

## Highlights of Polio Fax Bulletin No. 1155 for Week 47 2020

### I. Salient features

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 cases reported this week. Two new WPV1 positive environmental samples both reported from Pakistan.
3. Vaccine Derived Poliovirus (VDPV):
  - cVDPV1: One new cVDPV1 case from Yemen reported this week.
  - cVDPV2: 47 new cVDPV2 cases (Afghanistan – 24, Pakistan – 21 & Sudan – 2) and 26 new positive environmental samples (Afghanistan – 20, Pakistan – 5 & Somalia – 1) reported this week.

*Advance notification:* Two new WPV1 cases from Afghanistan, two new cVDPV2 cases from Somalia and one new cVDPV1 case from Yemen. Details will be shared in next bulletin.

### II. Wild Poliovirus Transmission

WPV1 transmission in the EMR and world is in two polio-endemic countries only, Pakistan and Afghanistan.

Total WPV1 cases in 2020 to date is 135 (54 from Afghanistan and 81 from Pakistan). This compares with 135 cases in 2019 in the same period (27 from Afghanistan and 108 from Pakistan).

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

**Afghanistan:** In 2020, **54 WPV1 cases** have been reported so far: 18 cases from Kandahar province; 10 from Hilmand province; 5 from Khost province; four each from Farah and Uruzgan provinces; three from Zabul province; two each from Herat and Badghis provinces; and one each from Nimroz, Laghman, Kunar, Badakhshan, Balkh and Paktika provinces. **The most recent case has onset of paralysis on 14 October 2020.**

**Pakistan:** In 2020 to date, **81 WPV1 cases** are reported, 23 from Balochistan province, 22 cases each from Khyber Pakhtunkhwa (KP) and Sindh provinces, and 14 from Punjab province. **The most recent case has onset of paralysis on 21 October 2020.**

- b. *Environmental samples:* 2 newly reported positive environmental samples both from Pakistan.

- **Afghanistan:** In 2020 to date, there are **34 WPV1 positive environmental samples** including five combined (WPV1 and cVDPV2) with most recent sample collected on 6 October 2020.
- **Pakistan:** In 2020 to date, there are **386 WPV1 positive environmental samples** including 58 combined (WPV1 and cVDPV2) and 4 combined (WPV1 and aVDPV2) with most recent positive sample collected on 21 October 2020.

- III. **Vaccine Derived Polioviruses (VDPVs):** Total cVDPV2 cases in 2020 to date is 321 (160 from Afghanistan, 104 from Pakistan, 11 from Somalia and 46 from Sudan). This compares with 14 cases in 2019 in the same period (11 from Pakistan and 3 from Somalia).

1. **Outbreaks:** Five countries have VDPVs outbreaks, four with cVDPV2 and one with cVDPV1.

**Afghanistan:** 24 new cVDPV2 cases and 20 positive environmental samples reported this week.

*Human samples:* The newly reported 24 cVDPV2 cases were reported from: 13 cases from South Region (Kandahar – 9 and Hilmand – 4); 6 from South East Region (Khost – 5 and Paktika – 1); 2 each from North East Region (1 each from Takhar and Kunduz provinces) and South Region (1 each from Uruzgan and Zabul provinces). The dates of onset vary between 23 August to 3 October 2020.

In 2020 to date, there are **160 cVDPV2 cases**; 69 reported from East Region, 46 from South Region, 23 from South East Region, 9 from Central Region, 8 from West Region, 3 from North East Region, 1 each from North and Badakhshan Regions. **The most recent case has onset of paralysis on 3 October 2020.**

*Environment:* In 2020 to date, 124 cVDPV2 positive environmental samples including 5 combined (WPV1 and cVDPV2) were reported. **The most recent cVDPV2 positive environmental sample was collected on 6 October 2020.**

**Pakistan:** 21 new cVDPV2 cases (out of which 1 case from Pishin district, Balochistan province, with date of onset 3 October 2020 is a mixture of wild + cVDPV2) and 5 positive environmental samples reported this week.

*Human samples:* The newly reported 21 cVDPV2 cases were reported from: 9 cases from Sindh province (2 from Kharachi Gadap town and 1 each from Kharachi towns of Baldia, Orangi, Nazim and Site, Hyderabad, Shikarpur and Jacobabad); 7 from Balochistan province (3 from Lasbella district and 1 each from Sherani, Quetta, Pishin and Kila Abdulla districts) and 5 from Punjab (1 each from Faisalabad, Sahiwal, Jhang, Ttsingh and Okara districts). The dates of onset vary between 9 August to 7 October 2020.

In 2020 to date, there are **104** cVDPV2 cases reported. Cases include 42 from KP province, 31 from Sindh province, 22 from Punjab province, and 9 from Balochistan province, with most recent case's onset on 7 October 2020. In addition to 7 aVDPV2 cases, 6 from Punjab province and 1 from Sindh province, with most recent case's onset on 11 September 2020.

*Environment:* In 2020, there are **76** positive environmental samples for cVDPV2 so far (including 58 combined WPV1 and cVDPV2), the most recent sample collected on 7 October 2020. Also, there are 9 aVDPV2 isolates detected in the environment samples, which include four combined (WPV1 + aVDPV2). The most recent aVDPV2 positive environmental sample was collected on 17 September 2020.

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

In 2020 to date, **11** cVDPV2 cases reported, 7 from Banadir province and 1 each from Lower Juba, Middle Shabelle, Bay and Galbeed provinces, with **most recent date of onset 30 September 2020**. Also, there are **26** cVDPV2 positive environmental samples reported, the most recent collected on 24 October 2020.

**SUDAN:** 2 new cVDPV2 cases reported and no new positive environmental samples were reported this week. The 2 new cVDPV2 cases were reported 1 each from River Nile State (from Atbara locality) and North Kordofan State (Bara locality). Their dates of onset are 27 September and 5 October 2020 respectively.

In 2020 to date, **46** cVDPV2 cases reported. **The most recent case has onset of paralysis on 5 October 2020.**

A total of **11** environmental samples have been positive for cVDPV2 so far, all from Khartoum with most recent collection on 6 September 2020.

**YEMEN:** One new cVDPV1 case was reported this week.

The newly cVDPV1 reported case is from Al Sabeen district, Sana'a City province, with date of onset 23 March 2020.

In 2020 to date, **17** cVDPV1 cases are reported. 16 cases are from Saadah province (5 each from Kitaf Wa Buga and Sahar districts, 3 from Al Safrah district, and one each from Sageen, Saadh City and Majz districts) and 1 case from Sana'a City province (Al Sabeen district). **The most recent case has onset of paralysis on 5 June 2020.**

## 2. **Events:** There are two countries currently having Event due to VDPV2.

**Egypt:** In 2020, an Event of an aVDPV2 positive environmental sample from Giza province is under investigation to determine the appropriate response. The isolate is genetically related with earlier virus seen in Sudan consequent to importation from Chad. **Date of sample collection is 21 September 2020.**

**Iran:** A reported VDPV2 positive environmental sample from Zabol district, Sistan & Balochistan province – it is under investigation to determine the appropriate response. The isolate is genetically related with earlier virus seen in Afghanistan consequent to importation from Pakistan. **Date of sample collection is 3 October 2020.**

## IV. Surveillance performance indicators

In 2020, 13 out 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.

- Morocco and Tunisia are missing both indicators as their non-polio AFP rates are 0.9 and 1.2 and their percentage of AFP cases with adequate stool specimens is 64.6%, and 61.3%, respectively.
- Djibouti, Jordan, Oman, Palestine, Saudi Arabia and United Arab Emirates have a non-polio AFP rate of 1.2, 0.9, 1.9, 0.7, 1.9 and 1.6 respectively.
- Qatar has AFP cases with adequate stool specimens is 33.3%.

## World Health Organization – Regional Office for Eastern Mediterranean

## AFP SURVEILLANCE

23-Nov-20

Week 47, ending 22 November 2020

Number 1155

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

Country	Reported AFP cases by week of onset - Week (47/20) / Ending on : 22/11/2020														
	Total AFP 2018	Total AFP 2019	Total AFP to date, 2020	W36 06 Sep 20	W37 13 Sep 20	W38 20 Sep 20	W39 27 Sep 20	W40 04 Oct 20	W41 11 Oct 20	W42 18 Oct 20	W43 25 Oct 20	W44 1 Nov 20	W45 8 Nov 20	W46 15 Nov 20	W47 22 Nov 20
Afghanistan	3378	3768	3435	118	106	117	82	94	100	90	87	70	76	33	1
Bahrain	35	17	12	0	0	0	1	0	0	0	0	1	0	0	0
Djibouti	0	5	4	0	1	0	0	0	0	0	1	0	0	0	0
Egypt	1246	1343	857	20	25	21	20	31	23	13	31	22	25	20	6
Iran	896	1070	505	17	12	14	9	9	8	7	11	6	4	0	0
Iraq	1023	1157	389	6	8	8	8	5	13	14	7	14	6	5	
Jordan ****	115	113	31	0	0	1	1	1	2	0	0	0			
Kuwait	72	48	29	0	0	0	0	0	1	1	1	1	0	0	
Lebanon ****	89	87	42	1	2	1	1	0	2	1	1	0	0	0	
Libya	122	107	87	3	0	0	2	0	1	3	1	1	1	1	
Morocco	212	247	79	0	0	1	0	0	3						
Oman	28	30	19	0	1	0	1	1	1	0	1	2	0	0	
Pakistan	12276	15216	10214	278	278	327	281	290	252	236	220	224	180	53	1
Palestine ****	44	62	12	0	0	1	0	0	0	0	1	0	0	0	0
Qatar	10	9	9	0	1	0	0	0	0	0	0	0	0	1	0
Saudi Arabia	242	236	144	2	5	5	8	10	2	8	6	3	9	4	0
Somalia	353	361	335	8	4	11	7	5	6	4	5	3	6	2	0
Sudan	579	608	620	30	27	34	32	18	27	20	28	16	10	5	1
Syria ****	362	377	305	4	8	1	13	3	1	3	11	4	5	6	
Tunisia	68	79	31	0	1	0	0	0	0	0	1	1	0	1	
U.A.E	40	50	18	1	0	0	0	0	0	1	0	0	0		
Yemen	730	779	681	27	19	20	22	29	15	16	18	22	23	9	
<b>Total EMR</b>	<b>21920</b>	<b>25769</b>	<b>17858</b>	<b>515</b>	<b>498</b>	<b>562</b>	<b>488</b>	<b>496</b>	<b>457</b>	<b>417</b>	<b>431</b>	<b>390</b>	<b>345</b>	<b>140</b>	<b>9</b>

No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2018	Total year 2019	15/11		Confirmed polio cases by month of onset											
			2019	2020	December 2019	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020
Afghanistan	21	29	27	54	1	2	3	7	0	12	10	7	6	6	1	
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	0	0		
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Iraq	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Jordan ****	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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		
Libya	0	0	0	0	0	0	0	0	0	0	0	0	0			
Morocco	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	147	108	81	32	18	17	7	6	6	6	6	5	7	3	
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	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	0		
Yemen	0	0	0	0	0	0										
<b>Total EMR</b>	<b>33</b>	<b>176</b>	<b>135</b>	<b>135</b>	<b>33</b>	<b>20</b>	<b>20</b>	<b>14</b>	<b>6</b>	<b>18</b>	<b>16</b>	<b>13</b>	<b>11</b>	<b>13</b>	<b>4</b>	<b>0</b>

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

## AFP SURVEILLANCE

Week 47, ending 22 November 2020

23-Nov-20

Number 1155

Table 3: Investigation of AFP cases with paralysis onset in 2019 &amp; 2020 up to Week (47/20) / Ending on : 22/11/2020

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	3768	29	1	0	3738	0	18.1	0	0	94.1	29	0	3435	54	1	362	2856	162	17.9	50	9	93.4	54	0	22/11/2020
Bahrain	17	0	0	0	17	0	5.7	0	0	100.0	0	0	12	0	0	2	10	0	4.5	0	0	91.7	0	0	22/11/2020
Djibouti	5	0	0	0	5	0	1.4	0	0	80.0	0	0	4	0	0	4	0	0	1.2	0	0	100.0	0	0	22/11/2019
Egypt	1343	0	0	0	1343	0	3.6	0	0	93.4	0	0	857	0	0	108	749	0	2.5	1	0	92.8	0	0	19/11/2020
Iran	1070	0	0	0	1069	1	5.2	0	0	97.1	0	0	505	0	0	12	493	0	2.7	0	0	99.0	0	0	22/11/2020
Iraq	1157	0	0	0	1157	0	7.4	0	0	94.3	0	0	389	0	0	22	367	0	2.7	0	0	93.1	0	0	21/11/2020
Jordan	113	0	0	0	113	0	3.9	0	0	100.0	0	0	31	0	0	0	31	0	0.9	0	0	100.0	0	0	05/11/2020
Kuwait	48	0	0	0	48	0	5.4	0	0	89.6	0	0	29	0	0	2	27	0	3.5	0	0	82.8	0	0	15/11/2020
Lebanon	87	0	0	0	87	0	4.7	0	0	89.7	0	0	42	0	0	6	36	0	2.5	2	0	95.2	0	0	20/11/2020
Libya	107	0	0	0	107	0	4.3	0	0	98.1	0	0	87	0	0	9	77	1	3.7	0	0	100.0	0	0	21/11/2020
Morocco	247	0	0	0	247	0	2.8	0	0	84.2	0	0	79	0	0	35	44	0	0.9	31	8	64.6	0	0	16/10/2020
Oman	30	0	0	0	30	0	2.7	0	0	80.0	0	0	19	0	0	3	16	0	1.9	0	0	100.0	0	0	15/11/2020
Pakistan	15216	147	6	0	15040	23	19.3	0	0	86.6	147	0	10214	81	8	912	9105	109	14.5	187	1	86.9	81	0	22/11/2020
Palestine	62	0	0	0	62	0	3.5	0	0	98.4	0	0	12	0	0	5	7	0	0.7	3	0	100.0	0	0	22/11/2020
Qatar	9	0	0	0	9	0	2.2	0	0	88.9	0	0	9	0	0	7	2	0	2.4	6	0	33.3	0	0	22/11/2020
Saudi Arabia	236	0	0	0	236	0	2.8	0	0	93.2	0	0	144	0	0	59	85	0	1.9	0	0	95.8	0	0	22/11/2020
Somalia	361	0	0	0	358	3	5.7	0	0	95.6	0	0	335	0	0	27	295	13 #	4.6	2	1	96.1	0	0	22/11/2020
Sudan	608	0	0	0	608	0	3.4	0	0	96.4	0	0	620	0	0	73	501	46	3.6	2	0	93.2	0	0	19/11/2020
Syria	377	0	0	0	377	0	4.8	0	0	88.1	0	0	305	0	0	17	288	0	4.3	0	0	91.5	0	0	21/11/2020
Tunisia	79	0	0	0	78	1	2.9	0	0	74.7	0	0	31	0	0	5	26	0	1.2	1	0	61.3	0	0	20/11/2020
U.A.E	50	0	0	0	50	0	4.0	0	0	90.0	0	0	18	0	0	1	17	0	1.6	0	0	100.0	0	0	08/11/2020
Yemen	779	0	0	0	778	1	5.5	0	0	89.0	0	0	681	0	1	396	268	17 #	5.4	200	174	90.7	0	0	21/11/2020
EMR	25769	176	7	0	25557	29	10.2	0	0	89.5	176	0	17858	135	10	2067	15300	348	7.6	485	193	89.6	135	0	
2018	21920	33	4	0	21868	15	8.7	0	0	89.8	33	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

**# Advance notification of 2 new cVDPV2 cases from Somaila & 1 new cVDPV1 case from Yemen - Details will be shared next bulletin**

World Health Organization – Regional Office for Eastern Mediterranean  
AFP SURVEILLANCE  
Week 47, ending 22 November 2020

23-Nov-20  
Number 1155

COUNTRY	2019						2020					
	# OF CONTACTS	LAB RESULTS					# OF CONTACTS	LAB RESULTS				
		WILD	VDPV	SL	NPEV	PENDING		WILD	VDPV	SL	NPEV	PENDING
AFG	1138	8	0	48	202	0	1054	14	35	36	205	77
BAH	0	0	0	0	0	0	1	0	0	0	0	0
DJI	1	0	0	0	0	0	2	0	0	0	0	2
EGY	498	0	0	8	57	0	258	0	0	8	19	41
IRN	216	0	0	4	7	0	16	0	0	0	0	0
IRQ	603	0	0	12	39	6	165	0	0	4	8	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	24	0	0	0	3	0	5	0	0	0	0	0
LIB	6	0	0	0	3	0	0	0	0	0	0	0
MOR	85	0	0	3	1	30	8	0	0	0	0	4
OMA	78	0	0	2	28	0	53	0	0	2	6	2
PAK	5497	26	9	248	959	0	4064	19	8	329	643	127
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	0	0	0	18	0	0	0	0	6
SOM	1082	0	1	45	141	5	997	0	5	17	124	94
SUD	402	0	0	1	31	90	296	0	16	0	4	229
SYR	813	0	0	23	36	0	276	0	0	11	12	10
TUN	27	0	0	0	2	0	5	0	0	0	0	1
UAE	0	0	0	0	0	0	0	0	0	0	0	0
YEM	423	0	2	6	68	5	187	0	0	0	25	35
<b>EMR</b>	<b>10937</b>	<b>34</b>	<b>12</b>	<b>400</b>	<b>1577</b>	<b>136</b>	<b>7405</b>	<b>33</b>	<b>64</b>	<b>407</b>	<b>1046</b>	<b>634</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	Afghanistan	14	26/Jul/20
	Pakistan	19	4/Sep/20
<b>2020 Total</b>		<b>33</b>	<b>4/Sep/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
2020	AFG	KANDAHAR	NESH	1	23-May-20	23-May-20
			HILMAND	1	04-Jan-20	04-Jan-20
			WASHER	1	28-Feb-20	28-Feb-20
			NIMROZ	1	06-May-20	06-May-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	
		KARAK	1	20-Jan-20	20-Jan-20	
		SINDH	2	07-Feb-20	14-Jul-20	
			<b>11</b>	<b>04-Jan-20</b>	<b>01-Sep-20</b>	
2019	AFG	URUZGAN	TIRINKOT	1	02-Aug-19	02-Aug-19
			HILMAND	1	05-Jun-19	05-Jun-19
	PAK	PUNJAB	SANGIN	1	06-Mar-19	06-Mar-19
			DG KHAN	2	2-Dec-19	10-Dec-19
			KHIORANGI	1	28-Aug-19	28-Aug-19
			SUJAWAL	1	25-Sep-19	25-Sep-19
			JAMSHORO	1	09-Oct-19	09-Oct-19
		SINDH	T. ALLAHYAR	1	10-Nov-19	10-Nov-19
			KAMBAR	1	02-Nov-19	02-Nov-19
			MIRPURKHAS	2	01-Dec-19	18-Dec-19
			LARKANA	1	24-Dec-19	24-Dec-19
			JACOBABAD	1	19-Dec-19	19-Dec-19
		BALOCHSITAN	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
			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>24</b>	<b>06-Mar-19</b>	<b>24-Dec-19</b>		

Table 5: Laboratory investigation of AFP cases with paralysis onset in 2020 up to Week (47/2020) / Ending on : (22/11/2020)

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	3369	427	20	525	2255	141	2	51	96			39	144		80	1		2		80	16%	94%	100%	97%	22/11/2020
Bahrain	NPL Oman / CDC	10			1	9																9%	100%		0%	16/11/2020
Djibouti	NPL Kenya / CDC	4						4																		22/11/2020
Egypt***	RRL Egypt	835	22	13	91	650	45	14		10						14		9	3		11%	95%	100%	99%	19/11/2020	
Iran	NPL Iran / CDC	513	7		5	483	4	15		3						5					1%	100%	100%	100%	14/11/2020	
Iraq	RRL Egypt	388	1		34	343	9	1	1	1											8%	95%	67%	98%	20/11/2020	
Jordan	NPL Jordan / RRL EGYPT	31			5	26															16%	100%		100%	05/11/2020	
Kuwait	RRL Kuwait / RIVM	31				29		2													1%	83%		93%	22/11/2020	
Lebanon	NPL Jordan / RRL EGYPT	42			5	33	4														12%	97%		100%	05/11/2020	
Libya	RRL Tunisia / RIVM	65	4			61										3	1				0%	100%	100%	65%	15/09/2020	
Morocco	NPL Morocco / RRL Tunisia	68			1	58	3	6													1%	100%		98%	20/11/2020	
Oman	NPL Oman / CDC	19			2	16	1														11%	100%		100%	16/11/2020	
Pakistan	RRL Pakistan	9990	818	45	1477	7308	320	30	74	156			299	104		248		1	7	2	65	14%	94%	99%	97%	22/11/2020
Palestine & UNRWA		12				11		1													0%	36%		100%	22/11/2020	
Qatar	NPL Oman / CDC	2				2															0%	100%		100%	16/11/2020	
Saudi Arabia	NPL Saudi Arabia / CDC	148	1			129	18									1					0%	100%	100%	100%	22/11/2020	
Somalia	NPL Kenya / CDC	335	21	5	49	234	9	16		3	1		10		14				1		18%	5%		97%	22/11/2020	
Sudan	NPL Sudan / RRL Egypt	626	45		80	450	30	21		2			26	43		1					15%	99%	100%	56%	19/11/2020	
Syria	NPL Syria / RRL Egypt	301	14	2	14	257	14														4%	100%			19/11/2020	
Tunisia	RRL Tunisia	21				20		1													0%	100%		95%	15/09/2020	
U.A.E	NPL Oman / CDC	16				16															0%	100%		50%	16/11/2020	
Yemen	NPL Kenya / CDC	204	25		46	118	13	2		2	17					5		1		1	25%	96%	20%	0%	21/11/2020	
<b>Total EMR 2020</b>		17030	1385	85	2335	12508	611	115	126	273	18		364	301		371	2	2	18	6	146	13%	93%	98%	96%	
<b>Total EMR 2019</b>		24920	1057	100	3669	20059		23	152	576	1		46	25		629	1	3	21	6		13%	95%	99%	96%	

\* 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

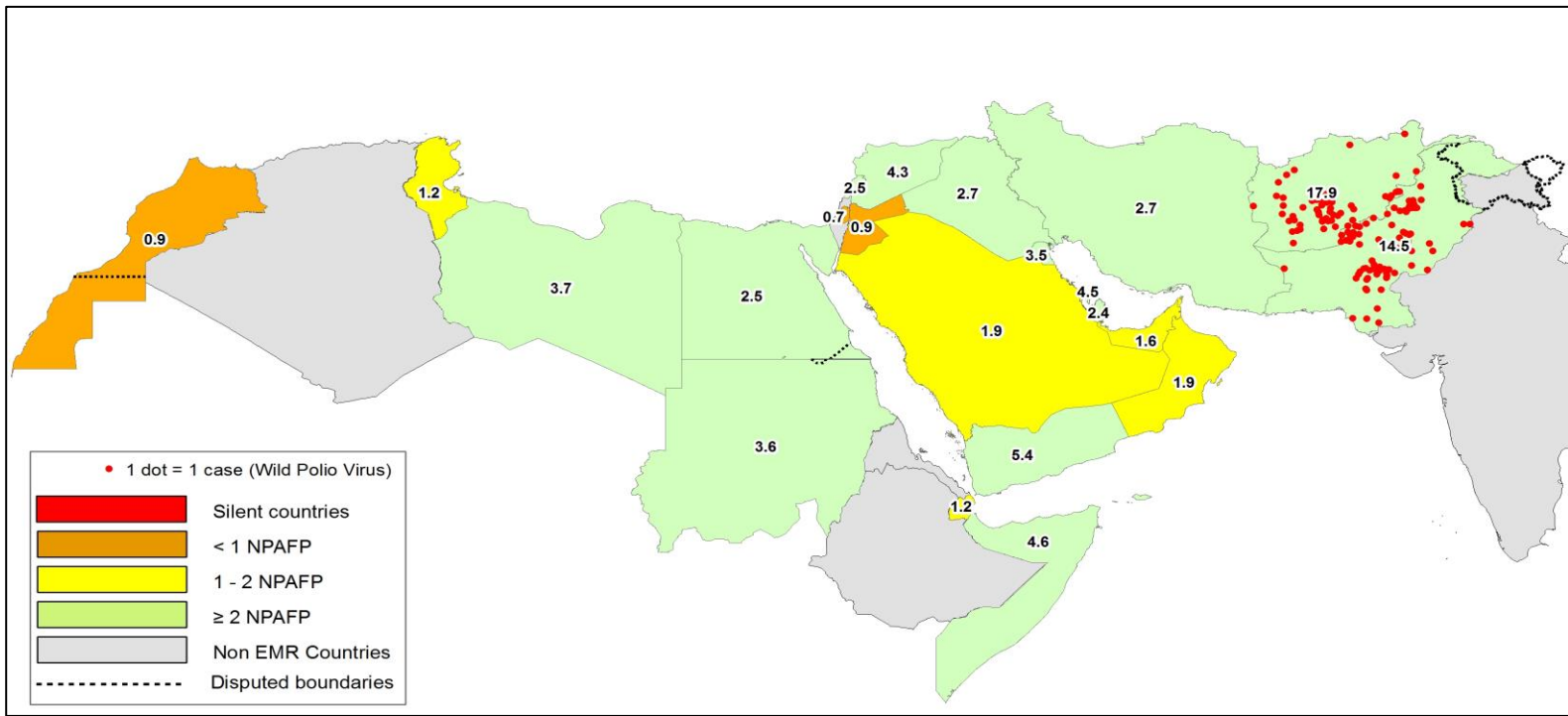
COUNTRY	LAB RESULTS	2016	2017	2018	2019	2020
AFG	Wild	2	42	83	56	29
	Wild+cVDPV2					5
	cVDPV2					119
	EV/SL	177	265	248	200	146
	Negative	6	9	5	3	3
AFG Total		185	316	336	259	349
EGY	aVDPV2					1
	EV/SL	493	481	508	666	419
	Negative	35	41	32	34	34
	Pending					23
	aVDPV3					1
	aVDPV1					1
EGY Total		528	522	540	700	480
IRN	Wild				3	
	VDPV2					1
	EV/SL		5	51	65	30
	Negative		1	3	3	1
	Pending					3
IRN Total			6	54	71	34
JOR	EV/SL	2	29	36	36	17
	Negative		2			1
	Pending					3
	JOR Total		2	31	36	36
KUW	EV/SL			3	3	
	Pending				8	
KUW Total			3	11		
LEB	EV/SL	2	26	44	44	17
	Negative	2	1	1	3	2
	Pending					4
	LEB Total		4	27	45	47
PAK	Wild	59	105	139	367	324
	Wild+cVDPV2	2			10	58
	Wild+aVDPV2	1	1		2	4
	cVDPV2	2			29	18
	aVDPV2	3	4			5
	EV/SL	456	523	531	420	241
	Negative	6		3	4	4
PAK Total		529	633	673	832	735
SOM	cVDPV2		2	18	5	26
	cVDPV3			11		
	aVDPV2			2	1	
	cVDPV2+cVDPV3			1		
	EV/SL		20	43	28	16
	Negative		14	138	29	28
SOM Total			36	213	63	72
SUD	cVDPV2					11
	EV/SL			15	42	12
	Negative				1	2
	Pending				17	20
SUD Total			15	60	45	
SYR	EV/SL		4	81	155	155
	Negative			21	30	17
	Pending					9
	SYR Total		4	102	185	181
<b>TOTAL</b>		<b>1248</b>	<b>1575</b>	<b>2017</b>	<b>2264</b>	<b>1940</b>

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

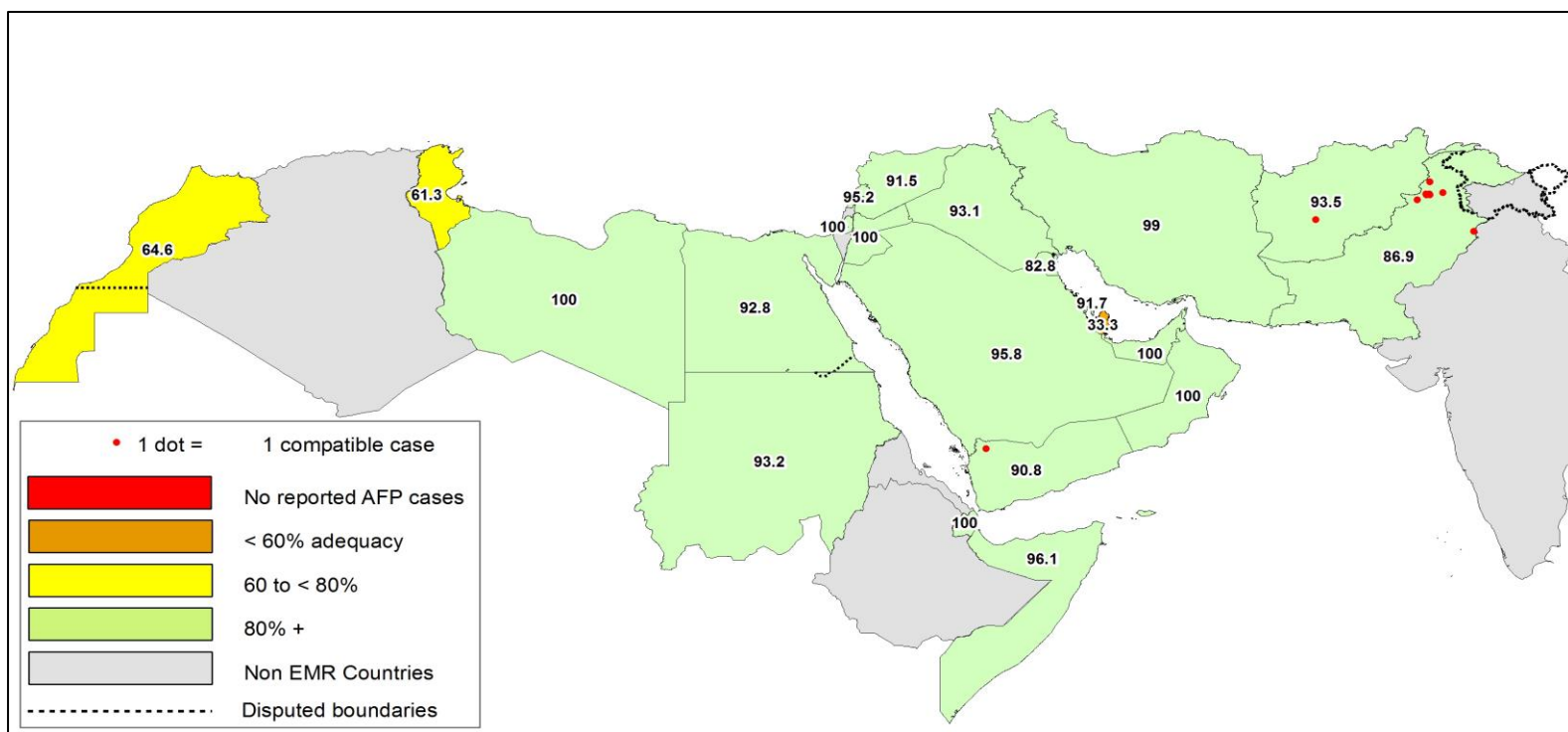
YEAR	COUNTRY	LAB RESULTS	PROVINCE	Count	First date	Last date		
2019	AFG	Wild	HILMAND	19	6/Jan/19	25/Dec/19		
			KANDAHAR	24	6/Jan/19	25/Dec/19		
			NANGARHAR	13	26/Jan/19	25/Dec/19		
	AFG Total			56	6/Jan/19	25/Dec/19		
	IRN	Wild	S & B	3	22/Apr/19	20/May/19		
			IRN Total	3	22/Apr/19	20/May/19		
	PAK	Wild	BALOCHISTAN	72	1/Jan/19	20/Dec/19		
			GBALTISTAN	1	9/Dec/19	9/Dec/19		
			ISLAMABAD	3	12/Apr/19	21/Aug/19		
			KPAKHTUNKHWA	40	8/Jan/19	28/Dec/19		
			PUNJAB	97	5/Jan/19	17/Dec/19		
			SINDH	154	2/Jan/19	17/Dec/19		
			Wild+cVDPV2	KPAKHTUNKHWA	1	31/Dec/19	31/Dec/19	
				PUNJAB	5	6/Aug/19	16/Dec/19	
				SINDH	4	7/Oct/19	18/Dec/19	
				GBALTISTAN	5	24/Aug/19	6/Nov/19	
			cVDPV2	ISLAMABAD	1	12/Nov/19	12/Nov/19	
				KPAKHTUNKHWA	10	9/Oct/19	28/Dec/19	
				PUNJAB	12	11/Apr/19	18/Dec/19	
				SINDH	1	19/Dec/19	19/Dec/19	
PAK Total			406	1/Jan/19	31/Dec/19			
SOM	cVDPV2	BANADIR	5	10/Nov/19	22/Dec/19			
		aVDPV2	1	3/Feb/19	3/Feb/19			
SOM Total			6	3/Feb/19	22/Dec/19			
2019 Total			471	1/Jan/19	31/Dec/19			
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	10	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		
			Wild+cVDPV2	HILMAND	1	6/Sep/20	6/Sep/20	
				KANDAHAR	2	9/Jul/20	27/Sep/20	
				NANGARHAR	2	8/Jan/20	25/Jul/20	
			cVDPV2	HILMAND	15	27/May/20	5/Oct/20	
				HIRAT	1	26/Sep/20	26/Sep/20	
				KABUL	15	26/Apr/20	4/Oct/20	
				KANDAHAR	20	9/Jul/20	5/Oct/20	
				KHOST	4	24/Jun/20	26/Sep/20	
				KUNAR	4	6/Jun/20	4/Aug/20	
				KUNDUZ	1	23/Aug/20	23/Aug/20	
				LAGHMAN	4	24/Jul/20	6/Oct/20	
				NANGARHAR	54	7/Jan/20	5/Oct/20	
				PAKTYA	1	26/Jul/20	26/Jul/20	
			AFG Total			153	1/Jan/20	6/Oct/20
			EGY	aVDPV2	GIZA	1	21/Sep/20	21/Sep/20
			EGY Total			1	21/Sep/20	21/Sep/20
			PAK	Wild	AJK	1	25/Feb/20	25/Feb/20
					BALOCHISTAN	76	1/Jan/20	20/Oct/20
					GBALTISTAN	1	12/May/20	12/May/20
					ISLAMABAD	4	16/Jan/20	12/Oct/20
	KPAKHTUNKHWA	18			28/Jan/20	12/Oct/20		
	PUNJAB	112			4/Jan/20	21/Oct/20		
	SINDH	112			3/Jan/20	21/Oct/20		
	Wild+cVDPV2	BALOCHISTAN			13	1/Feb/20	2/Oct/20	
		KPAKHTUNKHWA			1	11/Mar/20	11/Mar/20	
		PUNJAB			9	4/Jan/20	12/Aug/20	
		SINDH			35	3/Jan/20	15/Sep/20	
	cVDPV2	BALOCHISTAN			3	2/Jun/20	1/Oct/20	
		KPAKHTUNKHWA			4	10/Jan/20	17/Apr/20	
		PUNJAB			2	16/Jan/20	17/Apr/20	
		SINDH			9	8/Jun/20	7/Oct/20	
		aVDPV2			1	17/Sep/20	17/Sep/20	
		KPAKHTUNKHWA			3	10/Apr/20	17/Sep/20	
	PAK Total					405	1/Jan/20	21/Oct/20
	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	cVDPV2	KHARTOUM	11	29/Mar/20	6/Sep/20		
	SUD Total			11	29/Mar/20	6/Sep/20		
2020 Total			596	1/Jan/20	24/Oct/20			



**Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2020 - 22/11/2020**



**Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2020 - 22/11/2020**



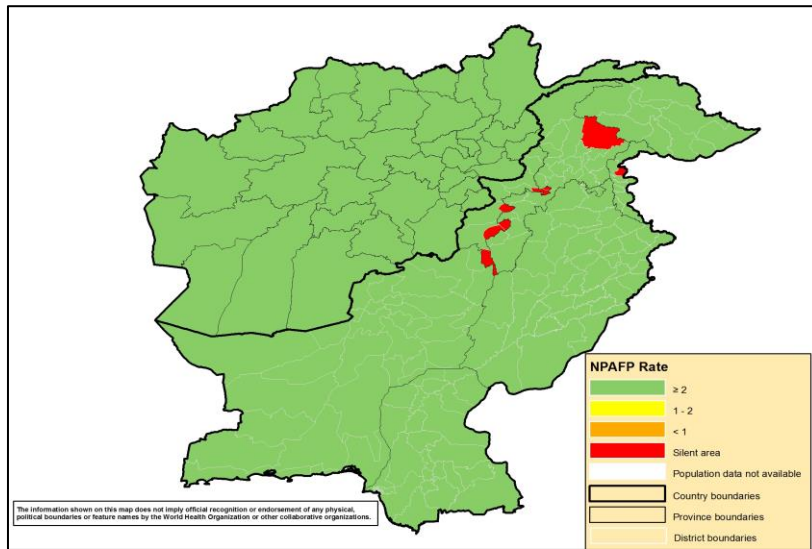
**Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2019 - 2020**

Year	COUNTRY	Count	First Case	Last Case
2020	AFG	54	4-Jan-20	14-Oct-20
	PAK	81	1-Jan-20	21-Oct-20
<b>2020 Total</b>		<b>135</b>	<b>1-Jan-20</b>	<b>21-Oct-20</b>
2019	AFG	29	4-Jan-19	7-Dec-19
	PAK	147	15-Jan-19	31-Dec-19
<b>2019 Total</b>		<b>176</b>	<b>4-Jan-19</b>	<b>31-Dec-19</b>

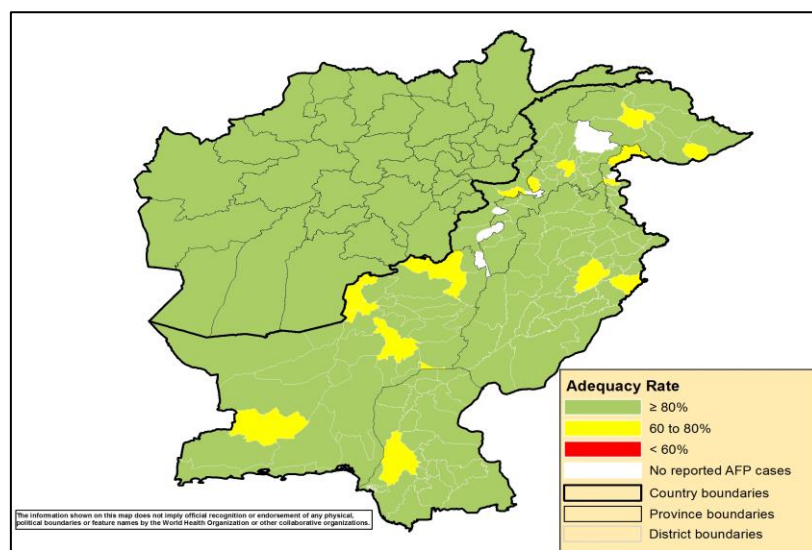
**Advance notification of 2 new WPV1 cases from Afghanistan from Hilmand province, with onset in October 2020 - Details will be shared next bulletin**



**Figure 3: Non Polio AFP rate by Province in Afghanistan & by District in Pakistan 01/01/2020 - 22/11/2020**

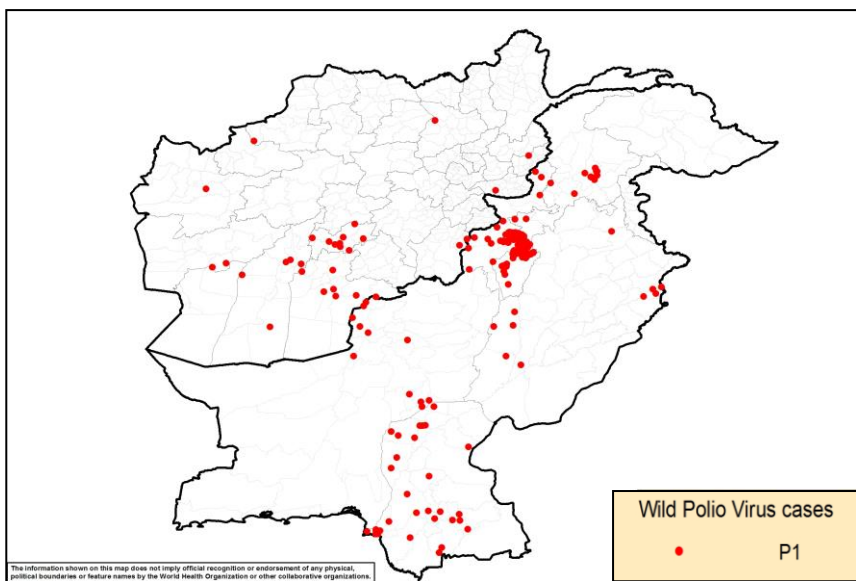


**Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan by Province & Pakistan by District 01/01/2020 - 22/11/2020**

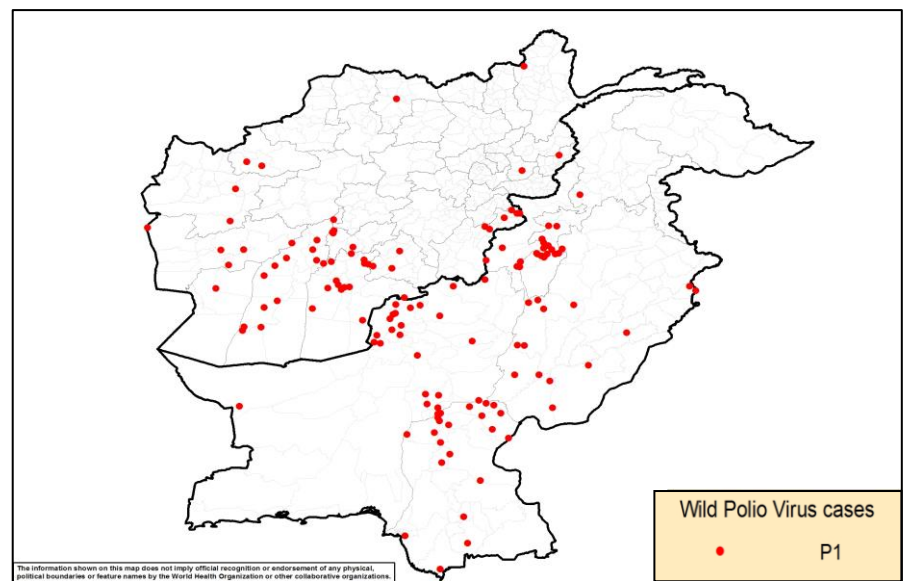


**Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan**

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



**5(b) 01/01/2020 - 22/11/2020**



## World Health Organization – Regional Office for Eastern Mediterranean

## AFP SURVEILLANCE

Week 46, ending 15 November 2020

15-Nov-20

Number 1154

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

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 SHELTON	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 (Z)	1	14-Jul-20	14-Jul-20
		MIZAN	1	21-Jan-20	21-Jan-20
	HILMAND	BAGHRAN	2	16-Jul-20	4-Sep-20
		KAJAKI	2	10-Jun-20	27-Jul-20
		WASHER	2	4-Jan-20	13-Jun-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
NAD-E-ALI		1	1-May-20	1-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>54</b>	<b>4-Jan-20</b>	<b>14-Oct-20</b>
2019	HIRAT	PASHTUNZARGHUN	1	19-Nov-19	19-Nov-19
	FARAH	BAKWA	2	14-Nov-19	25-Nov-19
	BADGHIS	BALAMURGHAB	1	17-Oct-19	17-Oct-19
	NANGARHAR	KHOGYANI	1	18-Sep-19	18-Sep-19
	KUNAR	WATAPUR	1	8-May-19	8-May-19
	PAKTIKA	BERMEL	2	15-Sep-19	28-Sep-19
	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
	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
	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	
BAGHLAN	PUL-E- KHUMRI	1	14-Nov-19	14-Nov-19	
<b>2019 Total</b>			<b>29</b>	<b>4-Jan-19</b>	<b>7-Dec-19</b>

## World Health Organization – Regional Office for Eastern Mediterranean

## AFP SURVEILLANCE

Week 46, ending 15 November 2020

16-Nov-20

Number 1154

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	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	PISHIN	6	31-Jan-20	3-Oct-20	
		QUETTA	4	17-Jul-20	15-Sep-20	
		KSAIFULAH	1	1-Sep-20	1-Sep-20	
		KABDULAH	2	11-May-20	29-Jun-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	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>81</b>	<b>1-Jan-20</b>	<b>21-Oct-20</b>
	2019	KHYBER PAKHTUNKHWA	LAKKIMRWT	32	27-May-19	31-Dec-19
			DIKHAN	4	5-May-19	21-Dec-19
			MOHMAND	1	20-Dec-19	20-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
			WAZIR-N	9	4-Apr-19	10-Oct-19
			TORGHAR	7	25-May-19	13-Sep-19
WAZIR-S			1	20-Aug-19	20-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	
KHYBER			1	14-Feb-19	14-Feb-19	
BAJOUR			1	18-Jan-19	18-Jan-19	
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	
PUNJAB		LAHORE	5	20-Jan-19	28-Dec-19	
		DGKHAN	4	2-Dec-19	25-Dec-19	
		OKARA	1	8-Dec-19	8-Dec-19	
		MUZFARGARH	1	26-Nov-19	26-Nov-19	
SINDH		JHELUM	1	21-Jun-19	21-Jun-19	
		THATTA	1	26-Dec-19	26-Dec-19	
		DADU	2	6-Dec-19	26-Dec-19	
		LARKANA	3	17-Apr-19	24-Dec-19	
		JAMSHORO	3	23-Aug-19	22-Dec-19	
		JACOBABAD	1	19-Dec-19	19-Dec-19	
		MIRPURKHAS	4	17-Nov-19	18-Dec-19	
		KAMBAR	3	2-Nov-19	14-Dec-19	
		BADIN	1	28-Nov-19	28-Nov-19	
		T.ALLAHYAR	1	10-Nov-19	10-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		
<b>2019 Total</b>				<b>147</b>	<b>15-Jan-19</b>	<b>31-Dec-19</b>

## World Health Organization – Regional Office for Eastern Mediterranean

## AFP SURVEILLANCE

9-Nov-20

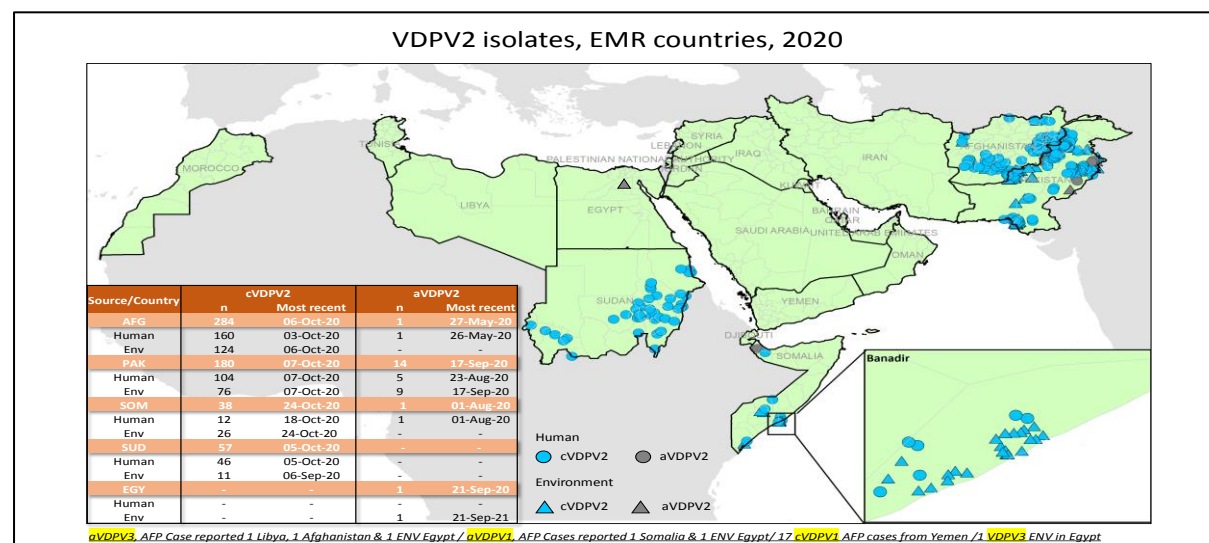
Week 45, ending 8 November 2020

Number 1153

Table 11: Circulating VDPV2 cases and date of onset of paralysis in EMR countries by provinces 2019-2020

YEAR	COUNTRY	PROVINCE	Count	First Case	Last Case	
2020	SOM	LOWER JUBA	1	29-Aug-20	29-Aug-20	
		GALBEED	1	29-Sep-20	29-Sep-20	
		MIDDLE SHABELLE	1	17-Jul-20	17-Jul-20	
		BAY	1	3-Sep-20	3-Sep-20	
		BANADIR	7	18-Jun-20	30-Sep-20	
	SUD	SOUTH DARFUR	2	7-Mar-20	29-Apr-20	
		EAST DARFUR	3	12-May-20	24-Jul-20	
		KHARTOUM	2	15-Jul-20	3-Aug-20	
		KASSALA	10	28-Jul-20	22-Sep-20	
		GEZIRA	5	9-Jul-20	19-Sep-20	
		RIVER NILE	5	29-Jun-20	27-Sep-20	
		RED SEA	6	29-Apr-20	30-Sep-20	
		WEST DARFUR	1	19-May-20	19-May-20	
		BLUE NILE	3	7-Aug-20	3-Sep-20	
		NORTH KORDOFAN	2	29-Aug-20	5-Oct-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	6	1-Jun-20	23-Sep-20
			HIRAT	2	10-Aug-20	15-Aug-20
	LOGAR		2	20-Aug-20	10-Sep-20	
	KANDAHAR		34	4-Aug-20	28-Sep-20	
	HILMAND		7	1-Aug-20	3-Oct-20	
	JAWZIAN		1	4-Aug-20	4-Aug-20	
	KABUL		6	6-Jul-20	9-Sep-20	
	NURISTAN		2	21-Jun-20	13-Jul-20	
	NIMROZ		3	6-Jul-20	8-Aug-20	
	KHOST		14	5-Jul-20	30-Sep-20	
	PAKTYA		4	18-Jun-20	5-Sep-20	
	KUNDUZ		2	28-Aug-20	22-Sep-20	
	PAKTIKA		4	25-Aug-20	30-Sep-20	
	GHAZNI		1	29-Aug-20	29-Aug-20	
	BADAKHSAN		1	23-Apr-20	23-Apr-20	
	LAGHMAN		14	20-May-20	23-Sep-20	
	TAKHAR		1	20-Sep-20	20-Sep-20	
	ZABUL		1	17-Sep-20	17-Sep-20	
	URUZGAN		1	28-Aug-20	28-Aug-20	
	PARWAN		1	4-Sep-20	4-Sep-20	
	KUNAR		8	6-Apr-20	11-Jul-20	
	NANGARHAR		45	5-Feb-20	21-Sep-20	
	PAK		SINDH	31	2-May-20	7-Oct-20
		BALOCHISTAN	9	29-Feb-20	3-Oct-20	
		PUNJAB	22	5-Feb-20	1-Oct-20	
		KHYBER PAKHTUNKHWA	42	2-Jan-20	24-May-20	
		<b>Total 2020</b>		<b>321</b>	<b>2-Jan-20</b>	<b>7-Oct-20</b>
	2019	PAK	PUNJAB	1	22-Nov-19	22-Nov-19
			KHYBER PAKHTUNKHWA	16	4-Sep-19	28-Dec-19
			ISLAMABAD	1	11-Sep-19	11-Sep-19
			GILGIT BALTISTAN	4	7-Jul-19	28-Aug-19
		SOM	BARI	1	8-May-19	8-May-19
TOGDHER			1	21-Apr-19	21-Apr-19	
SOOL			1	15-Mar-19	15-Mar-19	
<b>Total 2019</b>		<b>25</b>	<b>15-Mar-19</b>	<b>28-Dec-19</b>		

VDPV2 isolates, EMR countries, 2020



A positive VDPV2 environmental sample was reported from Iran, from S & B province, with collection date 3 October 2020 - classification type still awaited