



AFP SURVEILLANCE

20-Mar-17

Week 11, ending 19 March 2017

Number 963

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

Country	Reported AFP cases by week of onset - Week (11/17) / Ending on : 19/03/2017														
	Total AFP 2015	Total AFP 2016	Total AFP to date, 2017	W52 01 Jan 17	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
Afghanistan	2738	2904	560	29	53	43	46	65	51	67	67	55	74	21	5
Bahrain	19	14	5	0	0	0	0	0	0	2	0	1	2	0	0
Djibouti	3	3	3	0	0	0	0	1	0	0	1	0	1	0	0
Egypt	1046	1092	262	30	21	21	24	23	28	22	36	25	26	18	10
Iran	780	776	128	9	11	18	9	11	16	20	14	8	9	3	
Iraq	520	605	127	14	15	14	17	12	9	14	13	11	10	6	
Jordan ****	90	107	21	2	1	4	2	2	1	2	1	3	2	2	
Kuwait	32	50	7	2	0	0	3	2	1	0	1	0	0		
Lebanon ****	113	111	25	2	0	5	1	4	0	3	4	4	2	2	
Libya	54	70	20	4	3	4	2	2	0	2	3	1	1	1	
Morocco	79	84	17	0	0	3	1	2	2	3	1	1	3	1	
Oman	39	39	4	0	0	0	0	0	0	1	2	0	1	0	0
Pakistan	5814	7834	1477	151	161	199	172	139	171	173	181	146	93	12	0
Palestine ****	38	46	8	1	1	3	0	1	0	1	2	0	0	0	0
Qatar	11	9	5	0	0	0	0	0	1	3	0	1	0	0	0
Saudi Arabia	254	273	47	4	5	7	7	5	10	6	3	3	1	0	0
Somalia	281	316	75	1	6	9	10	6	2	8	9	11	6	8	0
Sudan	436	509	94	1	16	10	7	14	9	7	9	8	4	9	0
Syria ****	235	303	50	9	6	4	3	5	5	8	3	9	3	3	
Tunisia	64	90	7	0	1	1	0	1	0	1	3	0	0		
U.A.E	31	42	14	3	0	0	1	2	2	1	0	3	3	1	0
Yemen	537	715	154	12	17	21	14	13	7	16	10	17	24	15	0
Total EMR	13214	15992	3110	274	317	366	319	310	315	360	363	307	265	102	15

□ No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2015	Total year 2016	19/03		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	2	1	1	0	0	2	2	2	0	1	2		
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	0		
Iran	0	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	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	0	0		
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pakistan	54	20	7	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	0		
Qatar	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	0	0		
Somalia	0	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		
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	0	0		
Total EMR	74	33	10	4	4	1	2	1	2	4	4	1	2	3	1	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 (11/17) / Ending on : 19/03/2017

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	2904	13	0	12	2879	1	14.4	8	0	92.3	13	0	560	2	0	232	326	0	12.7	0	0	93.8	2	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	8.1	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	4.7	0	0	100.0	0	0	19/03/2017		
Egypt	1092	0	0	1	1091	0	2.9	1	0	94.1	0	0	262	0	0	87	174	0	3.2	0	0	79.8	0	0	16/03/2017		
Iran	776	0	0	0	775	1	4.2	0	0	95.5	0	0	128	0	0	18	110	0	3.2	0	0	100.0	0	0	15/03/2017		
Iraq	605	0	0	7	597	1	4.2	6	1	80.7	0	0	127	0	0	44	83	0	4.0	0	0	86.6	0	0	16/03/2017		
Jordan	107	0	0	7	100	0	3.8	6	0	100.0	0	0	21	0	0	20	1	0	3.5	0	0	100.0	0	0	15/03/2017		
Kuwait	50	0	0	0	50	0	5.7	0	0	90.0	0	0	7	0	0	1	6	0	3.7	0	0	85.7	0	0	12/03/2017		
Lebanon	111	0	0	10	101	0	5.8	10	0	82.9	0	0	25	0	0	7	18	0	6.2	0	0	88.0	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	4.3	0	0	90.0	0	0	17/03/2017		
Morocco	84	0	0	5	79	0	0.8	5	0	60.7	0	0	17	0	0	13	4	0	0.8	0	0	76.5	0	0	10/03/2017		
Oman	39	0	0	0	39	0	4.5	0	0	87.2	0	0	4	0	0	1	3	0	2.2	0	0	75.0	0	0	19/03/2017		
Pakistan	7834	20	5	100	7707	2	10.0	76	11	87.5	20	0	1477	2	0	332	1143	0	8.9	0	0	92.0	2	0	19/03/2017		
Palestine	46	0	0	0	46	0	2.4	0	0	97.8	0	0	8	0	0	6	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	7.9	0	0	80.0	0	0	19/03/2017		
Saudi Arabia	273	0	0	25	248	0	2.8	11	10	97.8	0	0	47	0	0	47	0	0	2.3	0	0	97.9	0	0	19/03/2017		
Somalia	316	0	0	0	315	1	5.5	0	0	99.1	0	0	75	0	0	22	53	0	6.1	0	0	97.3	0	0	19/03/2017		
Sudan	509	0	0	0	509	0	2.8	0	0	97.6	0	0	94	0	0	17	77	0	2.4	0	0	98.9	0	0	19/03/2017		
Syria	303	0	0	0	303	0	3.9	0	0	87.8	0	0	50	0	0	18	32	0	3.0	0	0	90.0	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	1.2	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	14	0	0	10	4	0	6.5	0	0	92.9	0	0	19/03/2017		
Yemen	715	0	0	7	707	1	5.4	2	0	90.9	0	0	154	0	0	152	2	0	5.2	0	0	92.9	0	0	19/03/2017		
EMR	15992	33	5	174	15773	8	6.4	125	22	89.8	33	0	3110	4	0	1053	2052	0	5.8	0	0	91.7	4	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 - 19/03/2017

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 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 (11/17) / Ending on : (19/03/2017)

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	540	34	1	56	311	138		2	28											12%	100%	100%	99%	18/03/2017	
Bahrain	PNL Oman	3					3																		13/03/2017	
Djibouti	NPL Kenya	3			1		1	1													100%			100%	19/03/2017	
Egypt***	RRL Egypt	202	5		19	117	61		1			1	1				1		1		11%	100%	100%	100%	19/03/2017	
Iran	NPL Iran	120	3			104	9	4		2				2							0%	100%	100%	100%	11/03/2017	
Iraq	RRL Egypt	128	8		12	83	22	3		3				2							10%	100%	100%	100%	16/03/2017	
Jordan	RRL Tunisia	20			2	17	1														12%	100%			12/03/2017	
Kuwait	RRL Kuwait	10				9	1														0%	89%		100%	20/03/2017	
Lebanon	NPL Jordan	17			3	14															18%	100%			12/03/2017	
Libya	RRL Tunisia	11				9		2													0%	100%		100%	24/02/2017	
Morocco	RRL Tunisia	17				10	7														0%	100%		100%	16/03/2017	
Oman	NPL Oman	4			2	1	1														27%	100%		100%	13/03/2017	
Pakistan	RRL Pakistan	1676	90	4	167	1067	346	2	2	59		1		66			1				11%	100%	100%	99%	18/03/2017	
Palestine & UNRWA		8			4	3		1													57%	17%		100%	19/03/2017	
Qatar	NPL Oman	5				3	2														0%	100%		100%	13/03/2017	
Saudi Arabia	NPL Oman	50			7	28	2	13													14%	91%		100%	12/03/2017	
Somalia	NPL Kenya	75	7	2	6	38	10	12		5				7					1		15%	26%		100%	19/03/2017	
Sudan	RRL Egypt	95	2		9	68	16			1											10%	100%	100%	100%	19/03/2017	
Syria	RRL Egypt	44				35	9														0%	100%			18/03/2017	
Tunisia	RRL Tunisia	8				4		4													3%	100%		100%	24/02/2017	
U.A.E	NPL Oman	4	1			3				1				1							0%	100%	100%	100%	13/03/2017	
Yemen	RRL Egypt	88				1		87													39%	100%		100%	19/03/2017	
Total EMR 2017		3128	150	7	288	1925	568	190	4	100		1	1	107			2		2		11%	98%	100%	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	32
	PENDING								16
	WILD					17	20	2	1
AFG Total					9	95	149	185	49
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	6
	PENDING								2
JOR Total								2	8
LEB	NEGATIVE							3	4
	PENDING								
LEB Total								3	4
PAK	NEGATIVE	77	68	151	257	237	347	462	81
	PENDING								37
	WILD	79	136	88	63	125	79	59	19
	WILD & VDPV2				2	6	5	3	
	VDPV2					4	8	5	
PAK Total		156	204	239	322	372	439	529	137
EMR	NEGATIVE	260	246	347	570	725	888	1178	200
	PENDING								81
	WILD	79	136	90	63	142	99	61	20
	WILD & VDPV2				2	6	5	3	
	VDPV1			1		1			
VDPV2			7	3	6	11	6		
EMR Total		339	382	445	638	880	1003	1248	301

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 KHAN	1	12-May	12-May
			PUNJAB	FAISALABAD	2	3-Feb	2-Jul
				LAHORE	3	5-Aug	18-Oct
				MULTAN	2	8-Nov	8-Dec
				RAWALPINDI	4	14-Apr	10-Dec
			SINDH	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
				KHILANDHI	1	14-Dec	14-Dec
			WILD1+VDPV2	BALOCHISTAN	QUETTA	3	20-Oct
VDPV2	BALOCHISTAN	QUETTA	4	20-Jun	28-Dec		
	SINDH	HYDERABAD	1	11-Jul	11-Jul		
PAK Total					67	5-Jan	28-Dec
2016 Total					70	5-Jan	28-Dec
2017	AFG	WILD1	NANGARHAR	JALALABAD	1	24-Jan	24-Jan
			AFG Total				1
	PAK	WILD1	BALOCHISTAN	KABDULLAH	4	1-Jan	15-Feb
				PISHIN	2	2-Jan	2-Feb
				QUETTA	4	1-Jan	12-Feb
			ISLAMABAD	CDA	1	10-Feb	10-Feb
			KHYBER PAKHTUNKHWA	PESHAWAR	2	10-Jan	10-Feb
			PUNJAB	MULTAN	1	9-Jan	9-Jan
				RAWALPINDI	2	10-Jan	10-Feb
				KHIGADAP	2	9-Jan	8-Feb
			SINDH	KHIGIQBAL	1	3-Feb	3-Feb
PAK Total					19	1-Jan	15-Feb
2017 Total					20	1-Jan	15-Feb



Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2017 - 19/03/2017

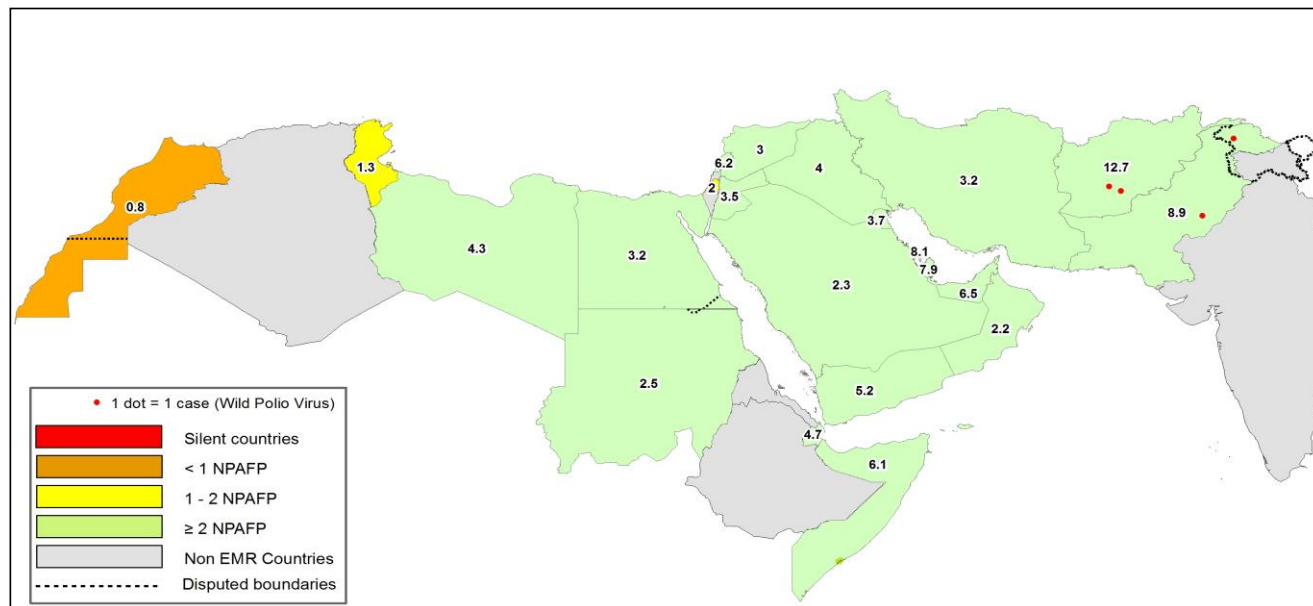


Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2017 - 19/03/2017

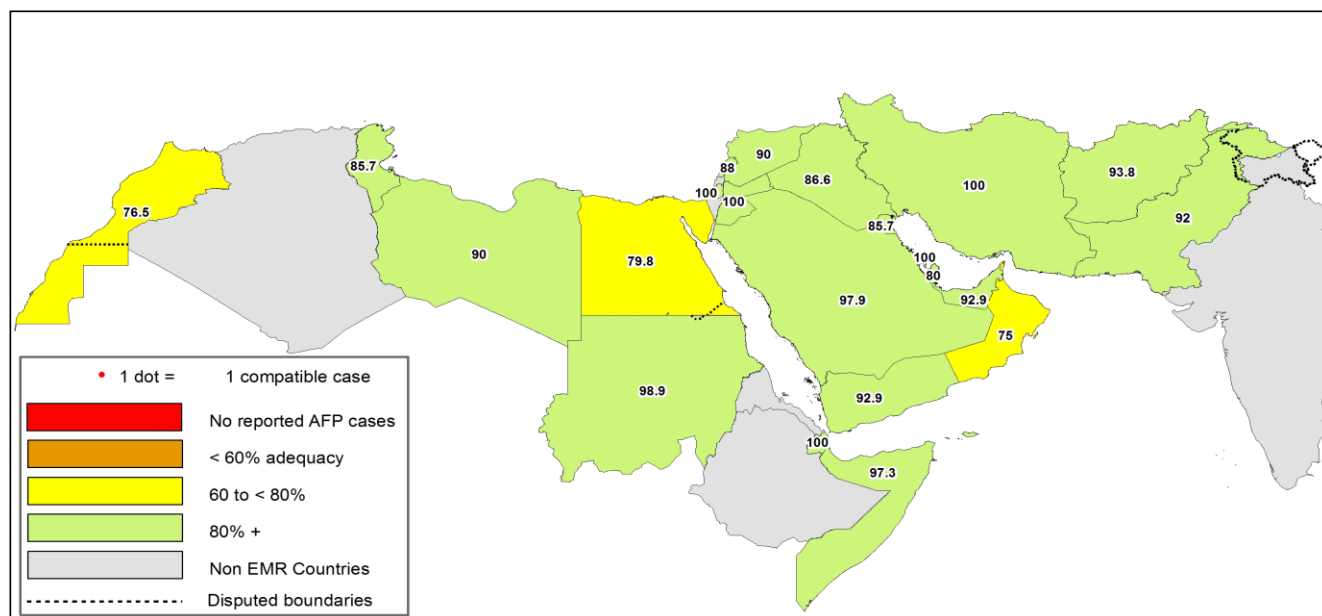


Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2016 - 2017

Year	COUNTRY	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	2	13-01-17	21-01-17
	PAK	2	28-01-17	13-02-17
2017 Total		4	13-01-17	13-02-17

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 - 19/03/2017

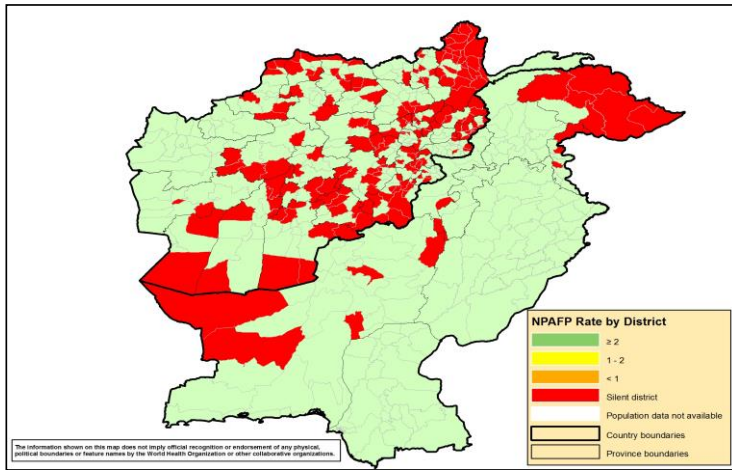


Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan & Pakistan by District 01/01/2017 - 19/03/2017

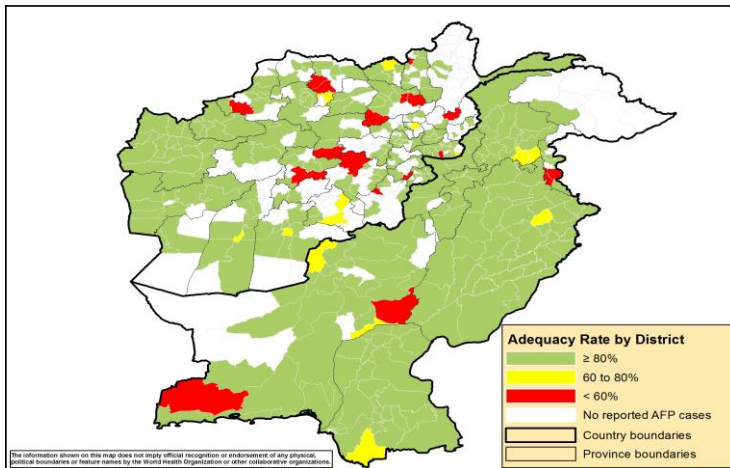
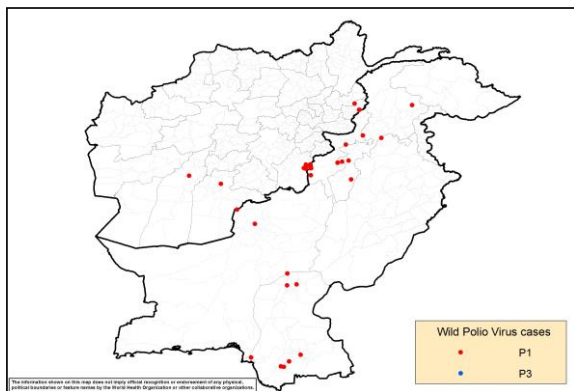


Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan

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



5b: 01/01/2017 - 19/03/2017

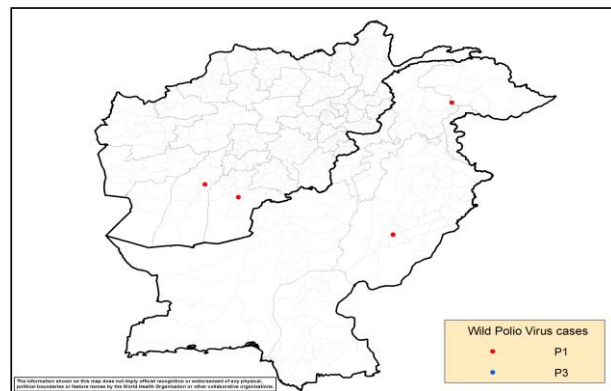




Table 9: Wild Polio cases by district and date of onset of paralysis, Afghanistan 2016-2017

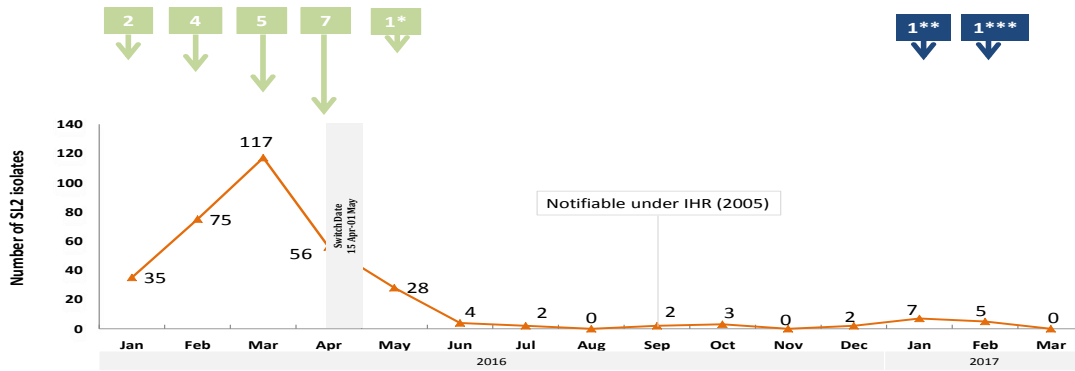
ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case
2016	PAKTIKA	BERMEL	7	02-08-16	16-12-16
	KUNAR	SHIGAL WA SHEL TAN	4	01-02-16	29-05-16
	KANDAHAR	SHAHWALIKOT	1	04-04-16	04-04-16
	HILMAND	NAWZAD	1	23-01-16	23-01-16
2016 Total			13	23-01-16	16-12-16
2017	HILMAND	NAHR-E-SARAJ	1	21-01-17	21-01-17
	KANDAHAR	KANDAHAR	1	13-01-17	13-01-17
2017 Total			2	13-01-17	21-01-17

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



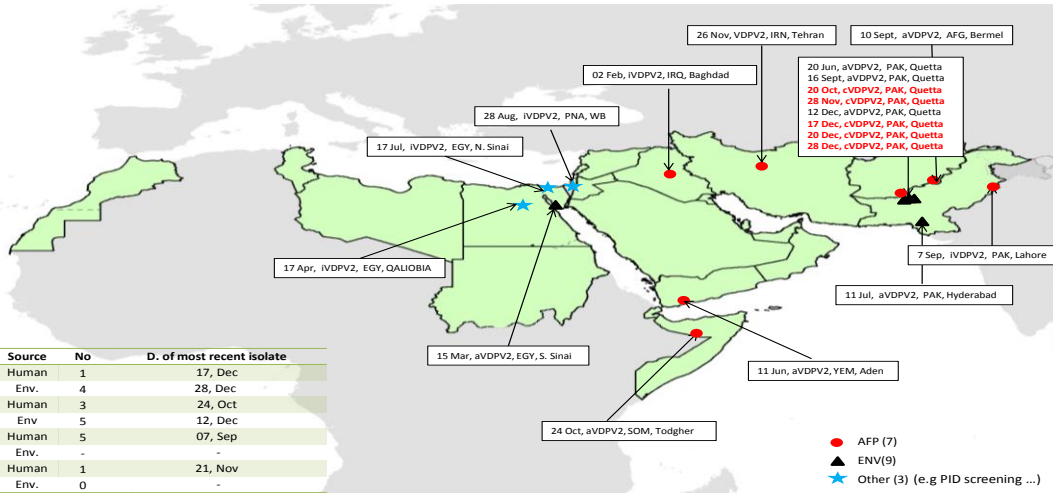
SL2 isolates, EMR countries from Human & ENV 2016/17



* Focused tOPV campaign in El Tur district (S. Sana/Egy) as a response to VDPV2 isolation
 ** mOPV2 in Quetta block 2-8 Jan, 2017
 *** mOPV2 in Quetta block 6-8 February, 2017

tOPV SIAs
 mOPV2 19 Mar 2017

VDPV2 isolates, EMR countries, 2016

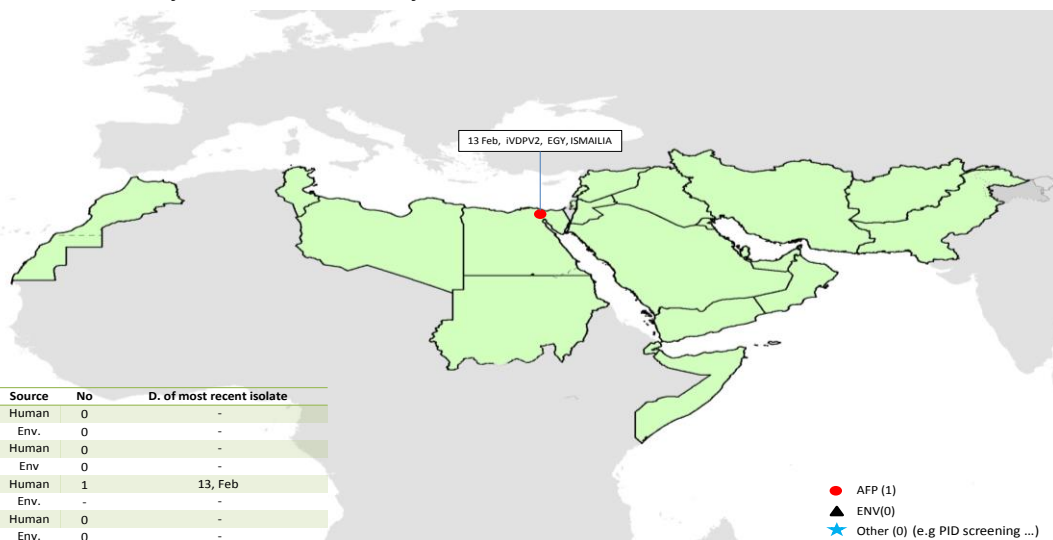


Type	Source	No	D. of most recent isolate
cVDPV	Human	1	17, Dec
	Env.	4	28, Dec
aVDPV	Human	3	24, Oct
	Env.	5	12, Dec
IVDPV	Human	5	07, Sep
	Env.	-	-
VDPV*	Human	1	21, Nov
	Env.	0	-

* Under investigation

19 Mar 2017

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

19 Mar 2017