2 isolation

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VDPV2 isolates, EMR countries, 2016



Type	Source	No	D. of most recent isolate
cVDPV	Human	1	17, Dec
	Env.	2	28, Nov
aVDPV	Human	3	27, Oct
	Env.	7	12, Dec
iVDPV	Human	5	07, Sep
	Env.	-	-
VDPV*	Human	0	-
	Env.	0	-

* Pending sequencing

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