

## **Highlights of Polio Fax Bulletin No. 1068 for Week 12 2019**

### **I. Poliovirus Transmission**

1. Endemic countries (PAKISTAN & AFGHANISTAN):
  - a. Human samples: Two new wild poliovirus (WPV) cases reported from Pakistan this week. Total WPV1 cases in 2019 to date are 8 (2 from Afghanistan and 6 from Pakistan).
    - i. Afghanistan: No new cases. In 2019 to date two cases are reported, both from Kandahar province. The most recent reported case has date of onset of paralysis on 12 January 2019.
    - ii. Pakistan: Two newly reported WPV1 cases this week; one from Khyber district, Khyber Pakhtunkhwa Tribal District (KPTD), with date of onset 14 February 2019. A 12-month male child who has received 7 OPV doses per recall all during supplementary immunization activities (SIAs) and none from routine. The other one is a malnourished child from Karachi Layari town, Sindh province, with date of onset 25 February 2019. A 36-months female child who has received 10 OPV doses out of which 3 doses were from routine and 7 doses from supplementary immunization activities (SIAs) per recall. In 2019 to date, the total number of WPV1 cases in Pakistan is currently six, two from KP, two from KPTD), one from Punjab and one from Sindh. The most recent reported case has date of onset of paralysis on 25 February 2019.
  - b. Environmental samples: Fourteen new positive environmental samples for WPV1 were reported this week from Pakistan.
    - i. Afghanistan: No new WPV1 positive environmental samples. In 2019 to date, there are 15 positive environmental samples with most recent positive sample collected on 23 February 2019.
    - ii. Pakistan: The Fourteen new WPV1 positive environmental samples reported this week include six from Sindh province (two from Karachi Gadap town, one from Karachi Saddar town, one from Karachi Liaqat town, one from Karachi Baldia town, and one from Karachi Site town); four from Punjab province (all from Lahore district); two from Balochistan province (one from Quetta and one from Kila Abdullah districts); and two from KP province (one from Kohat and one from Bannu districts). In 2019 to date, there are 64 positive environmental samples with most recent positive sample collected on 12 March 2019.

## II. Outbreak response countries

### 1. SOMALIA:

- No new circulating vaccine derived poliovirus (cVDPV) type-2 or type-3 isolates from human or environmental samples this week.
- a. In 2018 to date, 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.
- b. cVDPV2:
  - i. The date of onset of the most recent cVDPV2 case is 2 September 2018.
  - ii. In 2018 so far, cVDPV2 has been isolated from 19 sewage samples in Mogadishu and date of specimen collection of recent most positive sample is 11 October 2018.
- c. cVDPV3:
  - i. The date of onset of the most recent cVDPV3 case is 7 September, 2018.
  - ii. In 2018 so far, cVDPV3 isolated from 11 sewage samples in Mogadishu and date of specimen collection of recent most positive sample is 23 August 2018.
- d. Co-infection cVDPV2 and cVDPV3:
  - i. The date of onset of the most recent coinfection is 11 May 2018.
  - ii. In 2018 so far, cVDPV2 and cVDPV3 coinfection is isolated from 1 sewage samples in Mogadishu and date of specimen collection of recent most positive sample is 19 April, 2018.

## III. Surveillance performance indicators

1. In 2018 to date, 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.
  - a. Djibouti is missing both indicators. Djibouti, did not report any AFP case since April 2017.
  - b. Morocco has a percentage of AFP cases with adequate stool specimens of 77.8%
2. Yemen has 72 AFP cases which are not yet finally classified in 2017.

## World Health Organization – Regional Office for Eastern Mediterranean

## AFP SURVEILLANCE

25-Mar-19

Week 12, ending 24 March 2019

Number 1068

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

Country	Reported AFP cases by week of onset - Week (12/19) / Ending on : 24/03/2019														
	Total AFP 2017	Total AFP 2018	Total AFP to date, 2019	W52 30 Dec 18	W02 13 Jan 19	W03 20 Jan 19	W04 27 Jan 19	W05 03 Feb 19	W06 10 Feb 19	W07 17 Feb 19	W08 24 Feb 19	W09 03 Mar 19	W10 10 Mar 19	W11 17 Mar 19	W12 24 Mar 19
Afghanistan	3094	3378	818	78	79	81	81	69	86	70	77	77	72	46	4
Bahrain	18	35	4	0	1	0	1	0	0	0	1	0	1	0	0
Djibouti	4	0	0												
Egypt	1242	1246	273	28	27	30	26	22	24	20	20	40	30	7	0
Iran	820	896	192	18	20	20	31	23	27	15	23	8	7	0	
Iraq	699	1023	256	18	31	48	26	16	24	25	32	19	14	6	
Jordan ****	116	115	37	4	4	1	5	4	2	7	1	2	4	3	
Kuwait	69	72	11	1	1	1	2	1	0	1	0	1	3	0	
Lebanon ****	75	89	23	1	3	3	0	2	1	3	4	2	2	1	1
Libya	88	122	20	3	3	2	2	1	3	5	0	0	1	1	
Morocco	143	212	44	5	7	2	3	6	4	4	3	4	7	1	
Oman	40	28	3	0	0	0	1	0	1	0	0	1	0	0	0
Pakistan	10320	12256	2761	279	284	356	271	255	276	273	246	216	204	130	2
Palestine ****	43	44	12	0	0	1	1	1	2	1	2	1	1	2	0
Qatar	18	10	0	0	0	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	276	241	49	5	7	4	7	6	4	6	2	6	1	2	0
Somalia	345	353	70	6	5	3	10	7	13	3	4	6	7	6	1
Sudan	570	578	118	10	19	10	10	9	8	10	12	17	7	6	0
Syria ****	362	362	100	5	11	5	8	9	17	14	13	8	8	3	
Tunisia	67	68	14	3	1	2	1	0	0	3	0	2	3	0	
U.A.E	58	40	10	2	0	2	1	2	0	1	1	0	1	0	
Yemen	713	730	148	22	7	15	19	17	17	18	14	9	8	3	0
<b>Total EMR</b>	<b>19180</b>	<b>21898</b>	<b>4963</b>	<b>488</b>	<b>510</b>	<b>586</b>	<b>506</b>	<b>450</b>	<b>509</b>	<b>479</b>	<b>455</b>	<b>419</b>	<b>381</b>	<b>217</b>	<b>8</b>

No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2017	Total year 2018	24/03		Confirmed polio cases by month of onset											
			2018	2019	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018	January 2019	February 2019	March 2019
Afghanistan	14	21	7	2	1	0	2	3	2	3	2	1		2		
Bahrain	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				
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			
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			
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			
Oman	0	0	0	0	0	0	0	0	0	0		0	0	0	0	
Pakistan	8	12	1	6	1	1	0	0	1	3	1	0	4	4	2	
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	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	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			
Yemen	0	0	0	0												
<b>Total EMR</b>	<b>22</b>	<b>33</b>	<b>8</b>	<b>8</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>0</b>

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

## AFP SURVEILLANCE

25-Mar-19

Week 12, ending 24 March 2019

Number 1068

Table 3: Investigation of AFP cases with paralysis onset in 2018 &amp; 2019 up to Week (12/19) / Ending on : 24/03/2019

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	17	3340	0	16.6	13	1	93.7	21	0	818	2	0	223	593	0	17.7	0	0	94.1	2	0	24-03-2019
Bahrain	35	0	0	6	29	0	12.1	6	0	97.1	0	0	4	0	0	4	0	0	6.1	0	0	100.0	0	0	24-03-2019
Djibouti	0	0	0	0	0	0	0.0	0	0		0	0	0	0	0	0	0	0	0.0	0	0		0	0	09-12-2018
Egypt	1246	0	0	2	1243	1	3.2	2	0	93.2	0	0	273	0	0	98	175	0	3.1	0	0	77.7	0	0	24-03-2019
Iran	896	0	0	0	894	2	4.6	0	0	97.0	0	0	192	0	0	35	157	0	4.4	0	0	96.4	0	0	17-03-2019
Iraq	1023	0	0	0	1023	0	6.7	0	0	89.9	0	0	256	0	0	55	201	0	7.4	0	0	97.7	0	0	22-03-2019
Jordan	115	0	0	0	115	0	4.1	0	0	100.0	0	0	37	0	0	8	29	0	5.8	0	0	100.0	0	0	21-03-2019
Kuwait	72	0	0	0	72	0	8.1	0	0	90.3	0	0	11	0	0	9	2	0	5.5	0	0	72.7	0	0	17-03-2019
Lebanon	89	0	0	1	88	0	4.8	1	0	96.6	0	0	23	0	0	6	17	0	5.5	0	0	87.0	0	0	22-03-2019
Libya	122	0	0	0	122	0	4.9	0	0	96.7	0	0	20	0	0	2	18	0	3.5	0	0	100.0	0	0	23-03-2019
Morocco	212	0	0	1	211	0	2.4	1	0	77.8	0	0	44	0	0	32	12	0	2.1	0	0	54.5	0	0	22-03-2019
Oman	28	0	0	0	28	0	3.2	0	0	92.9	0	0	3	0	0	1	2	0	1.5	0	0	66.7	0	0	24-03-2019
Pakistan	12256	12	1	88	12155	0	15.7	79	0	87.2	12	0	2761	6	0	602	2153	0	15.5	0	0	91.5	6	0	24-03-2019
Palestine	44	0	0	0	44	0	2.3	0	0	90.9	0	0	12	0	0	12	0	0	2.8	0	0	100.0	0	0	24-03-2019
Qatar	10	0	0	0	10	0	2.8	0	0	100.0	0	0	0	0	0	0	0	0	0.0	0	0		0	0	24-03-2019
Saudi Arabia	241	0	0	1	240	0	3.0	0	0	95.9	0	0	49	0	0	45	4	0	2.7	0	0	87.8	0	0	20-03-2019
Somalia	353	0	0	0	341	12	5.5	0	0	97.7	0	0	70	0	0	18	52	0	4.8	0	0	95.7	0	0	24-03-2019
Sudan	578	0	0	0	578	0	3.2	0	0	97.2	0	0	118	0	0	31	87	0	2.9	0	0	98.3	0	0	24-03-2019
Syria	362	0	0	0	362	0	4.7	0	0	87.3	0	0	100	0	0	34	66	0	5.7	0	0	91.0	0	0	23-03-2019
Tunisia	68	0	0	0	68	0	2.6	0	0	80.9	0	0	14	0	0	5	8	1	2.2	0	0	85.7	0	0	22-03-2019
U.A.E	40	0	0	2	38	0	3.2	2	1	97.5	0	0	10	0	0	6	4	0	3.5	0	0	90.0	0	0	17-03-2019
Yemen	730	0	0	448	282	0	5.2	432	389	91.6	0	0	148	0	0	146	2	0	4.6	0	0	91.2	0	0	24-03-2019
EMR	21898	33	1	566	21283	15	8.7	536	391	89.8	33	0	4963	8	0	1372	3582	1	8.7	0	0	91.6	8	0	
2017	19180	22	3	72	19007	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 &lt;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 12, ending 24 March 2019

25-Mar-19  
Number 1068

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	259	0	0	7	31	30
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	78	0	0	0	2	6
IRN	145	0	0	3	6	0	28	0	0	0	1	0
IRQ	811	0	0	22	93	9	129	0	0	3	3	39
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	218	0	0	3	16	20	7	0	0	0	0	4
LIB	1	0	0	0	0	0	0	0	0	0	0	0
MOR	161	0	0	0	9	9	19	0	0	1	0	9
OMA	70	0	0	2	16	0	10	0	0	0	3	0
PAK	4209	3	0	207	882	0	1115	0	0	74	86	105
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	1050	0	10	49	133	2	218	0	0	1	11	59
SUD	350	0	0	3	24	88	70	0	0	0	3	32
SYR	670	0	0	8	17	0	184	0	0	0	4	28
TUN	1	0	0	0	0	0	4	0	0	0	0	0
UAE	0	0	0	0	0	0	0	0	0	0	0	0
YEM	1557	0	0	0	0	1557	163	0	0	0	0	164
<b>EMR</b>	<b>10754</b>	<b>7</b>	<b>10</b>	<b>360</b>	<b>1471</b>	<b>1707</b>	<b>2284</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>144</b>	<b>476</b>

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

Year	Country	Data	
		Count of wild contacts	Date of Most Recent stool collection
2018	Afghanistan	4	07-08-18
	Pakistan	3	12-10-18
<b>2018 Total</b>		<b>7</b>	<b>12-10-18</b>

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
2018	AFG	NANGARHAR	PACHIERAGAM	1	17-07-18	17-07-18
		URUZGAN	SHAHID-E-HASSA	1	08-07-18	08-07-18
	PAK	FATA	BAJOUR	1	01-09-18	01-09-18
		BALUCHISTAN	DUKKI	1	15-04-18	15-04-18
<b>2018 Total</b>				<b>4</b>	<b>15-04-18</b>	<b>01-09-18</b>

World Health Organization – Regional Office for Eastern Mediterranean  
AFP SURVEILLANCE

Week 12, ending 24 March 2019

25-Mar-19  
Number 1068

**Table 5: Laboratory investigation of AFP cases with paralysis onset in 2019 up to Week (12/2019) / Ending on : (24/03/2019)**

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	769	45	1	71	530	121	1	2	36						28						9%	100%	100%	99%	23/03/2019
Bahrain	NPL Oman / CDC																									25/03/2019
Djibouti	NPL Kenya / CDC																									09/12/2018
Egypt***	RRL Egypt	275	12		9	185	52	17		8						7						4%	97%	100%	100%	21/03/2019
Iran	NPL Iran / CDC	200	2		3	176	9	10								2						2%	100%	100%	100%	16/03/2019
Iraq	RRL Egypt	257	2		26	197	26	6								1						10%	100%	100%	100%	24/03/2019
Jordan	NPL Jordan / RRL EGYPT	38			6	28	4															18%	100%			24/03/2019
Kuwait	RRL Kuwait / RIVM	13			1	9		3														18%	100%		100%	10/03/2019
Lebanon	NPL Jordan / RRL EGYPT	20	1		1	18																6%	100%			24/03/2019
Libya	RRL Tunisia / RIVM	18			1	17																3%	100%		100%	15/03/2019
Morocco	NPL Morocco / RRL Tunisia	32			1	25	3	3														4%	100%		100%	15/03/2019
Oman	NPL Oman / CDC	2				2																15%	100%		100%	25/03/2019
Pakistan	RRL Pakistan	2748	118	12	187	1997	423	10	6	86						82		2	1			6%	100%	100%	99%	23/03/2019
Palestine & UNRWA		12			3	5	3	1														38%	25%		100%	24/03/2019
Qatar	NPL Oman / CDC	1				1																0%	100%		100%	25/03/2019
Saudi Arabia	NPL Saudi Arabia / CDC	48	1			34	7	6								1						0%	91%	100%	100%	17/03/2019
Somalia	NPL Kenya / CDC	69	2		7	43	12	5		1						2						13%	17%		100%	25/03/2019
Sudan	NPL Sudan / RRL Egypt	93	1		14	57		23														16%	94%		100%	10/03/2019
Syria	NPL Syria / RRL Egypt	98	6			78	13	1														1%	100%			20/03/2019
Tunisia	RRL Tunisia	14			1	9	2	2														17%	100%		100%	15/03/2019
U.A.E	NPL Oman / CDC	10			1	3	2	4														25%	100%		50%	25/03/2019
Yemen	NPL Kenya / CDC																									24/03/2019
<b>Total EMR 2019</b>		4717	190	13	332	3414	677	92	8	131						123		2	1			7%	98%	100%	99%	
<b>Total EMR 2018</b>		20744	902	90	3512	16214		22	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									# Somalia in 2018 so far has a total of 12 cVDPV cases (5 cVDPV2, 6 cVDPV3 & 1 coinfection cVDPV2/cVDPV3)																	
** This indicator reflects surveillance and laboratory activities																										

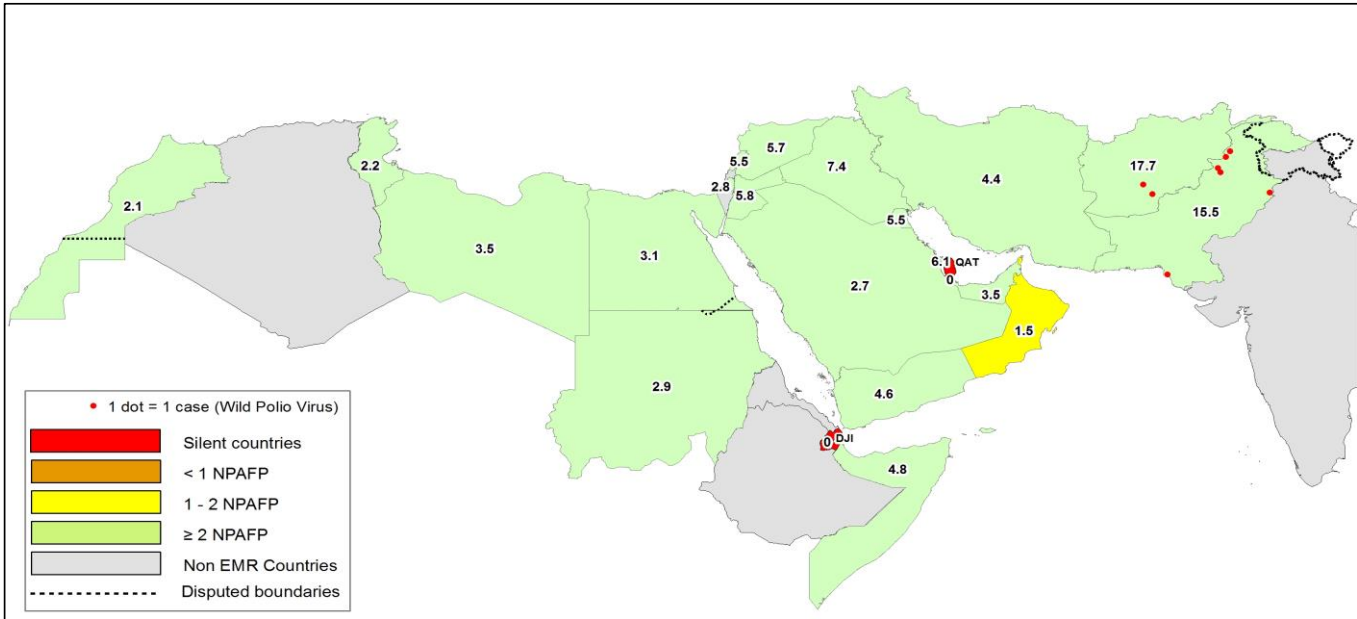
Table 6: Environmental isolate by year and type

Country	Status	2015	2016	2017	2018	2019
AFG	NEGATIVE	129	183	274	253	32
	PENDING					1
	WILD	20	2	42	83	15
<b>AFG Total</b>		<b>149</b>	<b>185</b>	<b>316</b>	<b>336</b>	<b>48</b>
EGY	NEGATIVE	495	528	522	539	96
	PENDING				1	27
	VDPV2	3	1			
<b>EGY Total</b>		<b>498</b>	<b>529</b>	<b>522</b>	<b>540</b>	<b>123</b>
IRN	NEGATIVE			6	54	14
<b>IRN Total</b>				<b>6</b>	<b>54</b>	<b>14</b>
JOR	NEGATIVE		2	32	19	5
	PENDING				17	3
<b>JOR Total</b>			<b>2</b>	<b>32</b>	<b>36</b>	<b>8</b>
LEB	NEGATIVE		4	27	11	3
	PENDING				34	5
<b>LEB Total</b>			<b>4</b>	<b>27</b>	<b>45</b>	<b>8</b>
PAK	NEGATIVE	347	462	523	534	64
	PENDING					31
	WILD	79	59	105	139	64
	WILD & VDPV2	5	3	1		
	VDPV2	8	5	4		
<b>PAK Total</b>		<b>439</b>	<b>529</b>	<b>633</b>	<b>673</b>	<b>159</b>
SOM	NEGATIVE			34	181	11
	PENDING					4
	VDPV2			2	20	1
	VDPV3				12	
<b>SOM Total</b>				<b>36</b>	<b>213</b>	<b>16</b>
SYR	NEGATIVE			4	102	15
	PENDING					17
<b>SYR Total</b>				<b>4</b>	<b>102</b>	<b>32</b>
<b>Grand Total</b>		<b>1086</b>	<b>1249</b>	<b>1576</b>	<b>1999</b>	<b>408</b>

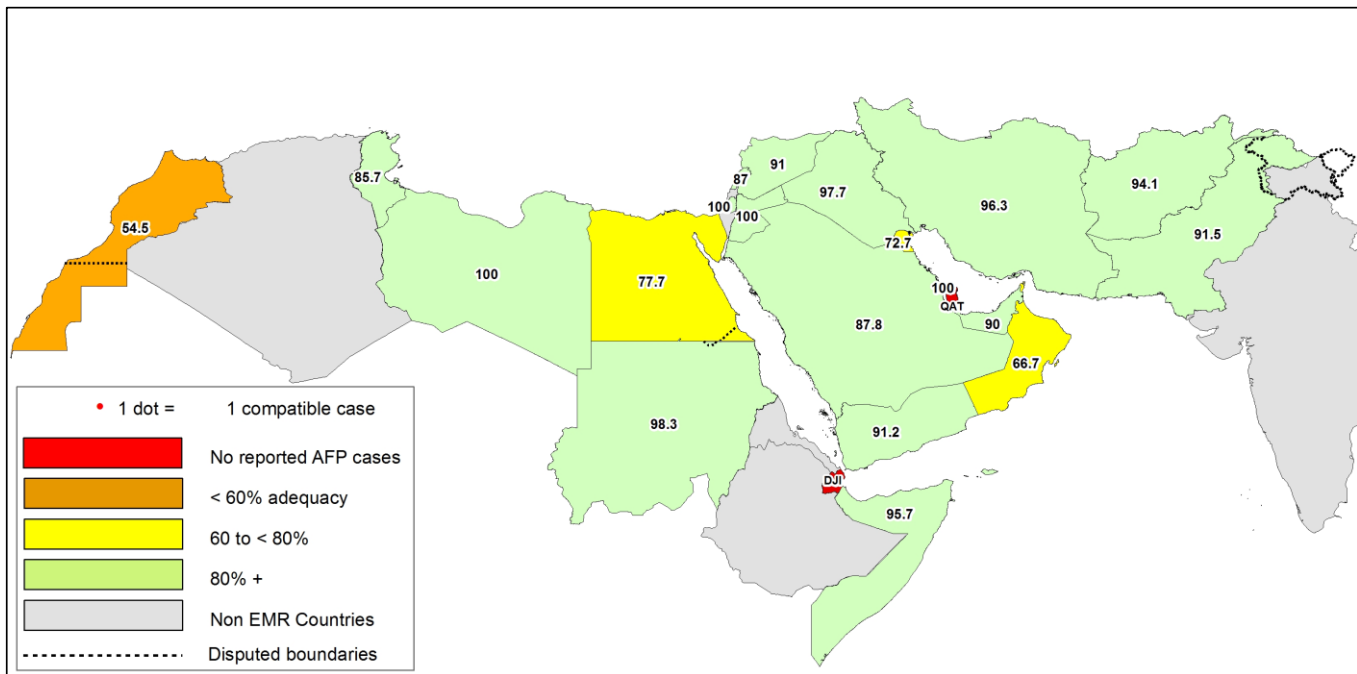
Table 7: Environmental Wild/VDPV isolate by site

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		
				<b>AFG Total</b>				<b>83</b>	<b>8-Jan</b>
	PAK	WILD	BALOCHISTAN	LORALAI	2	17-Mar	17-Aug		
				PISHIN	1	2-Dec	2-Dec		
				QUETTA	13	13-Feb	20-Dec		
				KABDULAH	8	1-Jan	15-Dec		
				ISLAMABAD	7	10-Jan	10-Nov		
				PUNJAB	LAHORE	12	11-Jun	18-Dec	
					RAWALPINDI	15	10-Jan	14-Dec	
					DGKHAN	2	12-Feb	12-Sep	
					SINDH	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		
				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			
KHIMALIR				1	13-Sep	13-Sep			
FATA				BAJOUR	5	19-May	25-Oct		
				WAZIR-S	2	26-Nov	27-Dec		
				KHYBER PAKHTOONKHW	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						
<b>PAK Total</b>				<b>139</b>	<b>1-Jan</b>	<b>27-Dec</b>			
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			
<b>SOM Total</b>				<b>32</b>	<b>4-Jan</b>	<b>11-Oct</b>			
<b>2018 Total</b>				<b>254</b>	<b>1-Jan</b>	<b>27-Dec</b>			
2019	AFG	WILD	HILMAND	LASHKARGAH	1	23-Feb	23-Feb		
				NAHR-E-SARAJ	3	6-Jan	26-Jan		
				KANDAHAR	9	6-Jan	23-Feb		
				NANGARHAR	2	26-Jan	23-Feb		
	<b>AFG Total</b>				<b>15</b>	<b>6-Jan</b>	<b>23-Feb</b>		
	PAK	WILD	BALOCHISTAN	QUETTA	7	1-Jan	28-Feb		
				KABDULAH	5	1-Jan	6-Mar		
				PUNJAB	FAISALABAD	2	3-Jan	6-Feb	
					LAHORE	12	5-Jan	12-Mar	
					RAWALPINDI	3	10-Jan	11-Feb	
				SINDH	HYDERABAD	2	24-Jan	11-Feb	
					JACOBABAD	2	24-Jan	12-Feb	
					KHIBALDIA	2	2-Jan	5-Mar	
					KHIGADAP	6	8-Jan	11-Mar	
					KHIKORANGI	1	18-Feb	18-Feb	
					KHILANDHI	1	19-Feb	19-Feb	
					KHISITE	3	3-Jan	4-Mar	
					SUKKUR	2	23-Jan	13-Feb	
					KHILIAQAT	2	7-Feb	6-Mar	
					KHISADDAR	3	7-Jan	7-Mar	
				FATA	WAZIR-S	2	22-Jan	25-Feb	
					KURRAM	1	15-Jan	15-Jan	
					KHYBER PAKHTOONKHW	BANNU	2	28-Jan	4-Mar
DIKHAN				1		8-Jan	8-Jan		
KOHAT				1		27-Feb	27-Feb		
PESHAWAR				4		11-Jan	25-Feb		
<b>PAK Total</b>							<b>64</b>	<b>1-Jan</b>	<b>12-Mar</b>
SOM				VDPV2	BANADIR	HODAN	1	3-Feb	3-Feb
<b>SOM Total</b>				<b>1</b>	<b>3-Feb</b>	<b>3-Feb</b>			
<b>2019 Total</b>				<b>80</b>	<b>1-Jan</b>	<b>12-Mar</b>			

**Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2019 - 24/03/2019**



**Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2019 - 24/03/2019**



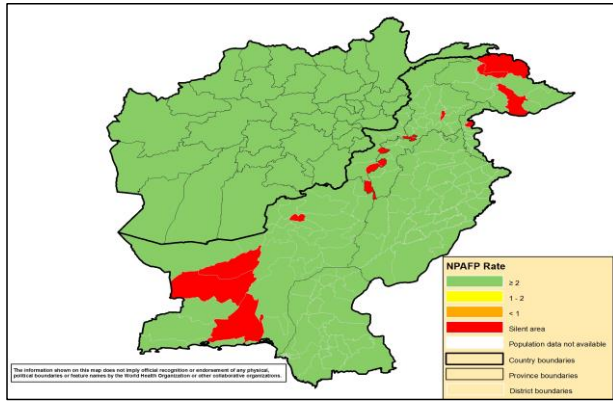
**Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2018 - 2019**

Year	COUNTRY	Count	First Case	Last Case
2018	AFG	21	01-01-18	06-11-18
	PAK	12	08-03-18	31-12-18
2018 Total		33	01-01-18	31-12-18
2019	AFG	2	04-01-19	12-01-19
	PAK	6	15-01-19	25-02-19
2019 Total		8	04-01-19	25-02-19

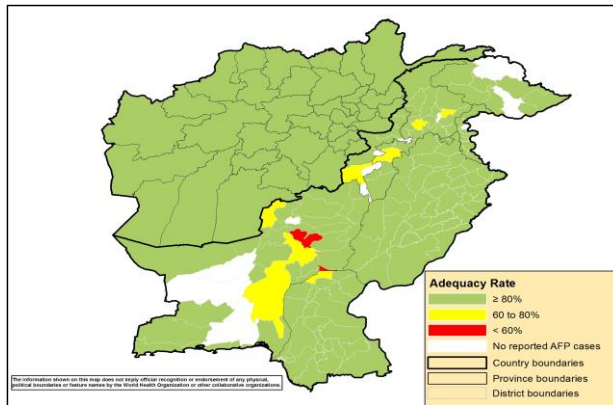
Last reported wild Polio P3 from Pakistan with date of onset 18/04/2012



**Figure 3: Non Polio AFP rate by Province in Afghanistan & by District in Pakistan 01/01/2019 - 24/03/2019**

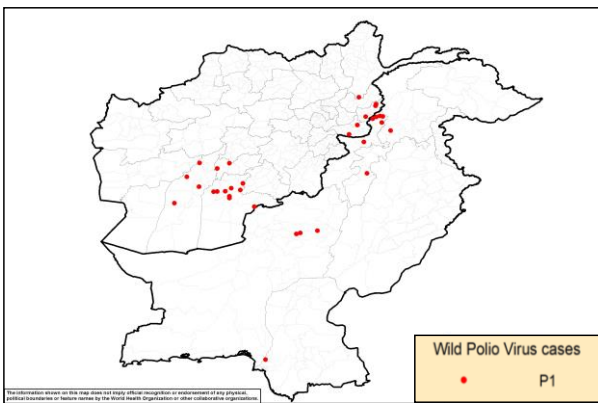


**Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan by Province & Pakistan by District 01/01/2019 - 24/03/2019**

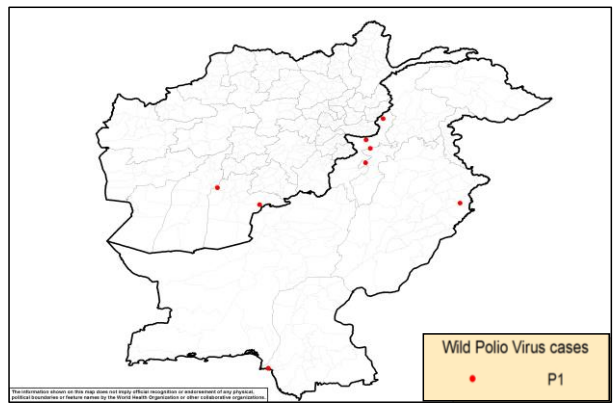


**Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan**

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



**5(b) 01/01/2019 - 24/03/2019**



World Health Organization – Regional Office for Eastern Mediterranean  
AFP SURVEILLANCE  
Week 12, ending 24 March 2019

25-Mar-19  
Number 1068

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		
<b>2018 Total</b>			<b>21</b>	<b>1-Jan-18</b>	<b>6-Nov-18</b>		
2019	KANDAHAR	GHORAK	1	12-Jan-19	12-Jan-19		
		SPINBOLDAK	1	4-Jan-19	4-Jan-19		
<b>2019 Total</b>			<b>2</b>	<b>4-Jan-19</b>	<b>12-Jan-19</b>		

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	FATA	BAJOUR	5	1-Sep-18	31-Dec-18	
		KHYBER	1	25-Sep-18	25-Sep-18	
	KHYBER PAKHTOON	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		
<b>2018 Total</b>			<b>12</b>	<b>8-Mar-18</b>	<b>31-Dec-18</b>	
2019	SINDH	KHILAYARI	1	25-Feb-19	25-Feb-19	
	FATA	KHYBER	1	14-Feb-19	14-Feb-19	
		BAJOUR	1	18-Jan-19	18-Jan-19	
	PUNJAB	LAHORE	1	20-Jan-19	20-Jan-19	
	KHYBER PAKHTOON	HANGU	1	20-Jan-19	20-Jan-19	
BANNU		1	15-Jan-19	15-Jan-19		
<b>2019 Total</b>			<b>6</b>	<b>15-Jan-19</b>	<b>25-Feb-19</b>	

World Health Organization – Regional Office for Eastern Mediterranean  
AFP SURVEILLANCE  
Week 12, ending 24 March 2019

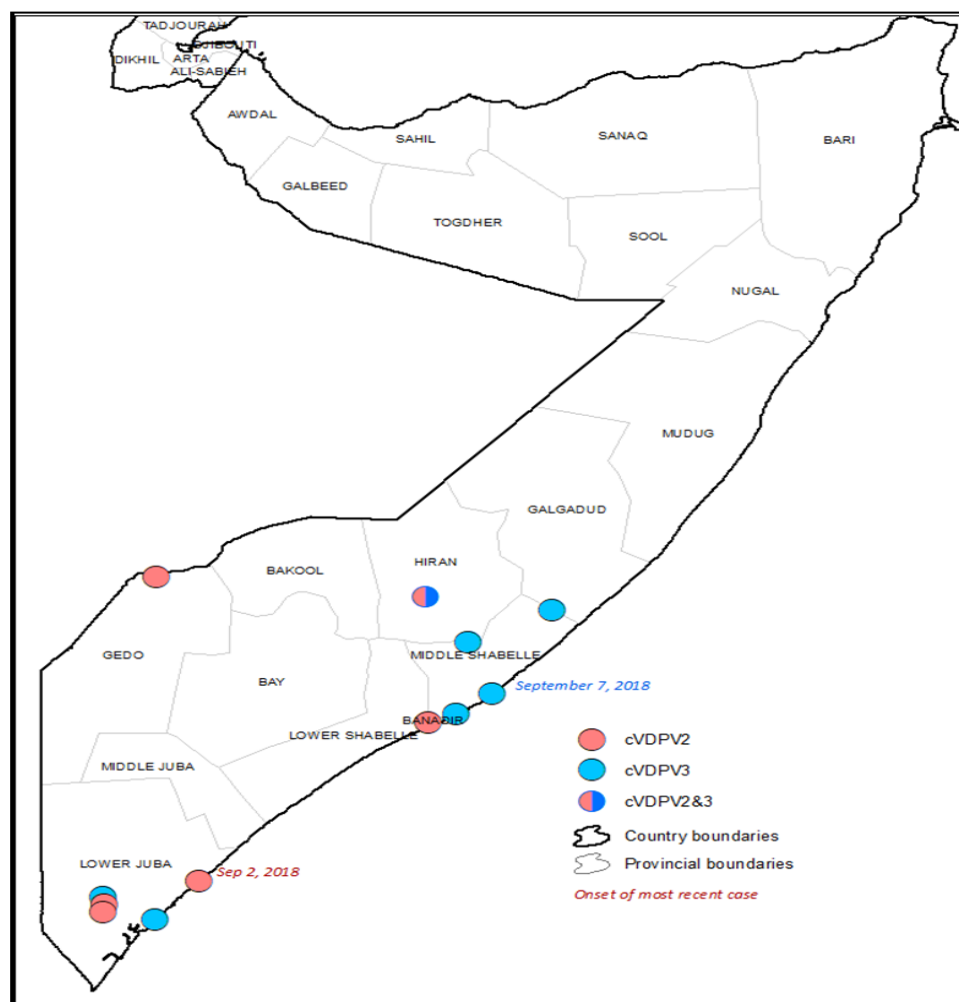
25-Mar-19  
Number 1068

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

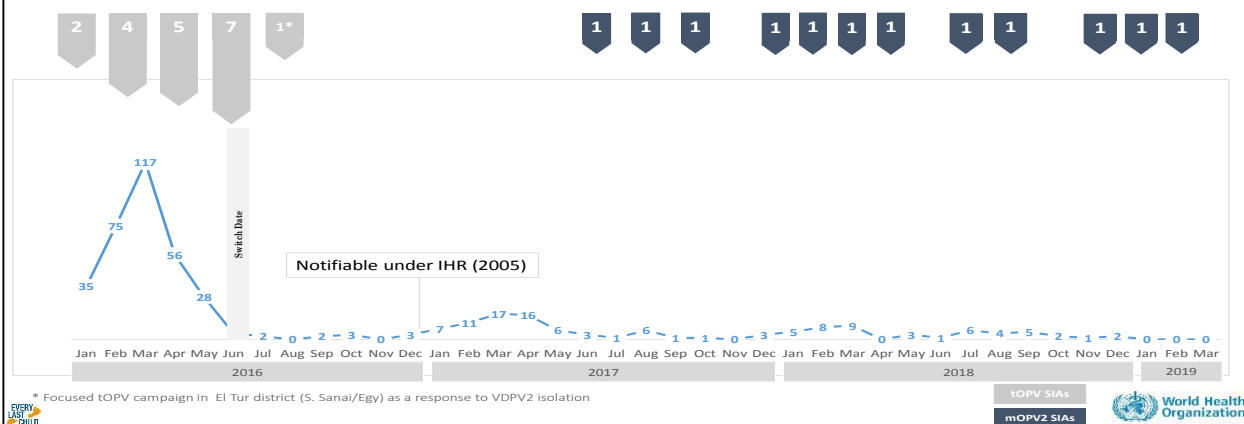
Year	COUNTRY	PROVINCE	DISTRICT	cVDPV2			cVDPV3		
				Count	First Case	Last Case	Count	First Case	Last Case
2018	SOM	LOWER JUBA	Jamaame West	1	02-Sep-18	02-Sep-18			
			KISMAYO	2	29-Jul-18	30-Jul-18	2	24-Jul-18	27-Jul-18
		MIDDLE SHABELLE	RUNINGOD				1	07-Sep-18	07-Sep-18
			MAHADAY WARSHEIKH				1	29-Jun-18	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			
SOM Total				6	11-May-18	2-Sep-18	7	11-May-18	7-Sep-18
<b>2018 Total</b>				<b>6</b>	<b>11-May-18</b>	<b>2-Sep-18</b>	<b>7</b>	<b>11-May-18</b>	<b>7-Sep-18</b>

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

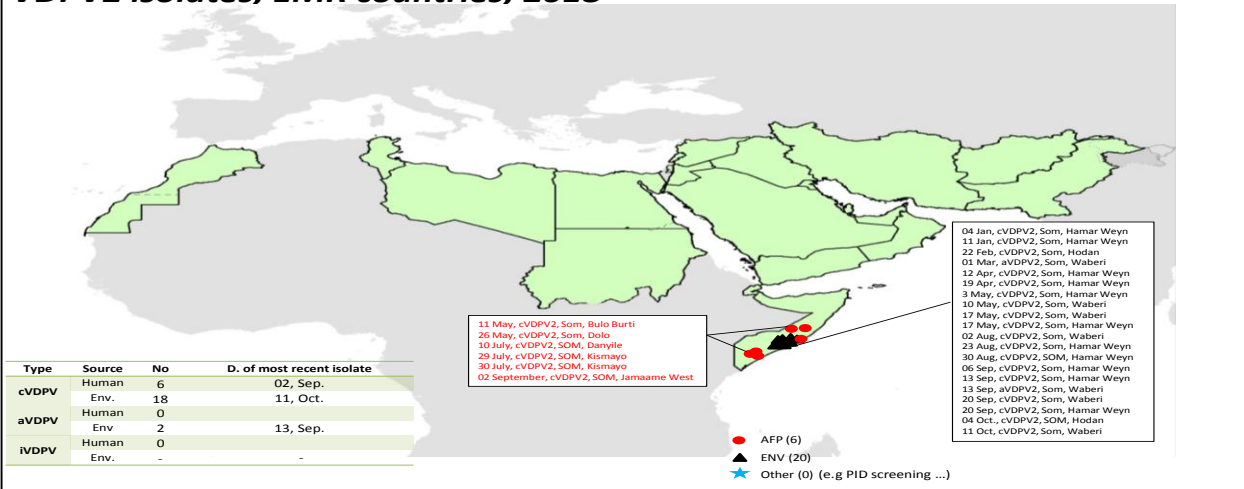
**Figure 6: Somalia cVDPV cases by type and district 01/01/2018 - 24/03/2019**



### Sabin Like Type-2 Poliovirus Isolates (H & E) EMR, 2016-19



### VDPV2 isolates, EMR countries, 2018



### VDPV2 isolates, EMR countries, 2019

