

## Highlights of Polio Fax Bulletin No. 1183 for Week 22 2021

### I. Salient features this week

1. Polio eradication teams at the Regional and Country levels continue to contribute to the COVID19 Response, particularly in areas of surveillance (field and laboratory), data analysis, communications and coordination.
2. No new wild poliovirus type-1 (WPV1) cases reported, but two new positive WPV1 environmental samples from Pakistan reported this week.
3. No new circulating vaccine derived poliovirus type-1 (cVDPV1) cases reported this week.
4. One new circulating vaccine derived poliovirus type-2 (cVDPV2) case from Afghanistan reported this week and one new cVDPV2 positive environmental sample from Pakistan. In addition, four VDPV2 positive environmental samples from Egypt are reported. These isolates are neither related with each other nor with earlier cVDPV2s reported in country or elsewhere.

### II. Wild Poliovirus Type-1 (WPV1) Transmission

WPV1 transmission continues though restricted globally to only two countries in the EMR namely Pakistan and Afghanistan – the remaining polio endemic countries in the world.

As of week 22 of 2021, two WPV1 cases were reported [83 in the same period in 2020; Afghanistan – 27, Pakistan - 56].

- a. *Human samples:* No new WPV1 cases reported this week.

#### **Afghanistan:**

In 2021 to date, **1 WPV1** case has been reported so far from Southeast Region with onset of paralysis **1 January 2021**.

#### **Pakistan:**

In 2021 to date, **1 WPV1** case has been reported so far from Balochistan province with date of onset **27 January 2021**.

- b. *Environmental samples:* Two new WPV1 positive environmental samples from Pakistan reported this week.
  - **Afghanistan:** In 2021 to date, there is **1** WPV1 combined with cVDPV2 positive environmental sample reported with collection date on **23 February 2021**.
  - **Pakistan:** In 2021, there are **57** WPV1 positive environmental samples (including 16 mixture of WPV1 and cVDPV2 and 4 mixture of WPV1 and aVDPV2) with most recent sample collected on **24 May 2021**.

- III. **Vaccine Derived Polioviruses (VDPVs):** One new cVDPV2 case reported from Afghanistan, in addition to one new cVDPV2 and one aVDPV2 positive environmental samples from Pakistan, and four new VDPV2 positive environmental samples from Egypt (not classified yet) reported this week.

In 2021 to date, two cVDPV1 reported from Yemen and 48 cVDPV2 cases were reported (Afghanistan 40 and Pakistan 8).

1. **Outbreaks:** *Six countries have VDPVs outbreaks, five with cVDPV2 and one with cVDPV1.*

**Afghanistan:** One new cVDPV2 case reported this week and no new positive environmental samples were reported.

The newly reported cVDPV2 case is from Badghis province, West Region, with date of onset 29 April 2021.

In 2021 to date, there are **40 cVDPV2** cases: 16 from West Region, 12 from South Region, seven from South East Region, three from Central Region and two from North Region. ***The most recent case had onset on 29 April 2021.***

***Environment:*** In 2021 to date, there are **39** cVDPV2 positive environmental samples including 1 mixture of WPV1 and cVDPV2 reported with ***most recent sample collected on 25 April 2021.***

**Pakistan:** No new VDPV cases reported this week, but one new cVDPV2 positive environmental sample was reported this week.

In 2021, there are **eight** cVDPV2 cases reported four from Balochistan, two from Sindh and one each from Khyber Pakhtunkhwa (KP) and Punjab provinces with ***most recent onset on 23 April 2021.***

***Environment:*** In 2021 to date; there are **32** cVDPV2 positive samples including 16 mixture of WPV1 and cVDPV2 with ***most recent sample collected on 18 May 2021.***

**SOMALIA:** No new cVDPV2 isolates from human or environmental samples reported this week. No VDPV isolates from human or environmental sample in 2021 so far.

***The most recent isolate was from a case having onset of paralysis on 25 October 2020.***

**SUDAN:** No new cVDPV2 isolates from human or environmental samples reported this week. No VDPV isolates from human or environmental sample in 2021 so far.

***The most recent isolate was from a case having onset of paralysis on 18 December 2020.***

**Egypt:** Four new positive VDPV2 isolates from environmental samples were reported this week, one from Aswan province (Aswan site) stool collection date on 8 May 2021, one each from Menofia province (Shebeen El-Kom site), Qena province (Qena site) and Port Said province (Port Said site) all with stool collection date on 9 May 2021. These VDPV2 isolates are awaiting classification type. These are not related to each other and other cVDPV2s nonetheless.

In 2021 to date, **nine** cVDPV2 positive environmental samples are reported. These include two each from Aswan, Qena and Alexandria provinces; and one each from Beni Suef, Kafr El Sheikh and Giza provinces. The samples are genetically related with each other and belong to CHA-NDG-1 emergence (importation from Sudan/Chad). ***Date of the recent most cVDPV2 positive environmental sample is 25 February 2021. There is no child paralyzed due to cVDPV2.***

In addition to two aVDPV2 positive environmental samples reported one from Cairo province and the other from Giza province with most recent stool collection date on 4 May 2021.

**YEMEN:** No new cVDPV1 cases reported this week.

In 2021 to date, **2** cVDPV1 cases were reported with most recent date of onset on 15 February 2021.

**VDPV Events:** There is one country having an Event due to VDPV2. Response per WHO's SOPs are ongoing.

**Iran:** In 2021 to date, **1** cVDPV2 positive environmental sample was collected from Zehedan district, Sistan & Balochistan province. The isolate is genetically related with earlier Pakistan virus. ***Date of collection was on 20 February 2021. There is no child paralyzed due to cVDPV2.***

#### IV. Surveillance performance indicators

In 2021, 11 out of 22 member states (14 in the same period in 2020) are meeting the global target of both key surveillance indicators: non polio AFP rate of 2/100,000 children aged below 15 years and percent AFP cases with adequate specimen 80% and above.

- Morocco, and Tunisia are missing both indicators as their non-polio AFP rates are 0.7 and 1.1 and the percentages of AFP cases with adequate stool specimens is 34.5% and 66.7% respectively.
- Bahrain, Jordan, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, and United Arab Emirates have a non-polio AFP rate of 1.5, 0.2, 1.8, 1.0, 0.4, 1.0, 1.5, and 1.1 respectively.
- Djibouti has AFP cases with adequate stool specimens is 75.0%.

## World Health Organization – Regional Office for Eastern Mediterranean

## AFP SURVEILLANCE

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

Country	Reported AFP cases by week of onset - Week (22/21) / Ending on : 06/06/2021														
	Total AFP 2019	Total AFP 2020	Total AFP to date, 2021	W11 21 Mar 21	W12 28 Mar 21	W13 4 Apr 21	W14 11 Apr 21	W15 18 Apr 21	W16 25 Apr 21	W17 02 May 21	W18 09 May 21	W19 16 May 21	W20 23 May 21	W21 30 May 21	W22 06 Jun 21
Afghanistan	3768	3972	1735	77	83	85	100	81	91	86	64	71	78	59	7
Bahrain	17	15	2	0	1	0	0	0	0	0	0	0	0	0	0
Djibouti	5	5	4	0	0	0	1	0	0	0	0	0	0	0	0
Egypt	1343	1009	504	46	21	27	18	14	27	9	11	16	26	25	1
Iran	1070	618	237	8	8	10	12	12	9	10	12	4	1	0	
Iraq	1157	476	285	6	16	14	18	9	5	7	6	10	7	8	
Jordan ****	113	32	4	0	0	0	1	0	0	0	0	0	0	0	1
Kuwait	48	36	12	1	0	0	1	2	1	0	0	0	0	0	
Lebanon ****	87	49	12	1	0	1	0	0	1	0	1	3	0	0	
Libya	107	95	34	3	4	4	3	2	2	0	1	1	2	0	
Morocco	247	87	29	3	3	2	0	2	3	1	1	0	1	1	
Oman	30	22	5	0	0	0	0	1	2	0	0	1	0	0	
Pakistan	15218	11971	4464	210	247	237	209	186	196	144	136	161	214	78	1
Palestine ****	62	16	3	0	0	0	0	0	0	0	0	0	0	0	
Qatar	9	9	2	0	0	0	0	0	0	1	0	0	0	0	
Saudi Arabia	236	200	55	3	3	2	1	1	3	2	0	0	0	0	0
Somalia	361	376	149	8	6	3	4	5	3	8	6	6	9	3	0
Sudan	608	733	228	11	14	8	9	7	5	9	1	4	10	6	
Syria ****	377	343	161	7	16	8	8	10	5	9	2	6	8	10	1
Tunisia	79	40	12	1	0	3	0	1	1	0	0	0	0	0	
U.A.E	50	19	7	0	0	0	1	1	0	0	0	1	0		
Yemen	779	825	303	15	19	9	9	10	9	7	8	7	12	10	
<b>Total EMR</b>	<b>25771</b>	<b>20948</b>	<b>8247</b>	<b>400</b>	<b>441</b>	<b>413</b>	<b>395</b>	<b>344</b>	<b>363</b>	<b>293</b>	<b>249</b>	<b>291</b>	<b>368</b>	<b>200</b>	<b>11</b>

No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2019	Total year 2020	06/06		Confirmed polio cases by month of onset											
			2020	2021	July 2020	August 2020	September 2020	October 2020	November 2020	December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	June 2021
Afghanistan	29	56	27	1	7	6	6	3	0	0	1	0	0	0		
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	147	84	56	1	6	5	7	4	2	0	1	0	0	0	0	
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	
<b>Total EMR</b>	<b>176</b>	<b>140</b>	<b>83</b>	<b>2</b>	<b>13</b>	<b>11</b>	<b>13</b>	<b>7</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</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 2020 &amp; 2021 up to Week (22/21) / Ending on : 06/06/2021

COUNTRY	2020												2021												Latest line List Date				
	AFP										Specimen		Wild cases ****		AFP											Specimen		Wild cases ****	
	Total AFP cases onset 2020	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 2021	Case classification					Annualized Non polio AFP rate **	AFP cases pending classification > 90 days from onset of paralysis	AFP cases pending classification and lab > 90 days from onset of paralysis	% with *** adequate specimens	Wild P1 Poliovirus	Wild P3 Poliovirus					
		Total Confirmed Polio Cases *	Polio Compatible	Pending Classification	Discarded (non polio AFP)	VDPV *****								Total Confirmed Polio Cases *	Polio Compatible	Pending Classification	Discarded (non polio AFP)	VDPV *****											
Afghanistan	3972	56	3	0	3600	314	18.5	0	0	92.6	56	0	1735	1	0	244	1448	42	18.7	29	0	93.7	1	0	06/06/2021				
Bahrain	15	0	0	0	15	0	5.0	0	0	93.3	0	0	2	0	0	1	1	0	1.5	0	0	100.0	0	0	06/06/2021				
Djibouti	5	0	0	0	5	0	1.4	0	0	100.0	0	0	4	0	0	0	4	0	2.4	0	0	75.0	0	0	06/06/2021				
Egypt	1009	0	0	0	1009	0	2.6	0	0	94.6	0	0	504	0	0	122	382	0	3.0	8	0	85.5	0	0	03/06/2021				
Iran	618	0	0	0	618	0	3.0	0	0	98.5	0	0	237	0	0	5	232	0	2.7	0	0	94.5	0	0	30/05/2021				
Iraq	476	0	0	0	476	0	2.8	0	0	93.3	0	0	285	0	0	39	246	0	3.8	6	0	93.0	0	0	05/06/2021				
Jordan	32	0	0	0	32	0	0.8	0	0	96.9	0	0	4	0	0	2	2	0	0.2	0	0	100.0	0	0	06/06/2021				
Kuwait	36	0	0	0	36	0	4.1	0	0	91.7	0	0	12	0	0	0	12	0	3.2	0	0	83.3	0	0	30/05/2021				
Lebanon	49	0	0	0	49	0	3.1	0	0	89.8	0	0	12	0	0	7	5	0	1.8	0	0	83.3	0	0	31/05/2021				
Libya	95	0	0	0	94	1	3.6	0	0	100.0	0	0	34	0	0	6	28	0	3.0	0	0	100.0	0	0	05/06/2021				
Morocco	87	0	0	0	87	0	0.9	0	0	78.2	0	0	29	0	0	23	6	0	0.7	3	1	34.5	0	0	28/05/2020				
Oman	22	0	0	0	22	0	1.9	0	0	100.0	0	0	5	0	0	1	4	0	1.0	0	0	80.0	0	0	01/06/2021				
Pakistan	11971	84	27	8	11712	142	15.2	8	0	85.4	84	0	4464	1	2	625	3822	14	10.3	100	0	88.4	1	0	06/06/2021				
Palestine	16	0	0	0	16	0	0.9	0	0	100.0	0	0	3	0	0	3	0	0	0.4	3	0	100.0	0	0	30/05/2021				
Qatar	9	0	0	0	9	0	2.1	0	0	33.3	0	0	2	0	0	2	0	0	1.0	0	0	100.0	0	0	30/05/2021				
Saudi Arabia	200	0	0	0	200	0	2.4	0	0	96.0	0	0	55	0	0	12	43	0	1.5	0	0	94.5	0	0	06/06/2021				
Somalia	376	0	0	1	360	15	4.7	1	0	94.7	0	0	149	0	0	32	117	0	4.2	1	1	96.6	0	0	06/06/2021				
Sudan	733	0	0	0	675	58	3.8	0	0	92.9	0	0	228	0	0	33	195	0	2.7	3	0	94.7	0	0	03/06/2021				
Syria	343	0	0	0	343	0	4.3	0	0	91.0	0	0	161	0	0	33	128	0	4.9	0	0	91.9	0	0	06/06/2021				
Tunisia	40	0	0	0	40	0	1.4	0	0	55.0	0	0	12	0	0	2	10	0	1.0	0	0	66.7	0	0	04/06/2021				
U.A.E	19	0	0	0	19	0	1.5	0	0	100.0	0	0	7	0	0	6	1	0	1.1	3	0	100.0	0	0	25/05/2021				
Yemen	825	0	1	1	792	31	5.4	1	1	88.7	0	0	303	0	0	168	133	2	4.6	26	16	91.1	0	0	05/06/2021				
EMR	20948	140	31	10	20209	561	8.0	10	1	88.6	140	0	8247	2	2	1366	6819	58	6.7	182	18	90.1	2	0					
2019	25771	176	7	0	25559	29	10.2	0	0	89.5	176	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

\*\*\*\*\* VDPV cases including all types (ambiguous, immune deficient &amp; circulating)

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COUNTRY	2020						2021					
	# OF CONTACTS	LAB RESULTS					# OF CONTACTS	LAB RESULTS				
		WILD	VDPV	SL	NPEV	PENDING		WILD	VDPV	SL	NPEV	PENDING
AFG	1252	14	79	52	270	0	601	0	16	53	78	40
BAH	1	0	0	0	0	0	0	0	0	0	0	0
DJI	2	0	0	0	0	0	1	0	0	0	0	0
EGY	330	0	0	12	32	1	248	0	0	29	17	36
IRN	46	0	0	0	0	0	79	0	0	11	1	3
IRQ	168	0	0	4	10	0	80	0	0	3	7	6
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	5	0	0	0	0	0	13	0	0	0	0	4
LIB	19	0	0	0	0	0	0	0	0	0	0	0
MOR	8	0	0	0	0	4	17	0	0	0	0	17
OMA	64	0	0	2	8	1	7	0	0	1	0	2
PAK	4652	21	19	379	787	0	1880	0	3	131	233	148
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	18	0	0	0	0	6	9	0	0	0	0	9
SOM	1110	0	10	23	149	8	437	0	0	0	28	103
SUD	364	0	18	3	29	11	53	0	0	0	0	22
SYR	280	0	0	11	15	0	28	0	0	3	3	2
TUN	6	0	0	0	0	1	1	0	0	0	0	0
UAE	0	0	0	0	0	0	0	0	0	0	0	0
YEM	230	0	0	7	41	0	109	0	0	2	4	82
<b>EMR</b>	<b>8555</b>	<b>35</b>	<b>126</b>	<b>493</b>	<b>1341</b>	<b>32</b>	<b>3563</b>	<b>0</b>	<b>19</b>	<b>233</b>	<b>371</b>	<b>474</b>

Table 4 (B): Most recent wild contacts in EMRO, 2020-2021

Year	Country	Data	
		Count of wild contacts	Date of Most Recent stool collection
2020	Afghanistan	14	26/Jul/20
	Pakistan	21	14/Dec/20
<b>2020 Total</b>		<b>35</b>	<b>14/Dec/20</b>

Table 4 (C): Number of distribution by district of -ve index AFP cases identified as wild positive by contact in EMR, 2020-2021

YEAR	COUNTRY	PROVINCE	DISTRICT	COUNT	First case	Last case	
2020	AFG	KANDAHAR	NESH	1	23-May-20	23-May-20	
			HILMAND	WASHER	1	04-Jan-20	04-Jan-20
				NIMROZ	1	28-Feb-20	28-Feb-20
			FARAH	1	06-May-20	06-May-20	
	PAK	BALOCHISTAN	KSAIFULLAH	1	01-Sep-20	01-Sep-20	
			PUNJAB	LAHORE	1	24-Jul-20	24-Jul-20
				DG KHAN	2	18-Jan-20	05-Jul-20
			KHYBER PAKHTUNKHWA (KP)	KARAK	1	20-Jan-20	20-Jan-20
				SINDH	2	07-Feb-20	14-Jul-20
	<b>2020 Total</b>				<b>11</b>	<b>04-Jan-20</b>	<b>01-Sep-20</b>

Table 5: Laboratory investigation of AFP cases with paralysis onset in 2020 up to Week (22/2021) / Ending on : (06/06/2021)

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	1709	173	20	214	1120	144		1	57	1		71	36		63		1		2	12%	100%	99%	98%	06/06/2021	
Bahrain	NPL Oman / CDC																								01/06/2021	
Djibouti	NPL Kenya / CDC	4			1																100%			100%	06/06/2021	
Egypt***	RRL Egypt	475	58	3	30	334	48	2		2			57			1		1	1		6%	91%	100%	99%	03/06/2021	
Iran	NPL Iran / CDC	286	9		3	252	22			1			6			2					1%	100%	100%	98%	05/06/2021	
Iraq	RRL Egypt	280	5		12	245	18			1						9					5%	100%	44%	97%	05/06/2021	
Jordan	NPL Jordan / RRL EGYPT	4			1	2	1														33%	100%		100%	06/06/2021	
Kuwait	RRL Kuwait / RIVM	13				12	1														0%	100%		100%	03/06/2021	
Lebanon	NPL Jordan / RRL EGYPT	12			1	7	4														7%	100%			06/06/2021	
Libya	RRL Tunisia / RIVM	28				28															0%	100%		96%	19/05/2021	
Morocco	NPL Morocco / RRL Tunisia	21				21															2%	100%		95%	04/06/2021	
Oman	NPL Oman / CDC	5				4	1														0%	100%		100%	01/06/2021	
Pakistan	RRL Pakistan	4408	258	24	618	3126	370	1	1	82			146	12		91		2	1		12%	100%	100%	97%	06/06/2021	
Palestine & UNRWA		3				3															0%	0%		100%	30/05/2021	
Qatar	NPL Oman / CDC	2				1	1														0%	100%		100%	01/06/2021	
Saudi Arabia	NPL Saudi Arabia / CDC	61				53	7	1													0%	98%		100%	06/06/2021	
Somalia	NPL Kenya / CDC	149			12	105	8	24													10%	5%		96%	06/06/2021	
Sudan	NPL Sudan / RRL Egypt	228			28	182	17	1													12%	100%			03/06/2021	
Syria	NPL Syria / RRL Egypt	155	4		4	128	19														3%	100%		0%	05/06/2021	
Tunisia	RRL Tunisia	12				12															0%	100%		100%	19/05/2021	
U.A.E	NPL Oman / CDC	4				4															0%	100%		50%	01/06/2021	
Yemen	NPL Kenya / CDC	132	6		20	106				1	1					3		1			13%	100%	100%	1%	05/06/2021	
<b>Total EMR 2021</b>		7991	513	47	944	5745	661	29	2	144	2		280	48		169		2	3	1	3	11%	98%	99%	96%	
<b>Total EMR 2020</b>		20389	1681	93	3046	15556		4	129	352	32		509	468		462	2	3	18	11		14%	94%	97%	93%	

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

\*\* This indicator reflects surveillance and laboratory activities

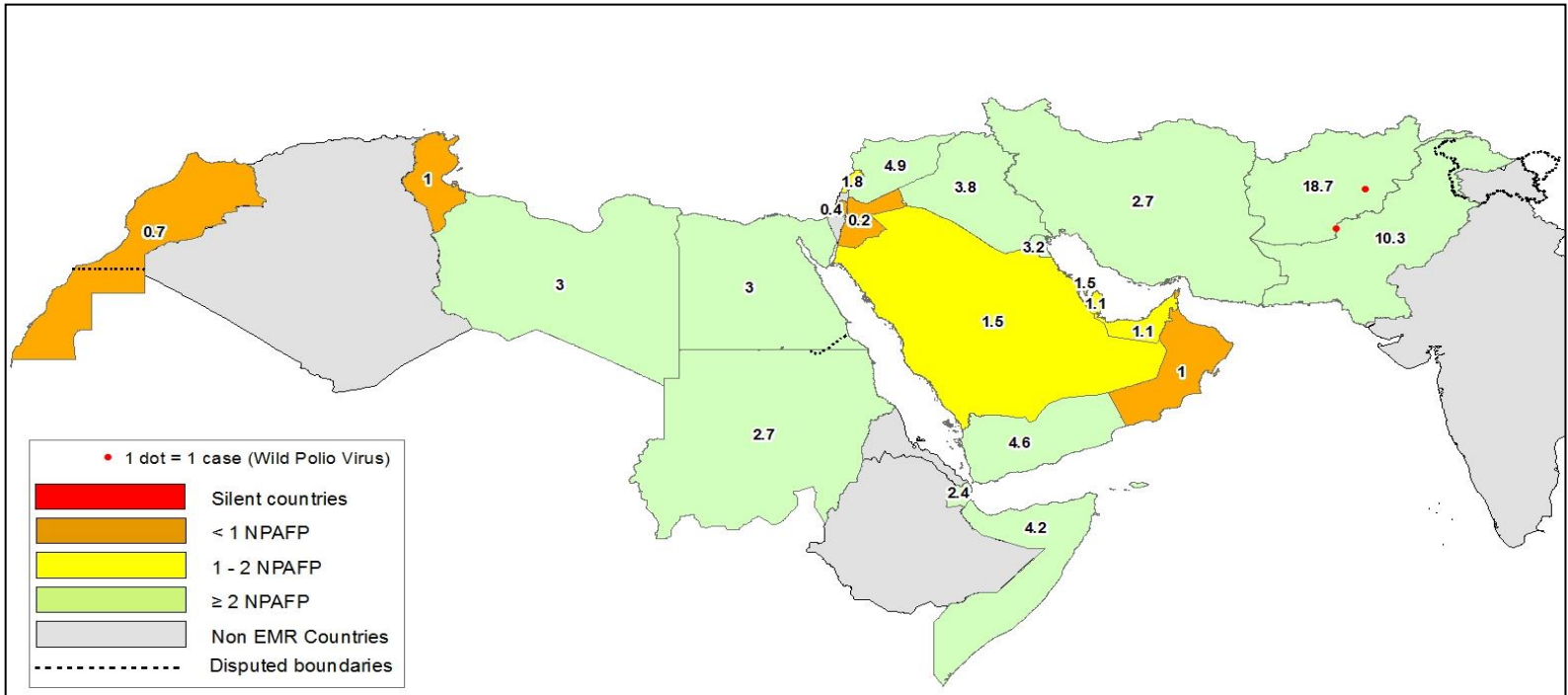
Table 6: Environmental isolate by year and type

COUNTRY	LAB RESULTS	2016	2017	2018	2019	2020	2021
AFG	Wild	2	42	83	56	28	1
	Wild+cVDPV2	2				7	2
	aVDPV2					2	38
	cVDPV2	125	170	177	138	111	25
	Enteric	6	9	5	3	3	2
	Negative						30
	Pending	36	94	71	60	31	4
SL1/3	16	1		2	64	81	
SL2					1		
AFG Total		185	316	336	259	413	183
EGY	aVDPV1					1	2
	aVDPV2					1	9
	aVDPV3						45
	cVDPV2	354	322	321	307	288	13
	Enteric	34	41	32	34	41	16
	Negative						36
	Pending	79	159	187	269	212	127
	SL1/3	60					4
SL2	1						
VDPV3					1		
EGY Total		528	522	540	700	545	252
IRN	Wild						1
	cVDPV2		1	29	55	23	9
	Enteric		1	3			2
	Negative						5
	Pending		4	22	10	16	3
SL1/3						20	
SL2							
IRN Total		6	54	71	43	43	20
JOR	Enteric	1	13	27	24	9	3
	Negative		2			1	2
	Pending					1	1
	SL1/3	1	16	9	12	14	9
JOR Total		2	31	36	36	25	14
KUW	Enteric			2	9		
	SL1/3			1	4		
KUW Total							
LEB	Enteric	2	12	24	15	16	12
	Negative	2	1	1	3	2	1
	Pending						4
	SL1/3		14	20	29	13	3
LEB Total		4	27	45	47	33	20
PAK	aVDPV1						1
	Wild	59	105	139	367	337	37
	Wild+cVDPV2	2			10	91	16
	Wild+aVDPV2	1	1		2	6	4
	aVDPV2	3	4		29	16	18
	cVDPV2	2	2		44	44	16
	Enteric	300	392	404	308	185	61
	Negative	6		3	4	6	1
	Pending						53
	SL1/3	77	106	127	90	49	14
	SL2	79	25		22	146	141
PAK Total		723	633	673	1177	610	317
SOM	aVDPV2		2	2	1		
	cVDPV2			18	5	26	
	cVDPV2+cVDPV3			1			
	cVDPV3			11			
	Enteric		16	25	22	12	14
	Negative		14	138	29	34	24
	Pending						2
SL1/3		2	8	6	6	3	
SL2		2	10		5	1	
VDPV2						1	
SOM Total			36	213	63	83	45
SUD	cVDPV2			15	51	14	11
	Enteric				32		5
	Negative				4	2	5
	Pending						1
	SL1/3				5		3
SL2							
SUD Total			15	60	20	25	
SYR	Enteric		4	72	111	152	55
	Negative			21	30	17	9
	Pending						6
	SL1/3			6	44	36	14
	SL2			3			
SYR Total			4	102	185	205	84
TOTAL		1248	1575	2017	2267	2225	1005

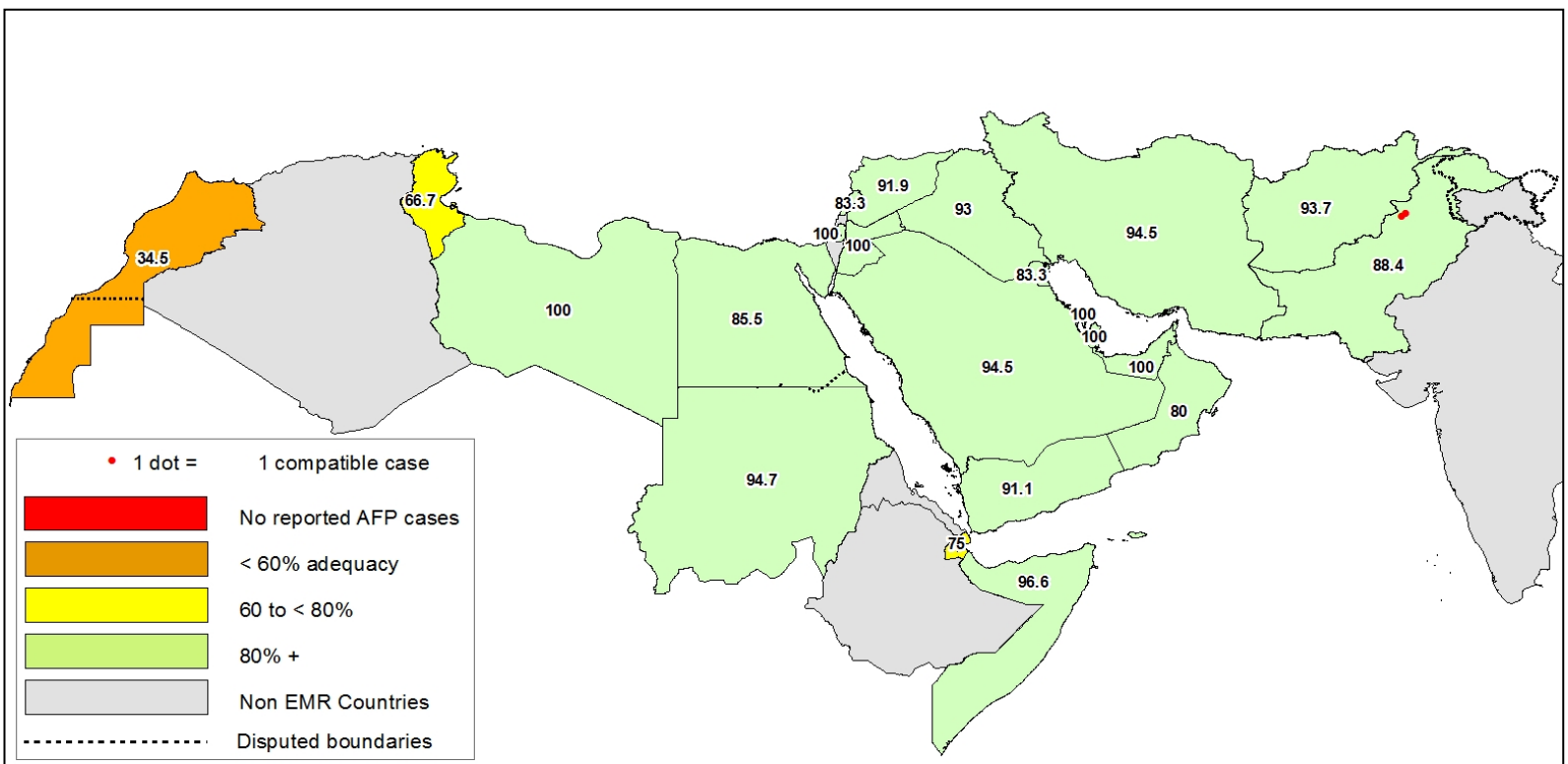
Table 7: Environmental Wild/VDPV isolate by site 2020-2021

YEAR	COUNTRY	LAB RESULTS	PROVINCE	Count	First date	Last date				
2020	AFG	Wild	HILMAND	10	1/Jan/20	24/Aug/20				
			HIRAT	4	26/Apr/20	23/Aug/20				
			KABUL	1	26/Sep/20	26/Sep/20				
			KANDAHAR	9	28/Jan/20	25/Jun/20				
			KHOST	1	25/Apr/20	25/Apr/20				
			KUNDUZ	1	27/Sep/20	27/Sep/20				
			NANGARHAR	2	26/Jan/20	6/Oct/20				
			HILMAND	1	6/Sep/20	6/Sep/20				
			KANDAHAR	4	25/Jun/20	6/Dec/20				
			NANGARHAR	2	8/Jan/20	25/Jul/20				
			HILMAND	34	27/May/20	27/Dec/20				
			HIRAT	3	26/Sep/20	26/Dec/20				
			KABUL	19	26/Apr/20	5/Nov/20				
			KANDAHAR	35	9/Jul/20	27/Dec/20				
		KHOST	6	24/Jun/20	23/Nov/20					
		KUNAR	5	6/Jun/20	7/Nov/20					
		KUNDUZ	2	23/Aug/20	24/Oct/20					
		LAGHMAN	4	24/Jul/20	6/Oct/20					
		NANGARHAR	58	7/Jan/20	23/Dec/20					
		PAKTYA	1	26/Jul/20	26/Jul/20					
		HILMAND	1	27/Sep/20	27/Sep/20					
		KABUL	1	26/Dec/20	26/Dec/20					
		AFG Total		204		1/Jan/20	27/Dec/20			
		EGY	EGY	aVDPV2	GIZA	1	21/Sep/20	21/Sep/20		
		EGY Total		1		21/Sep/20	21/Sep/20			
		IRN	IRN	cVDPV2	S & B	3	3/Oct/20	25/Dec/20		
		IRN Total		3		3/Oct/20	25/Dec/20			
PAK	PAK	Wild	AJK	1	25/Feb/20	25/Feb/20				
			BALUCHISTAN	71	1/Jan/20	21/Sep/20				
			GBALISTAN	1	12/May/20	12/May/20				
			ISLAMABAD	5	16/Jan/20	10/Nov/20				
			KPAKHTUNKHWA	23	28/Jan/20	18/Dec/20				
			PUNJAB	122	4/Jan/20	28/Dec/20				
			SINDH	114	3/Jan/20	8/Dec/20				
			BALUCHISTAN	27	1/Feb/20	21/Dec/20				
			KPAKHTUNKHWA	1	11/Mar/20	11/Mar/20				
			PUNJAB	14	4/Jan/20	12/Oct/20				
			SINDH	49	3/Jan/20	10/Dec/20				
			BALUCHISTAN	1	17/Dec/20	17/Dec/20				
			PUNJAB	5	16/Mar/20	21/Dec/20				
			BALUCHISTAN	15	2/Jun/20	28/Dec/20				
		KPAKHTUNKHWA	5	10/Jan/20	15/Oct/20					
		PUNJAB	3	16/Jan/20	18/Dec/20					
		SINDH	21	8/Jun/20	10/Dec/20					
		BALUCHISTAN	3	17/Sep/20	17/Nov/20					
		KPAKHTUNKHWA	6	10/Apr/20	2/Dec/20					
		PUNJAB	5	4/May/20	30/Dec/20					
		SINDH	2	13/Oct/20	3/Nov/20					
		PAK Total		494		1/Jan/20	30/Dec/20			
		SOM	SOM	cVDPV2	BANADIR	23	5/Jan/20	24/Oct/20		
					BAY	2	19/Jun/20	20/Jun/20		
					LOWER JUBA	1	8/Sep/20	8/Sep/20		
		SOM Total		26		5/Jan/20	24/Oct/20			
		SUD	SUD	cVDPV2	KHARTOUM	14	29/Mar/20	9/Nov/20		
	14				29/Mar/20	9/Nov/20				
2020 Total				742	1/Jan/20	30/Dec/20				
2021	AFG	Wild+cVDPV2	HILMAND	1	23/Feb/21	23/Feb/21				
			HILMAND	14	4/Jan/21	24/Mar/21				
			HIRAT	1	23/Mar/21	23/Mar/21				
			KABUL	1	6/Mar/21	6/Mar/21				
			KANDAHAR	17	5/Jan/21	25/Apr/21				
			KUNDUZ	1	23/Feb/21	23/Feb/21				
			NANGARHAR	4	5/Jan/21	25/Apr/21				
			KABUL	1	3/Feb/21	3/Feb/21				
			KANDAHAR	1	7/Mar/21	7/Mar/21				
			KANDAHAR	1	4/Jan/21	25/Apr/21				
			AFG Total		41		4/Jan/21	25/Apr/21		
			EGY	EGY	cVDPV2	ALEXANDRIA	2	10/Jan/21	25/Feb/21	
						ASWAN	2	20/Jan/21	9/Feb/21	
						BENI SUEF	1	27/Jan/21	27/Jan/21	
		GIZA				1	31/Jan/21	31/Jan/21		
		KAFR EL-SHEIKH				1	27/Jan/21	27/Jan/21		
		QENA				2	23/Jan/21	23/Feb/21		
		CAIRO				1	28/Apr/21	28/Apr/21		
		GIZA				1	4/May/21	4/May/21		
		GIZA				1	10/Jan/21	4/May/21		
		EGY Total					11		10/Jan/21	4/May/21
		IRN				IRN	cVDPV2	S & B	1	20/Feb/21
		IRN Total		1		20/Feb/21	20/Feb/21			
		PAK	PAK	Wild	BALUCHISTAN	6	20/Jan/21	28/Feb/21		
					ISLAMABAD	3	11/Jan/21	17/Mar/21		
					KPAKHTUNKHWA	6	18/Jan/21	24/May/21		
					PUNJAB	13	4/Jan/21	19/May/21		
					SINDH	9	4/Jan/21	12/Apr/21		
					BALUCHISTAN	11	2/Jan/21	12/Apr/21		
					KPAKHTUNKHWA	1	11/Jan/21	11/Jan/21		
					PUNJAB	2	11/Jan/21	18/Jan/21		
					SINDH	2	2/Mar/21	10/Mar/21		
				BALUCHISTAN	1	1/Jan/21	1/Jan/21			
				PUNJAB	1	8/Jan/21	8/Jan/21			
				SINDH	2	12/Jan/21	4/Feb/21			
				BALUCHISTAN	11	1/Jan/21	18/May/21			
				KPAKHTUNKHWA	2	16/Jan/21	2/Mar/21			
				SINDH	3	12/Jan/21	9/Feb/21			
				aVDPV2	1	16/Mar/21	16/Mar/21			
				KPAKHTUNKHWA	4	1/Mar/21	21/Apr/21			
				PUNJAB	7	1/Mar/21	19/Apr/21			
SINDH	6			12/Jan/21	4/May/21					
PAK Total		91		1/Jan/21	24/May/21					
2021 Total				144	1/Jan/21	24/May/21				

**Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2021 - 06/06/2021**



**Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2021 - 06/06/2021**

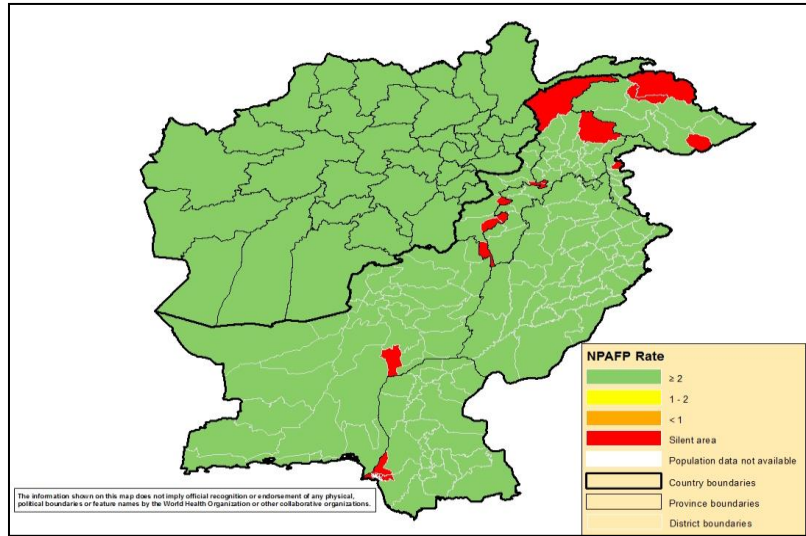


**Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2020 - 2021**

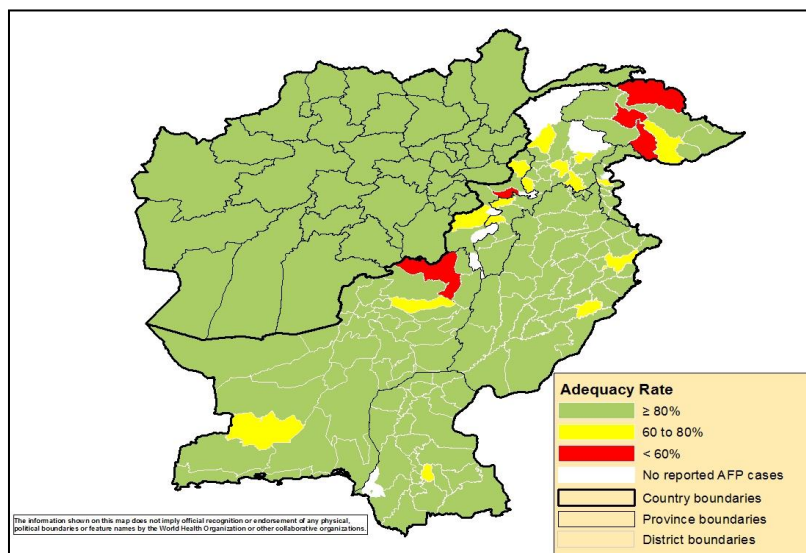
Year	COUNTRY	Count	First Case	Last Case
2020	AFG	56	4-Jan-20	19-Oct-20
	PAK	84	1-Jan-20	23-Nov-20
<b>2020 Total</b>		<b>140</b>	<b>1-Jan-20</b>	<b>23-Nov-20</b>
2021	AFG	1	1-Jan-21	1-Jan-21
	PAK	1	27-Jan-21	27-Jan-21
<b>2021 Total</b>		<b>2</b>	<b>1-Jan-21</b>	<b>27-Jan-21</b>



**Figure 3: Non Polio AFP rate by Province in Afghanistan & by District in Pakistan 01/01/2021 - 06/06/2021**

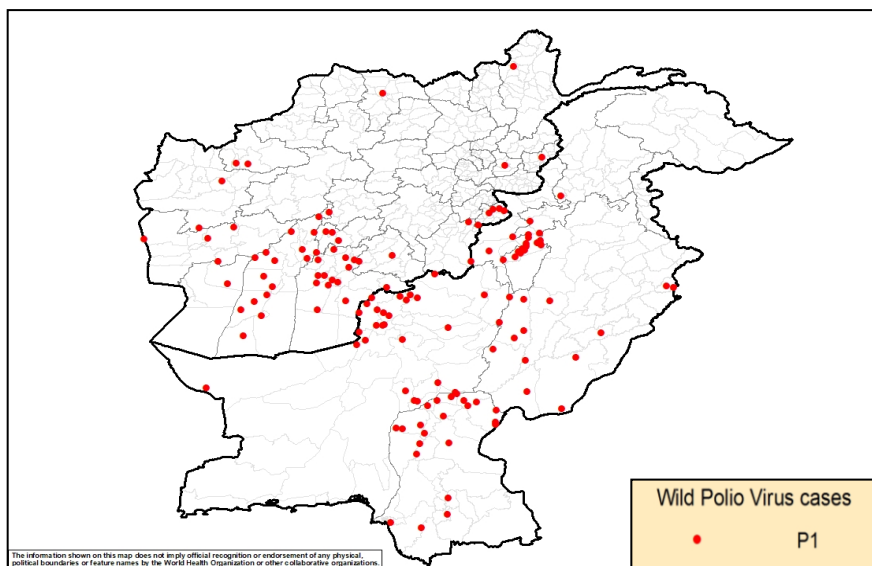


**Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan by Province & Pakistan by District 01/01/2021 - 06/06/2021**

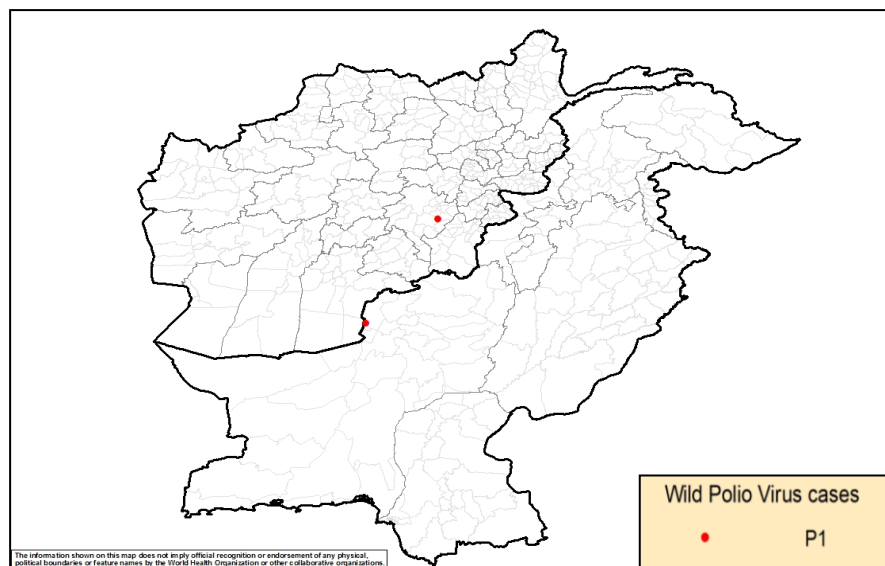


**Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan**

**5(a) 01/01/2020 - 31/12/2020**



**5(b) 01/01/2021 - 06/06/2021**



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Table 9: Wild Polio cases by district and date of onset of paralysis, Afghanistan 2020-2021

ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case
2020	BALKH	DEHDADI	1	15-Mar-20	15-Mar-20
	HIRAT	PASHTUNZARGHUN	1	29-Jun-20	29-Jun-20
		SHINDAND	1	21-Mar-20	21-Mar-20
	FARAH	BALABULUK	2	11-May-20	17-May-20
		ANARDARA	1	6-May-20	6-May-20
		BAKWA	1	4-Feb-20	4-Feb-20
	BADGHIS	QALA-E-NAW	1	5-Sep-20	5-Sep-20
		QADIS	1	13-May-20	13-May-20
	KUNAR	SHIGAL WA SHEL TAN	1	5-Mar-20	5-Mar-20
	LAGHMAN	MEHTARLAM	1	10-Feb-20	10-Feb-20
	PAKTIKA	NAKA	1	12-Aug-20	12-Aug-20
	KHOST	NADIRSHAHKOT	1	7-Sep-20	7-Sep-20
		BAK	2	3-Sep-20	7-Sep-20
		SABARI	1	8-Aug-20	8-Aug-20
		SPERA	1	1-Aug-20	1-Aug-20
	KANDAHAR	MARUF	1	14-Oct-20	14-Oct-20
		KANDAHAR	3	22-Jun-20	13-Sep-20
		ZHERAY	3	20-Jul-20	24-Aug-20
		SPINBOLDAK	1	25-Jul-20	25-Jul-20
		PANJWAYI	1	10-Jun-20	10-Jun-20
		SHAHWALIKOT	3	4-Mar-20	6-Jun-20
		NESH	1	23-May-20	23-May-20
		GHORAK	1	19-Mar-20	19-Mar-20
	ZABUL	QALAT	1	6-Aug-20	6-Aug-20
		ARGHANDAB	1	14-Jul-20	14-Jul-20
		MIZAN	1	21-Jan-20	21-Jan-20
	HILMAND	NAD-E-ALI	2	1-May-20	19-Oct-20
		WASHER	3	4-Jan-20	19-Oct-20
		BAGHRAN	2	16-Jul-20	4-Sep-20
		KAJAKI	2	10-Jun-20	27-Jul-20
		REG	4	25-May-20	3-Jun-20
DEH-E-SHU		1	27-May-20	27-May-20	
NAWZAD		1	11-May-20	11-May-20	
SANGIN		1	7-May-20	7-May-20	
URUZGAN	SHAHID-E-HASSAS	3	14-Jun-20	12-Jul-20	
	TIRINKOT	1	28-May-20	28-May-20	
NIMROZ	KHASHROD	1	28-Feb-20	28-Feb-20	
BADAKHSHAN	YAWAN	1	10-Mar-20	10-Mar-20	
<b>2020 Total</b>			<b>56</b>	<b>4-Jan-20</b>	<b>19-Oct-20</b>
2021	GAZNI	ANDAR	1	1-Jan-21	1-Jan-21
<b>2021 Total</b>			<b>1</b>	<b>1-Jan-21</b>	<b>1-Jan-21</b>

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Table 10: Wild Polio cases by district and date of onset of paralysis, Pakistan 2020-2021

ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case
2020	KHYBER PAKHTUNKHWA	PESHAWAR	1	13-Jul-20	13-Jul-20
		WAZIR-S	2	21-Feb-20	8-Jun-20
		BANNU	1	27-Apr-20	27-Apr-20
		TANK	4	11-Jan-20	15-Mar-20
		KARAK	2	20-Jan-20	13-Mar-20
		LAKKIMRWT	12	2-Jan-20	9-Mar-20
	BALOCHISTAN	KABDULAH	3	11-May-20	23-Nov-20
		QUETTA	5	17-Jul-20	5-Nov-20
		MASTUNG	1	15-Oct-20	15-Oct-20
		PISHIN	6	31-Jan-20	3-Oct-20
		KSAIFULAH	1	1-Sep-20	1-Sep-20
		CHAGHAI	1	4-Jun-20	4-Jun-20
		DUKKI	1	26-May-20	26-May-20
		JHALMAGSI	1	19-Apr-20	19-Apr-20
		ZHOB	2	22-Feb-20	13-Apr-20
		NSIRABAD	2	3-Jan-20	13-Apr-20
		SOHBATPUR	1	12-Feb-20	12-Feb-20
		JAFARABAD	1	12-Feb-20	12-Feb-20
		SIBI	1	7-Feb-20	7-Feb-20
		PUNJAB	LAYYAH	1	21-Oct-20
	MUZFARGARH		1	4-Oct-20	4-Oct-20
	VEHARI		1	16-Sep-20	16-Sep-20
	DGKHAN		5	18-Jan-20	14-Sep-20
	BAHAWALPUR		2	17-Aug-20	5-Sep-20
	RYKHAN		1	1-Sep-20	1-Sep-20
	LAHORE		2	12-Jun-20	24-Jul-20
	RAJANPUR		1	2-Jun-20	2-Jun-20
	SINDH	JACOBABAD	4	7-Feb-20	14-Jul-20
		GHOTKI	4	2-Mar-20	9-Jul-20
		KHILANDHI	1	9-Jun-20	9-Jun-20
		LARKANA	1	21-May-20	21-May-20
		KAMBAR	3	8-Jan-20	11-Apr-20
		KHAIRPUR	1	27-Mar-20	27-Mar-20
		NFEROZ	2	8-Feb-20	22-Feb-20
		SHIKARPUR	1	11-Feb-20	11-Feb-20
		KASHMORE	2	16-Jan-20	3-Feb-20
		SUJAWAL	1	7-Jan-20	7-Jan-20
		T.ALLAHYAR	1	7-Jan-20	7-Jan-20
		BADIN	1	1-Jan-20	1-Jan-20
	<b>2020 Total</b>			<b>84</b>	<b>1-Jan-20</b>
<b>2021</b>	BALOCHISTAN	KABDULAH	1	27-Jan-21	27-Jan-21
<b>2021 Total</b>			<b>1</b>	<b>27-Jan-21</b>	<b>27-Jan-21</b>

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**Table 11: Circulating VDPV2 cases and date of onset of paralysis in EMR countries by provinces 2020-2021**

YEAR	COUNTRY	PROVINCE	Count	First Case	Last Case	
2021	AFG	FARAH	5	1-Jan-21	16-Apr-21	
		LOGAR	1	19-Feb-21	19-Feb-21	
		KANDAHAR	1	16-Feb-21	16-Feb-21	
		WARDAK	2	3-Mar-21	22-Apr-21	
		HIRAT	5	20-Feb-21	11-Apr-21	
		BADGHIS	6	12-Jan-21	29-Apr-21	
		FARYAB	2	28-Jan-21	26-Mar-21	
		HILMAND	2	5-Jan-21	11-Mar-21	
		GHAZNI	7	8-Jan-21	15-Mar-21	
	ZABUL	9	7-Jan-21	4-Apr-21		
	PAK	KHYBER PAKHTUNKHWA	1	14-Jan-21	14-Jan-21	
		PUNJAB	2	7-Jan-21	7-Jan-21	
		SINDH	1	5-Jan-21	7-Jan-21	
BALOCHISTAN		4	2-Jan-21	23-Apr-21		
<b>Total 2021</b>			<b>48</b>	<b>1-Jan-21</b>	<b>29-Apr-21</b>	
2020	SOM	LOWER JUBA	1	29-Aug-20	29-Aug-20	
		AWDAL	1	1-Aug-20	1-Aug-20	
		GALBEED	1	29-Sep-20	29-Sep-20	
		HIRAN	1	18-Oct-20	18-Oct-20	
		MIDDLE SHABELLE	1	17-Jul-20	17-Jul-20	
		BAY	2	3-Sep-20	25-Oct-20	
		BANADIR	7	18-Jun-20	30-Sep-20	
	SUD	SOUTH DARFUR	3	7-Mar-20	18-Dec-20	
		NORTH DARFUR	2	26-Nov-20	13-Dec-20	
		EAST DARFUR	3	12-May-20	24-Jul-20	
		KHARTOUM	4	15-Jul-20	16-Nov-20	
		KASSALA	11	28-Jul-20	6-Nov-20	
		GEZIRA	5	9-Jul-20	19-Sep-20	
		RIVER NILE	5	29-Jun-20	27-Sep-20	
		RED SEA	8	29-Apr-20	29-Nov-20	
		WEST DARFUR	1	19-May-20	19-May-20	
		BLUE NILE	4	7-Aug-20	26-Nov-20	
		SOUTH KORDOFAN	2	20-Nov-20	25-Nov-20	
		NORTH KORDOFAN	3	29-Aug-20	2-Dec-20	
		SENNAR	1	16-Aug-20	16-Aug-20	
		WHITE NILE	3	15-Jun-20	22-Aug-20	
	GEDARIF	3	1-Apr-20	1-Aug-20		
	AFG	FARAH	17	1-Jun-20	27-Dec-20	
		BALKH	2	29-Oct-20	3-Nov-20	
		BADGHIS	10	1-Nov-20	27-Dec-20	
		FARYAB	1	18-Oct-20	18-Oct-20	
		SAMANGAN	1	1-Nov-20	1-Nov-20	
		HIRAT	2	10-Aug-20	15-Aug-20	
		LOGAR	4	20-Aug-20	18-Nov-20	
		KANDAHAR	75	4-Aug-20	30-Dec-20	
		HILMAND	40	1-Aug-20	24-Dec-20	
		JAWZIAN	3	4-Aug-20	21-Nov-20	
		KABUL	7	6-Jul-20	12-Oct-20	
		NURISTAN	2	21-Jun-20	13-Jul-20	
		NIMROZ	3	6-Jul-20	8-Aug-20	
		KHOST	17	5-Jul-20	19-Oct-20	
		PAKTYA	5	18-Jun-20	25-Oct-20	
		KUNDUZ	3	28-Aug-20	3-Oct-20	
		PAKTIKA	5	25-Aug-20	7-Oct-20	
		GHAZNI	7	29-Aug-20	26-Dec-20	
		BADAKHSHAN	1	23-Apr-20	23-Apr-20	
		LAGHMAN	14	20-May-20	23-Sep-20	
		TAKHAR	1	20-Sep-20	20-Sep-20	
		ZABUL	12	17-Sep-20	15-Nov-20	
		GHOR	1	14-Nov-20	14-Nov-20	
		URUZGAN	15	28-Aug-20	22-Dec-20	
		PARWAN	1	4-Sep-20	4-Sep-20	
WARDAK		5	6-Sep-20	22-11-20		
KUNAR		9	6-Apr-20	29-Sep-20		
NANGARHAR		45	5-Feb-20	21-Sep-20		
PAK		SINDH	45	2-May-20	28-Nov-20	
		BALOCHISTAN	23	29-Feb-20	24-Dec-20	
		PUNJAB	25	5-Feb-20	5-Nov-20	
		KHYBER PAKHTUNKHWA	42	2-Jan-20	24-May-20	
		<b>Total 2020</b>			<b>515</b>	<b>2-Jan-20</b>

VDPV2 isolates, EMR countries, 2021

