

Highlights of Polio Fax Bulletin No. 1116 for Week 08 2020

I. Wild Poliovirus Transmission

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

2019

Two new wild poliovirus type-1 (WPV1) cases from Pakistan.

One new positive WPV1 environmental sample from Pakistan.

2020

- No new wild poliovirus cases were reported this week.
- 14 new positive WPV1 environmental samples, one from Afghanistan and thirteen from Pakistan.

Advance notification: *One new WPV1 case from Pakistan (Kashmore district, Sindh province), with date of onset 3 February 2020. Details will be shared in the next bulletin.*

a. *Human samples:* 2 new WPV1 cases reported this week in 2019.

Total WPV1 cases in 2019 to date is 175 (29 from Afghanistan and 146 from Pakistan). This compares with 33 cases in 2018 in the same period (Afghanistan – 21 and Pakistan – 12).

Total WPV1 cases in 2020 to date is 17, all from Pakistan. This compares with 7 cases in 2019 in the same period (2 from Afghanistan and 5 from Pakistan).

- Afghanistan: No new wild poliovirus cases were reported this week:
 - Pakistan: Two new WPV1 cases having onset of paralysis in 2019 reported this week and details are as follows:
 - Case (1): The case is from Okara district, Punjab province, with date of onset 8 December 2019. The case is a 168-month old female child. The child reportedly received 3 OPV doses from routine and 7+ doses from supplementary immunization activities (SIAs).
 - Case (2): The case is from Lahore district, Punjab province, with date of onset 28 December 2019. The case is a 54-month old female child. The child reportedly received 1 OPV dose from routine and 7+ doses from SIAs.
- In 2019, 146 WPV1 cases were reported from Pakistan. They include 80 from Khyber Pakhtunkhwa (KP) province, 12 from KP Tribal Districts (KPTD), 30 from Sindh province, 12 each from Balochistan and Punjab provinces.

In 2020, 17 WPV1 cases are reported, 10 from KP, 5 from Sindh and 2 from Balochistan provinces. The most recent case has onset of paralysis on 2 February 2020.

b. *Environmental samples:* Fifteen new WPV1 positive environmental samples reported this week – one in 2019 from Pakistan and fourteen in 2020 (1 from Afghanistan and 13 from Pakistan):

- Afghanistan: In 2020 to date, 3 WPV1 positive environmental samples including 1 combined (WPV1 and cVDPV2) with most recent sample collected on 28 January 2020.
 - Pakistan: In 2019, there are 376 WPV1 positive environmental samples including 9 combined (WPV1 and cVDPV2) with most recent positive sample collected on 31 December 2019.
- In 2020 to date, there are 42 WPV1 positive environmental samples including 2 combined (WPV1 and cVDPV2) with most recent positive sample collected on 6 February 2020.

II. Circulating Vaccine Derived Polioviruses (cVDPVs)

1. AFGHANISTAN: No new cVDPV cases or environmental samples reported this week.

In 2020 to date, 2 cVDPV2 positive environmental samples including 1 combined (WPV1 and cVDPV2) were reported both from Jalalabad district, Nangarhar province, with most recent collection on 8 January 2020.

2. **PAKISTAN:** No new cVDPV isolates from human or environmental samples were reported this week. In 2019, 22 cVDPV2 cases reported. Cases include four from Diamir district of Gilgit-Baltistan (GB) province; three each from Torghar, Khyber and Mohmand; two from Kohistan Lower; and one each from Charsadda, Kohistan Upper, Bajour, Lakki Marwat and Peshawar districts in KP; one each from Islamabad and Gujranwala district, Punjab province. In 2020 to date, 3 cVDPV2 cases reported from KP province (one each from Peshawar, Bajour and Khyber) with most recent onset on 12 January 2020. Environment: In 2019, 30 positive environmental samples for cVDPV2, the recent most sample collected on 31 December 2019 (including nine combined WPV1 and cVDPV2). In addition, cVDPV2 has been isolated from 16 healthy children and 7 contacts.

Advance notification: Six new cVDPV2 cases from Pakistan; 4 from Khyber and 1 from Nowshera districts, KP province, and 1 from Rawalpindi district, Punjab province, with dates of onset between 13-22 January 2020. Details will be shared in the next bulletin.

2. **SOMALIA:** No new cVDPV isolates from human or environmental samples were reported this week. In 2019:
 - 3 cVDPV2 cases. The most recent reported case has date of onset of paralysis on 8 May 2019.

In 2020 to date: 3 cVDPV2 were isolated from environmental samples most recent collected on 19 January 2020.

III. Surveillance performance indicators

In 2019, 20 of 22 member states are meeting the global target of both key surveillance indicators, namely non polio AFP rate of 2 per 100,000 children aged below 15 years and percent AFP cases with adequate specimen 80% and above.

- Djibouti has a non-polio AFP rate of 1.4
- Tunisia has a percentage of AFP cases with adequate stool specimens of 74.7%
- In Yemen there are AFP cases pending final classification more than 90 days due to delayed lab results because of delay in shipment of specimens to reference polio laboratories and high workload in the labs.

AFP SURVEILLANCE

24-Feb-20

Week 08, ending 23 February 2020

Number 1116

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

Country	Reported AFP cases by week of onset - Week (08/20) / Ending on : 23/02/2020														
	Total AFP 2018	Total AFP 2019	Total AFP to date, 2020	W49 08 Dec 19	W50 15 Dec 19	W51 22 Dec 19	W52 29 Dec 19	W01 05 Jan 20	W02 12 Jan 20	W03 19 Jan 20	W04 26 Jan 20	W05 02 Feb 20	W06 09 Feb 20	W07 16 Feb 20	W08 23 Feb 20
Afghanistan	3378	3768	464	76	63	70	67	79	66	71	86	94	54	25	
Bahrain	35	17	2	1	0	0	0	0	0	0	0	1	1	0	
Djibouti	0	5	0	0	0	0	0	0	0	0	0	0	0	0	
Egypt	1246	1343	151	31	26	18	13	29	18	21	24	23	22	9	6
Iran	896	1070	121	24	24	17	24	20	22	30	18	18	10	3	
Iraq	1023	1157	126	31	20	25	13	23	20	12	22	17	22	12	
Jordan ****	115	113	12	4	1	1	1	1	4	0	3	0	3	1	
Kuwait	72	48	7	3	1	0	2	1	1	1	0	0	2	1	1
Lebanon ****	89	87	15	4	1	3	4	4	2	2	3	2	2	1	
Libya	122	107	21	4	4	3	4	4	4	5	1	4	3		
Morocco	212	248	20	14	6	4	2	4	2	3	5	3	3	0	
Oman	28	30	3	4	1	0	1	0	1	0	0	2	0	0	
Pakistan	12276	15176	1877	354	353	308	290	358	316	312	331	297	245	95	
Palestine ****	44	62	6	1	0	2	1	0	1	0	2	1	1	1	
Qatar	10	9	0	0	0	2	0	0	0	0	0	0	0	0	
Saudi Arabia	242	236	14	5	4	4	4	1	5	7	2	0	0	0	
Somalia	353	361	63	11	7	4	5	10	6	8	16	16	4	4	
Sudan	579	608	74	6	17	17	5	14	10	12	12	13	13	2	
Syria ****	362	377	57	11	16	8	3	7	6	11	11	15	6	4	
Tunisia	68	79	1	0	0	2	0	1	0	0	0	0	0	0	
U.A.E	40	50	10	1	1	0	2	2	0	1	1	3	2	1	
Yemen	730	780	81	26	19	10	25	9	16	14	11	14	13	5	
Total EMR	21920	25731	3125	611	564	498	466	567	500	510	548	523	406	164	7

No data = No report received

Table 2: Confirmed polio cases by month of onset

Country	Total year 2018	Total year 2019	23/02		Confirmed polio cases by month of onset											
			2019	2020	March 2019	April 2019	May 2019	June 2019	July 2019	August 2019	September 2019	October 2019	November 2019	December 2019	January 2020	February 2020
Afghanistan	21	29	2	0	3	1	5	1	2	2	3	1	7	1		
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	146	5	17	0	11	11	16	12	14	5	16	23	32	16	1
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	
Total EMR	33	175	7	17	3	12	16	17	14	16	8	17	30	33	16	1

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

Table 3: Investigation of AFP cases with paralysis onset in 2019 & 2020 up to Week (08/20) / Ending on : 23/02/2020)

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	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	3768	29	1	15	3723	0	18.5	5	0	94.1	29	0	464	0	0	151	313	0	15.5	0	0	96.8	0	0	22/02/2020
Bahrain	17	0	0	2	15	0	5.9	2	0	100.0	0	0	2	0	0	2	0	0	4.7	0	0	100.0	0	0	20/02/2020
Djibouti	5	0	0	0	5	0	1.4	0	0	80.0	0	0	0	0	0	0	0	0	0.0	0	0		0	0	16/02/2019
Egypt	1343	0	0	5	1338	0	3.6	0	0	93.2	0	0	151	0	0	76	75	0	2.7	0	0	88.1	0	0	20/02/2020
Iran	1070	0	0	0	1069	1	5.2	0	0	97.1	0	0	121	0	0	35	86	0	3.9	0	0	100.0	0	0	22/02/2020
Iraq	1157	0	0	6	1151	0	7.4	2	2	94.3	0	0	126	0	0	50	76	0	5.3	0	0	90.5	0	0	20/02/2020
Jordan	113	0	0	0	113	0	3.9	0	0	100.0	0	0	12	0	0	5	7	0	2.1	0	0	100.0	0	0	20/02/2020
Kuwait	48	0	0	0	48	0	5.4	0	0	89.6	0	0	7	0	0	4	3	0	4.6	0	0	42.9	0	0	22/02/2020
Lebanon	87	0	0	8	79	0	4.7	8	0	89.7	0	0	15	0	0	6	9	0	5.5	0	0	100.0	0	0	21/02/2020
Libya	107	0	0	0	107	0	4.3	0	0	98.1	0	0	21	0	0	8	13	0	5.7	0	0	100.0	0	0	15/02/2020
Morocco	248	0	0	16	232	0	2.8	10	0	83.1	0	0	20	0	0	10	10	0	1.5	0	0	80.0	0	0	17/02/2020
Oman	30	0	0	0	30	0	2.7	0	0	80.0	0	0	3	0	0	2	1	0	1.8	0	0	66.7	0	0	16/02/2020
Pakistan	15176	146	3	391	14613	22	19.3	211	0	86.8	146	0	1877	17	0	631	1226	3	16.1	0	0	90.0	17	0	22/02/2020
Palestine	62	0	0	5	57	0	3.3	0	0	98.4	0	0	6	0	0	6	0	0	2.1	0	0	100.0	0	0	16/02/2020
Qatar	9	0	0	0	9	0	2.5	0	0	88.9	0	0	0	0	0	0	0	0	0.0	0	0		0	0	16/02/2020
Saudi Arabia	236	0	0	9	227	0	2.8	0	0	93.2	0	0	14	0	0	14	0	0	1.1	0	0	100.0	0	0	20/02/2020
Somalia	361	0	0	4	354	3	5.7	4	0	95.6	0	0	63	0	0	19	44	0	5.3	0	0	100.0	0	0	22/02/2020
Sudan	608	0	0	6	602	0	3.4	2	0	96.4	0	0	74	0	0	21	53	0	2.6	0	0	95.9	0	0	20/02/2019
Syria	377	0	0	0	377	0	4.8	0	0	88.1	0	0	57	0	0	28	29	0	4.9	0	0	98.2	0	0	21/02/2020
Tunisia	79	0	0	0	78	1	2.9	0	0	74.7	0	0	1	0	0	0	1	0	0.3	0	0	100.0	0	0	21/02/2019
U.A.E	50	0	0	3	47	0	4.0	3	1	90.0	0	0	10	0	0	10	0	0	5.4	0	0	100.0	0	0	20/02/2020
Yemen	780	0	0	329	451	0	5.5	236	208	89.0	0	0	81	0	0	81	0	0	3.9	0	0	95.1	0	0	22/02/2020
EMR	25731	175	4	799	24725	27	10.2	483	211	89.5	175	0	3125	17	0	1159	1946	3	8.2	0	0	92.0	17	0	
2018	21920	33	1	86	21785	15	8.7	86	80	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 <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 08, ending 23 February 2020

24-Feb-20
Number 1116

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	107	0	0	8	5	12
BAH	0	0	0	0	0	0	0	0	0	0	0	0
DJI	1	0	0	0	0	0	0	0	0	0	0	0
EGY	498	0	0	8	57	0	23	0	0	0	0	3
IRN	213	0	0	4	7	0	0	0	0	0	0	0
IRQ	603	0	0	10	39	6	64	0	0	0	2	15
JOR	0	0	0	0	0	0	0	0	0	0	0	0
KUW	0	0	0	0	0	0	0	0	0	0	0	0
LEB	24	0	0	0	3	2	0	0	0	0	0	0
LIB	6	0	0	0	3	0	0	0	0	0	0	0
MOR	85	0	0	3	1	30	2	0	0	0	0	0
OMA	78	0	0	2	28	0	15	0	0	1	1	10
PAK	5497	26	7	248	959	2	938	6	0	73	69	193
PAL	0	0	0	0	0	0	0	0	0	0	0	0
QAT	0	0	0	0	0	0	0	0	0	0	0	0
SAA	44	0	0	1	0	0	0	0	0	0	0	0
SOM	1079	0	1	45	140	15	192	0	0	2	21	53
SUD	402	0	0	0	31	90	27	0	0	0	2	5
SYR	813	0	0	23	36	0	122	0	0	0	0	52
TUN	27	0	0	0	2	0	0	0	0	0	0	0
UAE	0	0	0	0	0	0	0	0	0	0	0	0
YEM	422	0	0	0	0	219	24	0	0	0	0	24
EMR	10930	34	8	392	1508	364	1514	6	0	84	100	367

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

Year	Country	Data	
		Count of wild contacts	Date of Most Recent stool collection
2020	Pakistan	6	21/Jan/20
2020 Total		6	21/Jan/20
2019	Afghanistan	8	17/Aug/19
	Pakistan	26	26/Dec/19
2019 Total		34	26/Dec/19

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

YEAR	COUNTRY	PROVINCE	DISTRICT	COUNT	First case	Last case
2019	AFG	URUZGAN	TIRINKOT	1	2-Aug-19	2-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	
		BANNU	1	13-Nov-19	13-Nov-19	
		SWABI	1	17-Nov-19	17-Nov-19	
	KHYBER PAKHTUNKHWA (KP)	TANK	1	30-Oct-19	30-Oct-19	
		LAKKIMRWAT	3	27-May-19	04-Oct-19	
		TORGHAR	1	25-May-19	25-May-19	
		2019 Total			24	06-Mar-19

Table 5: Laboratory investigation of AFP cases with paralysis onset in 2020 up to Week (08/2020) / Ending on : (23/02/2020)

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	452	37	3	34	283	100			28						25						3	7%	100%	100%	100%	22/02/2020		
Bahrain	NPL Oman / CDC																										17/02/2020		
Djibouti	NPL Kenya / CDC																										16/02/2020		
Egypt***	RRL Egypt	135		1	4	74	26	30													1		5%	100%	100%	100%	19/02/2020		
Iran	NPL Iran / CDC	137	1		2	122	12			1													1%	100%	100%	100%	22/02/2020		
Iraq	RRL Egypt	126			9	74	39	4															9%	100%		100%	22/02/2020		
Jordan	NPL Jordan / RRL EGYPT	10			2	5	3																29%	100%		100%	20/02/2020		
Kuwait	RRL Kuwait / RIVM	5				2	3																10%	100%		100%	20/02/2020		
Lebanon	NPL Jordan / RRL EGYPT	9			1	8																	11%	100%		100%	20/02/2020		
Libya	RRL Tunisia / RIVM	18	3			11	4									3							0%	100%	100%	100%	21/02/2020		
Morocco	NPL Morocco / RRL Tunisia	19			1	16	2																3%	100%		100%	21/02/2020		
Oman	NPL Oman / CDC	3				1	2																18%	100%		100%	17/02/2020		
Pakistan	RRL Pakistan	1850	164	8	124	1106	435	9	17	35			22	3		52						68	7%	100%	100%	100%	22/02/2020		
Palestine & UNRWA		6				1	2	2															0%	50%		100%	16/02/2020		
Qatar	NPL Oman / CDC																										17/02/2020		
Saudi Arabia	NPL Saudi Arabia / CDC	25				14	11																0%	79%			20/02/2020		
Somalia	NPL Kenya / CDC	63	1		11	33	10	8														1	25%	7%		100%	22/02/2020		
Sudan	NPL Sudan / RRL Egypt	47			1	19		27															8%	100%			09/02/2020		
Syria	NPL Syria / RRL Egypt	56	2			28	26																1%	100%			20/02/2020		
Tunisia	RRL Tunisia	4					4																				21/02/2020		
U.A.E	NPL Oman / CDC																										17/02/2020		
Yemen	NPL Kenya / CDC																										22/02/2020		
Total EMR 2020		2965	208	12	189	1797	679	80	17	64			22	3		80					1		72	7%	98%	100%	100%		
Total EMR 2019		24664	1049	98	3614	19848	7	31	151	570	1		45	24		620	1				3	21	6	2	12%	95%	99%	97%	

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

** This indicator reflects surveillance and laboratory activities

World Health Organization – Regional Office for Eastern Mediterranean
AFP SURVEILLANCE
Week 08, ending 23 February 2020

24-Feb-20
Number 1116

Table 6: Environmental isolate by year and type

COUNTRY	LAB RESULTS	2016	2017	2018	2019	2020
AFG	Wild	2	42	83	56	2
	Wild+cVDPV2					1
	cVDPV2					1
	EV/SL	177	265	248	196	16
	Negative	6	9	5	3	
AFG Total		185	316	336	259	34
EGY	EV/SL	492	481	508	666	48
	Negative	36	41	32	34	2
	Pending					20
EGY Total		528	522	540	700	70
IRN	Wild				3	
	EV/SL		5	51	65	3
	Negative		1	3	3	
	Pending					2
IRN Total			6	54	71	5
JOR	EV/SL	2	29	36	36	1
	Negative		2			1
	Pending					2
JOR Total		2	31	36	36	4
KUW	EV/SL			3	3	
	Pending				8	
KUW Total				3	11	
LEB	EV/SL	2	26	44	44	2
	Negative	2	1	1	3	
	Pending					2
LEB Total		4	27	45	47	4
PAK	Wild	60	106	139	367	40
	Wild+cVDPV2	2			9	2
	cVDPV2	2			21	1
	aVDPV2	3	4		2	
	EV/SL	456	523	531	418	12
	Negative	6		3	4	2
	Pending				10	63
PAK Total		529	633	673	831	120
SOM	cVDPV2		2	19	5	3
	cVDPV3			11		
	aVDPV2			2	1	
	EV/SL		20	43	28	3
	Negative		14	138	29	5
SOM Total			36	213	63	12
SUD	EV/SL			15	41	
	Negative				1	
	Pending				18	5
SUD Total				15	60	5
SYR	EV/SL		4	81	155	14
	Negative			21	30	5
	Pending					6
SYR Total			4	102	185	25
TOTAL		1248	1575	2017	2263	279

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
			ISLAMABAD	3	12/Apr/19	21/Aug/19
			KPAKHTUNKHWA	39	8/Jan/19	28/Dec/19
			PUNJAB	98	5/Jan/19	17/Dec/19
			SINDH	155	2/Jan/19	20/Dec/19
		Wild+cVDPV2	KPAKHTUNKHWA	1	31/Dec/19	31/Dec/19
			PUNJAB	4	6/Aug/19	15/Nov/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	7	9/Oct/19	24/Dec/19
aVDPV2	PUNJAB	8	21/Aug/19	17/Dec/19		
	PUNJAB	2	11/Apr/19	18/Dec/19		
PAK Total			399	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			464	1/Jan/19	31/Dec/19	
2020	AFG	Wild	HILMAND	1	1/Jan/20	1/Jan/20
			KANDAHAR	1	28/Jan/20	28/Jan/20
			NANGARHAR	1	8/Jan/20	8/Jan/20
			NANGARHAR	1	7/Jan/20	7/Jan/20
	AFG Total			4	1/Jan/20	28/Jan/20
	PAK	Wild	BALUCHISTAN	12	1/Jan/20	2/Feb/20
			ISLAMABAD	1	16/Jan/20	16/Jan/20
			KPAKHTUNKHWA	2	28/Jan/20	30/Jan/20
			PUNJAB	8	4/Jan/20	6/Feb/20
			SINDH	17	3/Jan/20	6/Feb/20
		Wild+cVDPV2	PUNJAB	1	4/Jan/20	4/Jan/20
			SINDH	1	3/Jan/20	3/Jan/20
			KPAKHTUNKHWA	1	10/Jan/20	10/Jan/20
PAK Total			43	1/Jan/20	6/Feb/20	
SOM	cVDPV2	BANADIR	3	5/Jan/20	19/Jan/20	
SOM Total			3	5/Jan/20	19/Jan/20	
2020 Total			50	1/Jan/20	6/Feb/20	
TOTAL			514	1/Jan/19	6/Feb/20	

Figure 1: Non Polio AFP Rate and Wild Virus in EMR 01/01/2020 - 23/02/2020

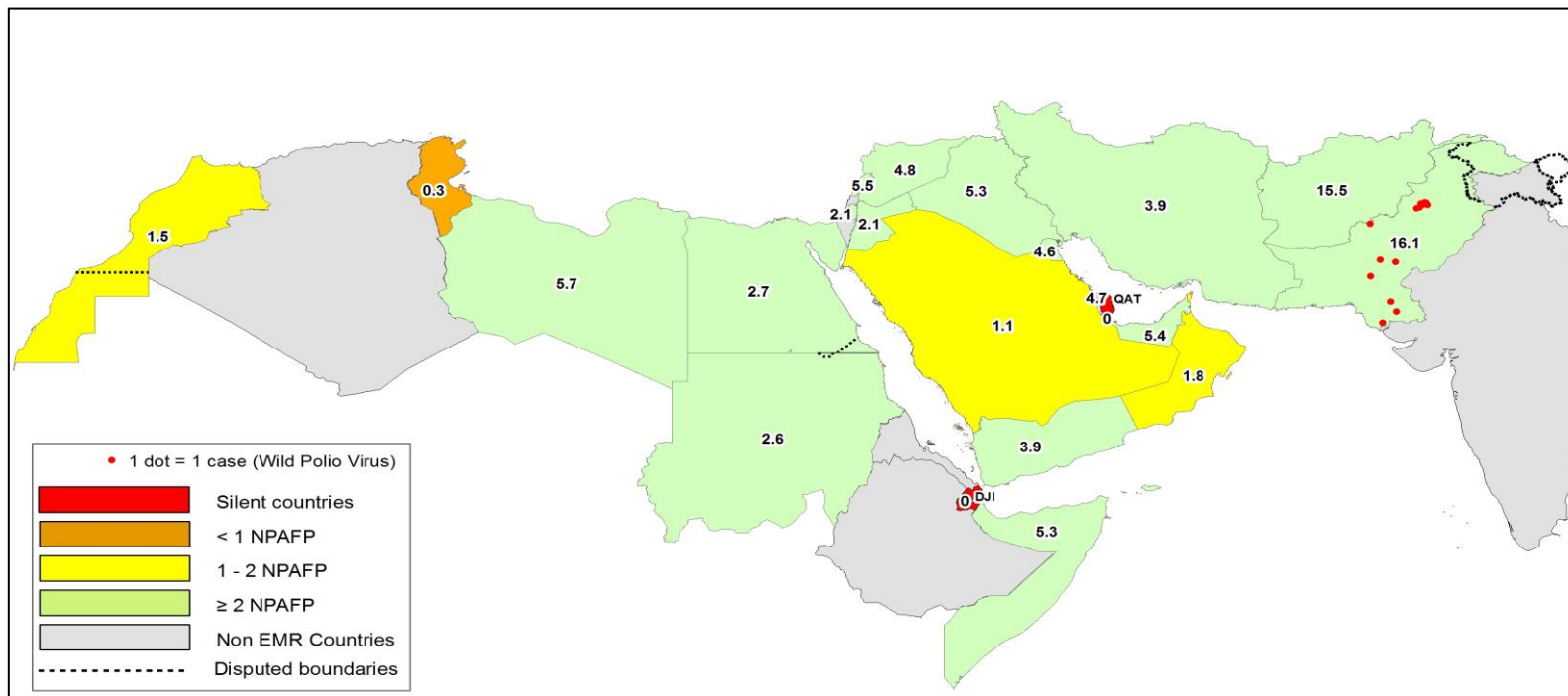


Figure 2: Percent of AFP cases with Adequate Samples & Compatible Cases in EMR 01/01/2020 - 23/02/2020

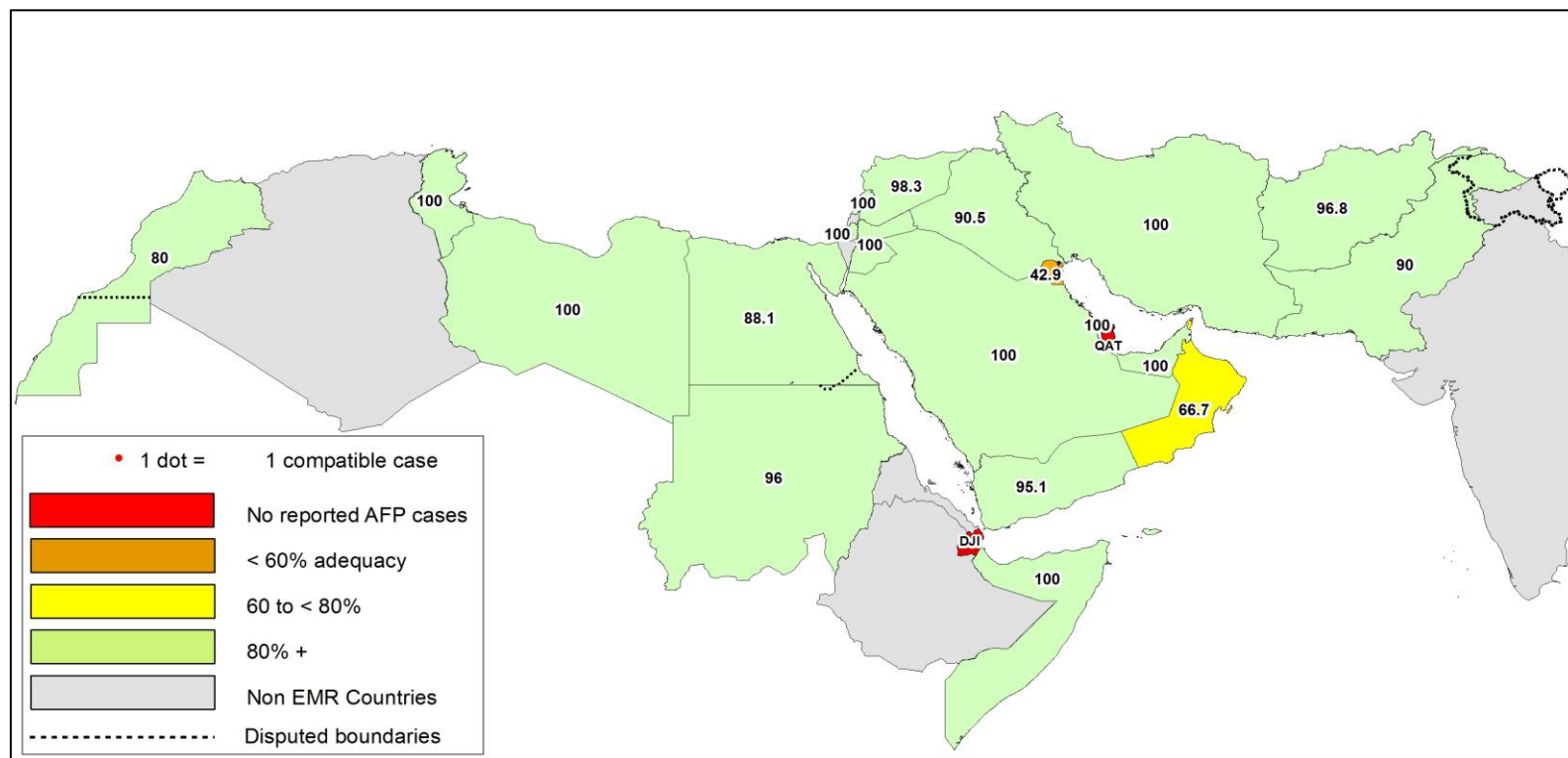


Table 8: Wild polio cases by country and date of onset of paralysis in EMR, 2019 - 2020

Year	COUNTRY	Count	First Case	Last Case
2020	PAK	17	1-Jan-20	2-Feb-20
2020 Total		17	1-Jan-20	2-Feb-20
2019	AFG	29	4-Jan-19	7-Dec-19
	PAK	146	15-Jan-19	31-Dec-19
2019 Total		175	4-Jan-19	31-Dec-19

Advance notification of a new WPV1 case in Pakistan from Kashmore district, Sindh province with date of onset 03/02/2020 - details will be shared in next bulletin

Figure 3: Non Polio AFP rate by Province in Afghanistan & by District in Pakistan 01/01/2020 - 23/02/2020

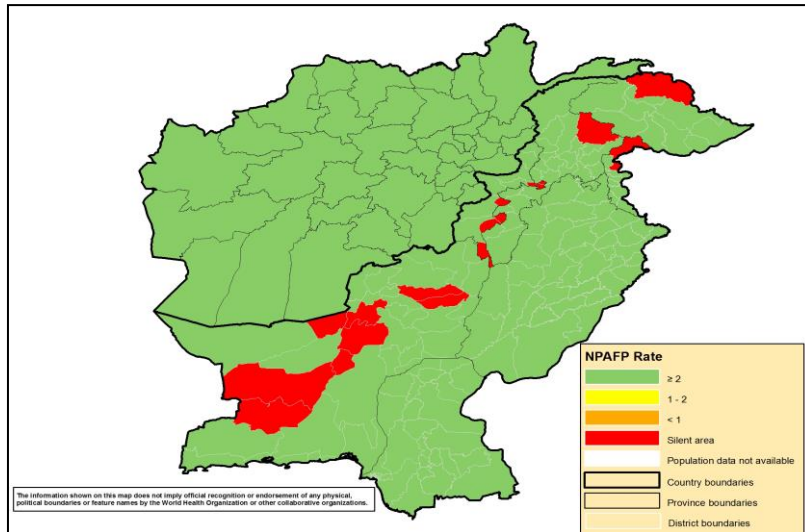


Figure 4: Percent of AFP cases with Adequate Samples in Afghanistan by Province & Pakistan by District 01/01/2020 - 23/02/2020

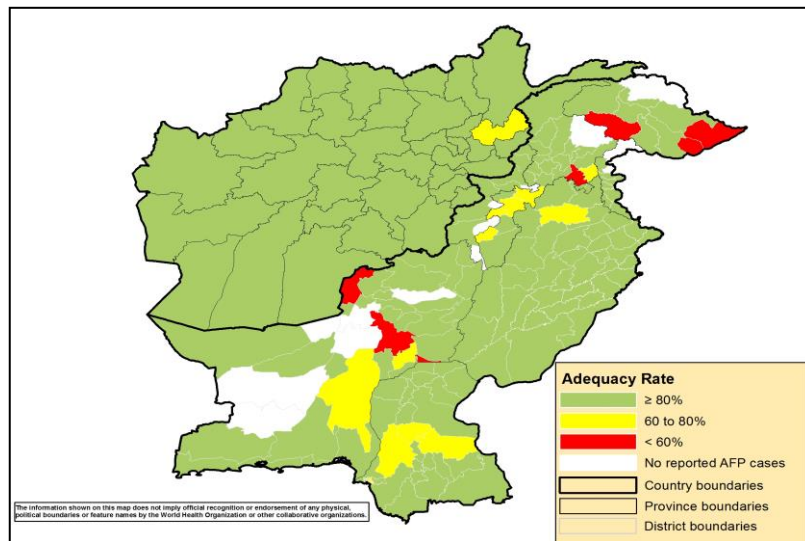
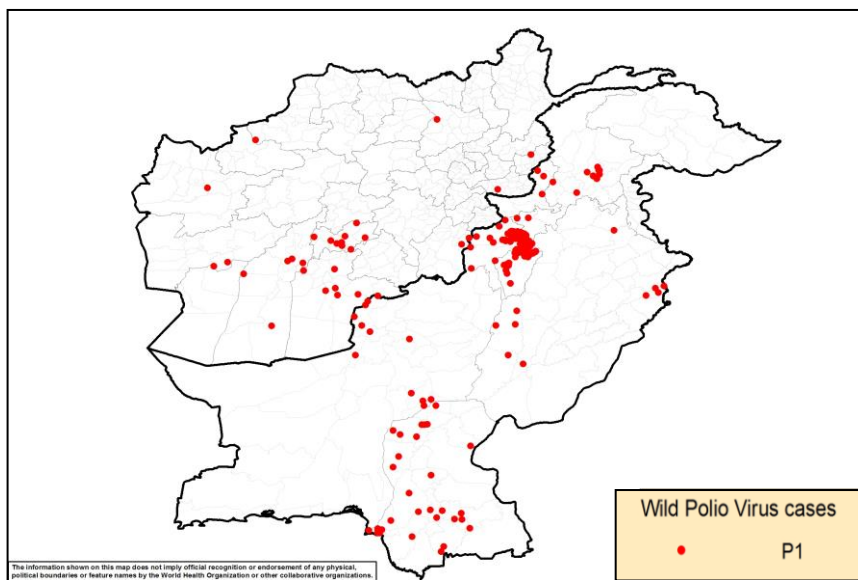
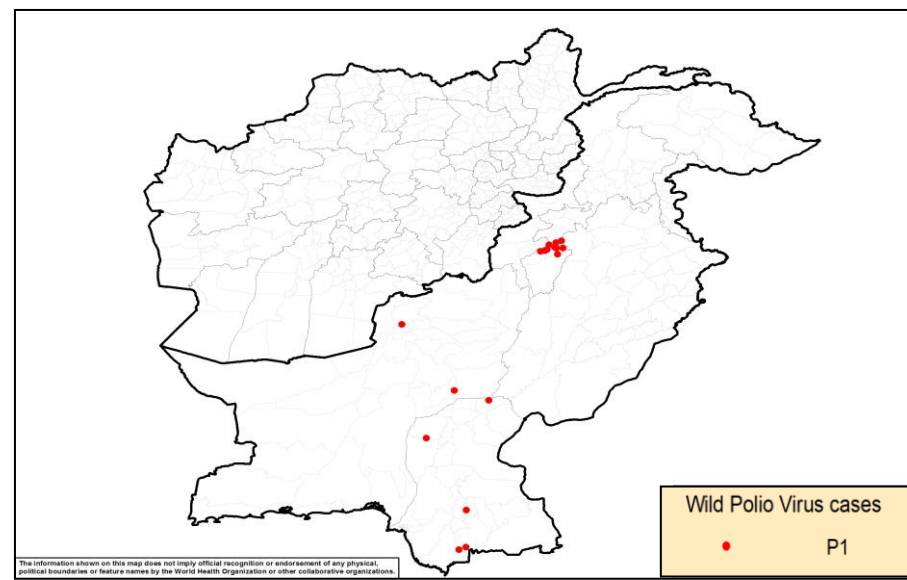


Figure 5: Wild Virus Cases by Type & District in Afghanistan & Pakistan

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



5(b) 01/01/2020 - 23/02/2020



World Health Organization – Regional Office for Eastern Mediterranean

AFP SURVEILLANCE

24-Feb-20

Week 08, ending 23 February 2020

Number 1116

ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case	
2019	KANDAHAR	SHAHWALIKOT	1	7-Dec-19	7-Dec-19	
		SPINBOLDAK	2	4-Jan-19	22-Nov-19	
		KANDAHAR	2	17-Aug-19	10-Nov-19	
		GHORAK	1	12-Jan-19	12-Jan-19	
	FARAH	BAKWA	2	14-Nov-19	25-Nov-19	
	HIRAT	PASHTUNZARGHUN	1	19-Nov-19	19-Nov-19	
	BAGHLAN	PUL-E- KHUMRI	1	14-Nov-19	14-Nov-19	
	URUZGAN	KHASURUZGAN	KHASURUZGAN	1	2-Nov-19	2-Nov-19
			TIRINKOT	4	19-May-19	2-Aug-19
			CHORA	3	20-Mar-19	23-Jul-19
		SHAHID-E-HASSAS	1	25-Feb-19	25-Feb-19	
	BADGHIS	BALAMURGHAB	1	17-Oct-19	17-Oct-19	
	PAKTIKA	BERMEL	2	15-Sep-19	28-Sep-19	
	NANGARHAR	KHOGYANI	1	18-Sep-19	18-Sep-19	
	HILMAND	GARMSE	GARMSE	1	26-May-19	26-May-19
			MUSAQALAH	1	5-May-19	5-May-19
			NAWZAD	1	3-Apr-19	3-Apr-19
			WASHER	1	23-Mar-19	23-Mar-19
		SANGIN	1	6-Mar-19	6-Mar-19	
	KUNAR	WATAPUR	1	8-May-19	8-May-19	
2019 Total			29	4-Jan-19	7-Dec-19	

ONSETYR	PROVINCE	DISTRICT	Count	First case	Last case		
2020	KHYBER PAKHTUNKHWA	LAKKIMRWT	9	2-Jan-20	2-Feb-20		
		TANK	1	11-Jan-20	11-Jan-20		
	BALOCHISTAN	PISHIN	1	31-Jan-20	31-Jan-20		
		NSIRABAD	1	3-Jan-20	3-Jan-20		
	SINDH	KASHMORE	KASHMORE	1	16-Jan-20	16-Jan-20	
			KAMBAR	1	8-Jan-20	8-Jan-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		
2020 Total			17	1-Jan-20	2-Feb-20		
2019	KHYBER PAKHTUNKHWA	LAKKIMRWT	32	27-May-19	31-Dec-19		
		DIKHAN	4	5-May-19	21-Dec-19		
		TANK	6	11-Oct-19	18-Dec-19		
		BANNU	26	15-Jan-19	30-Nov-19		
		SWABI	1	17-Nov-19	17-Nov-19		
		TORGHAR	7	25-May-19	13-Sep-19		
		HANGU	2	20-Jan-19	28-Jul-19		
		CHARSADA	1	21-Jul-19	21-Jul-19		
		SHANGLA	1	18-May-19	18-May-19		
		BALOCHISTAN	KABDULAH	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	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	
			JHELMUM	1	21-Jun-19	21-Jun-19	
	SINDH	THATTA	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	
	SUJAWAL	SBENAZIRABAD	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		
KP TRIBAL DISTRICTS	KHILAYARI	KHILAYARI	1	25-Feb-19	25-Feb-19		
		MOHMAND	1	20-Dec-19	20-Dec-19		
		WAZIR-S	1	20-Aug-19	20-Aug-19		
		WAZIR-N	8	4-Apr-19	21-Jul-19		
		KHYBER	1	14-Feb-19	14-Feb-19		
		BAJOUR	1	18-Jan-19	18-Jan-19		
2019 Total			146	15-Jan-19	31-Dec-19		

Advance notification of a new WPV1 case in Pakistan from Kashmore district, Sindh province with date of onset 03/02/2020 - details will be shared in next bulletin

World Health Organization – Regional Office for Eastern Mediterranean
AFP SURVEILLANCE
Week 08, ending 23 February 2020

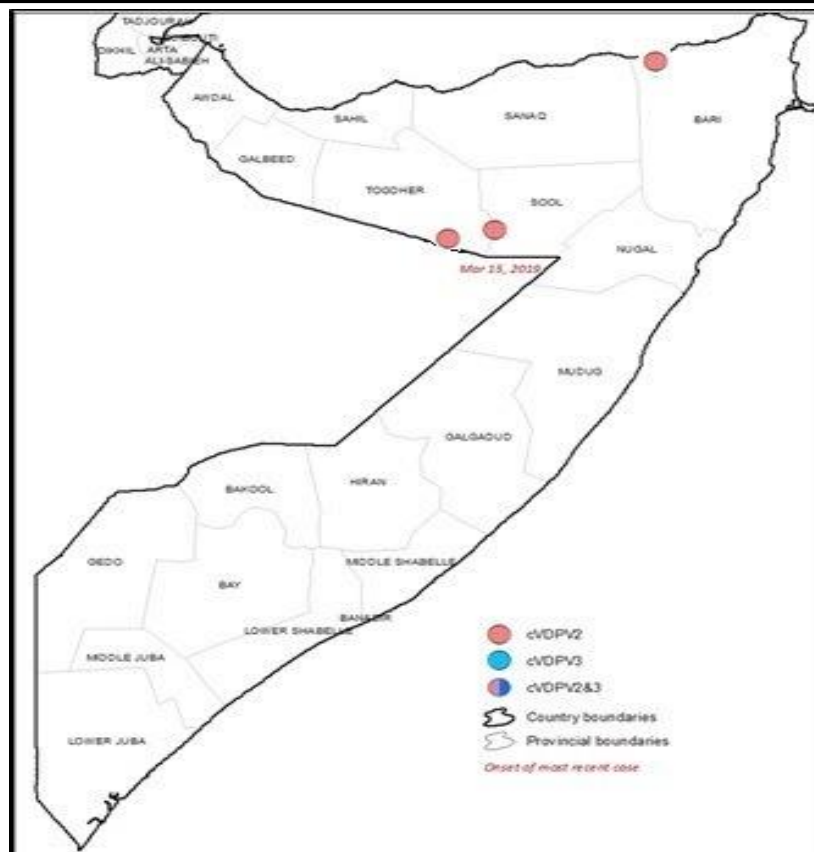
24-Feb-20
Number 1116

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

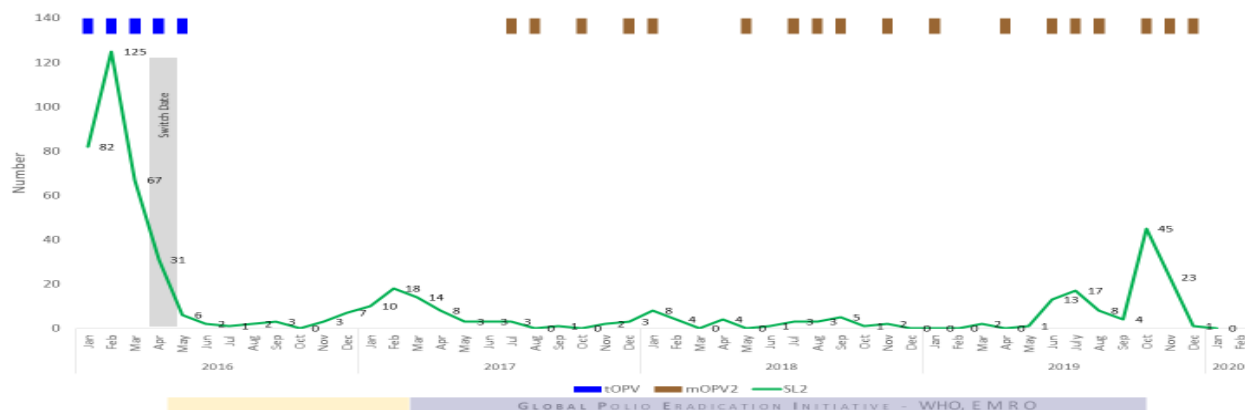
COUNTRY	YEAR	PROVINCE	DISTRICT	Count	cVDPV2			
					First Case	Last Case		
PAK	2020	KHYBER PAKHTUNKHWA	PESHAWAR	1	02-Jan-20	02-Jan-20		
			BAJOUR	1	03-Jan-20	03-Jan-20		
			KHYBER	1	12-Jan-20	12-Jan-20		
			Total 2020	3	2-Jan-20	12-Jan-20		
PAK	2019	PUNJAB	GUJRANWALA	1	22-Nov-19	22-Nov-19		
			KHYBER	3	12-Dec-19	28-Dec-19		
		KHYBER PAKHTUNKHWA	MOHMAND	3	12-Dec-19	21-Dec-19		
			BAJOUR	1	1-Dec-19	1-Dec-19		
			PESHAWAR	1	8-Dec-19	8-Dec-19		
			LAKKI MARWAT	1	13-Dec-19	13-Dec-19		
			CHARSADA	1	3-Nov-19	3-Nov-19		
			KOHISTANUPPER	1	27-Oct-19	27-Oct-19		
			KOHISTANLOWER	2	6-Oct-19	11-Oct-19		
			TORGHAR	3	4-Sep-19	17-Dec-19		
		ISLAMABAD	CDA	1	11-Sep-19	11-Sep-19		
		GILGIT BALTISTAN	DIAMER	4	7-Jul-19	28-Aug-19		
		SOM		BARI	BOSSASO	1	8-May-19	8-May-19
				TOGDHER	BUHODLE	1	21-Apr-19	21-Apr-19
SOOL	LAS ANOD			1	15-Mar-19	15-Mar-19		
Total 2019				25	15-Mar-19	28-Dec-19		

Advance notification of 6 new cVDPV2 cases in Pakistan, 4 from Khyber and 1 from Nowshera, Khyber Pakhtunkhwa (KP) province, and 1 from Rawalpindi district from Punjab province with dates of onset between 13-22 January 2020 - details will be shared in next bulletin

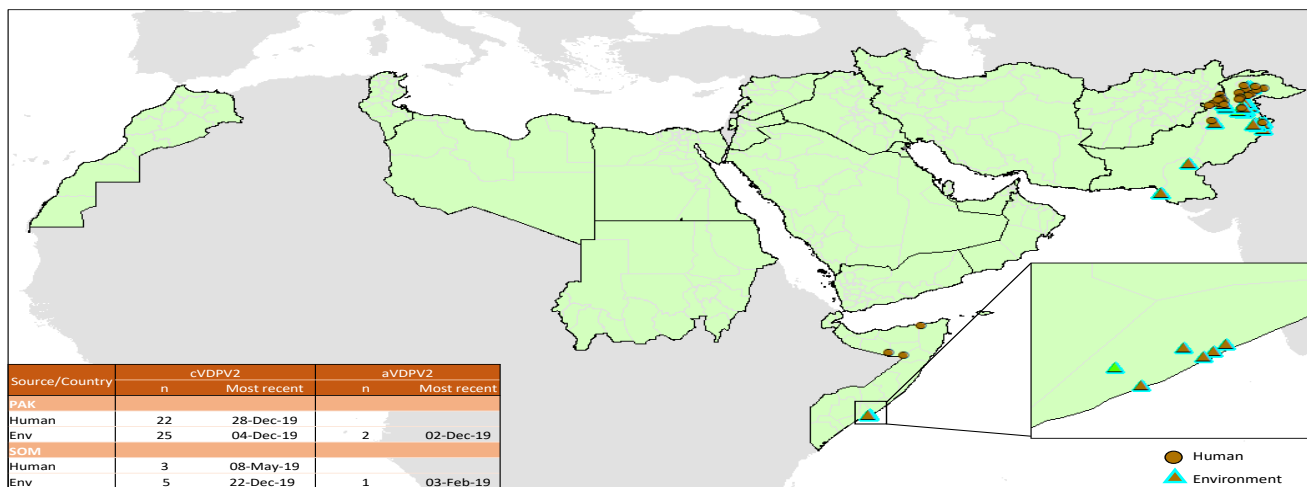
Figure 6: Somalia cVDPV cases by type and district 01/01/2019 - 31/12/2019



Sabin like type-2 poliovirus isolates (H&E) and vaccine types used during SIAs, EMRO, 2016 to 2020



VDPV2 isolates, EMR countries, 2019



VDPV2 isolates, EMR countries, 2020

