

## Highlights of Polio Fax Bulletin No. 1112 for Week 04 2020

### I. Wild Poliovirus Transmission

**Endemic countries (PAKISTAN & AFGHANISTAN):** Following was reported this week:

#### 2019

- 3 new wild poliovirus type-1 (WPV1) cases all from Pakistan
- 4 new Circulating Vaccine Derived Poliovirus type-2 (cVDPV2) cases all from Pakistan
- 1 new positive WPV1 environmental sample from Afghanistan
- 1 new cVDPV2 environmental sample from Pakistan

#### 2020

- 3 new wild poliovirus type-1 (WPV1) cases from Pakistan
- 10 new positive WPV1 environmental samples from Pakistan

a. *Human samples:* 6 new WPV1 cases reported this week. Total WPV1 cases in 2019 to date is 168 (29 from Afghanistan and 139 from Pakistan). This compares with 33 cases in 2018 in the same period (Afghanistan – 21 and Pakistan – 12). Also 3 new WPV1 cases in 2020 were reported this week from Pakistan. Total WPV1 cases in 2020 to date is 4 all from Pakistan. This compares with 6 cases in 2019 in the same period all from Pakistan.

- Afghanistan: No new WPV1 cases were reported this week:

In 2019 to date, 29 WPV1 cases are reported. They include 9 cases from Uruzgan province, 5 cases from Hilmand province, 6 from Kandahar province, 2 each from Paktika and Farah provinces and 1 each from Kunar, Nangarhar, Badghis, Baghlan and Herat provinces. The most recent case has onset of paralysis on 7 December 2019.

- Pakistan: Six new WPV1 cases reported this week and details are as follows:

Case (1): The case is from Kambar district, Sindh province, with date of onset 8 December 2019. The case is a 96-month old male child. The child reportedly received 7+ OPV doses all from SIAs and none from routine. The index case was identified as wild by a positive contact.

Case (2): The case is from Dadu district, Sindh province, with date of onset 26 December 2019. The case is a 24-month old male child. The child reportedly received 3 OPV doses from routine and 7+ doses from SIAs.

Case (3): The case is from Killa Abdullah district, Balochistan province, with date of onset 31 December 2019. The case is an 18-month old female child. The child reportedly received 3 OPV doses all from SIAs and none from routine.

Case (4): The case is from Lakki Marwat district, Khyber Pakhtunkhwa (KP) province, with date of onset 4 January 2020. The case is an 8-month old male child. The child reportedly received 3 OPV doses all from SIAs and none from routine.

Case (5): The case is from Sujawal district, Sindh province, with date of onset 7 January 2020. The case is a 42-month old male child. The child reportedly received 2 OPV doses from routine and 7+ doses from SIAs.

Case (6): The case is from Tando Allah Yar district, Sindh province, with date of onset 7 January 2020. The case is a 7-month old female child. The child reportedly received 2 OPV doses from routine and 1 dose from SIAs.

In 2019 to date, 139 WPV1 cases are reported from Pakistan. They include 80 from Khyber Pakhtunkhwa (KP) province, 12 from KP Tribal Districts (KPTD), 27 from Sindh province, 12 from Balochistan province and 8 from Punjab province. While in 2020, 4 WPV1 cases are reported, two each from KP and Sindh provinces. The most recent case has onset of paralysis on 7 January 2020.

b. *Environmental samples*: Eleven new WPV1 positive environmental samples reported this week – 1 in 2019 from Afghanistan and 10 from Pakistan in 2020:

- Afghanistan: In 2019 to date, there are 56 wild positive environmental samples with most recent positive sample collected on 25 December 2019.
- Pakistan: In 2019 to date, there are 375 WPV1 positive environmental samples including 7 combined (WPV1 and cVDPV2) with most recent positive sample collected on 31 December 2019. In 2020 to date, there are 12 WPV1 positive environmental samples with most recent positive sample collected on 9 January 2020.

## II. Circulating Vaccine Derived Polioviruses (cVDPVs)

1. **PAKISTAN**: Four new cVDPV2 cases and one environmental sample were reported this week in 2019. Case (1): The case is from Khyber district, KP province, with date of onset 12 December 2019. The case is a 24-month old male child. The child reportedly received 7 OPV doses all from SIAs and none from routine.

Case (2): The case is from Mohmand district, KP province, with date of onset 12 December 2019. The case is a 6-month old female child. The child reportedly received 2 OPV doses all from SIAs and none from routine.

Case (3): The case is from Mohmand district, KP province, with date of onset 19 December 2019. The case is a 15-month old male child. The child reportedly received 8 OPV doses out of which 1 dose was from routine and 7 doses from SIAs.

Case (4): The case is from Khyber district, KP province, with date of onset 28 December 2019. The case is a 9-month old male child. The child reportedly received a total of 3 OPV doses all from SIAs and none from routine.

In 2019 to date, 22 cVDPV2 cases reported (onset of the most recent case is 28<sup>th</sup> December). Cases include four from Diamir district of Gilgit-Baltistan (GB) province; three each from Torghar, Khyber and Mohmand; two from Kohistan Lower; and one each from Charsadda, Kohistan Upper, Bajour, Lakki Marwat and Peshawar districts in KP; one each from Islamabad and Gujranwala district, Punjab province.

Environment: 26 positive environmental samples for cVDPV2, the recent most sample collected on 16 December 2019 (including seven combined WPV1 and cVDPV2).

In addition, cVDPV2 has been isolated from 16 healthy children and 7 contacts.

2. **SOMALIA**: No new cVDPV2 or cVDPV3 isolates from human were reported this week, but 3 new cVDPV2 environmental samples from Banadir were reported.

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.

1 aVDPV2 was isolated from an environmental sample collected on 3 February 2019.

5 cVDPVs were isolated from environmental samples with most recent positive sample collected on 22 December 2019.

## III. 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 1.4
- Tunisia has a percentage of AFP cases with adequate stool specimens of 75.3%
- In Yemen there are AFP cases pending final classification more than 90 days due to delayed lab results because of delay in shipment of specimens to reference polio laboratories and high workload in the labs.

## World Health Organization – Regional Office for Eastern Mediterranean

## AFP SURVEILLANCE

27-Jan-20

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

Country	Reported AFP cases by week of onset - Week (04/20) / Ending on : 26/01/2020														
	Total AFP 2018	Total AFP 2019	Total AFP to date, 2020	W45 10 Nov 19	W46 17 Nov 19	W47 24 Nov 19	W48 01 Dec 19	W49 08 Dec 19	W50 15 Dec 19	W51 22 Dec 19	W52 29 Dec 19	W01 05 Jan 20	W02 12 Jan 20	W03 19 Jan 20	W04 26 Jan 20
Afghanistan	3378	3763	181	65	61	54	79	76	63	67	65	77	62	47	6
Bahrain	35	17	0	0	1	0	0	1	0	0	0	0	0	0	0
Djibouti	0	5	0	0	0	1	0	0	0	0	0	0	0	0	0
Egypt	1246	1343	48	34	39	34	28	31	26	18	13	29	16	4	
Iran	896	1070	0	31	43	33	25	24	24	18	24	0	0		
Iraq	1023	1157	38	28	26	36	33	31	20	25	13	22	16	2	
Jordan ****	115	113	5	0	1	2	0	4	1	1	1	1	3	0	1
Kuwait	72	48	3	0	1	1	1	3	1	0	2	1	1	1	0
Lebanon ****	89	87	9	2	2	1	1	4	1	3	4	4	2	2	2
Libya	122	107	14	1	1	2	1	4	4	3	4	4	4	5	1
Morocco	212	248	5	4	4	9	10	14	6	4	2	4	1	0	
Oman	28	30	0	1	0	2	1	3	1	0	1	0	0	0	0
Pakistan	12276	15094	610	307	318	337	320	350	346	297	265	302	254	119	2
Palestine ****	44	62	1	2	0	2	3	1	0	2	1	0	1	0	0
Qatar	10	9	0	1	0	0	0	0	0	2	0	0	0	0	0
Saudi Arabia	242	236	0	7	2	5	3	5	4	4	4	1	0	0	
Somalia	353	361	18	4	7	5	3	11	7	4	5	10	6	3	0
Sudan	579	608	26	11	11	14	13	6	17	17	5	14	10	4	0
Syria ****	362	377	16	6	3	13	9	11	16	8	3	7	6	6	0
Tunisia	68	77	1	1	1	2	2	0	0	0	0	1	0	0	
U.A.E	40	49	2	2	2	1	3	1	1	0	2	1	0	1	0
Yemen	730	777	24	16	17	15	14	26	19	9	23	8	12	5	
<b>Total EMR</b>	<b>21920</b>	<b>25638</b>	<b>1001</b>	<b>523</b>	<b>540</b>	<b>569</b>	<b>549</b>	<b>606</b>	<b>557</b>	<b>482</b>	<b>437</b>	<b>486</b>	<b>394</b>	<b>199</b>	<b>12</b>

No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2018	Total year 2019	26/01		Confirmed polio cases by month of onset											
			2019	2020	February 2019	March 2019	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019	October 2019	November 2019	December 2019	January 2020
Afghanistan	21	29	2	0	1	3	1	5	1	2	2	3	1	7	1	
Bahrain	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			
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	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	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		
Pakistan	12	139	4	4	2	0	11	11	16	12	14	5	16	23	25	4
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		
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	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			
<b>Total EMR</b>	<b>33</b>	<b>168</b>	<b>6</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>12</b>	<b>16</b>	<b>17</b>	<b>14</b>	<b>16</b>	<b>8</b>	<b>17</b>	<b>30</b>	<b>26</b>	<b>4</b>

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

## AFP SURVEILLANCE

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Table 3: Investigation of AFP cases with paralysis onset in 2019 &amp; 2020 up to Week (04/20) / Ending on : 26/01/2020

COUNTRY	2019												2020												Latest line List Date
	AFP									Specimen	Wild cases ****		AFP									Specimen	Wild cases ****		
	Total AFP cases onset 2019	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 2020	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	3763	29	1	58	3675	0	18.4	31	0	94.2	29	0	181	0	0	151	30	0	12.6	0	0	98.9	0	0	26/01/2020
Bahrain	17	0	0	6	11	0	5.9	2	2	100.0	0	0	0	0	0	0	0	0	0.0	0	0		0	0	20/01/2020
Djibouti	5	0	0	5	0	0	1.4	3	0	80.0	0	0	0	0	0	0	0	0	0.0	0	0		0	0	26/01/2019
Egypt	1343	0	0	32	1311	0	3.6	0	0	93.0	0	0	48	0	0	48	0	0	1.8	0	0	60.4	0	0	16/01/2020
Iran	1070	0	0	9	1060	1	5.2	0	0	97.0	0	0	0	0	0	0	0	0	0.0	0	0		0	0	18/01/2020
Iraq	1157	0	0	27	1130	0	7.6	3	0	94.3	0	0	38	0	0	19	19	0	3.5	0	0	100.0	0	0	25/01/2020
Jordan	113	0	0	3	110	0	3.9	0	0	100.0	0	0	5	0	0	5	0	0	1.8	0	0	100.0	0	0	26/01/2020
Kuwait	48	0	0	1	47	0	5.4	0	0	89.6	0	0	3	0	0	3	0	0	4.8	0	0	66.7	0	0	26/01/2020
Lebanon	87	0	0	16	71	0	4.7	8	0	89.7	0	0	9	0	0	9	0	0	6.8	0	0	66.7	0	0	24/01/2020
Libya	107	0	0	6	101	0	4.3	0	0	98.1	0	0	14	0	0	14	0	0	7.8	0	0	100.0	0	0	25/01/2020
Morocco	248	0	0	24	224	0	2.8	14	0	82.7	0	0	5	0	0	5	0	0	0.8	0	0	80.0	0	0	19/01/2020
Oman	30	0	0	1	29	0	3.3	0	0	86.7	0	0	0	0	0	0	0	0	0.0	0	0		0	0	19/01/2020
Pakistan	15094	139	2	527	14404	22	19.2	192	0	87.2	139	0	610	4	0	479	127	0	10.9	0	0	90.2	4	0	26/01/2020
Palestine	62	0	0	11	51	0	3.3	1	0	98.4	0	0	1	0	0	1	0	0	0.7	0	0	100.0	0	0	26/01/2020
Qatar	9	0	0	3	6	0	2.5	0	0	88.9	0	0	0	0	0	0	0	0	0.0	0	0		0	0	26/01/2020
Saudi Arabia	236	0	0	35	201	0	2.8	6	4	93.2	0	0	0	0	0	0	0	0	0.0	0	0		0	0	23/01/2020
Somalia	361	0	0	5	353	3	5.7	3	3	95.6	0	0	18	0	0	13	5	0	3.1	0	0	100.0	0	0	26/01/2020
Sudan	608	0	0	11	597	0	3.4	2	0	96.4	0	0	26	0	0	23	3	0	1.9	0	0	96.2	0	0	26/01/2019
Syria	377	0	0	6	371	0	4.9	0	0	88.1	0	0	16	0	0	14	2	0	2.9	0	0	100.0	0	0	25/01/2020
Tunisia	77	0	0	1	75	1	2.8	0	0	75.3	0	0	1	0	0	1	0	0	0.5	0	0	100.0	0	0	24/01/2019
U.A.E	49	0	0	26	23	0	3.9	11	2	89.8	0	0	2	0	0	2	0	0	2.2	0	0	100.0	0	0	26/01/2020
Yemen	777	0	0	326	451	0	5.5	168	148	89.3	0	0	24	0	0	24	0	0	2.4	0	0	100.0	0	0	25/01/2020
<b>EMR</b>	<b>25638</b>	<b>168</b>	<b>3</b>	<b>1139</b>	<b>24301</b>	<b>27</b>	<b>10.1</b>	<b>444</b>	<b>159</b>	<b>89.8</b>	<b>168</b>	<b>0</b>	<b>1001</b>	<b>4</b>	<b>0</b>	<b>811</b>	<b>186</b>	<b>0</b>	<b>5.5</b>	<b>0</b>	<b>0</b>	<b>91.3</b>	<b>4</b>	<b>0</b>	
<b>2018</b>	<b>21920</b>	<b>33</b>	<b>1</b>	<b>85</b>	<b>21786</b>	<b>15</b>	<b>8.7</b>	<b>85</b>	<b>80</b>	<b>89.8</b>	<b>33</b>	<b>0</b>													

\* 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

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COUNTRY	2019						2020					
	# OF CONTACTS	LAB RESULTS					# OF CONTACTS	LAB RESULTS				
		WILD	VDPV	SL	NPEV	PENDING		WILD	VDPV	SL	NPEV	PENDING
AFG	1137	8	0	48	202	0	33	0	0	0	1	26
BAH	0	0	0	0	0	0	0	0	0	0	0	0
DJI	1	0	0	0	0	0	0	0	0	0	0	0
EGY	498	0	0	8	55	13	15	0	0	0	0	15
IRN	213	0	0	4	7	0	0	0	0	0	0	0
IRQ	603	0	0	10	39	6	9	0	0	0	0	3
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	24	0	0	0	3	2	0	0	0	0	0	0
LIB	6	0	0	0	3	0	0	0	0	0	0	0
MOR	79	0	0	3	1	29	0	0	0	0	0	0
OMA	79	0	0	2	28	1	0	0	0	0	0	0
PAK	5492	26	7	246	959	3	318	1	0	10	14	178
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	44	0	0	1	0	0	0	0	0	0	0	0
SOM	1078	0	1	45	140	15	65	0	0	0	2	41
SUD	402	0	0	0	31	90	13	0	0	0	2	5
SYR	813	0	0	23	36	0	35	0	0	0	0	30
TUN	26	0	0	0	2	0	0	0	0	0	0	0
UAE	0	0	0	0	0	0	0	0	0	0	0	0
YEM	423	0	0	0	0	220	14	0	0	0	0	14
<b>EMR</b>	<b>10918</b>	<b>34</b>	<b>8</b>	<b>390</b>	<b>1506</b>	<b>379</b>	<b>502</b>	<b>1</b>	<b>0</b>	<b>10</b>	<b>19</b>	<b>312</b>

Table 4 (B): Most recent wild contacts in EMRO, 2019-2020

Year	Country	Data	
		Count of wild contacts	Date of Most Recent stool collection
2020	Pakistan	1	8/Jan/20
<b>2020 Total</b>		<b>1</b>	<b>8/Jan/20</b>
2019	Afghanistan	8	17/Aug/19
	Pakistan	26	26/Dec/19
<b>2019 Total</b>		<b>34</b>	<b>26/Dec/19</b>

Table 4 (C): Number of distribution by district of -ve index AFP cases identified as wild positive by contact in EMR, 2019-2020

YEAR	COUNTRY	PROVINCE	DISTRICT	COUNT	First case	Last case	
2019	AFG	URUZZGAN	TIRINKOT	1	2-Aug-19	2-Aug-19	
			HILMAND	MUSAQALAH	1	05-Jun-19	05-Jun-19
				SANGIN	1	06-Mar-19	06-Mar-19
	PAK	SINDH	KHIORANGI	1	28-Aug-19	28-Aug-19	
			SUJAWAL	1	25-Sep-19	25-Sep-19	
			JAMSHORO	1	09-Oct-19	09-Oct-19	
			T. ALLAHYAR	1	10-Nov-19	10-Nov-19	
			KAMBAR	1	02-Nov-19	02-Nov-19	
			MIRPURKHAS	1	01-Dec-19	01-Dec-19	
			MASTUNG	1	18-Nov-19	18-Nov-19	
			KILLABDULLAH	2	2-Jul-19	19-Nov-19	
			BANNU	1	13-Nov-19	13-Nov-19	
			SWABI	1	17-Nov-19	17-Nov-19	
	KHYBER PAKHTUNKHWA (KP)	TANK	1	30-Oct-19	30-Oct-19		
		LAKKIMRWAT	3	27-May-19	04-Oct-19		
		TORGHAR	1	25-May-19	25-May-19		
		<b>2019 Total</b>			<b>19</b>	<b>06-Mar-19</b>	<b>01-Dec-19</b>

Table 5: Laboratory investigation of AFP cases with paralysis onset in 2020 up to Week (04/2020) / Ending on : (26/01/2020)

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	147	5			31	114			2										2	1%	100%	100%	100%	26/01/2020	
Bahrain	NPL Oman / CDC																								27/01/2020	
Djibouti	NPL Kenya / CDC																								26/01/2020	
Egypt***	RRL Egypt	61			1	20	39	1													4%	100%		100%	23/01/2020	
Iran	NPL Iran / CDC	33				2	12	19													0%	100%		100%	18/01/2020	
Iraq	RRL Egypt	43			2	18	23														9%	100%		100%	24/01/2020	
Jordan	NPL Jordan / RRL EGYPT	4			1	3															25%	100%		100%	23/01/2020	
Kuwait	RRL Kuwait / RIVM	2					2														0%				23/01/2020	
Lebanon	NPL Jordan / RRL EGYPT																								23/01/2020	
Libya	RRL Tunisia / RIVM	6					6																		25/01/2020	
Morocco	NPL Morocco / RRL Tunisia	3						3													0%				17/01/2020	
Oman	NPL Oman / CDC	1					1														50%				27/01/2020	
Pakistan	RRL Pakistan	582	30		11	115	423	6	4	2										23	8%	100%	100%	100%	26/01/2020	
Palestine & UNRWA		1					1																		26/01/2020	
Qatar	NPL Oman / CDC																								27/01/2020	
Saudi Arabia	NPL Saudi Arabia / CDC	1				1															0%	100%			23/01/2020	
Somalia	NPL Kenya / CDC	18				5	5	8													0%	0%		100%	26/01/2020	
Sudan	NPL Sudan / RRL Egypt	2						2																	12/01/2020	
Syria	NPL Syria / RRL Egypt	10				2	6	2													0%	100%			16/01/2020	
Tunisia	RRL Tunisia																								25/01/2020	
U.A.E	NPL Oman / CDC																								27/01/2020	
Yemen	NPL Kenya / CDC																								25/01/2020	
<b>Total EMR 2020</b>		914	35		15	197	632	41	4	4					6					25	7%	98%	100%	100%		
<b>Total EMR 2019</b>		24581	1031	97	3588	19645	68	137	149	561	1		39	24	614	1	3	21	6	7	12%	95%	99%	97%		

\* 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	LAB RESULTS	2016	2017	2018	2019	2020
AFG	<b>Wild</b>	<b>2</b>	<b>42</b>	<b>83</b>	<b>56</b>	
	EV/SL	177	265	248	196	
	Negative	6	9	5	3	
	Pending				4	7
<b>AFG Total</b>		<b>185</b>	<b>316</b>	<b>336</b>	<b>259</b>	<b>7</b>
EGY	EV/SL	492	481	508	666	11
	Negative	36	41	32	34	
	Pending					22
<b>EGY Total</b>		<b>528</b>	<b>522</b>	<b>540</b>	<b>700</b>	<b>33</b>
IRN	<b>Wild</b>				<b>3</b>	
	EV/SL		5	51	65	
	Negative		1	3	3	
<b>IRN Total</b>			<b>6</b>	<b>54</b>	<b>71</b>	
JOR	EV/SL	2	29	36	33	
	Negative		2			
	Pending				3	3
<b>JOR Total</b>		<b>2</b>	<b>31</b>	<b>36</b>	<b>36</b>	<b>3</b>
KUW	EV/SL			3	3	
	Pending				8	
<b>KUW Total</b>			<b>3</b>	<b>11</b>		
LEB	EV/SL	2	26	44	37	
	Negative	2	1	1	3	
	Pending				7	
<b>LEB Total</b>		<b>4</b>	<b>27</b>	<b>45</b>	<b>47</b>	
PAK	<b>Wild</b>	<b>60</b>	<b>106</b>	<b>139</b>	<b>368</b>	<b>12</b>
	<b>Wild+cVDPV2</b>	<b>2</b>			<b>7</b>	
	<b>cVDPV2</b>	<b>2</b>			<b>19</b>	
	<b>aVDPV2</b>	<b>3</b>	<b>4</b>		<b>1</b>	
	EV/SL	456	523	531	411	4
	Negative	6		3	4	
	Pending				21	39
<b>PAK Total</b>		<b>529</b>	<b>633</b>	<b>673</b>	<b>831</b>	<b>55</b>
SOM	<b>cVDPV2</b>		<b>2</b>	<b>19</b>	<b>5</b>	
	<b>cVDPV3</b>			<b>11</b>		
	<b>aVDPV2</b>			<b>2</b>	<b>1</b>	
	EV/SL		20	43	28	
	Negative		14	138	31	2
<b>SOM Total</b>			<b>36</b>	<b>213</b>	<b>65</b>	<b>8</b>
SUD	EV/SL			15	41	
	Negative				1	
	Pending				18	
<b>SUD Total</b>			<b>15</b>	<b>60</b>		
SYR	EV/SL		4	81	153	1
	Negative			21	30	3
	Pending				2	8
<b>SYR Total</b>			<b>4</b>	<b>102</b>	<b>185</b>	<b>12</b>
<b>TOTAL</b>		<b>1248</b>	<b>1575</b>	<b>2017</b>	<b>2265</b>	<b>118</b>

**Table 7: Environmental Wild/VDPV isolate by site 2019-2020**

YEAR	COUNTRY	LAB RESULTS	PROVINCE	Count	First date	Last date
2019	AFG	Wild	HILMAND	19	6/Jan/19	25/Dec/19
			KANDAHAR	24	6/Jan/19	25/Dec/19
			NANGARHAR	13	26/Jan/19	25/Dec/19
	<b>AFG Total</b>			<b>56</b>	<b>6/Jan/19</b>	<b>25/Dec/19</b>
	IRN	Wild	S & B	3	22/Apr/19	20/May/19
				<b>3</b>	<b>22/Apr/19</b>	<b>20/May/19</b>
	PAK	Wild	BALUCHISTAN	72	1/Jan/19	20/Dec/19
			FATA	9	15/Jan/19	31/Dec/19
			ISLAMABAD	3	12/Apr/19	21/Aug/19
			KPAKHTUNKHWA	31	8/Jan/19	28/Dec/19
			PUNJAB	97	5/Jan/19	17/Dec/19
			SINDH	156	2/Jan/19	20/Dec/19
		Wild+cVDPV2	PUNJAB	4	6/Aug/19	15/Nov/19
			SINDH	3	7/Oct/19	7/Nov/19
		cVDPV2	GBALTISTAN	5	24/Aug/19	6/Nov/19
			ISLAMABAD	1	12/Nov/19	12/Nov/19
			KPAKHTUNKHWA	6	9/Oct/19	27/Nov/19
	aVDPV2	PUNJAB	7	21/Aug/19	16/Dec/19	
		PUNJAB	1	11/Apr/19	11/Apr/19	
	<b>PAK Total</b>			<b>395</b>	<b>1/Jan/19</b>	<b>31/Dec/19</b>
SOM	cVDPV2	BANADIR	5	10/Nov/19	22/Dec/19	
		aVDPV2	1	3/Feb/19	3/Feb/19	
<b>SOM Total</b>			<b>6</b>	<b>3/Feb/19</b>	<b>22/Dec/19</b>	
<b>2019 Total</b>			<b>460</b>	<b>1/Jan/19</b>	<b>31/Dec/19</b>	
2020	PAK	Wild	BALUCHISTAN	3	1/Jan/20	2/Jan/20
			PUNJAB	2	4/Jan/20	4/Jan/20
			SINDH	7	3/Jan/20	9/Jan/20
	<b>PAK Total</b>			<b>12</b>	<b>1/Jan/20</b>	<b>9/Jan/20</b>
<b>2020 Total</b>			<b>12</b>	<b>1/Jan/20</b>	<b>9/Jan/20</b>	

Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2020 - 26/01/2020

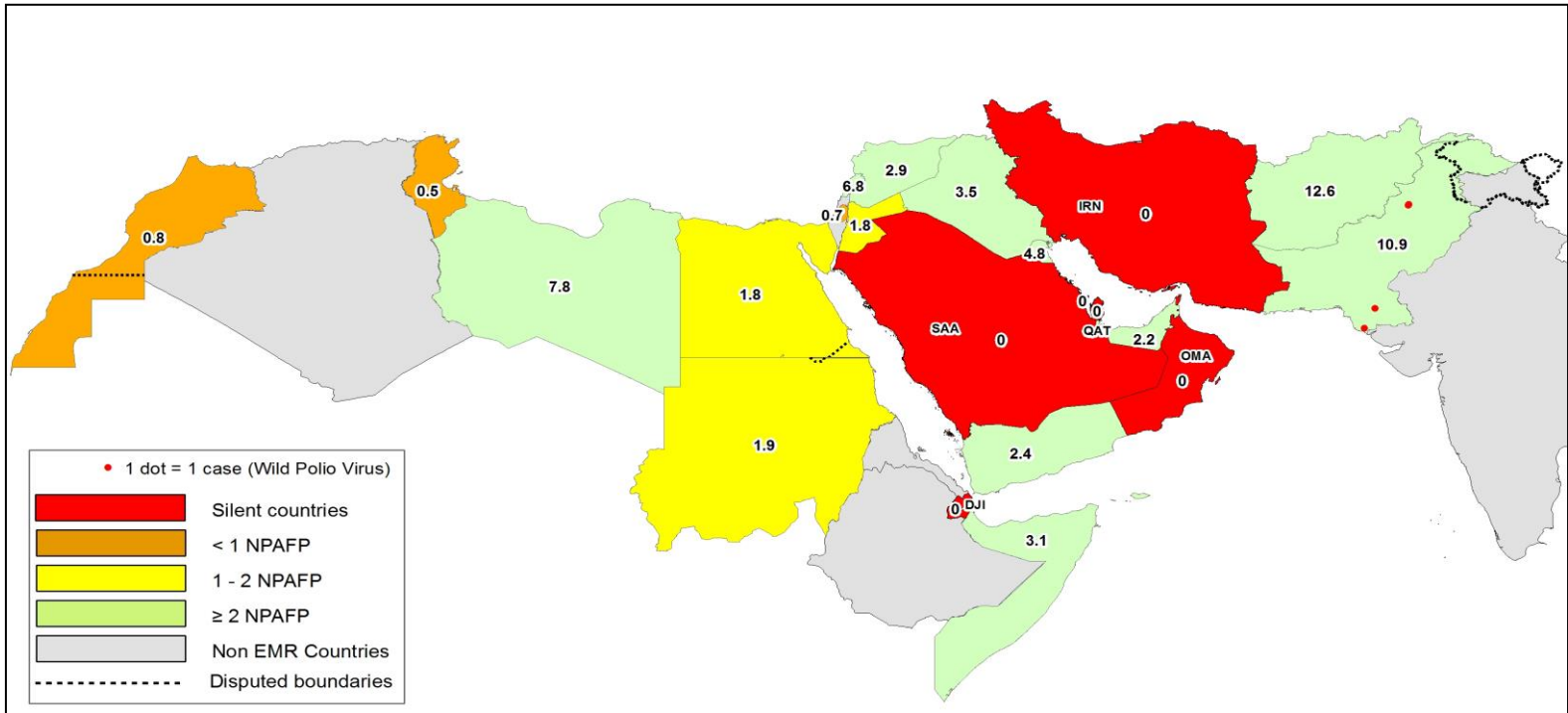


Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2020 - 26/01/2020

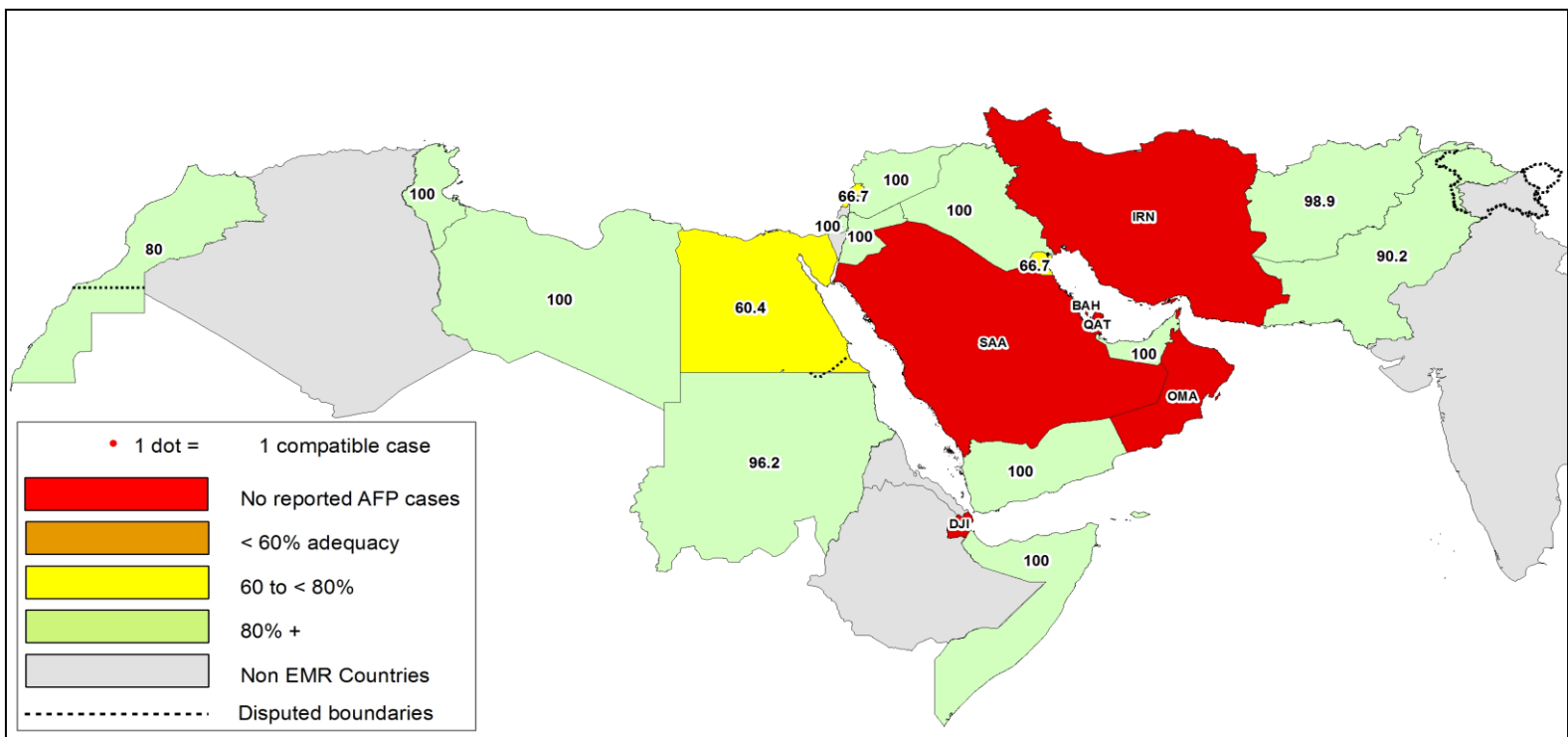
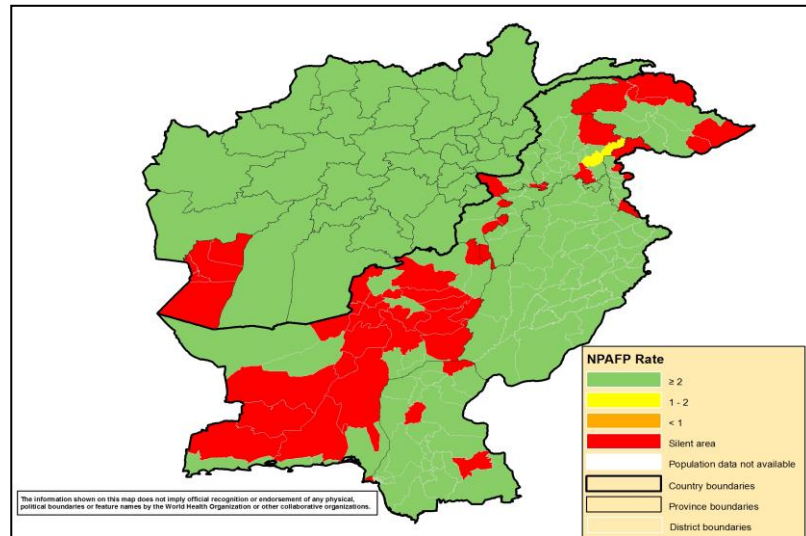


Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2019 - 2020

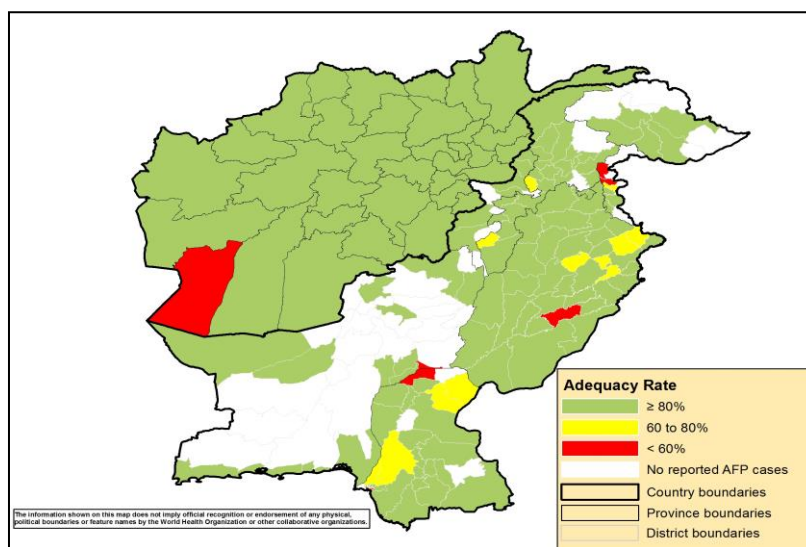
Year	COUNTRY	Count	First Case	Last Case
2020	PAK	4	3-Jan-20	7-Jan-20
<b>2020 Total</b>		<b>4</b>	<b>3-Jan-20</b>	<b>7-Jan-20</b>
2019	AFG	29	4-Jan-19	7-Dec-19
	PAK	139	15-Jan-19	31-Dec-19
<b>2019 Total</b>		<b>168</b>	<b>4-Jan-19</b>	<b>31-Dec-19</b>



**Figure 3: Non Polio AFP rate by Province in Afghanistan & by District in Pakistan 01/01/2020 - 26/01/2020**

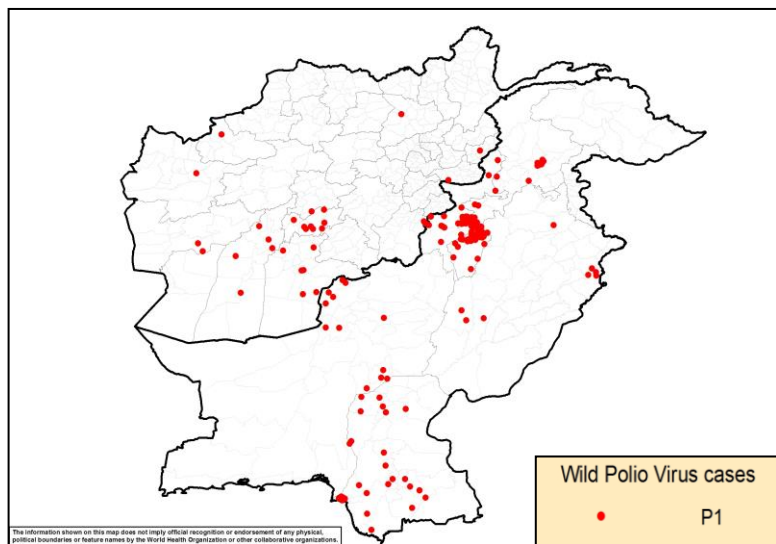


**Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan by Province & Pakistan by District 01/01/2020 - 26/01/2020**

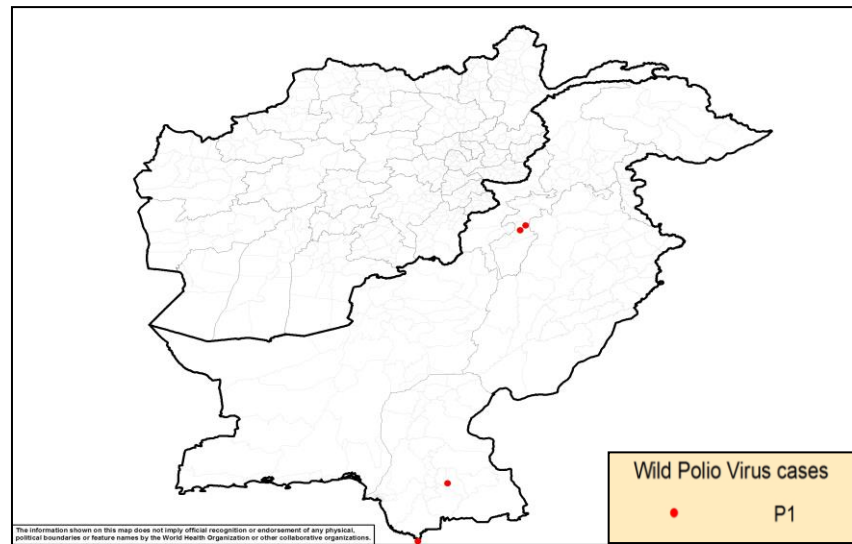


**Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan**

**5(a) 01/01/2019 - 31/12/2019**



**5(b) 01/01/2020 - 26/01/2020**



## World Health Organization – Regional Office for Eastern Mediterranean

## AFP SURVEILLANCE

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**Table 9: Wild Polio cases by district and date of onset of paralysis, Afghanistan 2019-2020**

ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case
2019	KANDAHAR	SHAHWALIKOT	1	7-Dec-19	7-Dec-19
		SPINBOLDAK	2	4-Jan-19	22-Nov-19
		KANDAHAR	2	17-Aug-19	10-Nov-19
		GHORAK	1	12-Jan-19	12-Jan-19
	FARAH	BAKWA	2	14-Nov-19	25-Nov-19
	HIRAT	PASHTUNZARGHUN	1	19-Nov-19	19-Nov-19
	BAGHLAN	PUL-E- KHUMRI	1	14-Nov-19	14-Nov-19
	URUZGAN	KHASURUZGAN	1	2-Nov-19	2-Nov-19
		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
	BADGHIS	BALAMURGHAB	1	17-Oct-19	17-Oct-19
	PAKTIKA	BERMEL	2	15-Sep-19	28-Sep-19
	NANGARHAR	KHOGYANI	1	18-Sep-19	18-Sep-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
<b>2019 Total</b>			<b>29</b>	<b>4-Jan-19</b>	<b>7-Dec-19</b>

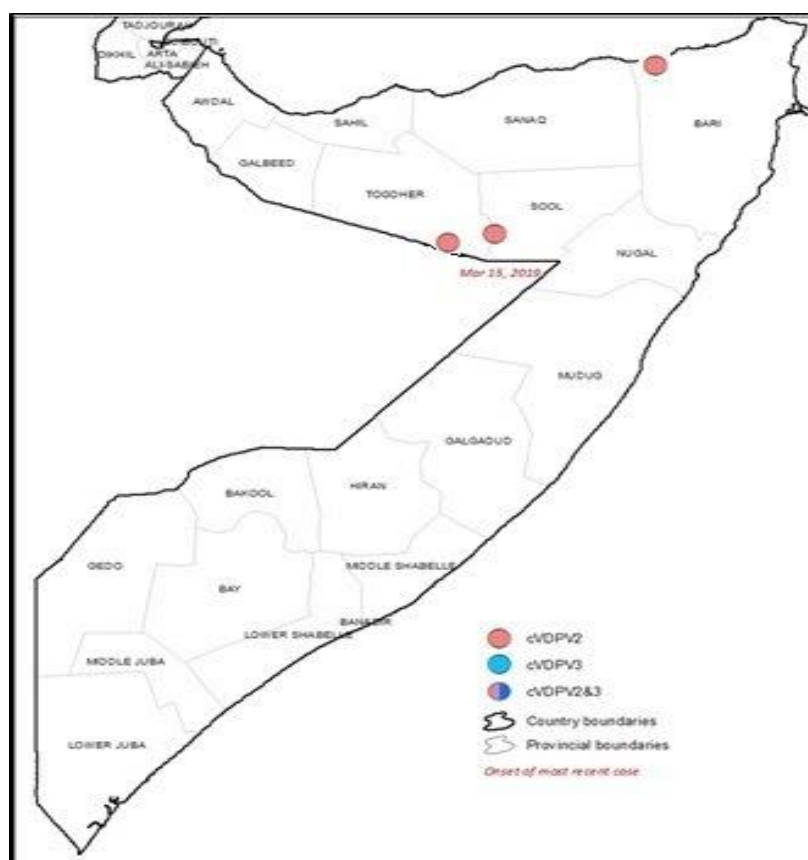
**Table 10: Wild Polio cases by district and date of onset of paralysis, Pakistan 2019-2020**

ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case	
2020	SINDH	SUJAWAL	1	7-Jan-20	7-Jan-20	
		T.ALLAHYAR	1	7-Jan-20	7-Jan-20	
	KHYBER PAKHTUNKHWA	LAKKIMRWT	2	3-Jan-20	4-Jan-20	
<b>2020 Total</b>			<b>4</b>	<b>3-Jan-20</b>	<b>7-Jan-20</b>	
2019	BALOCHISTAN	KABDULAH	5	9-Jun-19	31-Dec-19	
		JAFARABAD	3	28-May-19	18-Dec-19	
		NSIRABAD	1	5-Dec-19	5-Dec-19	
		MASTUNG	1	18-Nov-19	18-Nov-19	
		HARNAI	1	27-Sep-19	27-Sep-19	
		QUETTA	1	6-Jul-19	6-Jul-19	
	KHYBER PAKHTUNKHWA	LAKKIMRWT	32	27-May-19	31-Dec-19	
		DIKHAN	4	5-May-19	21-Dec-19	
		TANK	6	11-Oct-19	18-Dec-19	
		BANNU	26	15-Jan-19	30-Nov-19	
		SWABI	1	17-Nov-19	17-Nov-19	
		TORGHAR	7	25-May-19	13-Sep-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	
		DADU	2	6-Dec-19	26-Dec-19	
		SINDH	THATTA	1	26-Dec-19	26-Dec-19
			JAMSHORO	3	23-Aug-19	22-Dec-19
			KAMBAR	3	2-Nov-19	14-Dec-19
			MIRPURKHAS	3	17-Nov-19	1-Dec-19
	BADIN		1	28-Nov-19	28-Nov-19	
	T.ALLAHYAR		1	10-Nov-19	10-Nov-19	
	LARKANA		2	17-Apr-19	9-Nov-19	
	KHIKAMARI		1	29-Oct-19	29-Oct-19	
	SUKKUR		1	27-Oct-19	27-Oct-19	
	KHIJAMSHEED		1	24-Oct-19	24-Oct-19	
	SBENAZIRABAD		1	19-Oct-19	19-Oct-19	
	SUJAWAL		1	25-Sep-19	25-Sep-19	
	KHIORANGI		2	20-Aug-19	26-Aug-19	
	HYDERABAD		2	20-Jul-19	5-Aug-19	
	KHIGIQBAL	1	29-Apr-19	29-Apr-19		
	KHILAYARI	1	25-Feb-19	25-Feb-19		
	PUNJAB	DGKHAN	2	18-Dec-19	25-Dec-19	
		MUZFARGARH	1	26-Nov-19	26-Nov-19	
		LAHORE	4	20-Jan-19	22-Jun-19	
		JHELUM	1	21-Jun-19	21-Jun-19	
	KP TRIBAL DISTRICTS	MOHMAND	1	20-Dec-19	20-Dec-19	
		WAZIR-S	1	20-Aug-19	20-Aug-19	
		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		
<b>2019 Total</b>			<b>139</b>	<b>15-Jan-19</b>	<b>31-Dec-19</b>	

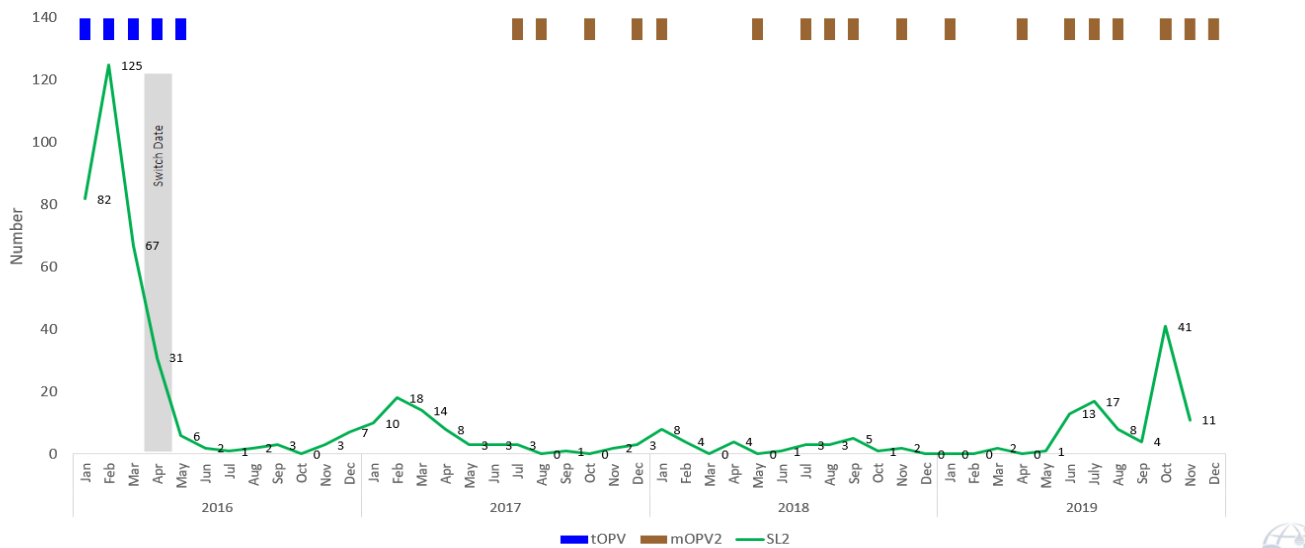
**Table 11: Circulating VDPV cases and date of onset of paralysis in EMR countries by districts 2019-2020**

COUNTRY	YEAR	PROVINCE	DISTRICT	cVDPV2		
				Count	First Case	Last Case
PAK	2019	PUNJAB	GUJRANWALA	1	22-Nov-19	22-Nov-19
		KHYBER PAKHTUNKHWA	KHYBER	3	12-Dec-19	28-Dec-19
			MOHMAND	3	12-Dec-19	21-Dec-19
			BAJOUR	1	1-Dec-19	1-Dec-19
			PESHAWAR	1	8-Dec-19	8-Dec-19
			LAKKI MARWAT	1	13-Dec-19	13-Dec-19
			CHARSADA	1	3-Nov-19	3-Nov-19
			KOHISTANUPPER	1	27-Oct-19	27-Oct-19
			KOHISTANLOWER	2	6-Oct-19	11-Oct-19
			TORGHAR	3	4-Sep-19	17-Dec-19
			ISLAMABAD	CDA	1	11-Sep-19
GILGIT BALTISTAN	DIAMER	4	7-Jul-19	28-Aug-19		
SOM		BARI	BOSSASO	1	8-May-19	8-May-19
		TOGDHER	BUHODLE	1	21-Apr-19	21-Apr-19
		SOOL	LAS ANOD	1	15-Mar-19	15-Mar-19
<b>Total 2019</b>				<b>25</b>	<b>15-Mar-19</b>	<b>28-Dec-19</b>

**Figure 6: Somalia cVDPV cases by type and district 01/01/2019 - 31/12/2019**



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



### VDPV2 isolates, EMR countries, 2019

