



World Health Organization – Regional Office for Eastern Mediterranean

AFP SURVEILLANCE

3-Apr-17

Week 13, ending 02 April 2017

Number 965

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

Country	Reported AFP cases by week of onset - Week (13/17) / Ending on : 30/03/2017														
	Total AFP 2015	Total AFP 2016	Total AFP to date, 2017	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	W13 02 Apr 17
Afghanistan	2738	2905	645	43	47	66	51	67	68	55	75	38	43	26	
Bahrain	19	14	5	0	0	0	0	2	0	1	2	0	0	0	
Djibouti	3	3	4	0	0	1	0	0	1	0	1	0	1	0	0
Egypt	1046	1092	307	21	24	23	28	22	36	25	26	20	28	24	1
Iran	780	776	140	18	9	11	16	20	14	8	12	6	2	4	
Iraq	520	605	155	14	17	12	9	14	13	11	12	12	14	6	
Jordan ****	90	107	25	4	2	2	1	2	1	3	2	2	2	2	
Kuwait	32	50	14	0	3	2	1	0	1	0	0	0	5	2	0
Lebanon ****	113	111	28	5	1	4	0	3	4	4	2	2	1	1	1
Libya	54	70	20	4	2	2	0	2	3	1	1	1			
Morocco	79	83	28	3	1	2	2	3	2	3	4	5	1	2	
Oman	39	39	5	0	0	0	0	1	2	1	1	0	0	0	
Pakistan	5814	7839	1875	199	176	143	175	180	196	174	181	133	101	24	0
Palestine ****	38	46	9	3	0	1	0	1	2	0	0	1	0	0	
Qatar	11	9	5	0	0	0	1	3	0	1	0	0	0	0	0
Saudi Arabia	254	273	56	7	7	5	10	6	3	3	2	3	4	1	
Somalia	281	316	92	9	10	6	2	8	9	11	6	12	8	5	0
Sudan	436	509	114	10	7	14	9	7	11	8	5	16	6	3	
Syria ****	235	303	58	4	3	5	5	8	3	9	5	4	3	2	
Tunisia	64	90	9	1	0	1	0	1	3	0	1	1	0	0	
U.A.E	31	42	15	0	1	2	2	1	0	3	2	3	0	0	0
Yemen	537	715	189	22	14	13	7	17	12	17	25	19	16	10	
Total EMR	13214	15997	3798	367	324	315	319	368	384	338	365	278	235	112	3

□ No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2015	Total year 2016	02/04		Confirmed polio cases by month of onset											
			2016	2017	May 2016	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	January 2017	February 2017	March 2017	April 2017
Afghanistan	20	13	4	3	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	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	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	0	
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Pakistan	54	20	8	2	0	2	1	0	2	2	1	1	1	1	0	
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	12	5	1	2	1	2	4	4	1	2	3	2	0	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 (13/17) / Ending on : 01/04/2017

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	
		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	13	1	92.2	13	0	645	3	0	159	483	0	12.4	1	0	94.0	3	0	30/03/2017
Bahrain	14	0	0	0	14	0	4.9	0	0	100.0	0	0	5	0	0	5	0	0	6.8	0	0	100.0	0	0	30/03/2017
Djibouti	3	0	0	0	3	0	1.0	0	0	33.3	0	0	4	0	0	4	0	0	5.4	0	0	75.0	0	0	02/04/2017
Egypt	1092	0	0	1	1091	0	2.9	1	0	94.1	0	0	307	0	0	99	206	0	3.2	0	0	90.6	0	0	30/03/2017
Iran	776	0	0	0	775	1	4.2	0	0	95.5	0	0	140	0	0	12	128	0	3.0	0	0	100.0	0	0	29/03/2017
Iraq	605	0	0	6	598	1	4.2	6	1	80.7	0	0	155	0	0	44	111	0	4.1	1	0	89.0	0	0	31/03/2017
Jordan	107	0	0	6	101	0	3.8	6	0	100.0	0	0	25	0	0	22	3	0	3.6	0	0	96.0	0	0	29/03/2017
Kuwait	50	0	0	0	50	0	5.7	0	0	90.0	0	0	14	0	0	8	6	0	6.3	0	0	64.3	0	0	02/04/2017
Lebanon	111	0	0	10	101	0	5.8	10	0	82.9	0	0	28	0	0	10	18	0	5.9	0	0	85.7	0	0	31/03/2017
Libya	70	0	0	0	70	0	3.4	0	0	97.1	0	0	20	0	0	10	10	0	3.7	0	0	90.0	0	0	17/03/2017
Morocco	83	0	0	0	83	0	0.8	0	0	61.4	0	0	28	0	0	12	16	0	1.1	0	0	78.6	0	0	31/03/2017
Oman	39	0	0	0	39	0	4.5	0	0	89.7	0	0	5	0	0	2	3	0	2.3	0	0	60.0	0	0	30/03/2017
Pakistan	7839	20	5	40	7772	2	10.0	40	11	87.4	20	0	1875	2	0	327	1546	0	9.5	5	0	90.9	2	0	02/04/2017
Palestine	46	0	0	0	46	0	2.4	0	0	97.8	0	0	9	0	0	6	3	0	1.9	0	0	100.0	0	0	30/03/2017
Qatar	9	0	0	0	9	0	3.0	0	0	100.0	0	0	5	0	0	5	0	0	6.7	0	0	80.0	0	0	02/04/2017
Saudi Arabia	273	0	0	0	273	0	2.8	0	0	97.8	0	0	56	0	0	56	0	0	2.3	0	0	98.2	0	0	31/03/2017
Somalia	316	0	0	0	315	1	5.5	0	0	99.1	0	0	92	0	0	24	68	0	6.3	0	0	97.8	0	0	02/04/2017
Sudan	509	0	0	0	509	0	2.8	0	0	97.6	0	0	114	0	0	13	101	0	2.5	0	0	99.1	0	0	30/03/2017
Syria	303	0	0	0	303	0	3.9	0	0	87.8	0	0	58	0	0	21	37	0	3.0	0	0	87.9	0	0	01/04/2017
Tunisia	90	0	0	0	89	1	3.4	0	0	77.8	0	0	9	0	0	5	4	0	1.4	0	0	88.9	0	0	31/03/2017
U.A.E	42	0	0	0	42	0	4.2	0	0	100.0	0	0	15	0	0	9	6	0	5.9	0	0	93.3	0	0	02/04/2017
Yemen	715	0	0	7	707	1	5.4	7	5	90.9	0	0	189	0	0	187	2	0	5.4	0	0	91.0	0	0	01/04/2017
EMR	15997	33	5	83	15869	8	6.4	83	18	89.8	33	0	3798	5	0	1040	2751	0	6.0	7	0	91.9	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



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Table 4 (a): Most recent wild contacts in EMRO, 01/01/2016 - 02/04/2017

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	



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Table 5: Laboratory investigation of AFP cases with paralysis onset in 2017 up to Week (13/17) / Ending on : (02/04/2017)

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	VDPV	Wild	Sabin	VDPV	Wild	Sabin	VDPV										
Afghanistan	RRL Pakistan	622	50	3	75	426	68		3	40							40			1			13%	100%	98%	98%	31/03/2017
Bahrain	PNL Oman	5				3	2																0%	100%		100%	30/03/2017
Djibouti	NPL Kenya	4					1	3																			02/04/2017
Egypt***	RRL Egypt	286	4	1	28	211	27	15		2					1		1			2			8%	100%	100%	100%	02/04/2017
Iran	NPL Iran	133	3			122		8		2							2						0%	100%	100%	100%	11/03/2017
Iraq	RRL Egypt	156	13		16	102	22	3		4							5						11%	100%	100%	100%	30/03/2017
Jordan	RRL Tunisia	25			2	22	1																10%	100%			02/04/2017
Kuwait	RRL Kuwait	10				9		1															0%	89%		100%	20/03/2017
Lebanon	NPL Jordan	26	1		3	19	3																14%	100%			02/04/2017
Libya	RRL Tunisia	11				9		2															0%	100%		100%	24/02/2017
Morocco	RRL Tunisia	23				17	6																0%	100%		100%	31/03/2017
Oman	NPL Oman	4			2	1		1															25%	100%		100%	30/03/2017
Pakistan	RRL Pakistan	2054	119	5	233	1381	314	2	2	75				1			84			1			11%	100%	100%	98%	31/03/2017
Palestine & UNRWA		9			4	4		1															50%	14%		100%	30/03/2017
Qatar	NPL Oman	5				5																	0%	100%		100%	30/03/2017
Saudi Arabia	NPL Oman	74			12	34	12	16															17%	93%		100%	02/04/2017
Somalia	NPL Kenya	92	9	2	8	49	8	16		6							8				2		15%	28%		100%	02/04/2017
Sudan	RRL Egypt	115	2		11	90	12			1													10%	100%	100%	100%	01/04/2017
Syria	RRL Egypt	46				36	1	9															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%	30/03/2017
Yemen	RRL Egypt	89	2	2	10	74		1		2							3			2			12%	100%	100%	30%	02/04/2017
Total EMR 2017		3805	204	13	404	2623	479	82	5	133				1	1		144			6		2	11%	98%	99%	96%	
Total EMR 2016		15756	823	94	2779	12040		17	28	480				85	7		564	1	2	23	3	4	15%	94%	98%	94%	

* 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	48
	PENDING								24
	WILD					17	20	2	2
AFG Total					9	95	149	185	74
EGY	NEGATIVE	183	178	196	304	410	412	528	113
	PENDING								18
	WILD			2					
	VDPV1			1		1			
	VDPV2			7	3	2	3	1	
EGY Total		183	178	206	307	413	415	529	131
JOR	NEGATIVE							2	5
	PENDING								4
JOR Total								2	9
LEB	NEGATIVE							4	4
	PENDING								1
LEB Total								3	5
PAK	NEGATIVE	77	68	151	257	237	347	462	112
	PENDING								22
	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	155
EMR	NEGATIVE	260	246	347	570	725	888	1179	282
	PENDING								69
	WILD	79	136	90	63	142	99	61	23
	WILD & VDPV2				2	6	5	3	
	VDPV2			1		1			
EMR Total		339	382	445	638	880	1003	1248	374

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		
	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 PAKHTUNKHW	DIKHAN	1	16-Jul	16-Jul		
				PESHAWAR	10	11-Jan	10-Dec		
			PUNJAB	DERA GHAZI KHA	1	12-May	12-May		
				FAISALABAD	2	3-Feb	2-Jul		
				LAHORE	3	5-Aug	18-Oct		
			SINDH	MULTAN	2	8-Nov	8-Dec		
				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		
			WILD1+VDPV2	BALOCHISTAN	QUETTA	3	20-Oct	12-Dec	
				VDPV2	BALOCHISTAN	QUETTA	4	20-Jun	28-Dec
					SINDH	HYDERABAD	1	11-Jul	11-Jul
			PAK Total					67	5-Jan
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	
	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 PAKHTUNKHW	PESHAWAR	2	10-Jan	10-Feb		
				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 - 02/04/2017

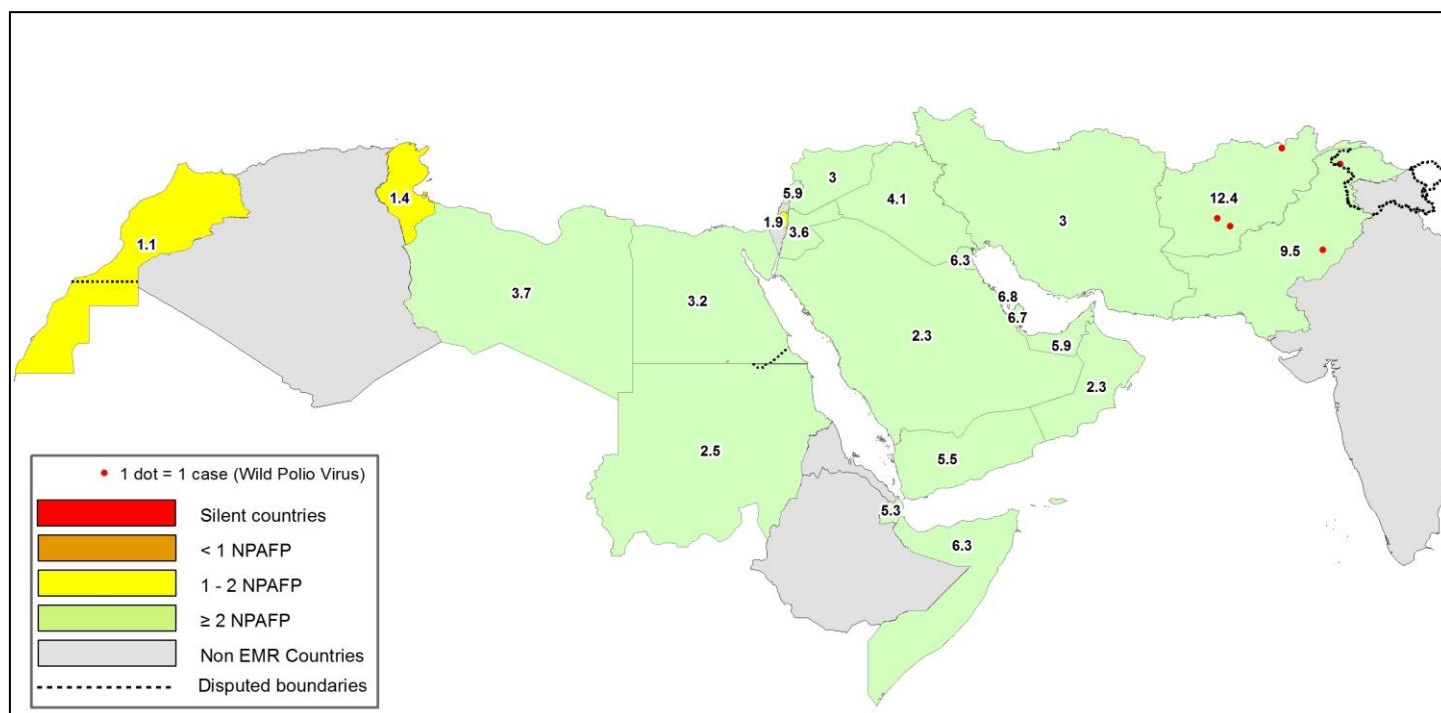


Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2017 - 02/04/2017

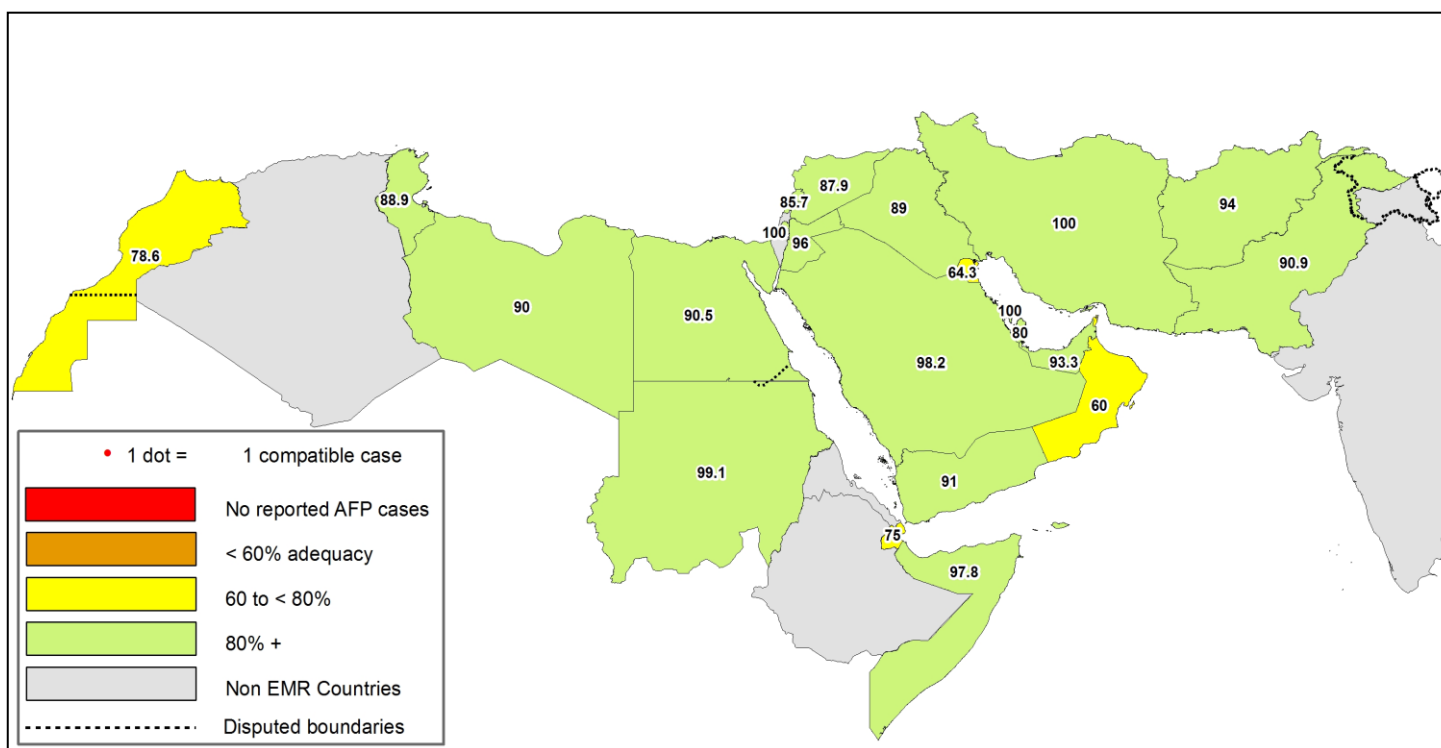


Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2016 - 2017

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 - 02/04/2017

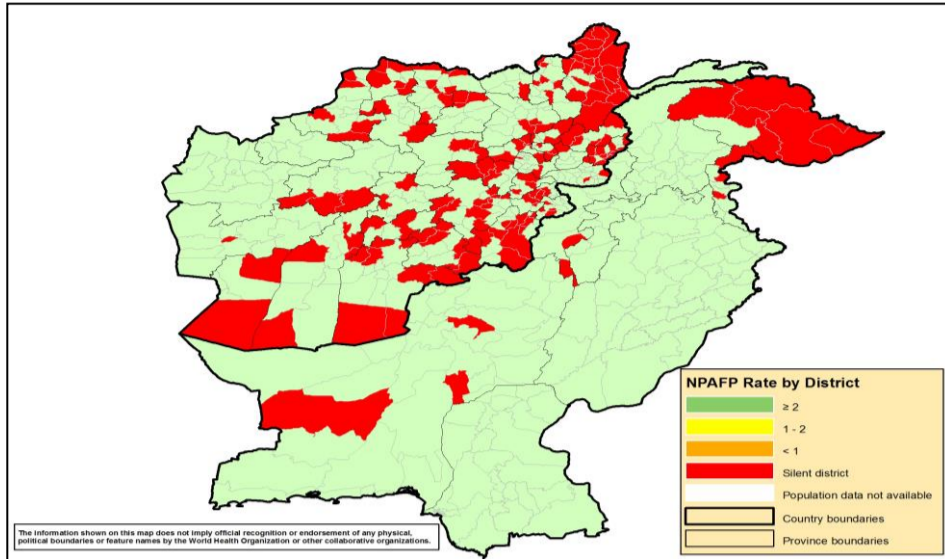


Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan & Pakistan by District 01/01/2017 - 02/04/2017

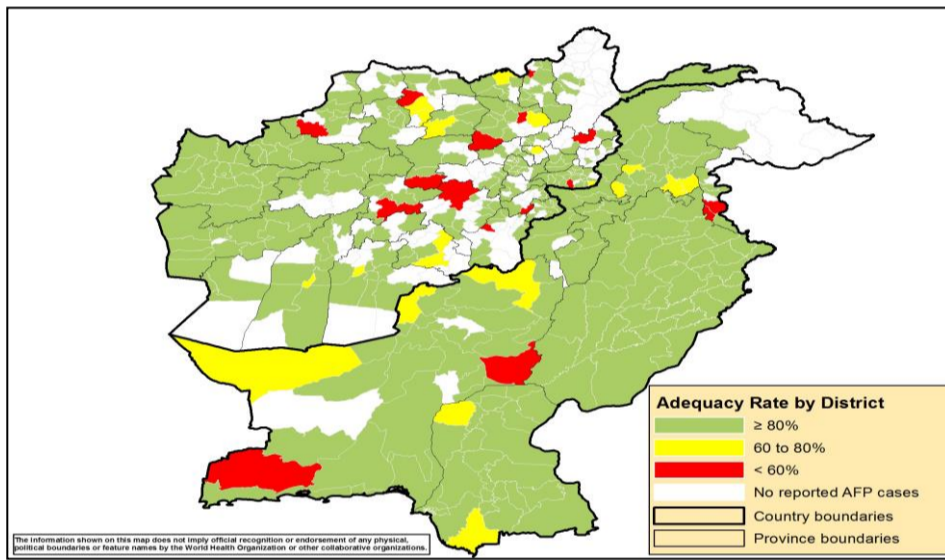
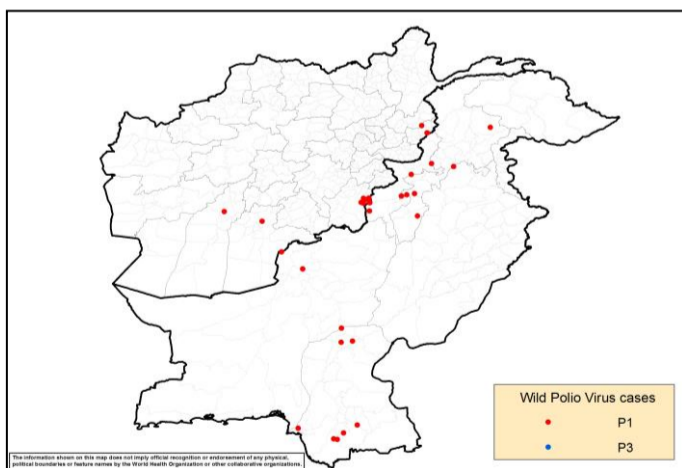
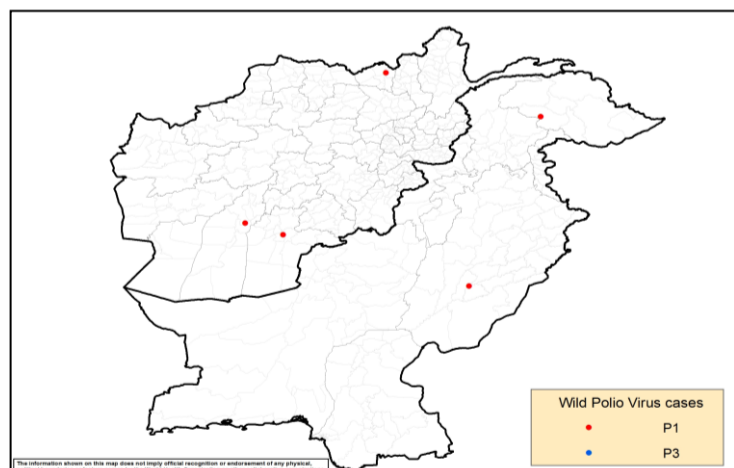


Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan

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



5b: 01/01/2017 - 02/04/2017



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

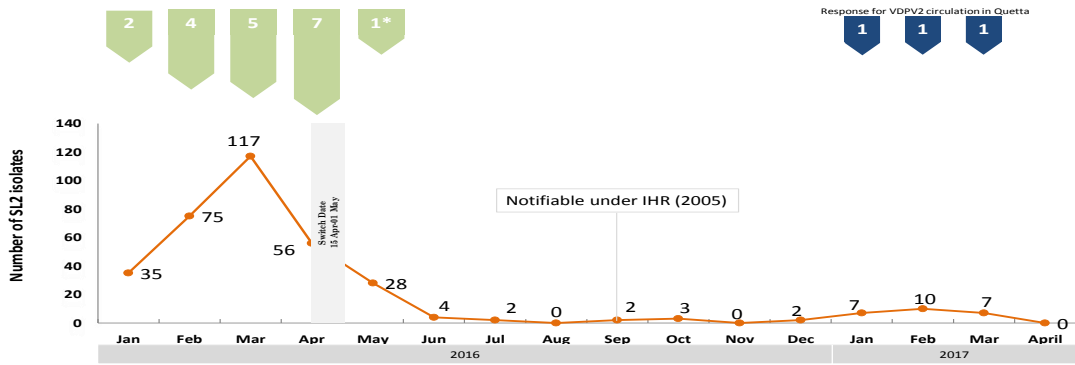
ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case
2016	PAKTIKA	BERMEL	7	02-08-16	16-12-16
	KUNAR	SHIGAL WA SHELTAN	4	01-02-16	29-05-16
	KANDAHAR	SHAHWALIKOT	1	04-04-16	04-04-16
	HILMAND	NAWZAD	1	23-01-16	23-01-16
2016 Total			13	23-01-16	16-12-16
2017	KUNDUZ	DASHT-E-ARCHI	1	21-02-17	21-02-17
	HILMAND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



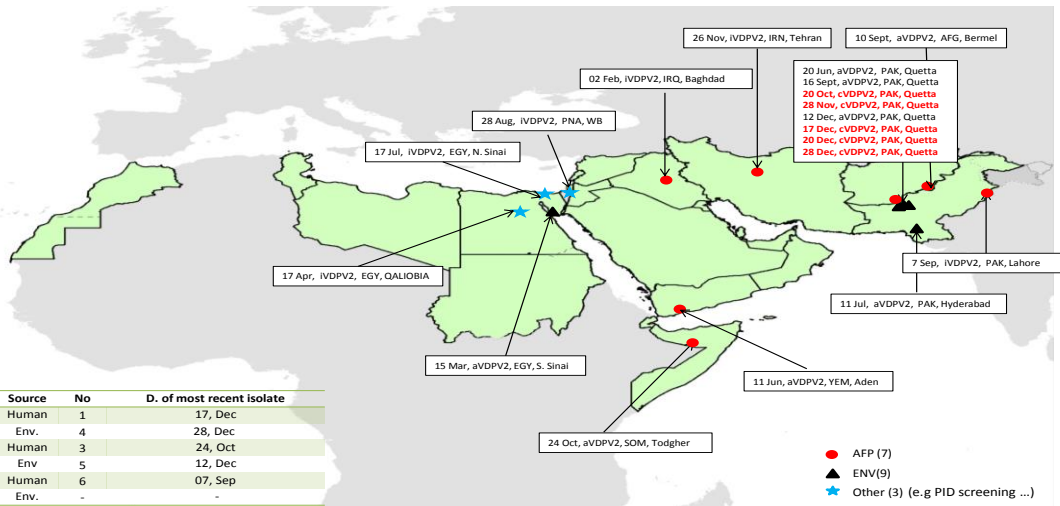
SL2 isolates, EMR countries from Human & ENV 2016/17



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

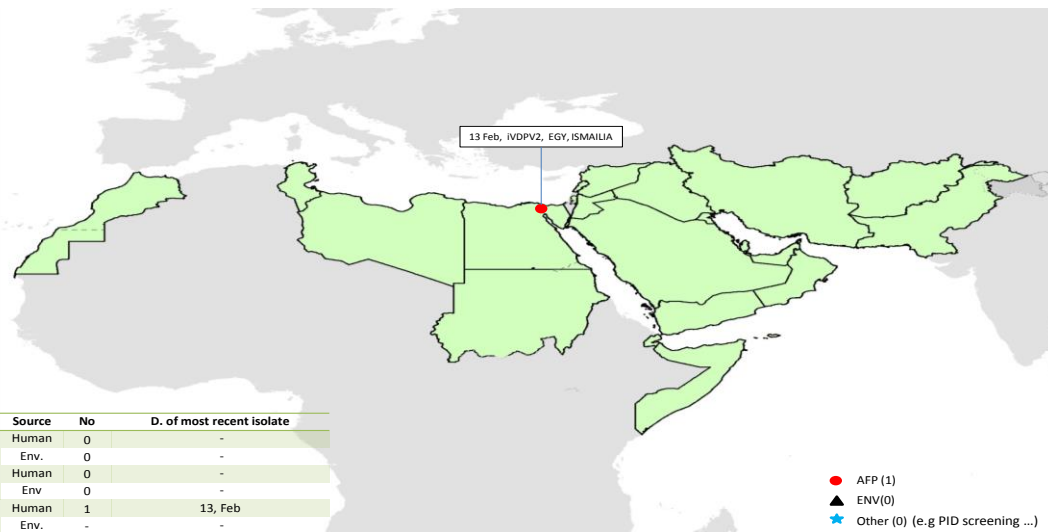
tOPV SIA's
mOPV2 SIA's
2 April 2017

VDPV2 isolates, EMR countries, 2016



2 April 2017

VDPV2 isolates, EMR countries, 2017



2 April 2017