

Highlights of Polio Fax Bulletin No. 1099 for Week 43 2019

I. Poliovirus Transmission

1. **Endemic countries (PAKISTAN & AFGHANISTAN):** Two new wild poliovirus cases reported this week, one from Afghanistan and one from Pakistan. Eleven new positive environmental samples were reported this week, all from Pakistan.

a. *Human samples:* Two new wild poliovirus cases reported this week. Total WPV1 cases in 2019 to date are 96 (19 from Afghanistan and 77 from Pakistan). This compares with 28 cases in 2018 in the same period (Afghanistan – 20 and Pakistan – 8).

- Afghanistan: One new WPV1 case were reported this week and the details are as follows:

The case was reported from Kandahar (Dand) district, Kandahar province, with date of onset 17 August 2019. The case is a 30-month old male child. The child received reportedly 7 doses of oral polio vaccine (OPV) all from supplementary immunization activities (SIAs).

In 2019 to date, 19 WPV1 cases are reported. They include 8 cases from Uruzgan province, 5 cases from Hilmand province, 3 from Kandahar province and 1 each from Kunar, Nangarhar and Paktika provinces. The most recent case has onset of paralysis on 18 September 2019.

- Pakistan: One new WPV1 case were reported this week and the details are as follows:

The case was reported from Lakki Marwat district, Khyber Pakhtunkhwa (KP) province, with date of onset 13 October 2019. The case is a 9-month old male child. The child received reportedly a total of 3 OPV doses all from SIAs and none from routine.

In 2019 to date, 77 WPV1 cases are reported from Pakistan. They include 46 from Khyber Pakhtunkhwa (KP) province, 11 from KP Tribal Districts (KPTD), 8 from Sindh province, 7 from Balochistan province and 5 from Punjab province. The most recent case has onset of paralysis on 13 October 2019.

Environmental samples: Eleven new WPV1 positive environmental samples were reported this week, all from Pakistan.

- Afghanistan: In 2019 to date, there are 42 positive environmental samples with most recent positive sample collected on 24 September 2019.
- Pakistan: In 2019 to date, there are 269 positive environmental samples with most recent positive sample collected on 11 October 2019.

2. Outbreak response countries

SOMALIA: No new cVDPV2 or cVDPV3 isolates from human or environmental samples were reported this week.

- In 2019 to date, Somalia has reported three cVDPV2 cases. The most recent reported case has date of onset of paralysis on 8 May 2019.
- In addition, cVDPV2 was isolated from healthy child sample collected during community sampling on 25 May 2019. aVDPV2 was isolated from an environmental sample on 3 February 2019.
- In 2018: Somalia has reported a total of 12 cases due to cVDPVs, which include 5 due to cVDPV2, 6 due to cVDPV3 and 1 due to co-infection of cVDPV2 and cVDPV3. The last cVDPV3 was isolated from a sewage sample from Mogadishu collected on 23 August 2018.

II. Surveillance performance indicators

In 2019, 20 of 22 member states are meeting the global target of both key surveillance indicators, namely non polio AFP rate of 2 per 100,000 children aged below 15 years and percent AFP cases with adequate specimen 80% and above.

- Djibouti has a non-polio AFP rate of 1.0 and percentage of AFP cases with adequate stool specimens of 66.7%
- Tunisia has a percentage of AFP cases with adequate stool specimens of 71.0%
- In Yemen there are AFP cases pending final classification more than 90 days due to delayed lab results because of delay shipment of specimens to reference polio laboratories.

World Health Organization – Regional Office for Eastern Mediterranean

AFP SURVEILLANCE

28-Oct-19

Week 43, ending 27 October 2019

Number 1099

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

Country	Reported AFP cases by week of onset - Week (43/19) / Ending on : 27/10/2019														
	Total AFP 2017	Total AFP 2018	Total AFP to date, 2019	W32 11 Aug 19	W33 18 Aug 19	W34 25 Aug 19	W35 01 Sep 19	W36 08 Sep 19	W37 15 Sep 19	W38 22 Sep 19	W39 29 Sep 19	W40 06 Oct 19	W41 13 Oct 19	W42 20 Oct 19	W43 27 Oct 19
Afghanistan	3094	3378	3047	38	76	81	60	71	80	74	53	59	77	43	3
Bahrain	18	35	13	0	0	0	0	0	0	0	1	0	0	1	0
Djibouti	4	0	3	1	0	0	1	0	0	0	0	0	0	0	0
Egypt	1242	1246	1042	7	23	29	25	16	28	33	27	21	26	13	
Iran	820	896	763	25	22	17	13	18	21	26	13	10	3	0	
Iraq	699	1023	875	6	15	28	19	21	22	21	23	24	17	12	
Jordan ****	116	115	97	0	2	2	0	2	1	4	0	1	0	1	
Kuwait	69	72	35	0	0	0	2	3	0	2	1	1	0	1	0
Lebanon ****	75	89	66	1	0	1	0	2	0	1	1	2	2	0	
Libya	88	122	81	1	3	9	3	1	2	2	4	3	4	2	
Morocco	143	212	165	1	0	4	4	5	3	8	4	3	1		
Oman	40	28	18	0	1	1	0	1	0	0	1	1	1	0	
Pakistan	10319	12276	11555	250	287	342	294	307	319	299	278	247	259	113	1
Palestine ****	43	44	48	0	1	1	1	1	1	4	0	1	1	0	0
Qatar	18	10	6	1	0	0	0	1	0	0	0	1	0	0	0
Saudi Arabia	276	242	167	1	1	5	2	5	2	0	0	0	1	0	0
Somalia	345	353	297	7	5	7	6	5	5	16	6	4	7	0	0
Sudan	570	579	459	4	10	18	16	15	12	12	14	20	13	10	0
Syria ****	362	362	291	2	3	5	4	8	6	8	2	5	3	3	0
Tunisia	67	68	62	2	2	0	2	3	1	1	1	0	0	0	
U.A.E	58	40	32	0	1	1	2	0	1	1	1	1	0	0	0
Yemen	713	730	598	8	12	10	12	12	20	8	17	13	5	2	1
Total EMR	19179	21920	19720	355	464	561	466	497	524	520	447	417	420	201	5

No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2017	Total year 2018	27/10		Confirmed polio cases by month of onset											
			2018	2019	November 2018	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019	October 2019
Afghanistan	14	21	20	19	1	0	2	1	3	1	5	1	2	2	2	
Bahrain	0	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	0	
Iran	0	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	0	
Jordan ****	0	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	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	0	
Pakistan	8	12	8	77	0	4	4	2	0	11	11	16	12	14	4	3
Palestine ****	0	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	0	
Saudi Arabia	0	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	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	0	
Yemen	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total EMR	22	33	28	96	1	4	6	3	3	12	16	17	14	16	6	3

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

AFP SURVEILLANCE

28-Oct-19

Week 43, ending 27 October 2019

Number 1098

Table 3: Investigation of AFP cases with paralysis onset in 2018 & 2019 up to Week (43/19) / Ending on : 27/10/2019)

COUNTRY	2018											2019											Latest line List Date		
	AFP									Specimen	Wild cases ****		AFP									Specimen		Wild cases ****	
	Total AFP cases onset 2018	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 2019	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	3378	21	0	0	3357	0	16.6	0	0	93.8	21	0	3047	19	0	236	2792	0	18.2	42	7	94.5	19	0	27-10-2019
Bahrain	35	0	0	0	35	0	12.1	0	0	97.1	0	0	13	0	0	2	11	0	5.5	0	0	100.0	0	0	27-10-2019
Djibouti	0	0	0	0	0	0	0.0	0	0		0	0	3	0	0	3	0	1.0	1	0	66.7	0	0	27-10-2019	
Egypt	1246	0	0	0	1245	1	3.2	0	0	93.2	0	0	1042	0	0	89	953	0	3.4	2	0	89.9	0	0	24-10-2019
Iran	896	0	0	0	894	2	4.6	0	0	97.0	0	0	763	0	0	18	744	1	4.8	1	0	96.5	0	0	26-10-2019
Iraq	1023	0	0	0	1023	0	6.7	0	0	89.9	0	0	875	0	0	58	817	0	7.0	12	0	94.6	0	0	26-10-2019
Jordan	115	0	0	0	115	0	4.1	0	0	100.0	0	0	97	0	0	4	93	0	4.2	0	0	99.0	0	0	24-10-2019
Kuwait	72	0	0	0	72	0	8.1	0	0	90.3	0	0	35	0	0	2	33	0	4.8	0	0	80.0	0	0	27-10-2019
Lebanon	89	0	0	0	89	0	4.8	0	0	96.6	0	0	66	0	0	13	53	0	4.3	7	0	86.4	0	0	25-10-2019
Libya	122	0	0	0	122	0	4.9	0	0	96.7	0	0	81	0	0	9	72	0	3.9	1	0	98.8	0	0	26-10-2019
Morocco	212	0	0	0	212	0	2.4	0	0	77.8	0	0	165	0	0	59	106	0	2.2	30	7	80.0	0	0	13-10-2019
Oman	28	0	0	0	28	0	3.2	0	0	92.9	0	0	18	0	0	3	15	0	2.4	0	0	88.9	0	0	20-10-2019
Pakistan	12276	12	1	0	12263	0	15.7	0	0	87.0	12	0	11555	77	0	910	10568	0	17.9	186	1	88.0	77	0	27-10-2019
Palestine	44	0	0	0	44	0	2.3	0	0	90.9	0	0	48	0	0	10	38	0	3.1	0	0	97.9	0	0	27-10-2019
Qatar	10	0	0	0	10	0	2.8	0	0	100.0	0	0	6	0	0	3	3	0	2.0	0	0	83.3	0	0	27-10-2019
Saudi Arabia	242	0	0	0	242	0	3.0	0	0	95.9	0	0	167	0	0	42	125	0	2.5	23	9	89.8	0	0	27-10-2019
Somalia	353	0	0	0	341	12	5.5	0	0	97.7	0	0	297	0	0	11	283	3	5.7	3	3	95.6	0	0	27-10-2019
Sudan	579	0	0	0	579	0	3.2	0	0	97.2	0	0	459	0	0	31	428	0	3.1	0	0	97.6	0	0	27-10-2019
Syria	362	0	0	0	362	0	4.7	0	0	87.0	0	0	291	0	0	17	274	0	4.6	0	0	85.9	0	0	27-10-2019
Tunisia	68	0	0	0	68	0	2.6	0	0	80.9	0	0	62	0	0	2	59	1	2.7	0	0	71.0	0	0	25-10-2019
U.A.E	40	0	0	0	40	0	3.2	0	0	97.5	0	0	32	0	0	10	22	0	3.1	5	0	87.5	0	0	27-10-2019
Yemen	730	0	0	140	590	0	5.2	140	129	91.6	0	0	598	0	0	472	126	0	5.2	336	308	89.8	0	0	27-10-2019
EMR	21920	33	1	140	21731	15	8.7	140	129	89.8	33	0	19720	96	0	2004	17615	5	9.6	649	335	90.1	96	0	
2017	19179	22	3	72	19006	76	7.7	72	58	88.9	22	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 and specimens received in the lab in Good Condition

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

World Health Organization – Regional Office for Eastern Mediterranean
AFP SURVEILLANCE
Week 43, ending 27 October 2019

28-Oct-19
Number 1099

Table 4 (a): Lab results of contacts' samples in EMR, 2018 - 2019

COUNTRY	2018						2019					
	# OF CONTACTS	LAB RESULTS					# OF CONTACTS	LAB RESULTS				
		WILD	VDPV	SL	NPEV	PENDING		WILD	VDPV	SL	NPEV	PENDING
AFG	1009	4	0	52	217	0	912	8	0	38	165	19
BAH	2	0	0	0	0	0	0	0	0	0	0	0
DJI	0	0	0	0	0	0	0	0	0	0	0	0
EGY	495	0	0	11	58	17	396	0	0	7	44	20
IRN	145	0	0	3	6	0	129	0	0	4	6	0
IRQ	811	0	0	22	93	9	464	0	0	7	14	32
JOR	0	0	0	0	0	0	0	0	0	0	0	0
KUW	0	0	0	0	0	0	0	0	0	0	0	0
LEB	229	0	0	3	16	22	24	0	0	0	3	2
LIB	1	0	0	0	0	0	3	0	0	0	0	0
MOR	161	0	0	0	9	9	59	0	0	3	1	17
OMA	70	0	0	2	16	0	43	0	0	2	16	0
PAK	4200	3	0	207	882	0	4199	11	0	162	750	204
PAL	0	0	0	0	0	0	0	0	0	0	0	0
QAT	0	0	0	0	0	0	0	0	0	0	0	0
SAA	5	0	0	0	0	5	0	0	0	0	0	0
SOM	1052	0	10	49	133	0	897	0	1	37	99	41
SUD	350	0	0	3	24	88	309	0	0	0	25	71
SYR	670	0	0	8	17	0	632	0	0	10	35	25
TUN	1	0	0	0	0	0	20	0	0	0	2	0
UAE	0	0	0	0	0	0	0	0	0	0	0	0
YEM	1559	0	0	0	0	636	370	0	0	0	0	169
EMR	10760	7	10	360	1471	786	8457	19	1	270	1160	600

Table 4 (B): Most recent wild contacts in EMRO, 2018 - 2019

Year	Country	Data	
		Count of wild contacts	Date of Most Recent stool collection
2019	Afghanistan	8	17/Aug/19
	Pakistan	11	4/Oct/19
2019 Total		19	4/Oct/19
2018	Afghanistan	4	7/Aug/18
	Pakistan	3	12/Oct/18
2018 Total		7	12/Oct/18

Table 4 (C): Number and distribution by district of -ve index AFP cases identified as wild positive by contact in EMR, 2018-2019

YEAR	COUNTRY	PROVINCE	DISTRICT	COUNT	First case	Last case
2019	AFG	HILMAND	MUSAQALAH	1	5-Jun-19	5-Jun-19
		HILMAND	SANGIN	1	6-Mar-19	6-Mar-19
	PAK	SINDH	KHIORANGI	1	28-Aug-19	28-Aug-19
		BALOCHSITAN	KILLABDULLAH	1	2-Jul-19	2-Jul-19
		KHYBER PAKHTUNKHWA (KP)	LAKKIMRWT	3	27-May-19	4-Oct-19
	KHYBER PAKHTUNKHWA (KP)	TORGHAR	1	25-May-19	25-May-19	
2019 Total				8	06-Mar-19	04-Oct-19
2018	AFG	NANGARHAR	PACHIERAGAM	1	17-Jul-18	17-Jul-18
		URUZGAN	SHAHID-E-HASSA	1	8-Jul-18	8-Jul-18
	PAK	KHYBER PAKHTUNKHWA TRIBAL DISTRICTS (KPTD)	BAJOUR	1	1-Sep-18	1-Sep-18
		BALOCHSITAN	DUKKI	1	15-Apr-18	15-Apr-18
2018 Total				4	15-Apr-18	01-Sep-18

Table 5: Laboratory investigation of AFP cases with paralysis onset in 2019 up to Week (43/2019) / Ending on : (27/10/2019)

Country	Polio laboratories ITD / Nucleotide Sequencing (Nucleotide Sequencing performed by EGY, PAK, TUN, 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	2995	223	22	465	2174	112		16 *	169							158		1	1	1	2	14%	95%	100%	98%	26/10/2019
Bahrain	NPL Oman / CDC	11			2	9																	14%	100%		0%	28/10/2019
Djibouti	NPL Kenya / CDC	3					3																				27/10/2019
Egypt**	RRL Egypt	1032	35	6	103	830	48	10		15							20			9	3		10%	96%	100%	99%	24/10/2019
Iran	NPL Iran / CDC	782	11		20	733	13	5		2	1						8						3%	100%	100%	98%	26/10/2019
Iraq	RRL Egypt	947	13		115	762	41	17		5							9						11%	99%	100%	69%	25/10/2019
Jordan	NPL Jordan / RRL EGYPT	98			14	82	2	1															15%	100%			27/10/2019
Kuwait	RRL Kuwait / RIVM	40			2	33	1	4															6%	89%		100%	24/10/2019
Lebanon	NPL Jordan / RRL EGYPT	60	1		7	52											1						11%	100%	100%	0%	27/10/2019
Libya	RRL Tunisia / RIVM	75			2	67		6															2%	99%		99%	11/10/2019
Morocco	NPL Morocco / RRL Tunisia	168	2		3	154	9										2						2%	99%	100%	95%	25/10/2019
Oman	NPL Oman / CDC	19			3	15		1															25%	100%		100%	28/10/2019
Pakistan	RRL Pakistan	11273	413	43	1903	8439	466	6	71	238							235			5	1	8	15%	97%	99%	97%	26/10/2019
Palestine & UNRWA		48			6	41		1															13%	35%		100%	27/10/2019
Qatar	NPL Oman / CDC	6				5	1																0%	100%		100%	28/10/2019
Saudi Arabia	NPL Saudi Arabia / CDC	184	4		1	170	6	3									4						1%	95%	100%	100%	21/10/2019
Somalia	NPL Kenya / CDC	297	22		58	207	4	6		7		9	3				8					2	20%	14%		98%	27/10/2019
Sudan	NPL Sudan / RRL Egypt	459	6		61	361	28	3		5							2						12%	68%	100%	63%	27/10/2019
Syria	NPL Syria / RRL Egypt	283	12		16	244	11			5							9						6%	100%	100%	54%	27/10/2019
Tunisia	RRL Tunisia	58			3	52		3															8%	100%		98%	11/10/2019
U.A.E	NPL Oman / CDC	25			3	22																	12%	100%		44%	28/10/2019
Yemen	NPL Kenya / CDC																										27/10/2019
Total EMR 2019		18863	742	71	2787	14452	742	69	87	446	1	9	3	456		1	15	5	12				13%	95%	100%	97%	
Total EMR 2018		20746	902	90	3513	16220		17	29	590	3	6	6 #	628	7 #		22	1	3				14%	92%	99%	97%	

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

* Notification received from National EOC Afghanistan of 1 new WPV1 case from Khandahar, that will show in laboratory table in next week bulletin

Somalia in 2018 has a total of 12 cVDPV cases (5 cVDPV2, 6 cVDPV3 & 1 coinfection cVDPV2/cVDPV3)

** This indicator reflects surveillance and laboratory activities

Table 6: Environmental isolate by year and type

Country	Status	2015	2016	2017	2018	2019
AFG	NEGATIVE	129	183	274	253	145
	PENDING					4
	WILD	20	2	42	83	42
AFG Total		149	185	316	336	191
EGY	NEGATIVE	493	528	522	540	573
	PENDING		2			30
	VDPV2		3	1		
EGY Total		498	529	522	540	603
JOR	NEGATIVE			2	32	36
	PENDING					4
JOR Total				2	32	36
LEB	NEGATIVE			4	27	45
	PENDING					6
LEB Total				4	27	45
PAK	NEGATIVE	347	462	523	534	302
	PENDING					45
	WILD	79	59	105	139	269
	WILD & VDPV2	5	3	1		
	VDPV2	8	5	4		
PAK Total		439	529	633	673	616
SOM	NEGATIVE			34	181	43
	PENDING					3
	VDPV2			2	20	1
	VDPV3					12
SOM Total				36	213	47
SYR	NEGATIVE			4	102	129
	PENDING					18
SYR Total				4	102	147
IRN	NEGATIVE				6	54
	WILD					3
IRN Total					6	54
KUW	NEGATIVE					3
	PENDING					5
KUW Total						3
SUD	NEGATIVE				15	35
	PENDING					10
SUD Total						15
Grand Total		1086	1249	1576	2017	1781

Table 7: Environmental Wild/VDPV isolate by site

Country	COUNTRY	Status	PROVINCE	DISTRICT	Count	First date	Last date
2018	AFG	WILD	HILMAND	LASHKARGAH	12	8-Jan	26-Dec
				HIRAT	1	25-Jun	25-Jun
				KABUL	3	26-Feb	26-Jun
				KANDAHAR	42	8-Jan	26-Dec
				KHOST	1	25-Sep	25-Sep
				KUNAR	2	24-Apr	25-Sep
				NANGARHAR	3	28-Jan	25-Oct
				JALALABAD	19	27-Jan	26-Dec
				AFG Total	83	8-Jan	26-Dec
				PAK	WILD	BALOCHISTAN	LORALAI
	PISHIN	1	2-Dec				2-Dec
	QUETTA	13	13-Feb				20-Dec
	KABDULAH	8	1-Jan				15-Dec
	CDA	7	10-Jan				10-Nov
	PUNJAB	12	11-Jun				18-Dec
	LAHORE	15	10-Jan				14-Dec
	DGKHAN	2	12-Feb				12-Sep
	HYDERABAD	1	9-Feb				9-Feb
	JACOBABAD	3	12-Feb				12-Sep
	KAMBAR	3	7-Apr				9-Jul
	KHIBALDIA	2	1-Aug				4-Sep
	KHIGADAP	15	15-Feb				11-Dec
	KHIGIQBAL	1	13-Sep				13-Sep
	KHIKORANGI	1	14-Dec	14-Dec			
KHILANDHI	3	10-Jan	30-Jul				
KHISITE	2	1-Jan	3-Sep				
SUKKUR	2	8-Feb	9-Nov				
KHILIAQAT	2	7-Mar	7-Nov				
KHISADDAR	1	10-Sep	10-Sep				
KP TRIBAL DISTRICTS	BAJOUR	5	19-May	25-Oct			
WAZIR-S	2	26-Nov	27-Dec				
KHYBER PAKHTUNKHWA	BANNU	4	31-Mar	27-Dec			
KOHAT	5	5-Jan	27-Sep				
MARDAN	2	15-Oct	15-Nov				
NOWSHERA	2	18-Sep	18-Oct				
PESHAWAR	23	10-Jan	26-Dec				
PAK Total	139	1-Jan	27-Dec				
SOM	VDPV2	BANADIR	HAMAR WEYN	11	4-Jan	20-Sep	
			HODAN	2	22-Feb	4-Oct	
	VDPV3	BANADIR	WABERI	7	1-Mar	11-Oct	
			HAMAR WEYN	6	11-Feb	5-Apr	
HODAN	1	1-Feb	1-Feb				
WABERI	5	8-Mar	23-Aug				
SOM Total	32	4-Jan	11-Oct				
2018 Total				254	1-Jan	27-Dec	
2019	AFG	WILD	HILMAND	LASHKARGAH	7	23-Feb	24-Sep
				NAHR-E-SARAJ	6	6-Jan	24-Sep
				KANDAHAR	23	6-Jan	24-Sep
				JALALABAD	6	26-Jan	27-Aug
	AFG Total	42	6-Jan	24-Sep			
	PAK	WILD	BALOCHISTAN	KHUZDAR	1	20-Mar	20-Mar
				LORALAI	1	17-Mar	17-Mar
				PISHIN	5	2-Feb	2-Oct
				QUETTA	29	1-Jan	1-Oct
				DBUGTI	2	19-Aug	19-Sep
				KABDULAH	10	1-Jan	1-Sep
				CDA	3	12-Apr	21-Aug
				PUNJAB	4	3-Jan	3-Sep
				FAISALABAD	4	3-Jan	3-Sep
				LAHORE	44	5-Jan	2-Oct
				MULTAN	5	18-Feb	18-Sep
				RAWALPINDI	9	10-Jan	22-Jul
				RAJANPUR	1	20-Sep	20-Sep
				BAHAWALPUR	1	28-Aug	28-Aug
				DGKHAN	2	8-Apr	12-Sep
				DADU	5	2-May	10-Oct
				HYDERABAD	10	24-Jan	7-Oct
				JACOBABAD	4	24-Jan	17-Sep
				KAMBAR	6	7-Mar	3-Oct
KHIBALDIA				8	2-Jan	8-Oct	
KHIGADAP	24	8-Jan	11-Oct				
KHIGIQBAL	9	11-Apr	23-Sep				
KHIKORANGI	8	18-Feb	24-Sep				
KHILANDHI	7	19-Feb	25-Sep				
KHISITE	10	3-Jan	7-Oct				
SUKKUR	11	23-Jan	3-Oct				
KHILIAQAT	8	7-Feb	10-Oct				
KHISADDAR	10	7-Jan	9-Oct				
KP TRIBAL DISTRICTS	WAZIR-S	5	22-Jan	28-May			
KURRAM	1	15-Jan	15-Jan				
BANNU	8	28-Jan	27-Sep				
DIKHAN	4	8-Jan	11-Jun				
KOHAT	1	27-Feb	27-Feb				
MARDAN	4	16-Mar	15-Jun				
PESHAWAR	9	11-Jan	18-Sep				
PAK Total	269	1-Jan	11-Oct				
SOM	VDPV2	BANADIR	HODAN	1	3-Feb	3-Feb	
SOM Total	1	3-Feb	3-Feb				
IRN	WILD	S & B	IRANSHAHR	3	22-Apr	20-May	
IRN Total	3	22-Apr	20-May				
2019 Total				315	1-Jan	11-Oct	

Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2019 - 27/10/2019

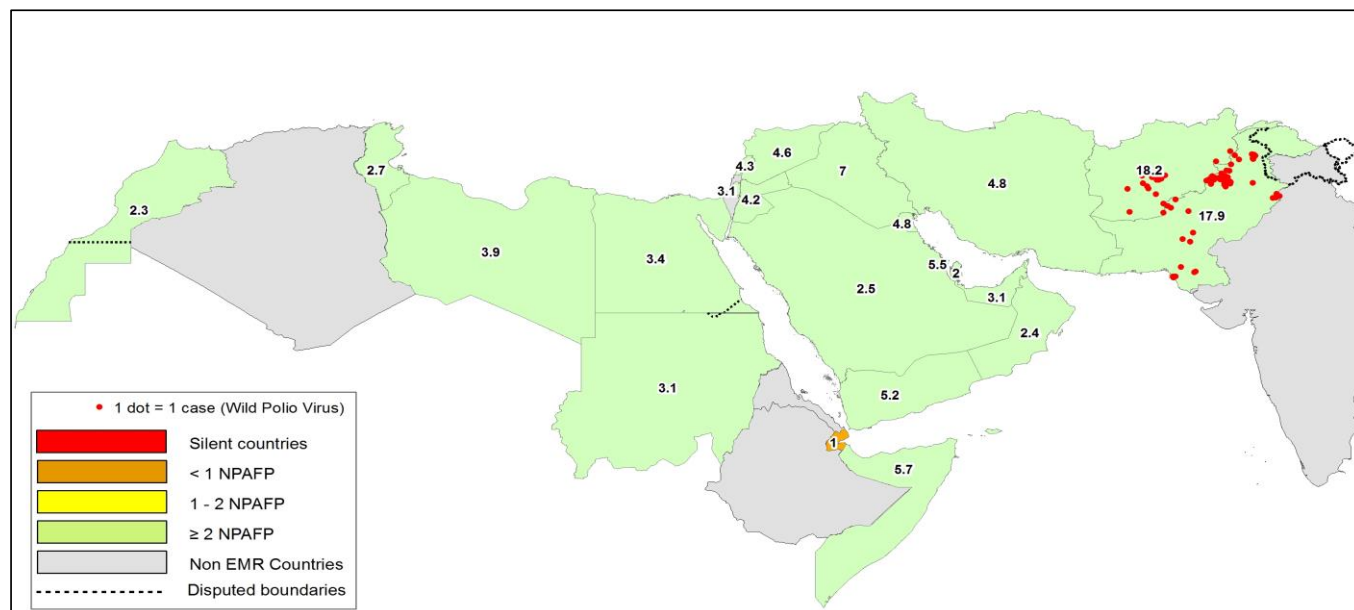


Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2019 - 27/10/2019

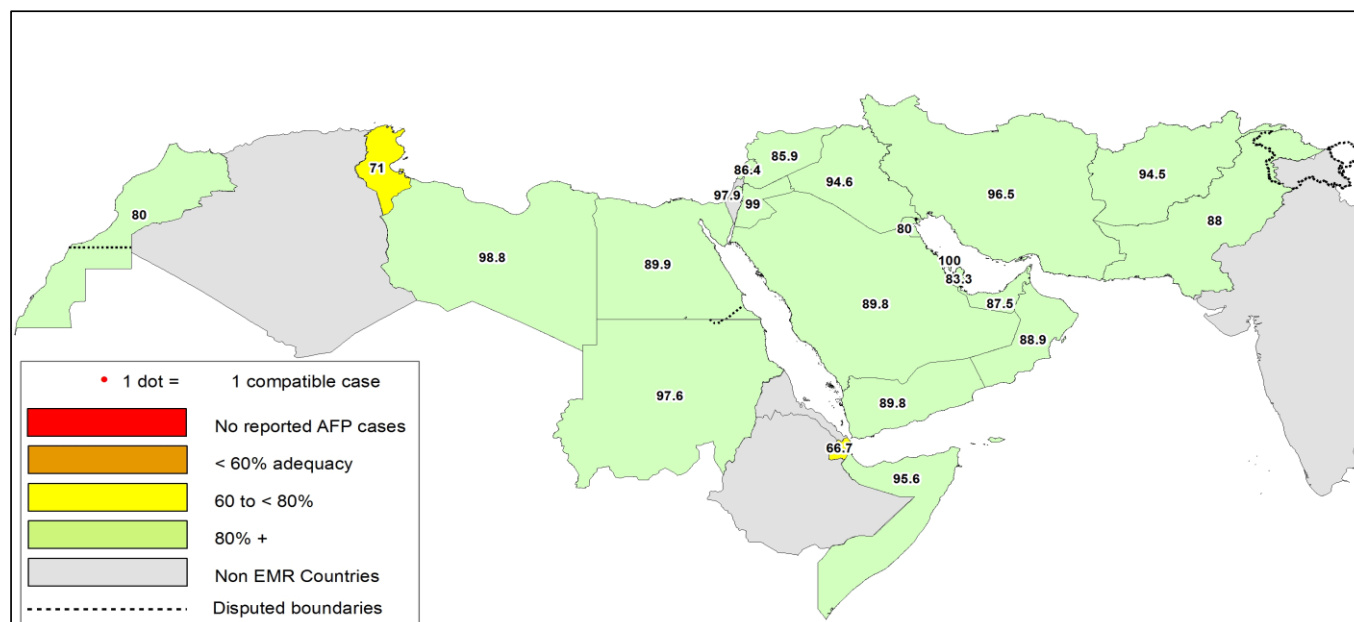


Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2018 - 2019

Year	COUNTRY	Count	First Case	Last Case
2018	AFG	21	1-Jan-18	6-Nov-18
	PAK	12	8-Mar-18	31-Dec-18
2018 Total		33	1-Jan-18	31-Dec-18
2019	AFG	19	4-Jan-19	18-Sep-19
	PAK	77	15-Jan-19	13-Oct-19
2019 Total		96	4-Jan-19	13-Oct-19

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

Figure 3: Non Polio AFP rate by Province in Afghanistan & by District in Pakistan 01/01/2019 - 27/10/2019

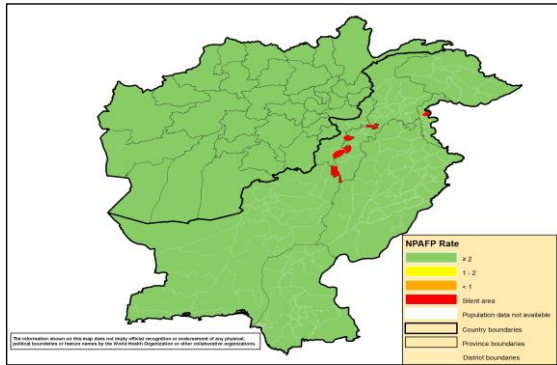


Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan by Province & Pakistan by District 01/01/2019 - 27/10/2019

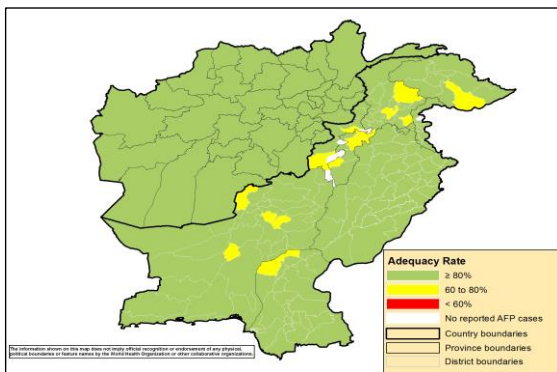
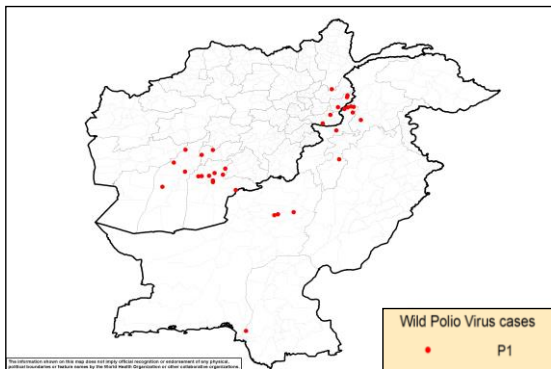
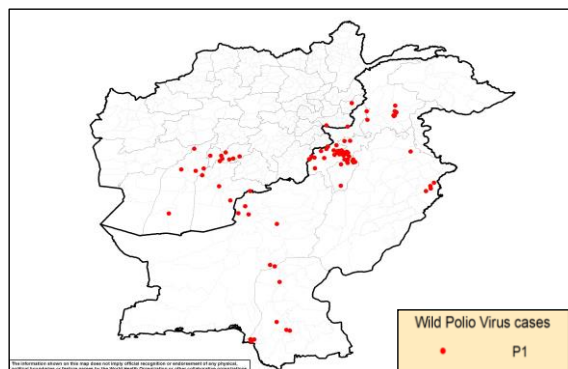


Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan

5(a) 01/01/2018 - 31/12/2018



5(b) 01/01/2019 - 27/10/2019



World Health Organization – Regional Office for Eastern Mediterranean

AFP SURVEILLANCE

Week 43, ending 27 October 2019

28-Oct-19

Number 1099

Table 9: Wild Polio cases by district and date of onset of paralysis, Afghanistan 2018-2019

ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case
2018	HILMAND	NAWZAD	3	1-Sep-18	6-Nov-18
		NAD-E-ALI	1	1-Jun-18	1-Jun-18
	URUZGAN	SHAHID-E-HASSAS	2	8-Jul-18	9-Oct-18
	NURISTAN	PORUNS	1	26-Sep-18	26-Sep-18
	KANDAHAR	MAYWAND	1	24-Sep-18	24-Sep-18
		KANDAHAR	2	11-Aug-18	27-Aug-18
		ARGHANDAB (K)	1	17-Jul-18	17-Jul-18
		SHAHWALIKOT	3	5-Jan-18	27-Apr-18
		KHAKREZ	1	25-Feb-18	25-Feb-18
		SPINBOLDAK	1	6-Jan-18	6-Jan-18
	NANGARHAR	PACHIERAGAM	1	17-Jul-18	17-Jul-18
		KAMA	1	1-Jan-18	1-Jan-18
	KUNAR	CHAWKAY	1	22-Jun-18	22-Jun-18
GHAZIABAD		2	14-Feb-18	3-Mar-18	
2018 Total			21	1-Jan-18	6-Nov-18
2019	NANGARHAR	KHOGYANI	1	18-Sep-19	18-Sep-19
	PAKTIKA	BERMEL	1	15-Sep-19	15-Sep-19
	KANDAHAR	KANDAHAR	1	17-Aug-19	17-Aug-19
		GHORAK	1	12-Jan-19	12-Jan-19
		SPINBOLDAK	1	4-Jan-19	4-Jan-19
	URUZGAN	TIRINKOT	4	19-May-19	2-Aug-19
		CHORA	3	20-Mar-19	23-Jul-19
		SHAHID-E-HASSAS	1	25-Feb-19	25-Feb-19
	HILMAND	GARMSER	1	26-May-19	26-May-19
		MUSAQALAH	1	5-May-19	5-May-19
		NAWZAD	1	3-Apr-19	3-Apr-19
		WASHER	1	23-Mar-19	23-Mar-19
		SANGIN	1	6-Mar-19	6-Mar-19
KUNAR	WATAPUR	1	8-May-19	8-May-19	
2019 Total			19	4-Jan-19	18-Sep-19

Table 10: Wild Polio cases by district and date of onset of paralysis, Pakistan 2018-2019

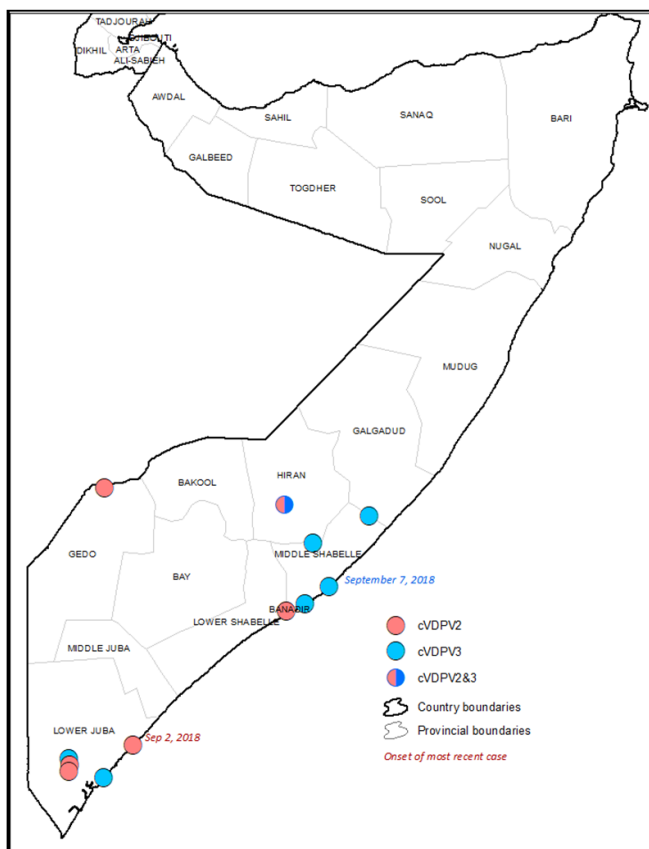
ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case
2018	KP TRIBAL DISTRICTS	BAJOUR	5	1-Sep-18	31-Dec-18
		KHYBER	1	25-Sep-18	25-Sep-18
	KHYBER PAKHTUNKHWA	LAKKIMRWT	1	16-Dec-18	16-Dec-18
		CHARSADA	1	1-Aug-18	1-Aug-18
	SINDH	KHIGADAP	1	22-Sep-18	22-Sep-18
	BALUCHISTAN	DUKKI	3	8-Mar-18	18-May-18
2018 Total			12	8-Mar-18	31-Dec-18
2019	KHYBER PAKHTUNKHWA	LAKKIMRWT	11	27-May-19	13-Oct-19
		TORGHAR	7	25-May-19	13-Sep-19
		BANNU	23	15-Jan-19	19-Aug-19
		HANGU	2	20-Jan-19	28-Jul-19
		CHARSADA	1	21-Jul-19	21-Jul-19
		SHANGLA	1	18-May-19	18-May-19
		DIKHAN	1	5-May-19	5-May-19
	BALUCHISTAN	HARNAI	1	27-Sep-19	27-Sep-19
		JAFARABAD	2	28-May-19	13-Sep-19
		KABDULAH	3	9-Jun-19	8-Aug-19
		QUETTA	1	6-Jul-19	6-Jul-19
	SINDH	KHIORANGI	2	20-Aug-19	26-Aug-19
		JAMSHORO	1	23-Aug-19	23-Aug-19
		HYDERABAD	2	20-Jul-19	5-Aug-19
		KHIGIQBAL	1	29-Apr-19	29-Apr-19
		LARKANA	1	17-Apr-19	17-Apr-19
		KHILAYARI	1	25-Feb-19	25-Feb-19
		WAZIR-S	1	20-Aug-19	20-Aug-19
	KP TRIBAL DISTRICTS	WAZIR-N	8	4-Apr-19	21-Jul-19
		KHYBER	1	14-Feb-19	14-Feb-19
BAJOUR		1	18-Jan-19	18-Jan-19	
PUNJAB	LAHORE	4	20-Jan-19	22-Jun-19	
	JHELUM	1	21-Jun-19	21-Jun-19	
2019 Total			77	15-Jan-19	13-Oct-19

Table 11: Circulating VDPV cases and date of onset of paralysis in EMR countries by districts 2018-2019

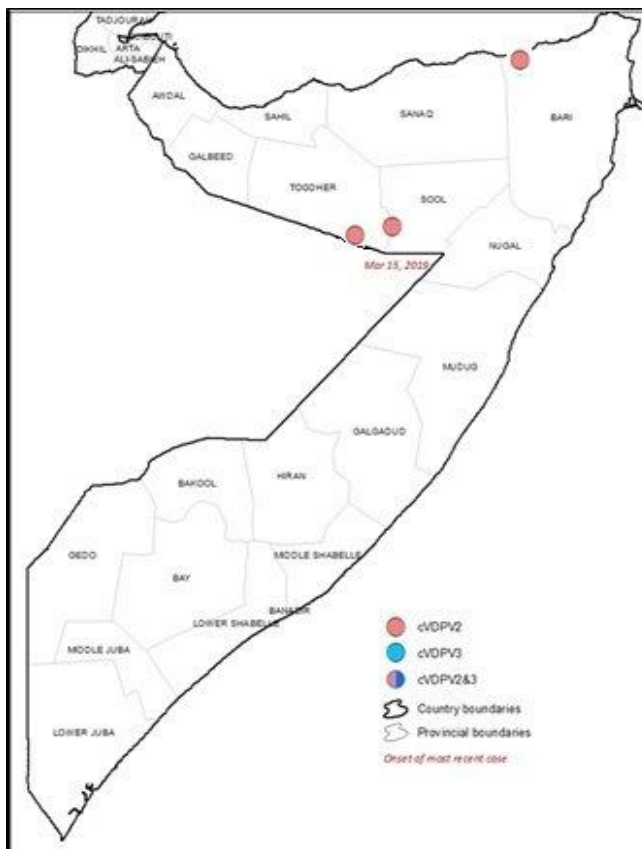
COUNTRY	YEAR	PROVINCE	DISTRICT	cVDPV2			cVDPV3			
				Count	First Case	Last Case	Count	First Case	Last Case	
SOM	2019	BARI	BOSSASO	1	08-May-19	08-May-19				
		TOGDHER	BUHODLE	1	21-Apr-19	21-Apr-19				
		SOOL	LAS ANOD	1	15-Mar-19	15-Mar-19				
	Total 2019				3	15-Mar-19	8-May-19			
	2018	LOWER JUBA	JAMAAME WEST	1	02-Sep-18	02-Sep-18				
			KISMAYO	2	29-Jul-18	30-Jul-18	2	4-Jul-18	27-Jul-18	
		MIDDLE SHABELLE	RUNINGOD				1	07-Sep-18	07-Sep-18	
			MAHADAY WARSHEIKH				1	29-Jun-18	29-Jun-18	
		BANADIR	DANYILE	1	10-Jul-18	10-Jul-18				
		HIRAN	BULO BURTI	1	11-May-18	11-May-18	1	11-May-18	11-May-18	
	GEDO	DOLO	1	26-May-18	26-May-18					
	Total 2018				6	11-May-18	2-Sep-18	7	11-May-18	7-Sep-18

Figure 6: Somalia cVDPV cases by type and district

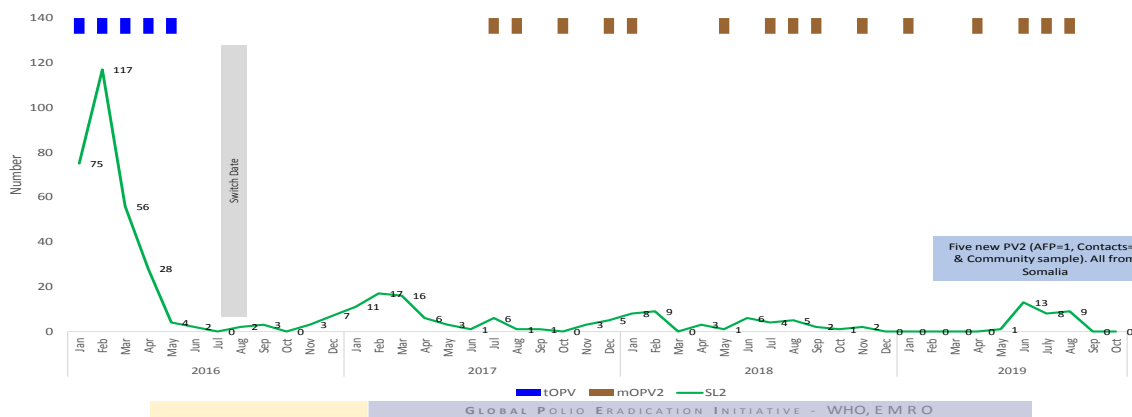
6(a) 01/01/2018 - 31/12/2018



6(b) 01/01/2019 - 27/10/2019

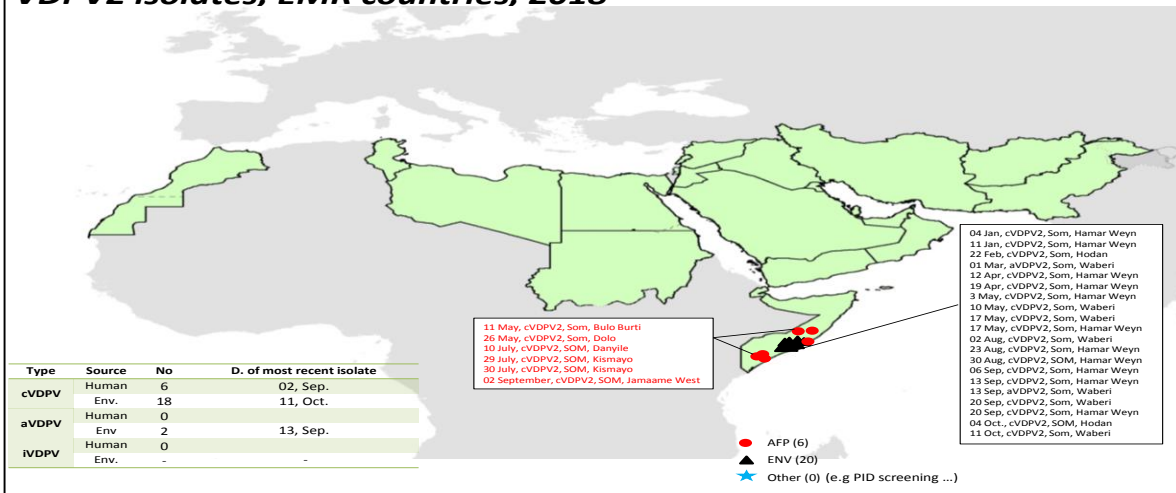


Sabin like type-2 poliovirus isolates (H&E) and vaccine types used during SIAs, EMRO, 2016 to 2019



Five new PV2 (AFP=1, Contacts=3 & Community sample). All from Somalia

VDPV2 isolates, EMR countries, 2018



VDPV2 isolates, EMR countries, 2019

