



AFP SURVEILLANCE

27-Mar-17

Week 12, ending 26 March 2017

Number 964

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

Country	Reported AFP cases by week of onset - Week (12/17) / Ending on : 26/03/2017														
	Total AFP 2015	Total AFP 2016	Total AFP to date, 2017	W01 08 Jan 17	W02 15 Jan 17	W03 22 Jan 17	W04 29 Jan 17	W05 05 Feb 17	W06 12 Feb 17	W07 19 Feb 17	W08 26 Feb 17	W09 05 Mar 17	W10 12 Mar 17	W11 19 Mar 17	W12 26 Mar 17
Afghanistan	2738	2905	614	53	43	46	65	51	67	68	55	75	38	33	7
Bahrain	19	14	5	0	0	0	0	0	2	0	1	2	0	0	0
Djibouti	3	3	3	0	0	0	1	0	0	1	0	1	0	0	0
Egypt	1046	1092	280	21	21	24	23	28	22	36	25	26	20	26	
Iran	780	776	131	11	18	9	11	16	20	14	8	11	4	0	0
Iraq	520	605	135	15	14	17	12	9	14	13	11	12	10	2	
Jordan ****	90	107	23	1	4	2	2	1	2	1	3	2	2	2	
Kuwait	32	50	13	0	0	3	2	1	0	1	0	0	0	5	1
Lebanon ****	113	111	27	0	5	1	4	0	3	4	4	2	2	1	1
Libya	54	70	20	3	4	2	2	0	2	3	1	1	1		
Morocco	79	83	24	0	3	1	2	2	3	2	2	3	5	1	0
Oman	39	39	4	0	0	0	0	0	1	2	0	1	0	0	0
Pakistan	5814	7838	1699	163	199	174	143	174	177	191	167	162	95	23	1
Palestine ****	38	46	9	1	3	0	1	0	1	2	0	0	1	0	0
Qatar	11	9	5	0	0	0	0	1	3	0	1	0	0	0	0
Saudi Arabia	254	273	47	5	7	7	5	10	6	3	3	1	0	0	0
Somalia	281	316	82	6	9	10	6	2	8	9	11	6	10	5	0
Sudan	436	509	107	16	10	7	14	9	7	11	8	5	16	3	0
Syria ****	235	303	52	6	4	3	5	5	8	3	9	4	3	1	
Tunisia	64	90	7	1	1	0	1	0	1	3	0	0			
U.A.E	31	42	15	0	0	1	2	2	1	0	3	3	2	0	
Yemen	537	715	174	17	22	14	13	7	16	12	17	25	18	13	
Total EMR	13214	15996	3476	319	367	321	314	318	364	379	329	342	227	115	10

□ No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2015	Total year 2016	26/03		Confirmed polio cases by month of onset												
			2016	2017	April 2016	May 2016	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	January 2017	February 2017	March 2017	
Afghanistan	20	13	3	3	1	1	0	0	2	2	2	0	1	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	0	0	0			
Egypt	0	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				
Jordan ****	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	0	0			
Lebanon ****	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				
Morocco	0	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				
Pakistan	54	20	8	2	3	0	2	1	0	2	2	1	1	1	1		
Palestine ****	0	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				
Saudi Arabia	0	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				
Tunisia	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				
Yemen	0	0	0	0	0	0	0	0	0	0	0	0	0				
Total EMR	74	33	11	5	4	1	2	1	2	4	4	1	2	3	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 (12/17) / Ending on : 26/03/2017

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	2905	13	0	13	2879	1	14.4	12	1	92.2	13	0	614	3	0	209	402	0	12.8	0	0	94.0	3	0	19/03/2017
Bahrain	14	0	0	0	14	0	4.9	0	0	100.0	0	0	5	0	0	5	0	0	7.4	0	0	100.0	0	0	19/03/2017
Djibouti	3	0	0	0	3	0	1.0	0	0	33.3	0	0	3	0	0	3	0	0	4.3	0	0	100.0	0	0	19/03/2017
Egypt	1092	0	0	1	1091	0	2.9	1	0	94.1	0	0	280	0	0	102	176	0	3.1	0	0	82.5	0	0	16/03/2017
Iran	776	0	0	0	775	1	4.2	0	0	95.5	0	0	131	0	0	8	123	0	3.0	0	0	100.0	0	0	15/03/2017
Iraq	605	0	0	6	598	1	4.2	6	1	80.7	0	0	135	0	0	34	101	0	3.9	0	0	87.4	0	0	16/03/2017
Jordan	107	0	0	7	100	0	3.8	7	0	100.0	0	0	23	0	0	20	3	0	3.6	0	0	100.0	0	0	15/03/2017
Kuwait	50	0	0	0	50	0	5.7	0	0	90.0	0	0	13	0	0	7	6	0	6.4	0	0	61.5	0	0	12/03/2017
Lebanon	111	0	0	10	101	0	5.8	10	0	82.9	0	0	27	0	0	9	18	0	6.2	0	0	88.9	0	0	18/03/2017
Libya	70	0	0	0	70	0	3.4	0	0	97.1	0	0	20	0	0	10	10	0	4.0	0	0	90.0	0	0	17/03/2017
Morocco	83	0	0	0	83	0	0.8	0	0	61.4	0	0	24	0	0	15	9	0	1.0	0	0	66.7	0	0	10/03/2017
Oman	39	0	0	0	39	0	4.5	0	0	89.7	0	0	4	0	0	1	3	0	2.0	0	0	75.0	0	0	19/03/2017
Pakistan	7838	20	5	55	7756	2	10.0	48	10	87.5	20	0	1699	2	0	380	1317	0	9.4	0	0	91.2	2	0	19/03/2017
Palestine	46	0	0	0	46	0	2.4	0	0	97.8	0	0	9	0	0	7	2	0	2.0	0	0	100.0	0	0	19/03/2017
Qatar	9	0	0	0	9	0	3.0	0	0	100.0	0	0	5	0	0	5	0	0	7.2	0	0	80.0	0	0	19/03/2017
Saudi Arabia	273	0	0	13	260	0	2.8	9	9	97.8	0	0	47	0	0	47	0	0	2.1	0	0	97.9	0	0	19/03/2017
Somalia	316	0	0	0	315	1	5.5	0	0	99.1	0	0	82	0	0	18	64	0	6.1	0	0	97.6	0	0	19/03/2017
Sudan	509	0	0	0	509	0	2.8	0	0	97.6	0	0	107	0	0	26	81	0	2.6	0	0	99.1	0	0	19/03/2017
Syria	303	0	0	0	303	0	3.9	0	0	87.8	0	0	52	0	0	20	32	0	2.9	0	0	88.5	0	0	18/03/2017
Tunisia	90	0	0	0	89	1	3.4	0	0	76.7	0	0	7	0	0	3	4	0	1.1	0	0	85.7	0	0	10/03/2017
U.A.E	42	0	0	0	42	0	4.2	0	0	100.0	0	0	15	0	0	11	4	0	6.4	0	0	93.3	0	0	19/03/2017
Yemen	715	0	0	7	707	1	5.4	2	0	90.9	0	0	174	0	0	172	2	0	5.4	0	0	91.4	0	0	19/03/2017
EMR	15996	33	5	112	15839	8	6.4	95	21	89.8	33	0	3476	5	0	1112	2357	0	6.0	0	0	91.4	5	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 - 26/03/2017

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 (12/17) / Ending on : (26/03/2017)

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	579	48	3	65	373	90		3	39							1			12%	100%	98%	98%	18/03/2017		
Bahrain	PNL Oman	5				3	2													0%	100%		100%	13/03/2017		
Djibouti	NPL Kenya	3			1		2													100%			100%	19/03/2017		
Egypt***	RRL Egypt	276	5		19	117	43	92		1		1	1				1		1	11%	100%	100%	100%	19/03/2017		
Iran	NPL Iran	133	3			122	8			2				2						0%	100%	100%	100%	11/03/2017		
Iraq	RRL Egypt	136	8		13	96	14	5		3				2						10%	100%	100%	100%	16/03/2017		
Jordan	RRL Tunisia	24			2	19	3													11%	100%			12/03/2017		
Kuwait	RRL Kuwait	10				9	1													0%	89%		100%	20/03/2017		
Lebanon	NPL Jordan	23	1		3	19														14%	100%			12/03/2017		
Libya	RRL Tunisia	11				9		2												0%	100%		100%	24/02/2017		
Morocco	RRL Tunisia	21				14	7													0%	100%		100%	16/03/2017		
Oman	NPL Oman	4			2	1		1												25%	100%		100%	13/03/2017		
Pakistan	RRL Pakistan	1842	110	5	214	1288	225	2	2	69		1		79			1		1	11%	100%	100%	99%	18/03/2017		
Palestine & UNRWA		9			4	4	1													50%	14%		100%	19/03/2017		
Qatar	NPL Oman	5				5														0%	100%		100%	13/03/2017		
Saudi Arabia	NPL Oman	50			7	28		15												14%	91%		100%	12/03/2017		
Somalia	NPL Kenya	82	9	2	7	46	10	8		6				8					2	14%	30%		100%	19/03/2017		
Sudan	RRL Egypt	95	2		9	68	11	5		1										10%	100%	100%	100%	19/03/2017		
Syria	RRL Egypt	45				35	3	7												0%	100%			18/03/2017		
Tunisia	RRL Tunisia	8				4		4												3%	100%		100%	24/02/2017		
U.A.E	NPL Oman	8	1			5	2			1				1						0%	100%	100%	67%	13/03/2017		
Yemen	RRL Egypt	89				1		88												39%	100%		100%	19/03/2017		
Total EMR 2017		3458	187	10	346	2266	420	231	5	122		1	1	132			3		4	11%	98%	99%	99%			
Total EMR 2016		15756	823	94	2776	12036		24	28	479		85	7	564	1	2	23	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	45
	PENDING								10
	WILD					17	20	2	2
AFG Total					9	95	149	185	57
EGY	NEGATIVE	183	178	196	304	410	412	528	77
	PENDING								26
	WILD			2					
	VDPV1			1		1			
	VDPV2			7	3	2	3	1	
EGY Total		183	178	206	307	413	415	529	103
JOR	NEGATIVE							2	5
	PENDING								4
JOR Total								2	9
LEB	NEGATIVE							4	3
	PENDING								2
LEB Total								3	5
PAK	NEGATIVE	77	68	151	257	237	347	462	96
	PENDING								31
	WILD	79	136	88	63	125	79	59	21
	WILD & VDPV2				2	6	5	3	
	VDPV2					4	8	5	
PAK Total		156	204	239	322	372	439	529	148
EMR	NEGATIVE	260	246	347	570	725	888	1179	226
	PENDING								73
	WILD	79	136	90	63	142	99	61	23
	WILD & VDPV2				2	6	5	3	
	VDPV1			1		1			
VDPV2			7	3	6	11	6		
EMR Total		339	382	445	638	880	1003	1248	322

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-Dec	23-Dec
			NANGARHAR	JALALABAD	1	26-Dec	26-Dec
AFG Total					2	23-Dec	26-Dec
2016	EGY	VDPV2	SOUTH SINIA	EL TUR	1	15-Mar	15-Mar
EGY Total					1	15-Mar	15-Mar
2016	PAK	WILD1	BALOCHISTAN	KABDULLAH	6	15-Jan	2-Dec
				PISHIN	4	2-Aug	16-Sep
				QUETTA	11	12-Feb	20-Nov
			KHYBER PAKHTUNKHWA	DIKHAN	1	16-Jul	16-Jul
				PESHAWAR	10	11-Jan	10-Dec
				DERA GHAZI KHA	1	12-May	12-May
			PUNJAB	FAISALABAD	2	3-Feb	2-Jul
				LAHORE	3	5-Aug	18-Oct
				MULTAN	2	8-Nov	8-Dec
			SINDH	RAWALPINDI	4	14-Apr	10-Dec
				HYDERABAD	1	5-Jan	5-Jan
				JACOBABAD	3	4-Feb	16-Aug
				KHIBALDIA	1	14-Jul	14-Jul
				KHIGADAP	4	27-Jan	9-Mar
				KHIGIQBAL	2	18-Jan	15-Mar
2016	PAK	WILD1+VDPV2	BALOCHISTAN	KHILANDHI	1	14-Dec	14-Dec
				SUKKUR	3	12-Jan	19-Mar
				QUETTA	3	20-Oct	12-Dec
2016	PAK	VDPV2	BALOCHISTAN	QUETTA	4	20-Jun	28-Dec
				SINDH	HYDERABAD	1	11-Jul
PAK Total					67	5-Jan	28-Dec
2016 Total					70	5-Jan	28-Dec
2017	AFG	WILD1	KANDAHAR	KANDAHAR	1	26-Jan	26-Jan
			NANGARHAR	JALALABAD	1	24-Jan	24-Jan
AFG Total					2	24-Jan	26-Jan
2017	PAK	WILD1	BALOCHISTAN	KABDULLAH	5	1-Jan	1-Mar
				PISHIN	3	2-Jan	2-Mar
				QUETTA	4	1-Jan	12-Feb
			ISLAMABAD	CDA	1	10-Feb	10-Feb
				KHYBER PAKHTUNKHWA	PESHAWAR	2	10-Jan
			PUNJAB	MULTAN	1	9-Jan	9-Jan
				RAWALPINDI	2	10-Jan	10-Feb
			SINDH	KHIGADAP	2	9-Jan	8-Feb
				KHIGIQBAL	1	3-Feb	3-Feb
PAK Total					21	1-Jan	2-Mar
2017 Total					23	1-Jan	2-Mar



Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2017 - 26/03/2017

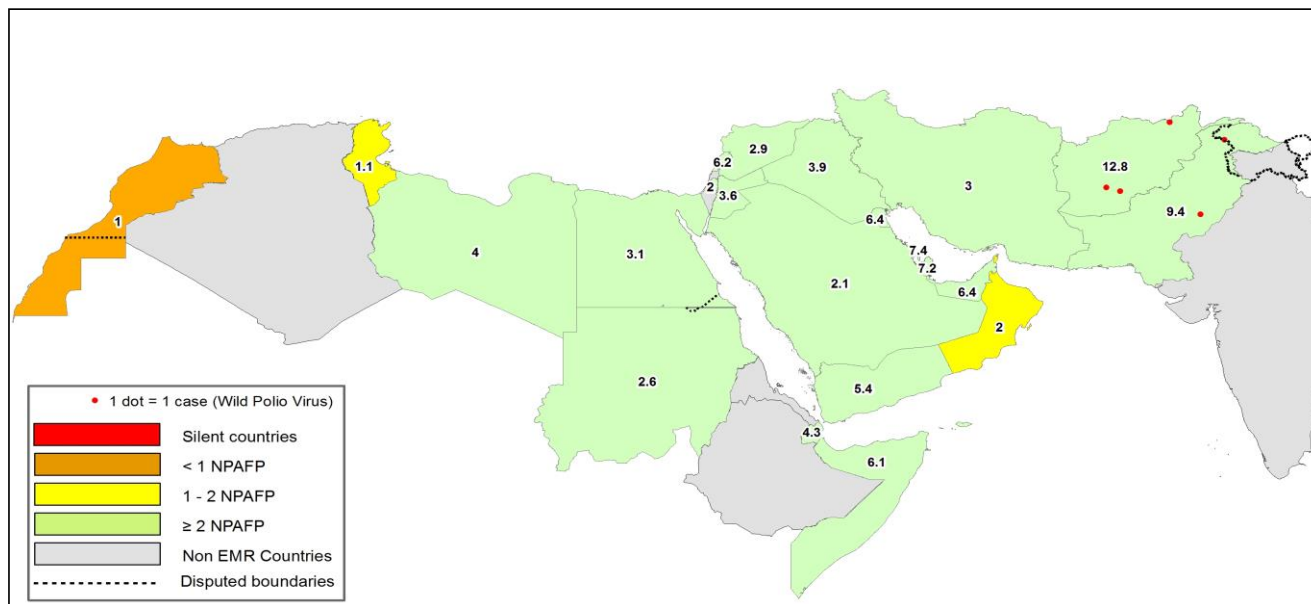


Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2017 - 26/03/2017

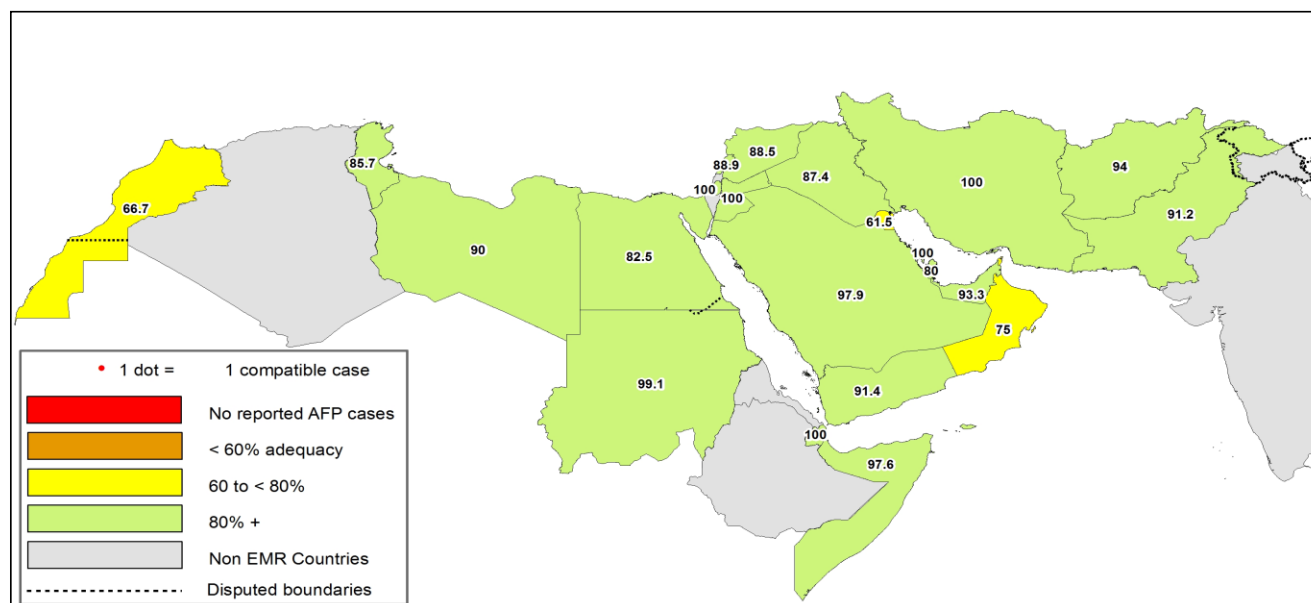


Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2016 - 2017

Year	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
2017	AFG	3	13-01-17	21-02-17
	PAK	2	28-01-17	13-02-17
2017 Total		5	13-01-17	21-02-17

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 01/01/2017 - 26/03/2017

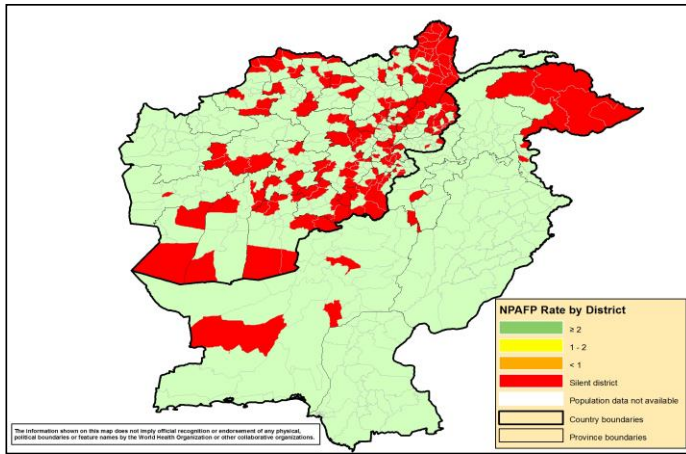


Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan & Pakistan by District 01/01/2017 - 26/03/2017

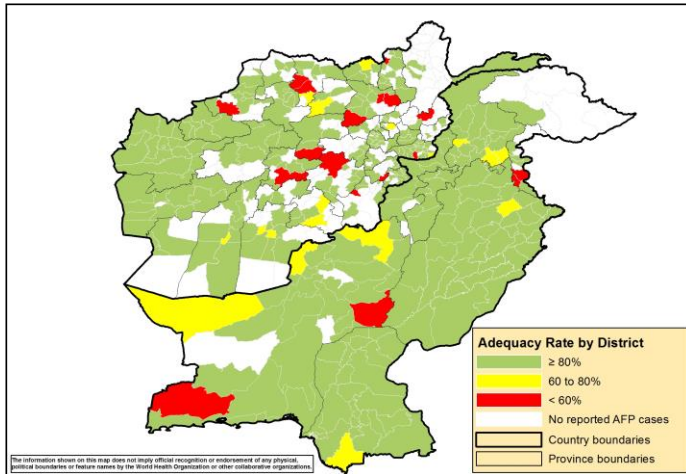
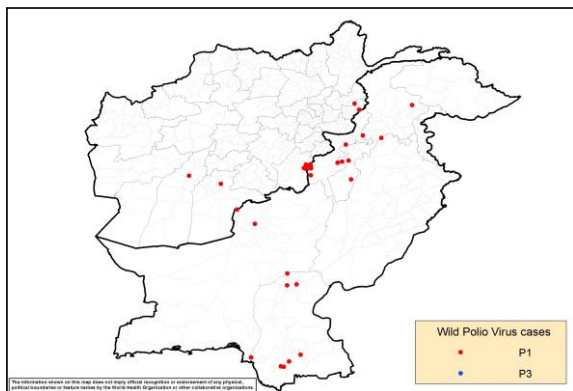


Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan

5a: 01/01/2016 - 31/12/2016



5b: 01/01/2017 - 26/03/2017

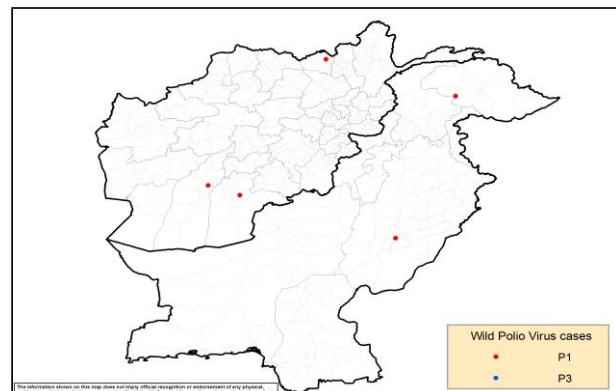




Table 9: Wild Polio cases by district and date of onset of paralysis, Afghanistan 2016-2017

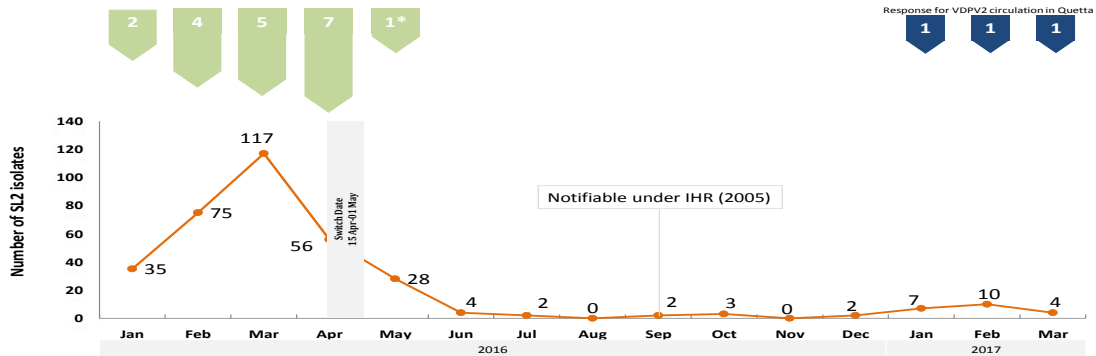
ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case
2016	PAKTIKA	BERMEL	7	02-08-16	16-12-16
	KUNAR	SHIGAL WA SHEL TAN	4	01-02-16	29-05-16
	KANDAHAR	SHAHWALIKOT	1	04-04-16	04-04-16
	HILMAND	NAWZAD	1	23-01-16	23-01-16
2016 Total			13	23-01-16	16-12-16
2017	KUNDUZ	DASHT-E-ARCHI	1	21-02-17	21-02-17
	HILMAND	NAHR-E-SARAJ	1	21-01-17	21-01-17
	KANDAHAR	KANDAHAR	1	13-01-17	13-01-17
2017 Total			3	13-01-17	21-02-17

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

ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case
2016	BALOCHISTAN	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
	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	
2016 Total			20	17-01-16	22-12-16
2017	GILGIT BALTISTAN	DIAMIR	1	13-02-17	13-02-17
	PUNJAB	LODHRAN	1	28-01-17	28-01-17
2017 Total			2	28-01-17	13-02-17



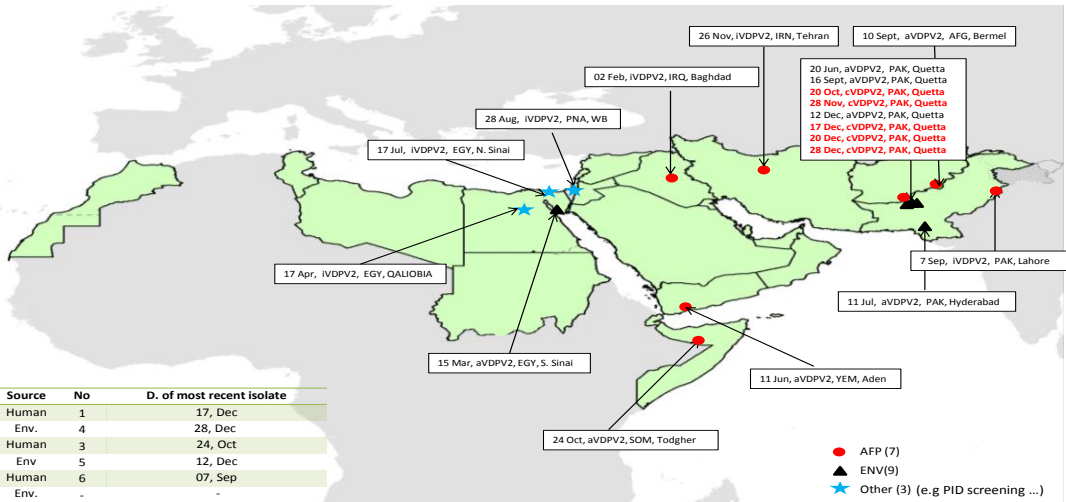
SL2 isolates, EMR countries from Human & ENV 2016/17



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

tOPV SIA's
mOPV2 SIA's 26 Mar 2017

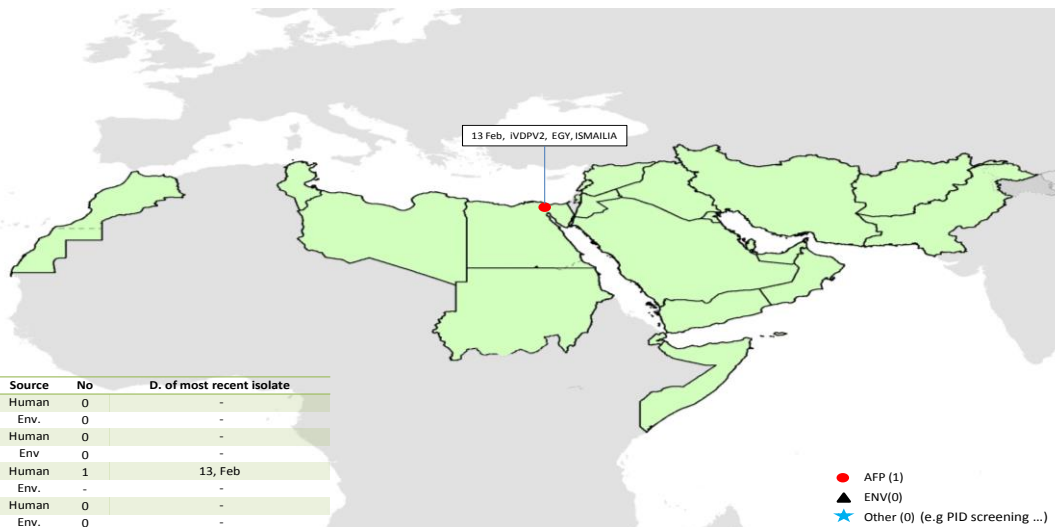
VDPV2 isolates, EMR countries, 2016



Type	Source	No	D. of most recent isolate
cVDPV	Human	1	17, Dec
	Env.	4	28, Dec
aVDPV	Human	3	24, Oct
	Env.	5	12, Dec
IVDPV	Human	6	07, Sep
	Env.	-	-

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VDPV2 isolates, EMR countries, 2017



Type	Source	No	D. of most recent isolate
cVDPV	Human	0	-
	Env.	0	-
aVDPV	Human	0	-
	Env.	0	-
IVDPV	Human	1	13, Feb
	Env.	-	-
VDPV*	Human	0	-
	Env.	0	-

* Under investigation

26 Mar 2017