

## Highlights of Polio Fax Bulletin No. 1146 for Week 38 2020

### I. Salient features

1. Polio eradication teams at the Regional and Country levels are contributing into COVID19 Response, particularly in areas of surveillance (field and laboratory), data analysis, communications and coordination.
2. Wild Poliovirus Type-1 (WPV1): 4 new cases (1 from Afghanistan and 2 from Pakistan) & 10 new positive environmental samples, all from Pakistan
3. Vaccine Derived Poliovirus (VDPV):
  - cVDPV1: No new cases reported this week.
  - cVDPV2: 4 new cVDPV2 cases (Afghanistan 1, Pakistan 2, and Sudan 1) & 25 new cVDPV2 positive environmental samples, 20 from Afghanistan and 5 from Somalia

### II. Wild Poliovirus Transmission

**Endemic countries (Pakistan & Afghanistan):** Total WPV1 cases in 2020 to date is 120 (47 from Afghanistan and 73 from Pakistan). This compares with 92 cases in 2019 in the same period (19 from Afghanistan and 73 from Pakistan).

#### • Afghanistan:

a. *Human samples:* The new WPV1 case reported this week is from Zheray district, Kandahar province, with onset of paralysis on 24 August 2020.

In 2020, **47 WPV1 cases** have been reported so far: 16 cases from Kandahar province; 9 from Hilmand province; four each from Farah and Uruzgan provinces; three from Zabul province; two each from Herat and Khost provinces; and one each from Nimroz, Laghman, Kunar, Badakhshan, Balkh, Badghis and Paktika provinces. ***The most recent case has onset of paralysis on 24 August 2020.***

#### • Pakistan:

*Human samples:* Three new WPV1 cases reported this week. 2 cases are from Balochistan province (Killa Saifullah – 1 and Quetta – 1) and Punjab province (Rahimyar Khan) with onset of paralysis between 1-3 September 2020. The Killa Saifullah case was identified as wild by a positive contact.

In 2020 to date, **73 WPV1** cases are reported, 22 cases each from Khyber Pakhtunkhwa (KP) and Sindh provinces, 20 from Balochistan province and 9 from Punjab province. ***The most recent case has onset of paralysis on 3 September 2020.***

b. *Environmental samples:* 10 new WPV1 positive environmental samples, all from Pakistan.

- Afghanistan: In 2020 to date, there are 27 WPV1 positive environmental samples including two combined (WPV1 and cVDPV2) with most recent sample collected on 23 August 2020.
- Pakistan: In 2020 to date, there are 329 WPV1 positive environmental samples including 33 combined (WPV1 and cVDPV2) and 3 combined (WPV1 and aVDPV2) with most recent positive sample collected on 12 September 2020.

III. **Vaccine Derived Polioviruses (VDPVs):** Total cVDPV2 cases in 2020 to date is 167 (79 from Afghanistan, 61 from Pakistan, 4 from Somalia and 23 from Sudan). This compares with 9 cases in 2019 in the same period (6 from Pakistan and 3 from Somalia).

**Afghanistan:** One new cVDPV2 case and 20 positive environmental samples were reported this week.

*Human samples:* The new cVDPV2 case was reported from Kunar province (Dara-E-Pech district) with date of onset in 6 July 2020. The index case was identified as cVDPV2 by a positive contact.

**In 2020 to date, there are 79 cVDPV2 cases;** 44 reported from Nangarhar province, 12 from Laghman province, 8 from Kunar province, 3 from Kabul province, 2 each from Nuristan, Nimroz and Khost provinces and one each from Badakhshan, Farah, Paktya, Jawzian, Hilmand and Kandahar provinces and with **most recent case's onset on 8 August 2020.**

*Environment:* In 2020 to date, 75 cVDPV2 positive environmental samples including 2 combined (WPV1 and cVDPV2) were reported: 36 from Jalalabad, 8 from Batikot, 3 from Behsud districts, Nangarhar province, 8 from Kabul district, Kabul province, 4 from Asadabad and 8 from Kandahar districts, Kandahar province; 3 from Lashkargah district, Hilmand province; 2 each from Khost (Matun) district, Khost province and Mehtarlam (Gumeen) district, Laghman province and 1 from Gardez district, Paktya province,; with **most recent collection on 4 August 2020**.

*NB:* One aVDPV3 has been reported from Ghazni district, Ghazni province, with date of onset 23 June 2020. It is not related with any reported VDPV3 viruses. Further investigations are underway to classify the case.

**Pakistan:** Two new cVDPV2 cases and no new positive environmental samples reported this week.

*Human samples:* The two new cVDPV2 cases are reported from Sindh province both from Khibaldia town. The dates of onset of the cVDPV2 cases are 4 and 18 August 2020 respectively.

In 2020 to date, there are 61 cVDPV2 cases reported. Cases include 42 from KP province, 11 from Punjab province, 7 from Sindh province and 1 from Balochistan province, with most recent case's onset on 18 August 2020. In addition to 4 aVDPV2 cases all from Punjab province, with most recent case's onset on 9 August 2020.

*Environment:* In 2020, there are 44 positive environmental samples for cVDPV2 so far (including 33 combined WPV1 and cVDPV2), the most recent sample collected on 6 August 2020. Also, there are five aVDPV2 isolates detected in the environment samples, which include three combined (WPV1 + aVDPV2). The most recent aVDPV2 positive environmental sample was collected on 10 April 2020.

**SOMALIA:** No new cVDPV cases or positive environmental samples were reported this week.

In 2020 to date: Four cVDPV2 cases reported from Abdul Aziz, Shibis, Dharkenley and Daynile districts, Banadir province, with **most recent date of onset 31 July 2020**. Also, there are 20 cVDPV2 positive environmental samples reported, the most recent collected on 29 July 2020.

**SUDAN:** One new cVDPV2 case and five positive environmental samples were reported this week.

The new cVDPV2 case is from Hay locality, Red Sea State, with date of onset 16 August 2020.

In 2020 to date, 23 cVDPV2 cases reported. **The most recent case has onset of paralysis on 18 August 2020.**

A total of five environmental samples have been positive for cVDPV2 so far, all from Khartoum with most recent collection on 9 August 2020.

**YEMEN:** No new cases.

In 2020 to date, 14 cVDPV1 cases are reported. All cases are from Saadah province, 5 from Kitaf Wa Buga district, 3 each from Sahar and Al Safrah districts, and one each from Sageen, Saadh City and Majz districts. The dates of onset vary between 31 January to 5 June 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 1.2 and 1.3 and their percentage of AFP cases with adequate stool specimens is 67.6% and 61.5%, respectively.
- Djibouti, Jordan, Oman, Palestine, Qatar, Saudi Arabia and United Arab Emirates have a non-polio AFP rate of 0.7, 0.9, 1.5, 0.8, 0.6, 1.4 and 1.7 respectively.

## World Health Organization – Regional Office for Eastern Mediterranean

## AFP SURVEILLANCE

21-Sep-20

Week 38, ending 20 September 2020

Number 1146

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

Country	Reported AFP cases by week of onset - Week (38/20) / Ending on : 20/09/2020														
	Total AFP 2018	Total AFP 2019	Total AFP to date, 2020	W27 5 Jul 20	W28 12 Jul 20	W29 19 Jul 20	W30 26 Jul 20	W31 02 Aug 20	W32 09 Aug 20	W33 16 Aug 20	W34 23 Aug 20	W35 30 Aug 20	W36 06 Sep 20	W37 13 Sep 20	W38 20 Sep 20
Afghanistan	3378	3768	2607	88	91	94	72	68	96	72	93	88	102	53	7
Bahrain	35	17	10	0	0	0	0	0	0	0	0	0	0	0	0
Djibouti	0	5	2	0	0	0	0	0	0	0	0	2	0	0	0
Egypt	1246	1343	644	11	12	16	14	7	14	23	23	29	19	24	1
Iran	896	1070	413	7	5	9	14	10	11	11	14	8	6	2	
Iraq	1023	1157	306	2	4	7	1	3	2	3	4	8	6	5	
Jordan ****	115	113	26	0	0	0	1	1	2	0	0	0	0	0	
Kuwait	72	48	25	0	0	0	1	1	1	2	0	1	0	0	
Lebanon ****	89	87	35	0	0	0	1	1	2	0	0	1	1	1	
Libya	122	107	77	3	3	0	0	1	3	5	6	2	3	0	
Morocco	212	247	74	1	2	0	0	0	0	1	1				
Oman	28	30	12	0	0	0	1	0	0	0	0	0	0	0	
Pakistan	12276	15216	7762	146	164	183	173	174	214	225	227	173	205	75	0
Palestine ****	44	62	10	2	0	0	0	0	0	0	0	0	0	0	0
Qatar	10	9	2	0	0	0	0	0	0	0	0	0	0	1	
Saudi Arabia	242	236	83	1	1	4	2	1	1	4	5	1	1	1	
Somalia	353	361	277	5	6	6	10	5	6	8	9	6	6	1	0
Sudan	579	608	393	7	11	13	15	12	21	29	30	25	19	4	
Syria ****	362	377	256	12	8	3	5	4	7	2	3	7	4	8	
Tunisia	68	79	26	0	0	1	0	0	1	1	1	0	0	0	
U.A.E	40	50	15	0	1	0	0	0	0	0	0	0	0	0	
Yemen	730	779	494	18	12	18	13	11	14	18	24	17	23	8	3
<b>Total EMR</b>	<b>21920</b>	<b>25769</b>	<b>13549</b>	<b>303</b>	<b>320</b>	<b>354</b>	<b>323</b>	<b>299</b>	<b>395</b>	<b>404</b>	<b>440</b>	<b>368</b>	<b>395</b>	<b>183</b>	<b>11</b>

No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2018	Total year 2019	20/09		Confirmed polio cases by month of onset											
			2019	2020	October 2019	November 2019	December 2019	January 2020	February 2020	March 2020	April 2020	May 2020	June 2020	July 2020	August 2020	September 2020
Afghanistan	21	29	19	47	1	7	1	2	3	7	0	12	10	7	6	
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	12	147	73	73	17	23	32	18	17	7	6	6	6	6	4	3
Palestine ****	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Qatar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Saudi Arabia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Somalia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sudan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Syria ****	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Tunisia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
U.A.E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Yemen	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total EMR</b>	<b>33</b>	<b>176</b>	<b>92</b>	<b>120</b>	<b>18</b>	<b>30</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>10</b>	<b>3</b>

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

## AFP SURVEILLANCE

Week 37, ending 20 September 2020

21-Sep-20

Number 1146

Table 3: Investigation of AFP cases with paralysis onset in 2019 &amp; 2020 up to Week (38/20) / Ending on : 20/09/2020

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	2607	47	0	420	2059	81	16.8	34	3	94.3	47	0	20/09/2020
Bahrain	17	0	0	0	17	0	5.7	0	0	100.0	0	0	10	0	0	0	10	0	4.6	0	0	90.0	0	0	20/09/2020
Djibouti	5	0	0	0	5	0	1.4	0	0	80.0	0	0	2	0	0	2	0	0	0.7	0	0	100.0	0	0	20/09/2019
Egypt	1343	0	0	0	1343	0	3.6	0	0	93.4	0	0	644	0	0	104	540	0	2.3	0	0	91.5	0	0	17/09/2020
Iran	1070	0	0	0	1069	1	5.2	0	0	97.1	0	0	413	0	0	20	393	0	2.7	0	0	99.3	0	0	19/09/2020
Iraq	1157	0	0	0	1157	0	7.4	0	0	94.3	0	0	306	0	0	22	284	0	2.6	2	1	91.8	0	0	19/09/2020
Jordan	113	0	0	0	113	0	3.9	0	0	100.0	0	0	26	0	0	1	25	0	0.9	0	0	100.0	0	0	17/09/2020
Kuwait	48	0	0	0	48	0	5.4	0	0	89.6	0	0	25	0	0	3	22	0	3.9	0	0	84.0	0	0	13/09/2020
Lebanon	87	0	0	0	87	0	4.7	0	0	89.7	0	0	35	0	0	8	27	0	2.6	1	0	94.3	0	0	11/09/2020
Libya	107	0	0	0	107	0	4.3	0	0	98.1	0	0	77	0	0	17	59	1	4.1	0	0	100.0	0	0	13/09/2020
Morocco	247	0	0	0	247	0	2.8	0	0	84.2	0	0	74	0	0	31	43	0	1.2	23	6	67.6	0	0	28/08/2020
Oman	30	0	0	0	30	0	2.7	0	0	80.0	0	0	12	0	0	0	12	0	1.5	0	0	100.0	0	0	13/09/2020
Pakistan	15216	147	6	0	15040	23	19.3	0	0	86.6	147	0	7762	73	6	897	6721	65	13.6	280	0	87.3	73	0	20/09/2020
Palestine	62	0	0	0	62	0	3.5	0	0	98.4	0	0	10	0	0	4	6	0	0.8	1	0	100.0	0	0	20/09/2020
Qatar	9	0	0	0	9	0	2.2	0	0	88.9	0	0	2	0	0	2	0	0	0.6	1	0	100.0	0	0	19/09/2020
Saudi Arabia	236	0	0	0	236	0	2.8	0	0	93.2	0	0	83	0	0	22	61	0	1.4	0	0	95.2	0	0	13/09/2020
Somalia	361	0	0	0	358	3	5.7	0	0	95.6	0	0	277	0	0	25	246	6	4.7	3	3	96.0	0	0	20/09/2020
Sudan	608	0	0	0	608	0	3.4	0	0	96.4	0	0	393	0	0	82	288	23	2.9	1	0	94.4	0	0	17/09/2020
Syria	377	0	0	0	377	0	4.8	0	0	88.1	0	0	256	0	0	21	235	0	4.5	0	0	91.8	0	0	19/09/2020
Tunisia	79	0	0	0	78	1	2.9	0	0	74.7	0	0	26	0	0	9	17	0	1.3	4	3	61.5	0	0	18/09/2020
U.A.E	50	0	0	0	50	0	4.0	0	0	90.0	0	0	15	0	0	4	11	0	1.7	2	2	100.0	0	0	15/09/2020
Yemen	779	0	0	0	778	1	5.5	0	0	89.0	0	0	494	0	1	321	158	14	4.9	130	113	90.5	0	0	19/09/2020
EMR	25769	176	7	0	25557	29	10.2	0	0	89.5	176	0	13549	120	7	2015	11217	190	7.2	482	131	89.9	120	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

World Health Organization – Regional Office for Eastern Mediterranean  
AFP SURVEILLANCE  
Week 38, ending 20 September 2020

21-Sep-20  
Number 1146

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	739	14	19	26	93	121
BAH	0	0	0	0	0	0	1	0	0	0	0	0
DJI	1	0	0	0	0	0	0	0	0	0	0	0
EGY	498	0	0	8	57	0	174	0	0	8	7	28
IRN	216	0	0	4	7	0	14	0	0	0	0	0
IRQ	603	0	0	12	39	6	137	0	0	0	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	0	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	40	0	0	2	6	0
PAK	5497	26	9	248	959	0	3114	18	6	260	463	144
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	9	0	0	1	0	0
SOM	1081	0	1	45	141	5	826	0	2	15	95	87
SUD	402	0	0	1	31	90	185	0	6	0	4	128
SYR	813	0	0	23	36	0	253	0	0	11	9	8
TUN	27	0	0	0	2	0	3	0	0	0	0	2
UAE	0	0	0	0	0	0	0	0	0	0	0	0
YEM	423	0	2	6	68	5	164	0	0	0	20	122
<b>EMR</b>	<b>10936</b>	<b>34</b>	<b>12</b>	<b>401</b>	<b>1577</b>	<b>136</b>	<b>5667</b>	<b>32</b>	<b>33</b>	<b>323</b>	<b>705</b>	<b>650</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	18	4/Sep/20
<b>2020 Total</b>		<b>32</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
			NIMROZ	1	28-Feb-20	28-Feb-20
			FARAH	1	06-May-20	06-May-20
	PAK	PUNJAB	KSAIFULLAH	1	01-Sep-20	01-Sep-20
			LAHORE	1	24-Jul-20	24-Jul-20
2020 Total	PAK	KHYBER PAKHTUNKHWA (KP)	DG KHAN	2	18-Jan-20	05-Jul-20
			SINDH	1	20-Jan-20	20-Jan-20
2020 Total	PAK	SINDH	KARAK	2	07-Feb-20	14-Jul-20
			JACOBABAD	2	07-Feb-20	14-Jul-20
2020 Total	PAK	SINDH	JACOBABAD	2	07-Feb-20	14-Jul-20
			JACOBABAD	2	07-Feb-20	14-Jul-20
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
		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	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	
	KHYBER PAKHTUNKHWA (KP)	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>2019 Total</b>			<b>24</b>	<b>06-Mar-19</b>	<b>24-Dec-19</b>	

## AFP SURVEILLANCE

Week 38, ending 20 September 2020

21-Sep-20

Number 1146

Table 5: Laboratory investigation of AFP cases with paralysis onset in 2020 up to Week (38/2020) / Ending on : (20/09/2020)

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	2375	226	20	303	1697	127	2	43 *	81			4	65 *		76			2		19	12%	91%	100%	98%	13/09/2020
Bahrain	NPL Oman / CDC	10			1	9																9%	100%		0%	08/09/2020
Djibouti	NPL Kenya / CDC	2					1	1																		20/09/2020
Egypt***	RRL Egypt	625	18	10	56	493	40	8		8						11		7	3		9%	94%	100%	99%	17/09/2020	
Iran	NPL Iran / CDC	428	5		5	398	20			3						3					1%	100%	100%	100%	19/09/2020	
Iraq	RRL Egypt	309			30	255	21	3													10%	94%	100%	97%	18/09/2020	
Jordan	NPL Jordan / RRL EGYPT	26			5	21															19%	100%		100%	13/09/2020	
Kuwait	RRL Kuwait / RIVM	26				24		2													1%	79%		92%	20/09/2020	
Lebanon	NPL Jordan / RRL EGYPT	32			5	27															15%	97%		100%	13/09/2020	
Libya	RRL Tunisia / RIVM	65	4			61										3	1				0%	100%	100%	65%	15/09/2020	
Morocco	NPL Morocco / RRL Tunisia	59			1	58															1%	100%		98%	18/09/2020	
Oman	NPL Oman / CDC	12			2	10															15%	100%		100%	08/09/2020	
Pakistan	RRL Pakistan	7359	568	44	928	5468	137	209	64 *	132			181	60 *	203			1	1	2	56	12%	94%	99%	97%	13/09/2020
Palestine & UNRWA		10				10															0%	30%		100%	20/09/2020	
Qatar	NPL Oman / CDC	1				1															0%	100%		100%	08/09/2020	
Saudi Arabia	NPL Saudi Arabia / CDC	87				81	6														0%	100%		100%	19/09/2020	
Somalia	NPL Kenya / CDC	277	11	4	41	196	4	21		3	1			5	9						18%	5%		97%	20/09/2020	
Sudan	NPL Sudan / RRL Egypt	309	19		32	207		51		1			20	21 *							12%	98%	100%	57%	06/09/2020	
Syria	NPL Syria / RRL Egypt	252	11		9	217	15														3%	100%			19/09/2020	
Tunisia	RRL Tunisia	21				20	1														0%	100%		95%	15/09/2020	
U.A.E	NPL Oman / CDC	10				10															0%	100%		60%	08/09/2020	
Yemen	NPL Kenya / CDC	174	24		42	108				2	17					5			1		25%	96%	21%	0%	19/09/2020	
<b>Total EMR 2020</b>		12469	886	78	1460	9371	372	297	107	230	18		205	151	310	1	1	10	6	75	11%	92%	97%	95%		
<b>Total EMR 2019</b>		24920	1057	100	3669	20055		26	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

\* Advance notifications of new WPV1 and cVDPV2 cases from Afghanistan &amp; Pakistan and a new cVDPV2 case from Sudan their lab data will be shared in next week bulletin

\*\* This indicator reflects surveillance and laboratory activities

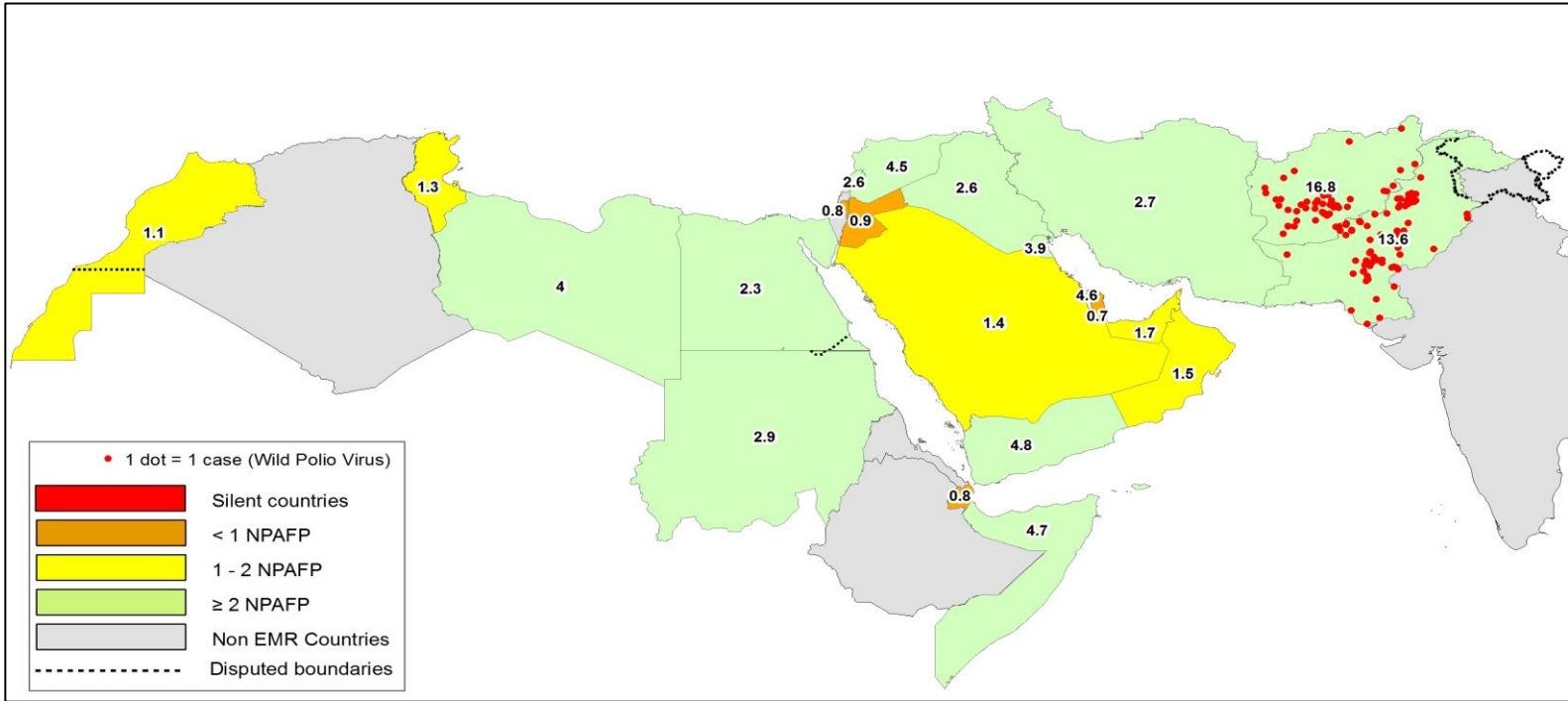
Table 6: Environmental isolate by year and type

COUNTRY	LAB RESULTS	2016	2017	2018	2019	2020
AFG	Wild	2	42	83	56	25
	Wild+cVDPV2					2
	cVDPV2					73
	EV/SL	177	265	248	200	119
	Negative	6	9	5	3	3
AFG Total		185	316	336	259	263
EGY	EV/SL	492	481	508	666	318
	Negative	36	41	32	34	26
	Pending					18
	aVDPV3					1
	aVDPV1					1
EGY Total		528	522	540	700	364
IRN	Wild				3	
	EV/SL		5	51	65	20
	Negative		1	3	3	
	Pending					3
IRN Total			6	54	71	23
JOR	EV/SL	2	29	36	36	14
	Negative		2			1
JOR Total		2	31	36	36	15
KUW	EV/SL			3	3	
	Pending					8
KUW Total				3	11	
LEB	EV/SL	2	26	44	44	9
	Negative	2	1	1	3	2
	Pending					4
LEB Total		4	27	45	47	15
PAK	Wild	59	105	139	367	293
	Wild+cVDPV2	2			10	33
	Wild+aVDPV2	1	1		2	3
	cVDPV2	2			27	11
	aVDPV2	3	4		2	2
	EV/SL	456	523	531	420	194
	Negative	6		3	4	4
	Pending					33
PAK Total		529	633	673	832	573
SOM	cVDPV2		2	19	5	20
	cVDPV3			11		
	aVDPV2			2	1	
	EV/SL		20	43	28	10
	Negative		14	138	29	21
SOM Total			36	213	63	58
SUD	cVDPV2					8
	EV/SL			15	42	10
	Negative				1	2
	Pending				17	10
SUD Total				15	60	30
SYR	EV/SL		4	81	155	117
	Negative			21	30	15
	Pending					8
SYR Total			4	102	185	140
<b>TOTAL</b>		<b>1248</b>	<b>1575</b>	<b>2017</b>	<b>2264</b>	<b>1481</b>

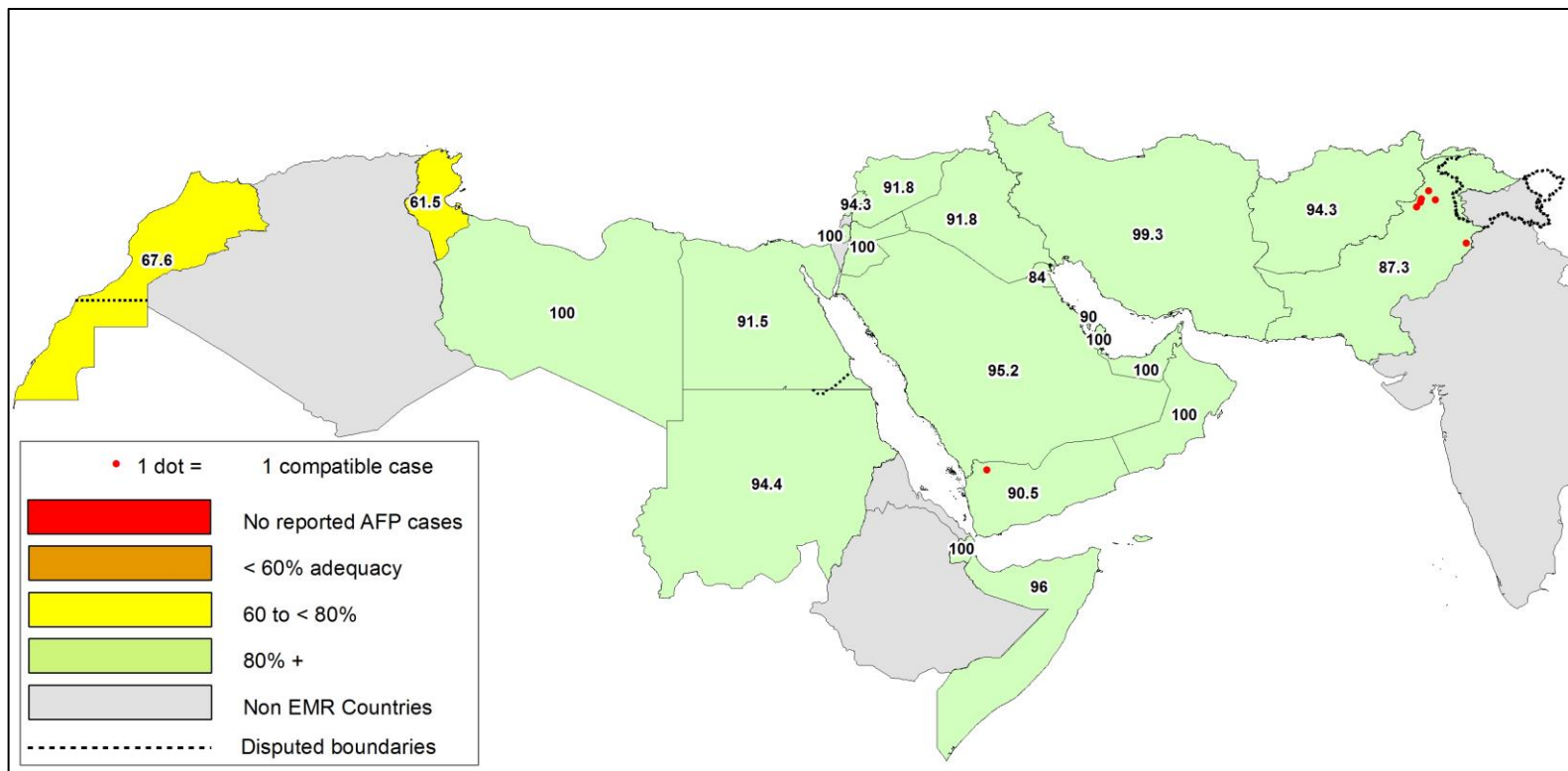
Table 7: Environmental Wild/VPV isolate by site 2019-2020

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	BALUCHISTAN	72	1/Jan/19	20/Dec/19		
			GBALISTAN	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		
			cVDPV2	GBALISTAN	5	24/Aug/19	6/Nov/19	
			ISLAMABAD	1	12/Nov/19	12/Nov/19		
			KPAKHTUNKHWA	10	9/Oct/19	28/Dec/19		
			PUNJAB	10	21/Aug/19	17/Dec/19		
			SINDH	1	19/Dec/19	19/Dec/19		
aVDPV2	PUNJAB	2	11/Apr/19	18/Dec/19				
PAK Total			406	1/Jan/19	31/Dec/19			
SOM	cVDPV2	BANADIR	5	10/Nov/19	22/Dec/19			
		BANADIR	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	9	1/Jan/20	3/Aug/20		
			HIRAT	3	26/Apr/20	23/Aug/20		
			KANDAHAR	10	28/Jan/20	25/Jun/20		
			KHOST	1	25/Apr/20	25/Apr/20		
			NANGARHAR	2	26/Jan/20	25/Jul/20		
			Wild+cVDPV2	KANDAHAR	1	9/Jul/20	9/Jul/20	
			NANGARHAR	1	8/Jan/20	8/Jan/20		
			cVDPV2	HILMAND	3	27/May/20	3/Aug/20	
			KABUL	8	26/Apr/20	3/Aug/20		
			KANDAHAR	7	9/Jul/20	3/Aug/20		
			KHOST	2	24/Jun/20	25/Jul/20		
			KUNAR	4	6/Jun/20	4/Aug/20		
			LAGHMAN	2	24/Jul/20	3/Aug/20		
			NANGARHAR	46	7/Jan/20	4/Aug/20		
			PAKTYA	1	26/Jul/20	26/Jul/20		
			AFG Total			100	1/Jan/20	23/Aug/20
			PAK	Wild	AJK	1	25/Feb/20	25/Feb/20
	BALUCHISTAN	71			1/Jan/20	1/Sep/20		
	GBALISTAN	1			12/May/20	12/May/20		
	ISLAMABAD	3			16/Jan/20	10/Sep/20		
	KPAKHTUNKHWA	15			28/Jan/20	12/Aug/20		
	PUNJAB	92			4/Jan/20	10/Sep/20		
	SINDH	110			3/Jan/20	12/Sep/20		
	Wild+cVDPV2	BALUCHISTAN			4	1/Feb/20	20/Jul/20	
	KPAKHTUNKHWA	1			11/Mar/20	11/Mar/20		
	PUNJAB	7			4/Jan/20	4/Aug/20		
	SINDH	21			3/Jan/20	6/Aug/20		
	cVDPV2	BALUCHISTAN			1	2/Jun/20	2/Jun/20	
	KPAKHTUNKHWA	4			10/Jan/20	17/Apr/20		
	PUNJAB	2			16/Jan/20	17/Apr/20		
	SINDH	4			8/Jun/20	13/Jul/20		
	aVDPV2	KPAKHTUNKHWA			2	10/Apr/20	29/Jul/20	
	PAK Total			339	1/Jan/20	12/Sep/20		
SOM	cVDPV2	BANADIR	18	5/Jan/20	29/Jul/20			
		BAY	2	19/Jun/20	20/Jun/20			
SOM Total			20	5/Jan/20	29/Jul/20			
SUD	cVDPV2	KHARTOUM	8	29/Mar/20	9/Aug/20			
		SUD Total	8	29/Mar/20	9/Aug/20			
2020 Total			467	1/Jan/20	12/Sep/20			

**Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2020 - 20/09/2020**



**Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2020 - 20/09/2020**

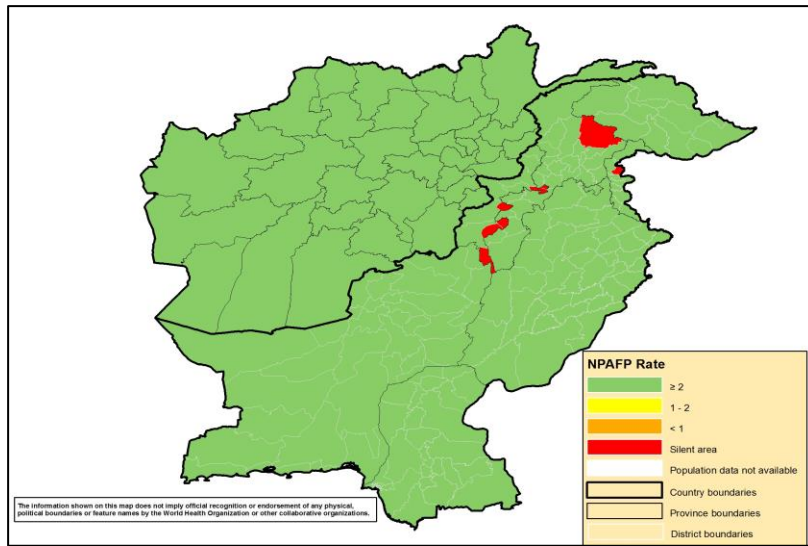


**Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2019 - 2020**

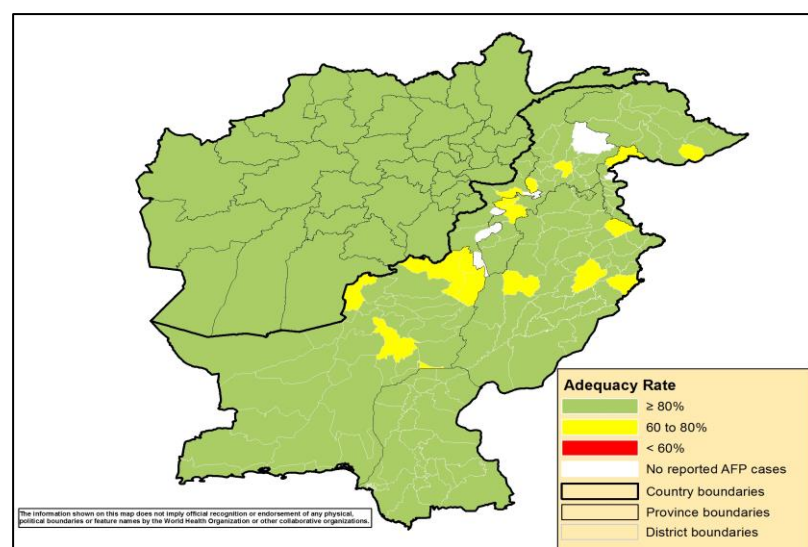
Year	COUNTRY	Count	First Case	Last Case
2020	AFG	47	4-Jan-20	24-Aug-20
	PAK	73	1-Jan-20	3-Sep-20
<b>2020 Total</b>		<b>120</b>	<b>1-Jan-20</b>	<b>3-Sep-20</b>
2019	AFG	29	4-Jan-19	7-Dec-19
	PAK	147	15-Jan-19	31-Dec-19
<b>2019 Total</b>		<b>176</b>	<b>4-Jan-19</b>	<b>31-Dec-19</b>



**Figure 3: Non Polio AFP rate by Province in Afghanistan & by District in Pakistan 01/01/2020 - 20/09/2020**

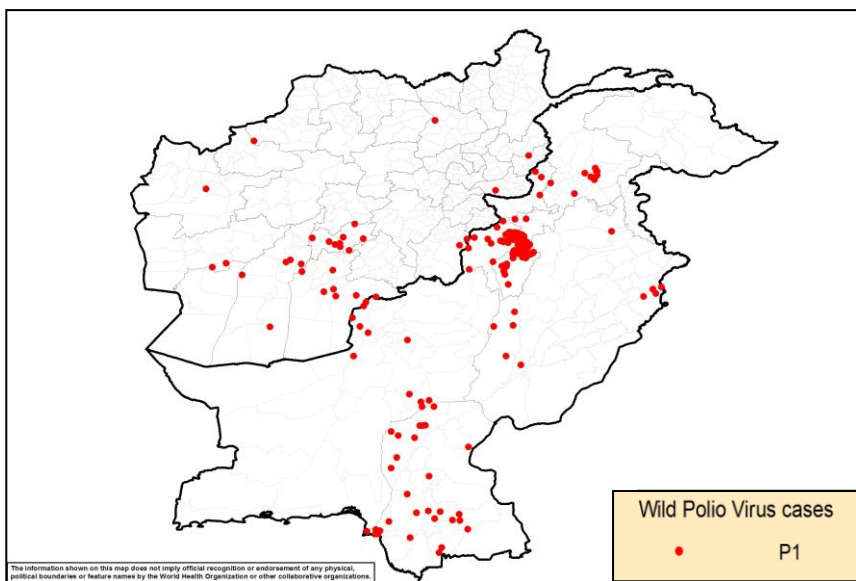


**Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan by Province & Pakistan by District 01/01/2020 - 20/09/2020**

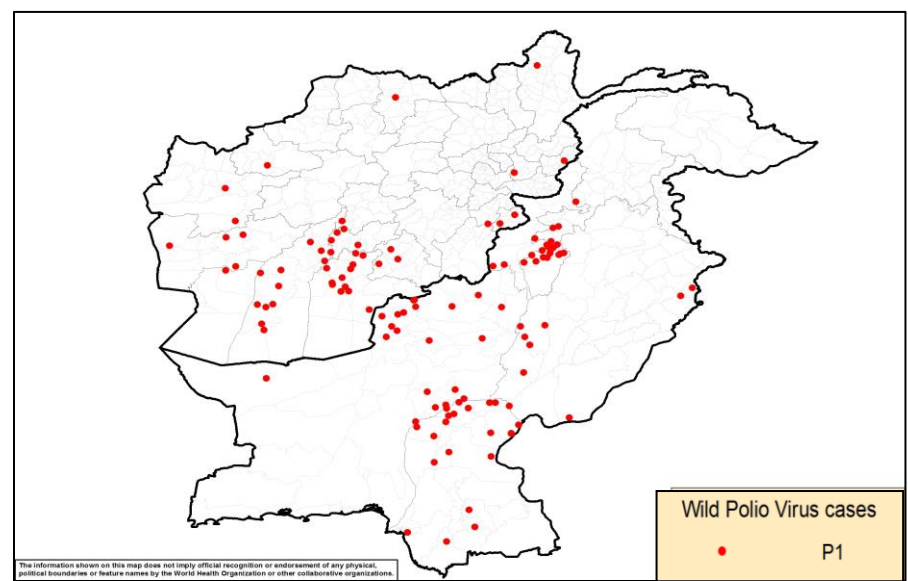


**Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan**

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



**5(b) 01/01/2020 - 20/09/2020**



## World Health Organization – Regional Office for Eastern Mediterranean

## AFP SURVEILLANCE

Week 38, ending 20 September 2020

21-Sep-20

Number 1146

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	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	SABARI	1	8-Aug-20	8-Aug-20
		SPERA	1	1-Aug-20	1-Aug-20
	KANDAHAR	ZHERAY	3	20-Jul-20	24-Aug-20
		KANDAHAR	2	22-Jun-20	6-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	KAJAKI	2	10-Jun-20	27-Jul-20
		BAGHRAN	1	16-Jul-20	16-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>47</b>	<b>4-Jan-20</b>	<b>24-Aug-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	GARM SER	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 38, ending 20 September 2020

21-Sep-20

Number 1146

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	QUETTA	2	17-Jul-20	3-Sep-20		
		KSAIFULAH	1	1-Sep-20	1-Sep-20		
		PISHIN	5	31-Jan-20	16-Aug-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		
		JAFARABAD	1	12-Feb-20	12-Feb-20		
		SOHBATPUR	1	12-Feb-20	12-Feb-20		
		SIBI	1	7-Feb-20	7-Feb-20		
		PUNJAB	RYKHAN	1	1-Sep-20	1-Sep-20	
	BAHAWALPUR		1	17-Aug-20	17-Aug-20		
	DGKHAN		4	18-Jan-20	8-Aug-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>73</b>	<b>1-Jan-20</b>	<b>3-Sep-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		
PUNJAB	QUETTA		1	6-Jul-19	6-Jul-19		
	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

21-Sep-20

Week 38, ending 20 September 2020

Number 1146

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

COUNTRY	YEAR	PROVINCE	Count	First Case	Last Case
SOM		BANADIR	4	18-Jun-20	31-Jul-20
SUD		SOUTH DARFUR	2	7-Mar-20	29-Apr-20
		EAST DARFUR	3	12-May-20	24-Jul-20
		KHARTOUM	1	3-Aug-20	3-Aug-20
		KASSALA	3	28-Jul-20	31-Jul-20
		GEZIRA	1	9-Jul-20	9-Jul-20
		RIVER NILE	3	29-Jun-20	18-Aug-20
		RED SEA	4	29-Apr-20	16-Aug-20
		WEST DARFUR	1	19-May-20	19-May-20
		BLUE NILE	2	7-Aug-20	17-Aug-20
		WHITE NILE	1	15-Jun-20	15-Jun-20
		GEDARIF	2	1-Apr-20	5-Jul-20
AFG		FARAH	1	1-Jun-20	1-Jun-20
		KANDAHAR	1	4-Aug-20	4-Aug-20
		HILMAND	1	1-Aug-20	1-Aug-20
		JAWZIAN	1	4-Aug-20	4-Aug-20
		KABUL	3	6-Jul-20	8-Feb-20
		NURISTAN	2	21-Jun-20	13-Jul-20
		NIMROZ	2	6-Jul-20	8-Aug-20
		KHOST	2	5-Jul-20	10-Jul-20
		PAKTYA	1	18-Jun-20	18-Jun-20
		BADAKHSAN	1	23-Apr-20	23-Apr-20
		LAGHMAN	12	20-May-20	20-Jul-20
		KUNAR	8	6-Apr-20	11-Jul-20
		NANGARHAR	44	5-Feb-20	29-Jul-20
		PAK		SINDH	7
BALOCHISTAN	1			29-Feb-20	29-Feb-20
PUNJAB	11			5-Feb-20	13-Aug-20
KHYBER PAKHTUNKHWA	42			2-Jan-20	24-May-20
<b>Total 2020</b>			<b>167</b>	<b>2-Jan-20</b>	<b>18-Aug-20</b>
PAK	2019	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
		BARI	1	8-May-19	8-May-19
		TOGDHER	1	21-Apr-19	21-Apr-19
SOM		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>

