



AFP SURVEILLANCE

30-Jan-17

Week 04, ending 29 January 2017

Number 956

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

Country	Reported AFP cases by week of onset - Week (04/17) / Ending on : 29/01/2017														
	Total AFP 2015	Total AFP 2016	Total AFP to date, 2017	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	W04 29 Jan 17
Afghanistan	2738	2898	93	68	56	51	57	56	53	50	29	50	26	4	
Bahrain	19	14	0	0	1	1	0	0	0	0	0	0	0	0	0
Djibouti	3	3	0												
Egypt	1046	1092	76	17	33	19	27	18	25	20	30	21	21	23	3
Iran	780	776	33	20	14	17	16	14	15	12	9	10	12	2	
Iraq	520	605	37	11	10	13	18	12	10	9	13	14	12	6	
Jordan ****	90	107	8	3	3	3	1	3	2	2	2	1	4	1	1
Kuwait	32	48	2	0	3	0	5	3	1	1	2	0	0	2	
Lebanon ****	113	111	6	1	5	1	0	1	0	4	2	0	5	1	
Libya	54	70	8	1	3	2	2	2	3	1	4	3	3	1	
Morocco	79	83	0	1	1	2	3	1	2	1	0	0			
Oman	39	39	0	1	0	0	0	2	0	2	0	0	0	0	0
Pakistan	5814	7745	297	160	198	205	162	166	203	178	130	120	120	34	0
Palestine ****	38	46	3	0	0	0	0	0	0	0	1	1	2	0	0
Qatar	11	9	0	0	0	0	0	1	1	0	0	0	0	0	0
Saudi Arabia	254	273	0	8	13	5	8	11	3	10	4	0	0	0	
Somalia	281	316	19	4	4	13	8	5	4	7	1	6	8	4	1
Sudan	436	509	30	10	9	7	9	4	4	6	1	16	9	4	0
Syria ****	235	303	12	5	5	3	5	11	10	4	9	6	3	2	
Tunisia	64	89	0	3	3	1	1	1	2	0	0	0	0	0	
U.A.E	31	42	2	1	1	2	2	2	0	1	3	0	0	1	0
Yemen	537	715	44	11	10	11	18	7	7	13	12	17	19	8	0
Total EMR	13214	15893	670	325	372	356	342	320	345	321	252	265	244	93	5

□ No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2015	Total year 2016	29/01		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	1	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					
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	0	2	1	0	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	0	0	
Syria ****	0	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	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	0	0		
Total EMR	74	33	3	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 (04/17) / Ending on : 29/01/2017)

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	12	1	92.4	13	0	93	0	0	86	7	0	5.9	0	0	93.5	0	0	22/01/2017		
Bahrain	14	0	0	0	14	0	4.9	0	0	100.0	0	0	0	0	0	0	0	0	0.0	0	0		0	0	29/01/2017		
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	75	1017	0	2.9	0	0	94.0	0	0	76	0	0	76	0	0	2.5	0	0	71.1	0	0	26/01/2017		
Iran	776	0	0	4	772	0	4.2	0	0	95.4	0	0	33	0	0	11	22	0	2.2	0	0	100.0	0	0	28/01/2017		
Iraq	605	0	0	42	562	1	4.2	17	1	80.3	0	0	37	0	0	28	9	0	3.2	0	0	86.5	0	0	28/01/2017		
Jordan	107	0	0	24	83	0	3.8	4	0	100.0	0	0	8	0	0	8	0	0	3.6	0	0	87.5	0	0	29/01/2017		
Kuwait	48	0	0	13	35	0	5.5	2	0	81.3	0	0	2	0	0	2	0	0	2.9	0	0	50.0	0	0	22/01/2017		
Lebanon	111	0	0	13	98	0	5.8	9	0	82.9	0	0	6	0	0	6	0	0	4.0	0	0	83.3	0	0	28/01/2017		
Libya	70	0	0	2	68	0	3.4	0	0	97.1	0	0	8	0	0	8	0	0	4.9	0	0	100.0	0	0	27/01/2017		
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	29/01/2017		
Pakistan	7745	20	3	244	7476	2	9.9	75	9	88.0	20	0	297	0	0	215	82	0	4.8	0	0	96.0	0	0	29/01/2017		
Palestine	46	0	0	2	44	0	2.4	1	0	97.8	0	0	3	0	0	3	0	0	2.0	0	0	100.0	0	0	29/01/2017		
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	29/01/2017		
Saudi Arabia	273	0	0	78	195	0	2.8	8	8	97.8	0	0	0	0	0	0	0	0	0.0	0	0		0	0	26/01/2017		
Somalia	316	0	0	12	303	1	5.5	0	0	99.1	0	0	19	0	0	19	0	0	4.1	0	0	100.0	0	0	29/01/2017		
Sudan	509	0	0	0	509	0	2.8	0	0	97.6	0	0	30	0	0	16	14	0	2.1	0	0	100.0	0	0	29/01/2017		
Syria	303	0	0	6	297	0	3.9	0	0	87.8	0	0	12	0	0	10	2	0	2.0	0	0	91.7	0	0	27/01/2017		
Tunisia	89	0	0	0	88	1	3.4	0	0	77.5	0	0	0	0	0	0	0	0	0.0	0	0		0	0	26/01/2017		
U.A.E	42	0	0	1	41	0	4.2	0	0	100.0	0	0	2	0	0	2	0	0	2.5	0	0	100.0	0	0	29/01/2017		
Yemen	715	0	0	119	595	1	5.4	27	22	90.8	0	0	44	0	0	43	1	0	4.0	0	0	90.9	0	0	28/01/2017		
EMR	15893	33	3	737	15113	7	6.4	178	42	90.0	33	0	670	0	0	533	137	0	3.4	0	0	92.1	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 - 29/01/2017

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 SHEL TAN	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 (04/17) / Ending on : (29/01/2017)

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	113	2		8	35	68			2											12%	100%	100%	100%	28/01/2017	
Bahrain	PNL Oman																								23/01/2017	
Djibouti	NPL Kenya																								10/09/2016	
Egypt***	RRL Egypt	24			1	16		7													6%	100%		100%	28/01/2017	
Iran	NPL Iran	41				19	22														0%	100%		100%	28/01/2017	
Iraq	RRL Egypt	36			2	11	22	1													12%	100%			26/01/2017	
Jordan	RRL Tunisia	8			1	1	6														25%	100%			25/01/2017	
Kuwait	RRL Kuwait	3				1	2														0%	100%		100%	26/01/2017	
Lebanon	NPL Jordan																				0%				25/01/2017	
Libya	RRL Tunisia	7					7																		27/01/2017	
Morocco	RRL Tunisia	2					2																		27/01/2017	
Oman	NPL Oman																				0%				23/01/2017	
Pakistan	RRL Pakistan	431	1		14	107	308	2				1			1						9%	100%	100%	100%	28/01/2017	
Palestine & UNRWA		3			1		1	1													100%				29/01/2017	
Qatar	NPL Oman																								23/01/2017	
Saudi Arabia	NPL Oman	1						1																	22/01/2017	
Somalia	NPL Kenya	19					8	11																	29/01/2017	
Sudan	RRL Egypt	31	2		1	13	15														6%	100%			29/01/2017	
Syria	RRL Egypt	12			2		4	6													0%	100%			26/01/2017	
Tunisia	RRL Tunisia	2			1		1														3%	100%		100%	27/01/2017	
U.A.E	NPL Oman																								23/01/2017	
Yemen	RRL Egypt	1						1																	28/01/2017	
Total EMR 2017		734	5		28	206	466	30		2		1		1		3	21	3	5		8%	100%	100%	100%		
Total EMR 2016		15726	813	93	2746	11878	38	155	28	471		85	6	553	1	3	21	3	5		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	2
	PENDING								14
	WILD					17	20	2	
AFG Total					9	95	149	185	16
EGY	NEGATIVE	183	178	196	304	410	412	528	20
	PENDING								21
	WILD			2					
	VDPV1			1		1			
	VDPV2			7	3	2	3	1	
EGY Total		183	178	206	307	413	415	529	41
JOR	NEGATIVE								2
	PENDING								1
JOR Total									2
LEB	NEGATIVE								3
	PENDING								2
LEB Total									3
PAK	NEGATIVE	77	68	151	257	237	347	462	11
	PENDING								29
	WILD	79	136	88	63	125	79	59	6
	WILD & VDPV2				2	6	5	3	
	VDPV2					4	8	5	
PAK Total		156	204	239	322	372	439	529	46
EMR	NEGATIVE	260	246	347	570	725	888	1176	33
	PENDING								67
	WILD	79	136	90	63	142	99	61	6
	WILD & VDPV2				2	6	5	3	
	VDPV1			1		1			
VDPV2			7	3	6	11	6		
EMR Total		339	382	445	638	880	1003	1248	106

Table 7: Environmental Wild/VDPV isolate by site

Year	Country	Status	Province	District	Count	First date	Last date		
2016	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		
	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 KHA		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
					RAWALPINDI		4	14-04-16	10-12-16
				SINDH	HYDERABAD		1	05-01-16	05-01-16
					JACOBABAD		3	04-02-16	16-08-16
					KHIGADAP		5	27-01-16	14-07-16
					KHIGQBAL		2	18-01-16	15-03-16
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				69	05-01-16	28-12-16			
2017	PAK	WILD1	BALOCHISTAN	KABDULLAH	1	01-01-17	01-01-17		
				PISHIN	1	02-01-17	02-01-17		
				QUETTA	1	01-01-17	01-01-17		
				KHYBER PAKHTUNKHWA	PESHAWAR	1	10-01-17	10-01-17	
					SINDH	JACOBABAD	1	09-01-17	09-01-17
				KHIGADAP	1	09-01-17	09-01-17		
PAK Total				6	01-01-17	10-01-17			
2017 Total				6	01-01-17	10-01-17			



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

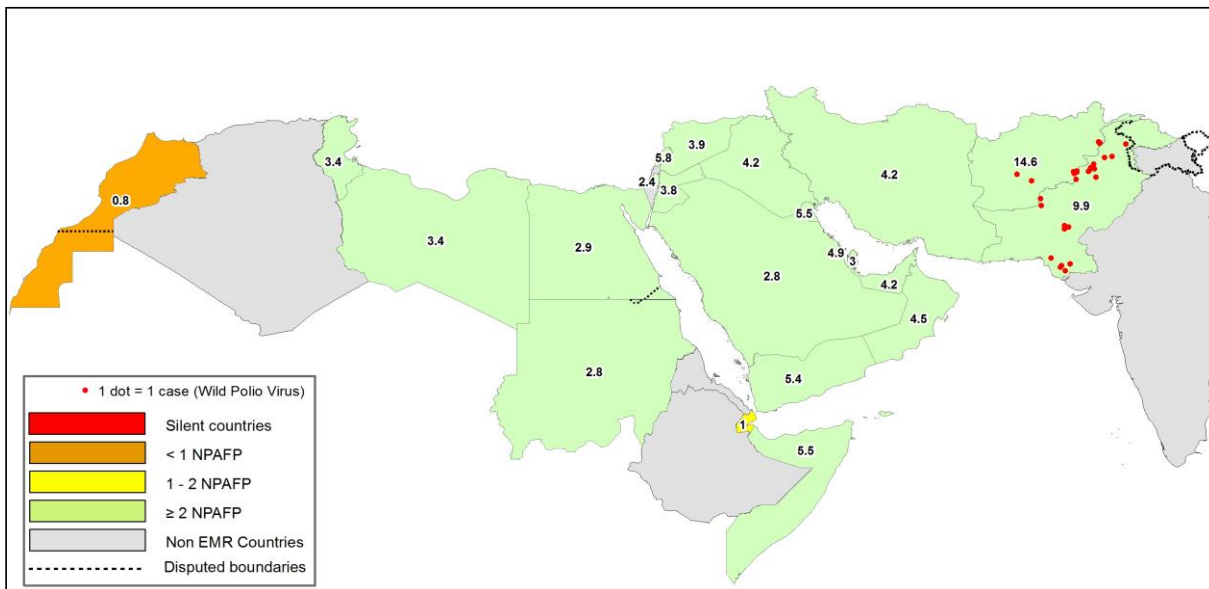


Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2016 - 31/12/2016

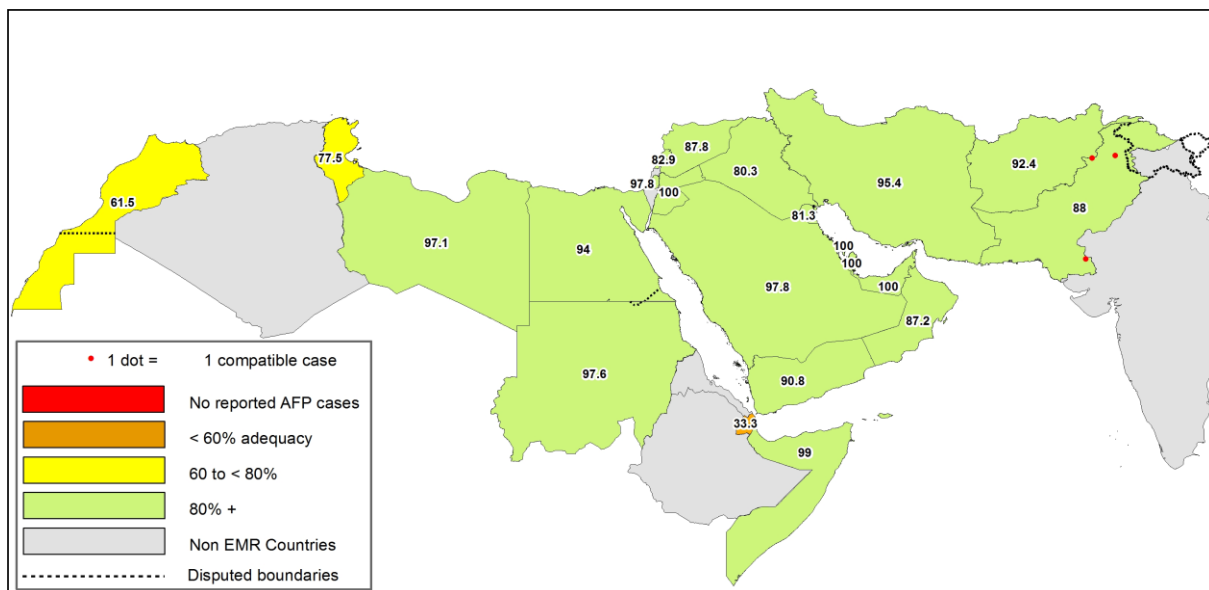


Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2016 - 2017

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

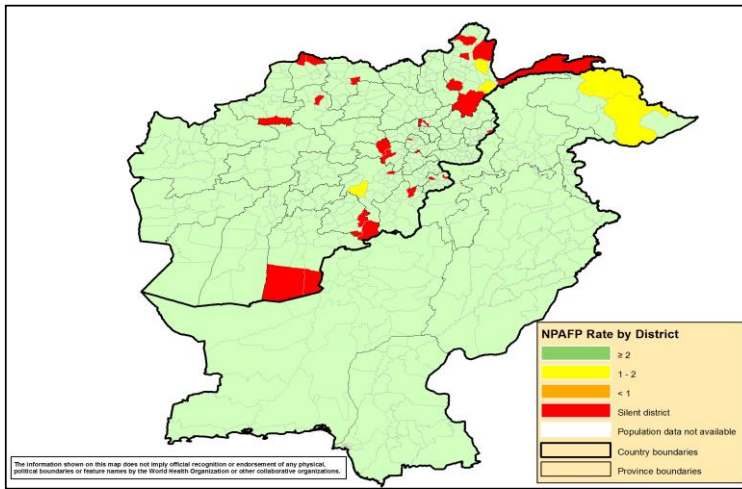


Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan & Pakistan by District 01/01/2016 - 31/12/2016

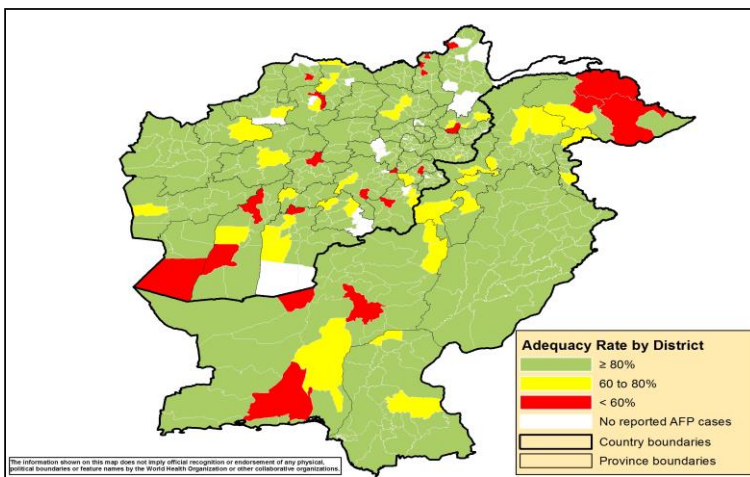


Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan 01/01/2016 - 31/12/2016

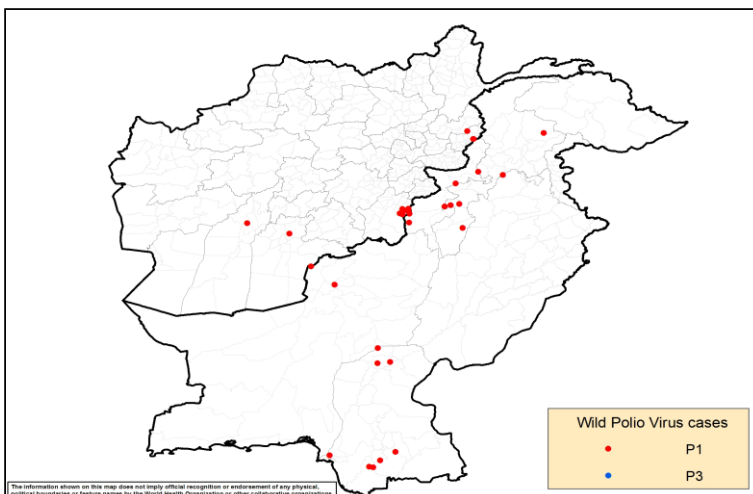




Table 9: Wild Polio cases by district and date of onset of paralysis, Afghanistan 2016-2017

ONSETYR	COUNTRY	PROVINCE	DISTRICT	Count	First case	Last case
2016	AFG	PAKTIKA	BERMEL	7	02-08-16	16-12-16
		KUNAR	SHIGAL WA SHEL TAN	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	BALUCHISTAN	QUETTA	1	17-12-16	17-12-16
	PAK Total			1	17-12-16	17-12-16
2016 Total				1	17-12-16	17-12-16

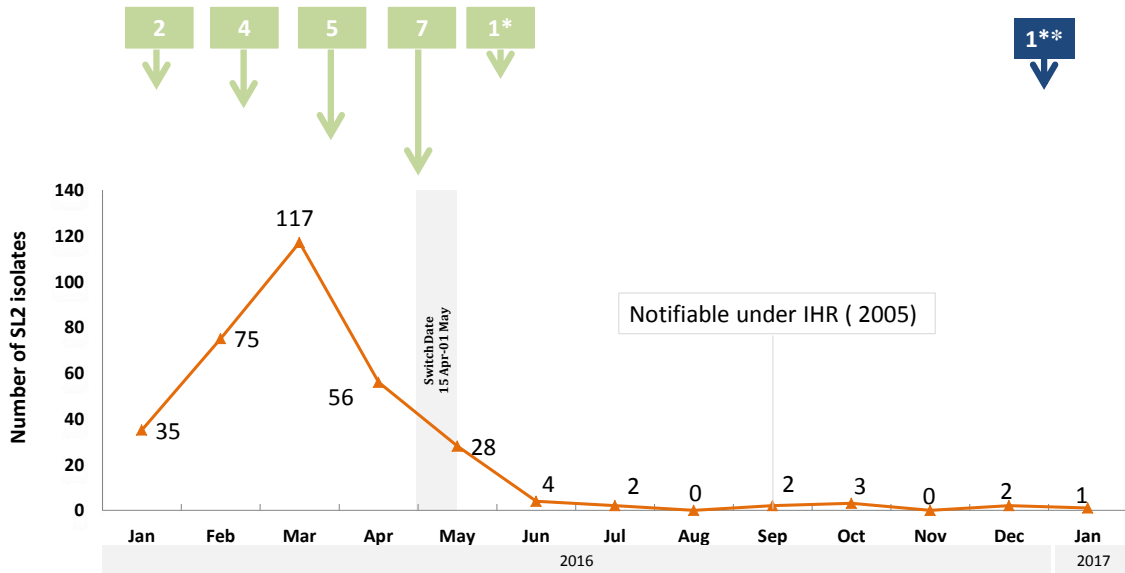
Table 12: VDPV2 and Sabin Like 2 isolates, EMRO countries 2016 - 2017

Country	VDPV2 and SL2 by month, EMR Countries 2016-2017																							
	Source	2016												2017										
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb									
AFG	AFP	1	2	11	3	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	2			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	1*																	
	Contact		1		2	1	1*																	
	ENV																							
EMR	AFP	12	1	15	39	6	8	1	1	1	1			2	1	1	1			1	2		1	
	Contact	4	7	20	18	3	3	1	1	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

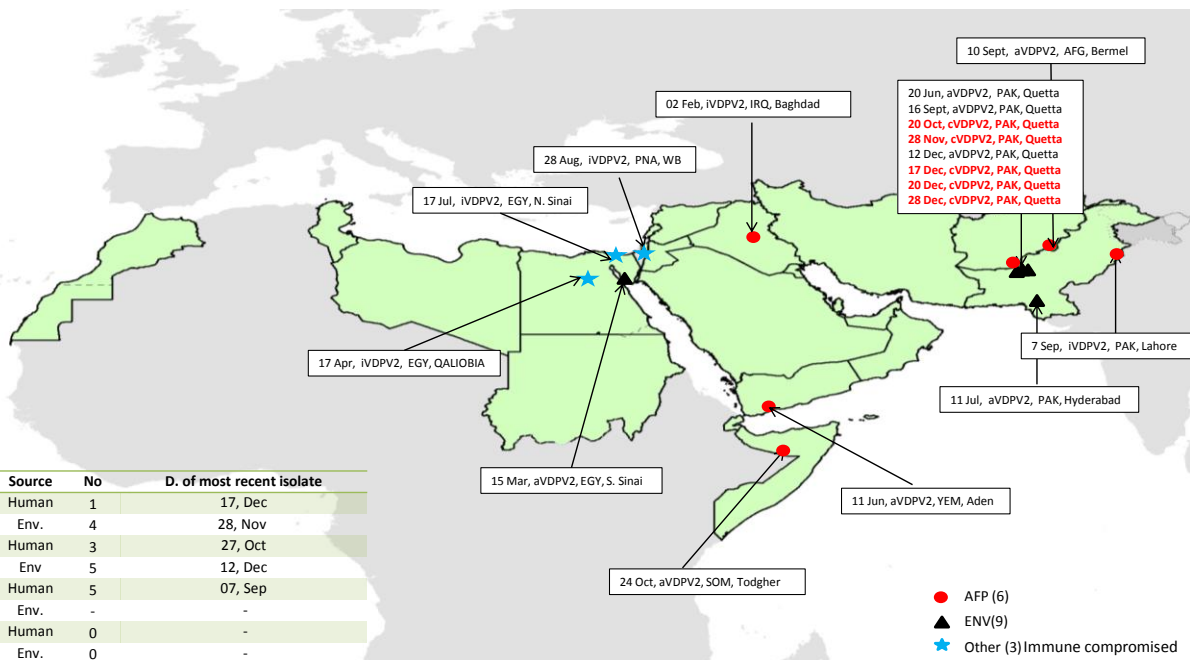


SL2 isolates, EMR countries from Human & ENV 2016/17



* Focused tOPV campaign in El Tur district (S. Sinai/Egy) as a response to VDPV2 isolation
 ** mOPV2 in Quetta block 2-8 Jan. 2017

VDPV2 isolates, EMR countries, 2016



Type	Source	No	D. of most recent isolate
cVDPV	Human	1	17, Dec
	Env.	4	28, Nov
aVDPV	Human	3	27, Oct
	Env.	5	12, Dec
iVDPV	Human	5	07, Sep
	Env.	-	-
VDPV*	Human	0	-
	Env.	0	-

● AFP (6)
 ▲ ENV(9)
 ★ Other (3) Immune compromised

* Pending sequencing

28 Jan 2017