

Highlights



Children
Paralyzed
by polio



Sewage
water
sampling

2021

- 05 cases of Wild Polio 1
 - 04 in Afghanistan
 - 01 in Pakistan

- 118 cases of cVDPV2
 - 43 in Afghanistan
 - 08 in Pakistan
 - 01 in Somalia
 - 66 in Yemen

- 03 cVDPV1 cases
 - All in Yemen

2022

- 66 samples Wild Polio 1
 - 01 in Afghanistan
 - 65 in Pakistan

- 104 samples cVDPV2
 - 40 in Afghanistan
 - 35 in Pakistan
 - 12 in Egypt
 - 01 in Iran
 - 01 in Somalia
 - 05 in Djibouti
 - 10 in Yemen

2022

- 12 cases of Wild Polio 1
 - 01 in Afghanistan
 - 11 in Pakistan

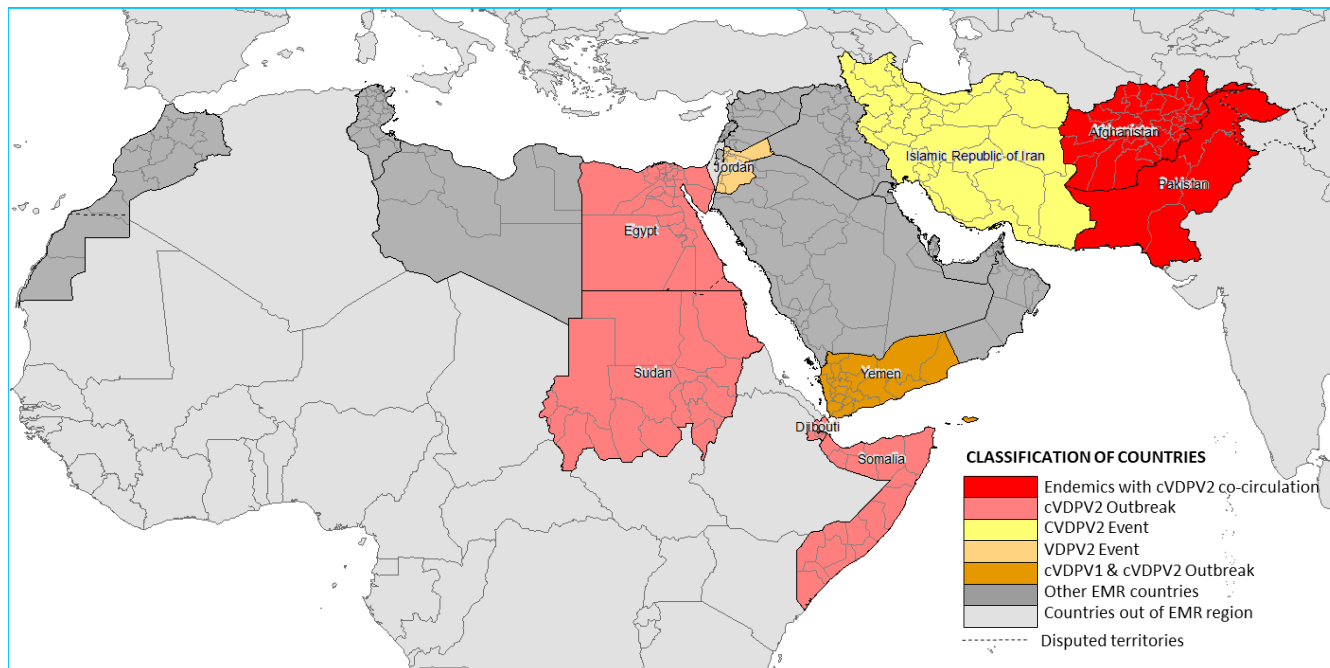
- 51 cases of cVDPV2
 - 02 in Somalia
 - 49 in Yemen

- Zero case of cVDPV1
(No cVDPV1 for the last ten months)

2022

- 05 sample Wild Polio 1
 - 01 in Afghanistan
 - 04 in Pakistan

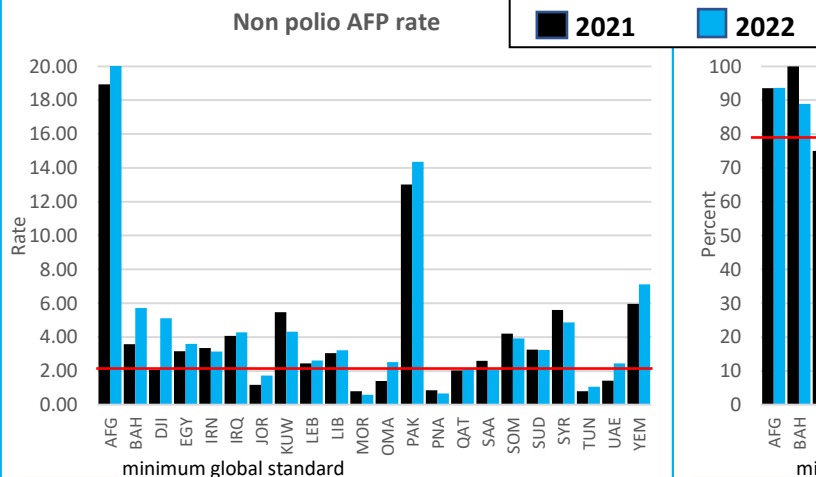
- 18 samples of cVDPV2
 - 05 in Egypt
 - 11 in Djibouti
 - 02 in Somalia



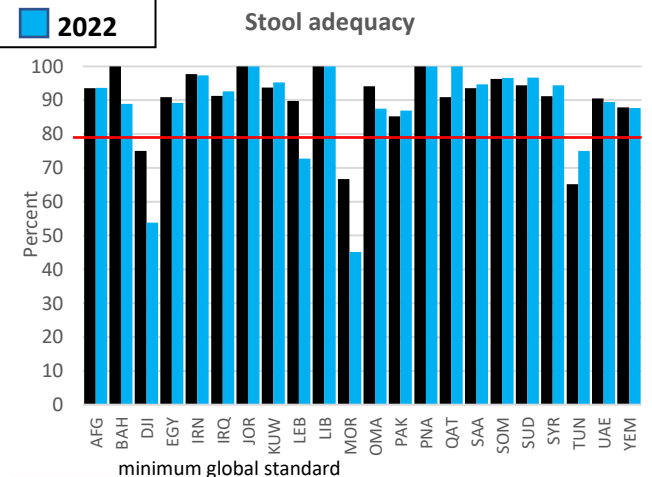
Highlights of the week

- No new case reported for wild poliovirus from human however, one new wild poliovirus isolated from environmental samples in Pakistan (Bannu district) in Khyber Pakhtunkhwa province. Sample was collected in 03 June 2022. This is 4th isolate this year from same district.
- No new cVDPV2 case/isolate reported last week either from human or environment.
- Sudan has not reported a cVDPV2 case for more than one year. The most recent case had onset of paralysis on 18 December 2020. The last positive environmental sample was collected on 9 November 2020. The EMRO team had begun preparing for Outbreak Response Assessment (OBRA) for Sudan with the main objective to assess the quality of the response to the poliovirus cVDPV2 outbreak in Sudan; and to determine the possibility of outbreak closure.

Non polio AFP rate



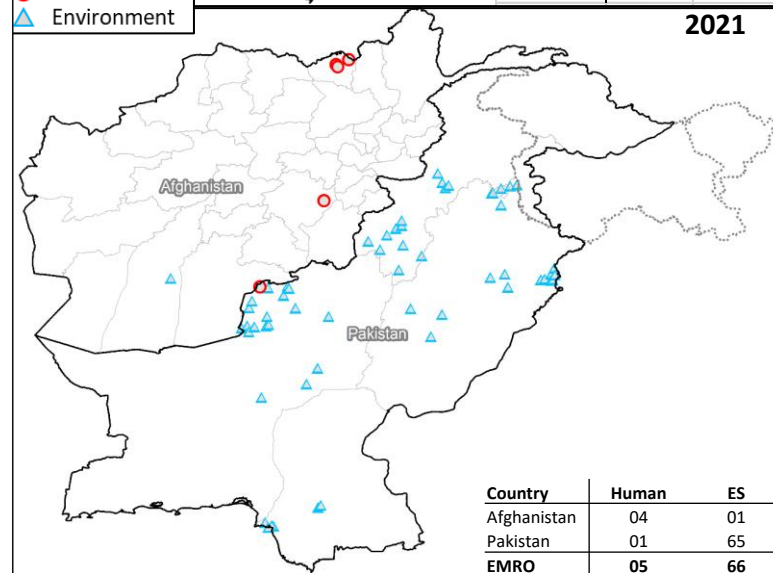
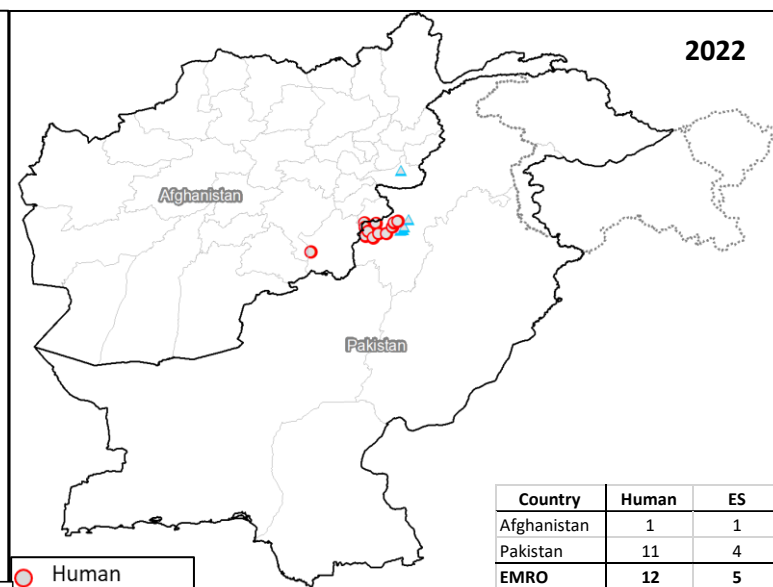
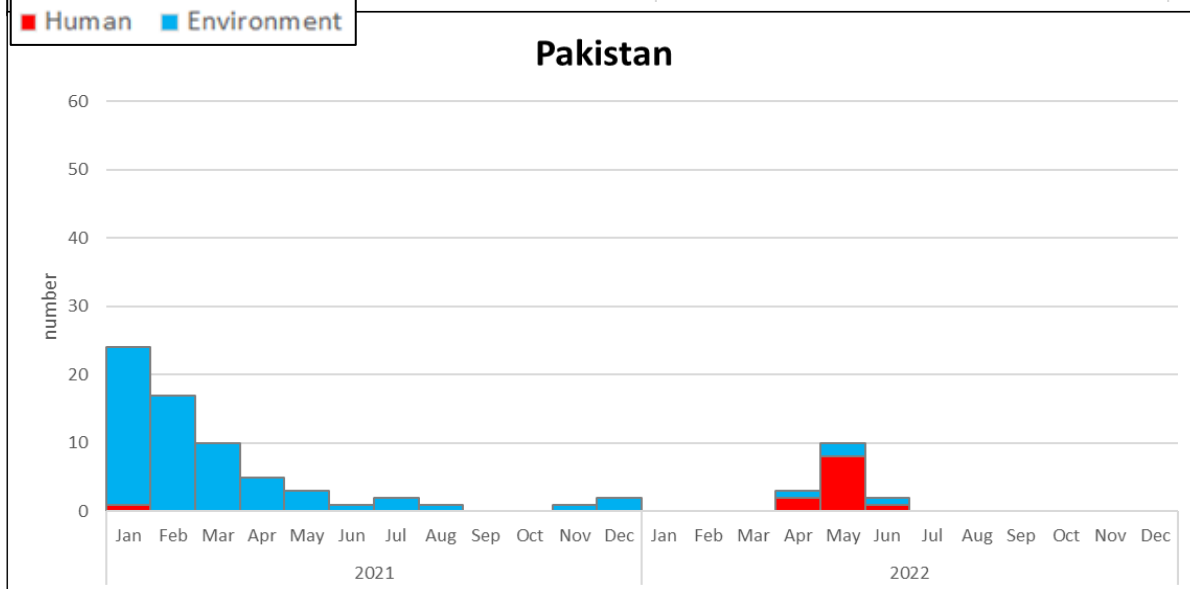
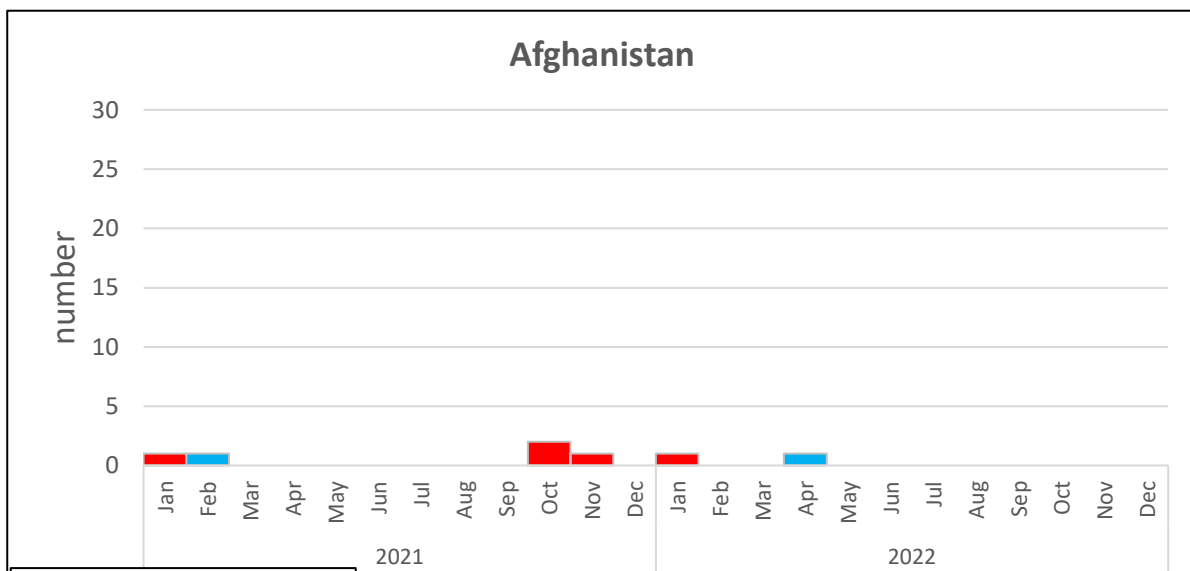
Stool adequacy



Wild Poliovirus type-1 (WPV1) Vaccine-derived Poliovirus (VDPV)

WPV1 Positive isolates from Afghanistan and Pakistan by source

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Virus isolation by country, last 12 months (Jul 13, 2021 to Jul 12, 2022)

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Source / Virus type	AFG	DJI	PAK	EGY	IRN	JOR	SOM	YEM	Total
Human (AFP only)	5		12				2	118	137
Wild	4		11						15
cVDPV2							2	114	116
aVDPV2	1		1						2
VDPV2								3	3
cVDPV2+aVDPV1								1	1
Environment	2	16	22	39	2	3	3	10	98
Wild	1		9						10
cVDPV2		16	1	6			2	10	35
aVDPV2	1		12		1				14
VDPV2				33	1	3	1		39
cVDPV2+aVDPV1									
Total	7	16	34	39	2	3	5	128	235

Note: Viruses isolated from 'other' sources (example healthy children) are not included in this analysis; they are shown in page No. (8)

Confirmed Wild Polio 1 Cases by month of onset

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Country	Total year 2020	Total year 2021	3 July		Confirmed Wild Polio 1 Cases by month of onset												Recent most Case
					2021						2022						
			2021	2022	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Afghanistan	56	4	1	1	0	0	2	1	0	1	0	0	0	0			14-Jan-22
Bahrain	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			
Egypt	0	0	0	0	0	0	0	0	0	0	0	0	0				
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0				
Iraq	0	0	0	0	0	0	0	0	0	0	0	0	0				
Jordan ****	0	0	0	0	0	0	0	0	0	0	0	0	0				
Kuwait	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					
Libya	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				
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0				
Pakistan	84	1	1	11	0	0	0	0	0	0	0	0	2	8	1		09-Jun-22
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			
Saudi Arabia	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					
Sudan	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			
U.A.E	0	0	0	0	0	0	0	0	0	0	0						
Yemen	0	0	0	0	0	0	0	0	0	0							
EMR	140	5	2	12	0	0	2	1	0	1	0	0	2	8	1	0	09-Jun-22

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

Investigation of AFP cases with paralysis onset in 2021 & 2022

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COUNTRY	2021									2022									Line List 2022
	AFP cases	Case classification						Surveillance indicators		AFP cases	Case classification						Surveillance indicators		Date of latest
		Total Confirmed WPV1 Polio Cases 🔴	Polio Compatible	(non polio Discarded AFP)	VDPV 🔴🔴🔴	Pending classification > 90 days from onset	Pending LAB classification > 90 days from onset	Annualized Non polio AFP rate	% with adequate specimens 🔴🔴🔴		Total Confirmed WPV1 Polio Cases 🔴	Polio Compatible	Discarded (non polio AFP)	VDPV 🔴🔴🔴	Pending classification > 90 days from onset	Pending LAB classification > 90 days from onset	Annualized Non polio AFP rate 🔴🔴🔴	% with adequate specimens 🔴🔴🔴	
Afghanistan	4088	4	1	4038	45	0	0	18.71	94	2621	1	0	2304	1	24	0	23.03	94	07-Jul-22
Bahrain	11	0	0	11	0	0	0	3.25	100	9	0	0	3	0	0	0	5.72	89	10-Jul-22
Djibouti	8	0	0	4	0	4	4	2.06	75	13	0	0	3	0	0	0	5.12	54	10-Jul-22
Egypt	1251	0	0	1245	1	5	0	3.17	91	747	0	0	574	0	8	1	3.60	89	10-Jul-22
Iraq	709	0	0	709	0	0	0	4.07	91	392	0	0	319	0	35	0	4.28	93	02-Jul-22
Islamic Republic of Iran	681	0	0	680	1	0	0	3.36	97	336	0	0	304	0	0	0	3.15	97	10-Jul-22
Jordan	47	0	0	47	0	0	0	1.19	100	37	0	0	33	0	0	0	1.73	100	12-Jun-22
Kuwait	48	0	0	48	0	0	0	5.47	92	21	0	0	17	0	0	0	4.31	95	26-Jun-22
Lebanon	39	0	0	39	0	0	0	2.45	90	22	0	0	11	0	6	4	2.62	73	26-Jun-22
Libya	79	0	0	79	0	0	0	3.05	100	44	0	0	31	0	0	0	3.23	100	02-Jul-22
Morocco	78	0	0	78	0	0	2	0.80	64	31	0	0	13	0	8	0	0.59	45	01-Jul-22
Oman	17	0	0	17	0	0	0	1.41	94	16	0	0	15	0	0	0	2.53	88	13-Jun-22
Pakistan	13117	1	4	13085	18	9	1	12.99	85	7624	11	0	6677	0	106	0	14.35	87	11-Jul-22
Palestine	16	0	0	16	0	0	0	0.85	100	7	0	0	3	0	3	0	0.66	100	12-Jun-22
Qatar	11	0	0	11	0	0	0	1.80	91	5	0	0	1	0	4	0	2.11	100	19-Jun-22
Saudi Arabia	217	0	0	217	0	0	0	2.58	94	94	0	0	56	0	1	0	2.06	95	10-Jul-22
Somalia	349	0	0	348	1	0	0	4.20	96	173	0	0	161	2	1	2	3.92	97	10-Jul-22
Sudan	637	0	0	637	0	0	0	3.26	94	332	0	0	280	0	8	0	3.24	97	10-Jul-22
Syrian Arab Republic	431	0	0	431	0	0	0	5.60	91	197	0	0	181	0	0	0	4.87	94	10-Jul-22
Tunisia	23	0	0	23	0	0	0	0.81	65	16	0	0	11	0	0	0	1.06	75	10-Jul-22
United Arab Emirates	21	0	0	21	0	0	0	1.42	86	19	0	0	0	0	9	3	2.45	89	10-Jul-22
Yemen	921	0	0	849	72	0	0	5.50	88	627	0	0	205	49	131	96	7.12	88	10-Jul-22
EMR POL	22799	5	5	22633	138	18	7	7.91	88	13383	12	0	11202	52	344	106	8.83	89	

* 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, with 14 days of paralysis onset and specimens received in the lab in 'Good Condition'

**** Includes all VDPV cases. Further details available in page (8)

Laboratory investigation of AFP cases with paralysis onset in 2022

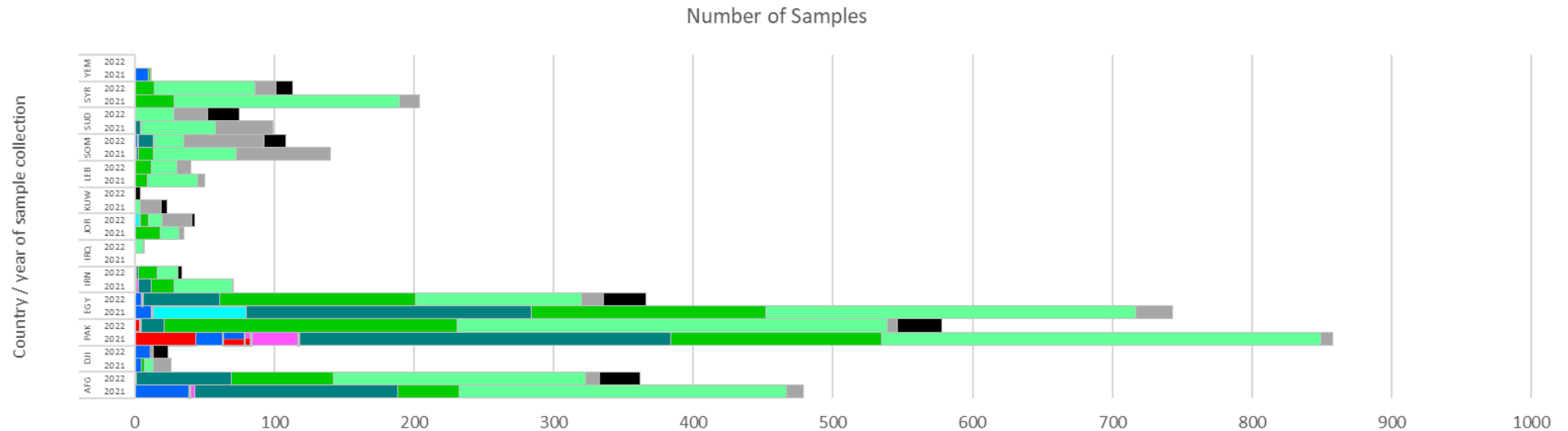
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Country	Pollo laboratories	AFP cases with specimens	Preliminary virus isolation results of AFP cases						Poliovirus intratypic differentiation results													Indicators				Latest report Date
	ITD / Nucleotide Sequencing		Referred for ITD		NPEV 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+/NPE V			received within last 14 days	received more than 14 days ago	Wild	Sabin	VDPV	Wild	Sabin	VDPV	Wild	Sabin	VDPV									
Afghanistan	RRL Pakistan	2616	154	23	432	1744	217	3	1	111			8			129				1	15%	95%	100%	98%	03-Jul-22	
Bahrain	PNL Oman	9				8	1														0%	100%		100%	30-Jun-22	
Djibouti	PNL Kenya	13	2		1	2		8								2					33%	40%		33%	03-Jul-22	
Egypt***	RRL Egypt	725	17	3	90	542	52	21		7						12		3	1		12%	98%	100%	99%	07-Jul-22	
Iran	PNL Iran	351	4		4	312	8	23		2	1					3					1%	100%	100%	99%	02-Jul-22	
Iraq	PNL Iraq, RRL Egypt	472	1		42	396	31	2								2					10%	100%	50%	100%	09-Jul-22	
Jordan	PNL Jordan, RRL Tunisia	67	2		19	40	3	3								2					30%	100%	100%	100%	07-Jul-22	
Kuwait	RRL Kuwait	19	1			15		3		1						1		1			5%	100%	100%	100%	03-Jul-22	
Lebanon	RRL Egypt	20	1			19															0%	100%			30-Jun-22	
Libya	RRL Tunisia	44				38	1	5													0%	100%		100%	01-Jul-22	
Morocco	PNL Morocco, RRL Tunisia	27			3	23	1														11%	100%		92%	01-Jul-22	
Oman	PNL Oman	20			2	17	1														13%	79%		100%	05-Jul-22	
Pakistan	RRL Pakistan	7532	268	37	1199	5464	544	17	11*	141			1			230				5	13%	96%	100%	96%	09-Jul-22	
Palestine & UNRWA		7				7															0%	14%		86%	12-Jun-22	
Qatar	RRL Kuwait	5	1			4				1											0%	80%	0%	100%	30-Jun-22	
Saudi Arabia	PNL Saudi Arabia, NPL Oman	91	1		3	82		5								1					4%	86%	0%	97%	27-Jun-22	
Somalia	PNL Kenya	173	7		33	124	2	9		2			7								20%	7%		99%	03-Jul-22	
Sudan	PNL Sudan, RRL Egypt	317	8		78	202	11	18													27%	57%		100%	29-Jun-22	
Syria	PNL Syria, RRL Egypt	188	2		13	167	5	1													6%	99%			06-Jul-22	
Tunisia	RRL Tunisia	17				14		3													0%	100%		93%	01-Jul-22	
U.A.E	PNL Oman	18				18															0%	100%		72%	30-Jun-22	
Yemen	PNL Oman, RRL Egypt	375	94		30	171	53	33		3			30	26		5				34	10%	55%	37%	0%	02-Jul-22	
Total EMR 2022		13106	563	63	1949	9409	930	154	10	268	1	0	46	26	0	387	0	1	4	1	40	13%	93%	93%	95%	
Total EMR 2021		22112	1183	128	3873	16915	0	9	5	478	7	0	373	107	0	599	1	1	7	2	2	14%	97%	97%	93%	

* Two WPV1 cases are confirmed due to positive contacts (Index cases were negative for WPV1)

Environmental Surveillance Isolation by Classification

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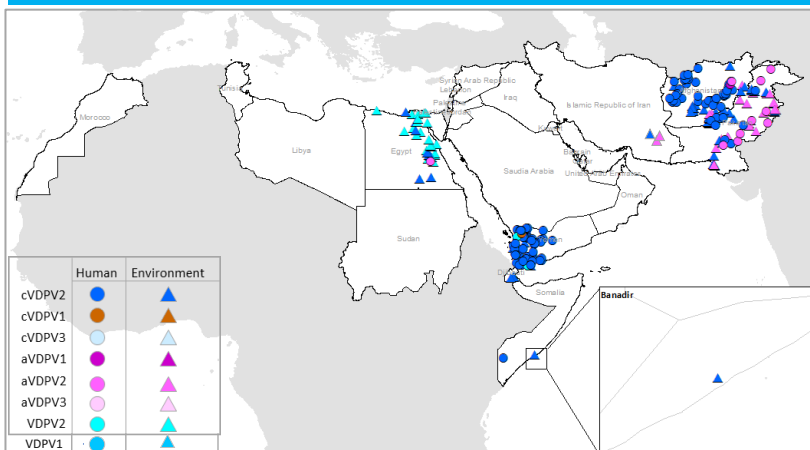


	AFG		DJI		PAK		EGY		IRN		IRQ		JOR		KUW		LEB		SOM		SUD		SYR		YEM	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
🇰🇪 Wild		1			44	4																				
🇰🇪 cVDPV2	39		5	11	19		12	5	1										1	2					10	
🇰🇪 Wild+cVDPV2	1				16																					
🇰🇪 Wild+aVDPV2					4																					
🇰🇪 Wild+aVDPV3					1																					
🇰🇪 aVDPV1																										
🇰🇪 aVDPV2	3				33	1			2																	
🇰🇪 aVDPV3																										
🇰🇪 VDPV1					1		1																			
🇰🇪 VDPV2							67	1		1				4							1					
🇰🇪 SL2	145	68			266	16	204	55	9	2									2	10	4					
🇰🇪 SL1/3	44	73	2		151	210	168	140	16	13			18	6			9	12	10	1	1			28	14	1
🇰🇪 Entero	235	181	6		314	308	265	119	42	15		6	14	10	4		36	18	60	21	53	28	162	72	1	
🇰🇪 Negative	12	10	13	2	9	7	26	16	1				3	21	15		5	10	67	58	41	24	14	15		
🇰🇪 Pending		29		11		32		30		3		1		2	4	4				15		23		12		

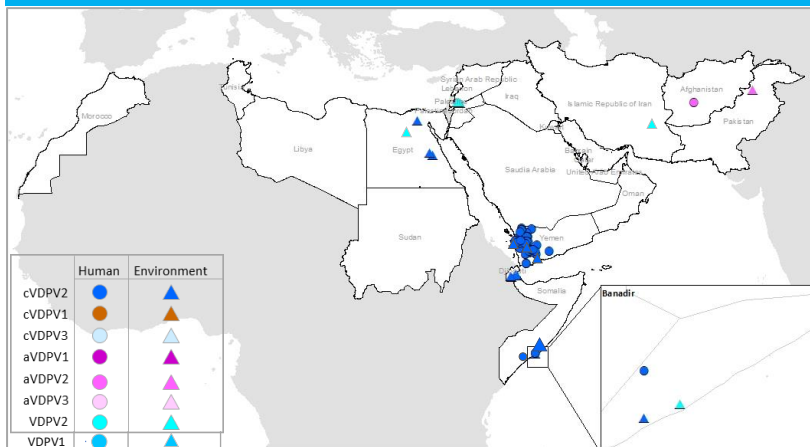
VDPVs isolations by Source and Country

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VDPV Isolates, EMR countries, 2021



VDPV Isolates, EMR countries, 2022



VDPVs isolated from 2017-2022

VDPV Isolate type	EMR Country	Sources																												
		AFP cases(Human)						Contacts(Human)						Environment						Other Sources (Healthy Children)										
		2017	2018	2019	2020	2021	2022	Most recent	2017	2018	2019	2020	2021	2022	Most recent	2017	2018	2019	2020	2021	2022	Most recent	2017	2018	2019	2020	2021	2022	Most recent	
cVDPV2	Afghanistan				307	43	09-07-21												174	40		23-06-21								
	Djibouti																		5	11		24-04-22								
	Egypt																		12	5		28-04-22								
	Iran																		3	1		20-02-21								
	Pakistan			22	135	8		23-04-21										38	135	35		11-08-21								
	Somalia	6	3	14	1	2	18-02-22		3	1	11		3	22-02-22	2	19	5	26	1	2	21-04-22				1	5		1	10-03-22	
	Sudan				58		18-12-20				18			08-10-20				14			09-11-20					4			24-08-21	
	Syria	74					21-09-17	63						12-09-17									4						20-08-17	
Yemen					66	49	21-03-22					23	5	17-01-22				10			29-11-21									
cVDPV1	Yemen			1	31	3	27-03-21			2				10-07-19																
cVDPV3	Somalia		7				07-09-18		7					30-06-18		12					23-08-18									
aVDPV1	Afghanistan					1	22-02-21																							
	Egypt																	1			16-07-20									
	Pakistan																		1		10-02-21									
	Somalia				1		26-01-20																							
	Yemen					1	20-07-21																							
aVDPV2	Afghanistan			3	1	1	01-01-22				75	15	1	14-02-22				2	3		25-07-21									
	Egypt					1	30-05-21					1	14-06-21					1			21-09-21									
	Iran																		2		23-09-21									
	Pakistan				7	8	24-09-21			8	19	1	28-04-21	5		3	22	37		06-12-21										
	Somalia														2	1				03-02-19										
	Yemen					3	01-11-21					1	09-12-21																	
aVDPV3	Afghanistan				1		23-06-20																							
	Egypt																	2			30-09-20									
	Pakistan																		1		05-04-21									
	Libya				1		15-01-20																							
VDPV1	Egypt																	1			11-07-21									
VDPV2	Egypt																		67	1		12-01-22								
	Iran																			1		04-02-22								
	Jordan																		3			25-05-22								
	Pakistan																		1			15-02-22								

Important links

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- [Global Polio Eradication Initiative](#)
- [IMST – Outbreak Response Dashboard](#)
- [nOPV2 Tracker](#)
- [Pol-MIS](#) (restricted to registered users)
- [Containment](#) (restricted to registered users)