

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

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

2022

- 09 cases of Wild Polio 1
 - 01 in Afghanistan
 - 08 in Pakistan

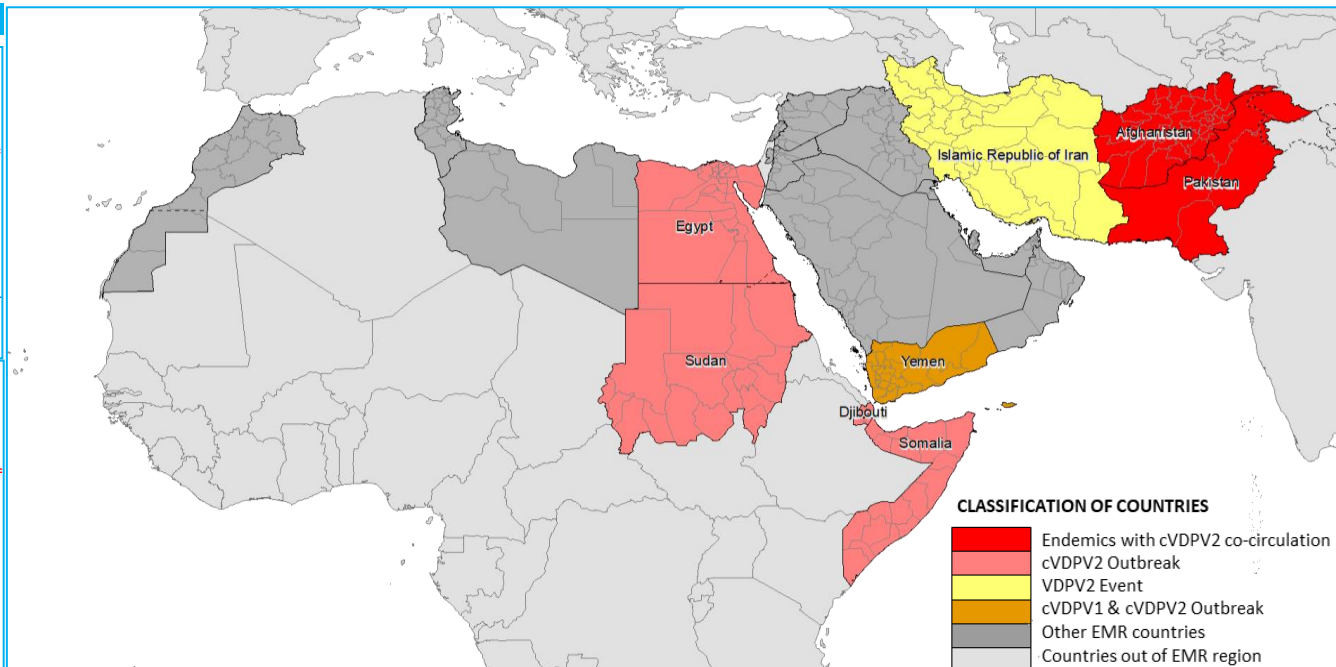
- 47 cases of cVDPV2
 - 02 in Somalia
 - 45 in Yemen

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

2022

- 03 sample Wild Polio 1
 - 01 in Afghanistan
 - 02 in Pakistan

- 15 samples of cVDPV2
 - 05 in Egypt
 - 09 in Djibouti
 - 01 in Somalia

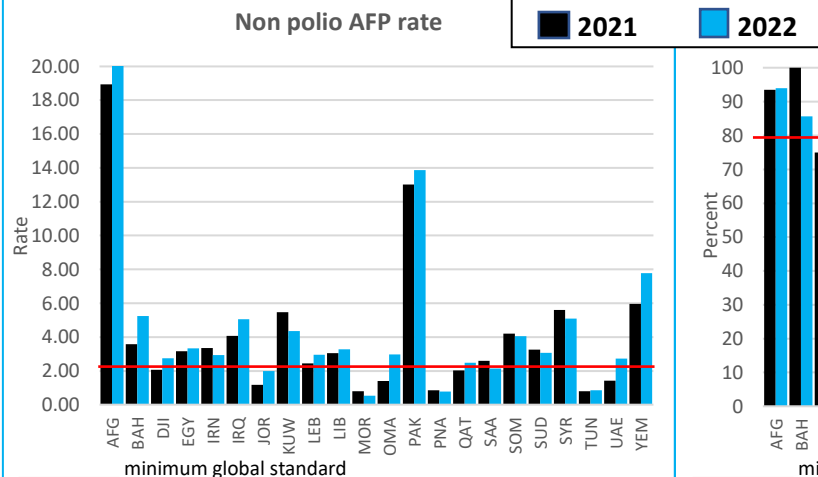


Highlights of the week

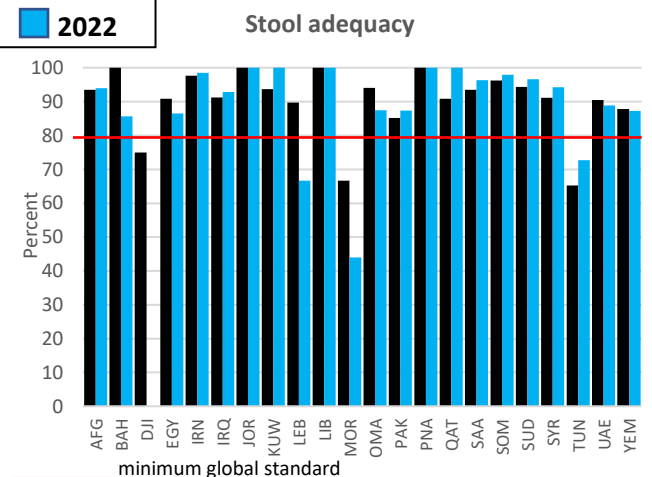
- No new wild isolates from human or environmental samples reported this week. The WPV1 cases count in 2022 to date is 9 (1 from Afghanistan and 8 from Pakistan) with most recent onset on 15 May 2022.
- No new cVDPV isolates from human or environmental samples reported this week. The cVDPV2 cases count in 2022 to date is 47 (2 from Somalia and 45 from Yemen) with most recent onset on 3 March 2022.
- The meeting of the 36th Eastern Mediterranean Regional Certification Commission (RCC) was successfully convened from 31 May to 2 June 2022 in addition to implementation of two trainings on the Electronic Annual Certification Reports (e-ACR) submission for RCC Members and National Certification Committees (NCC) and Ministry of Health focal points of 11 countries from 28-30 May and 3-5 June 2022 respectively.

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

Non polio AFP rate

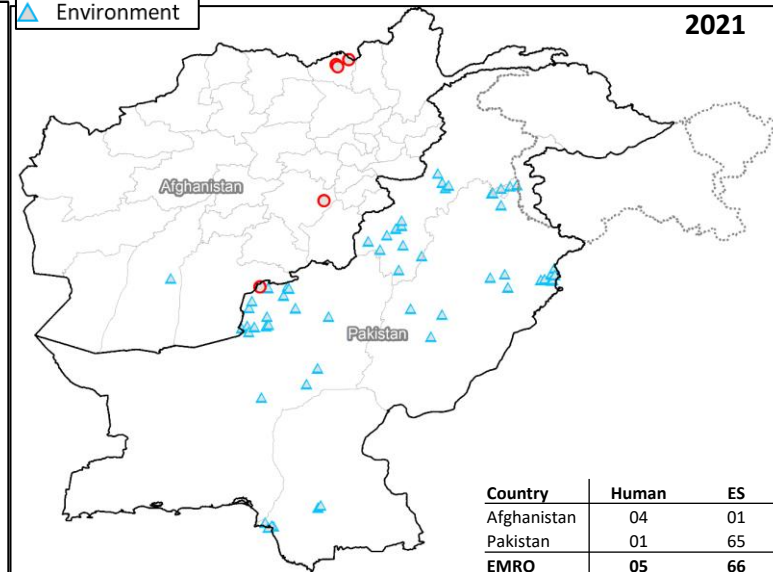
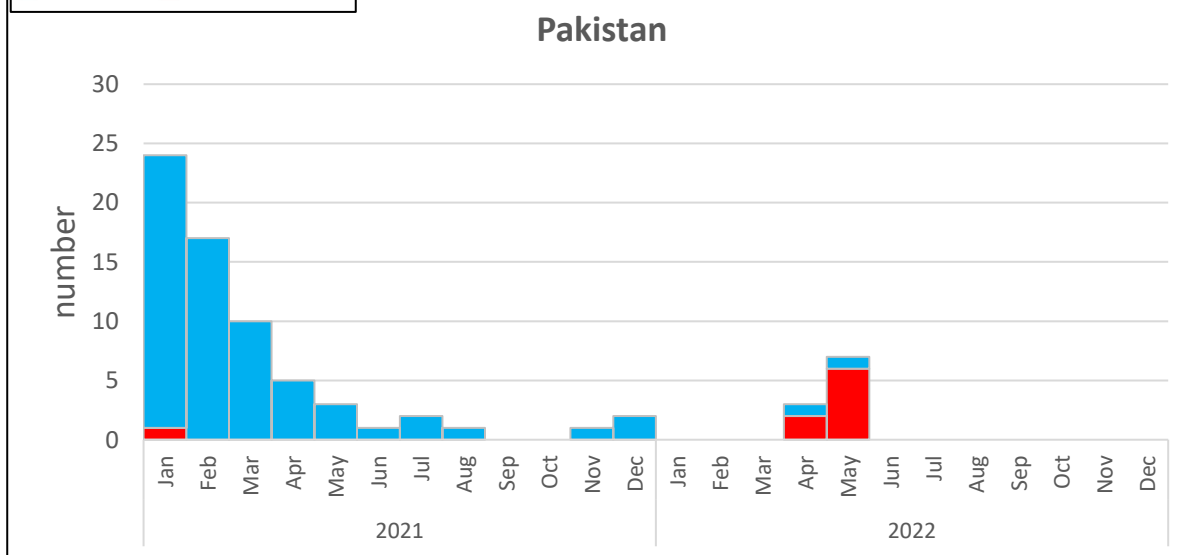
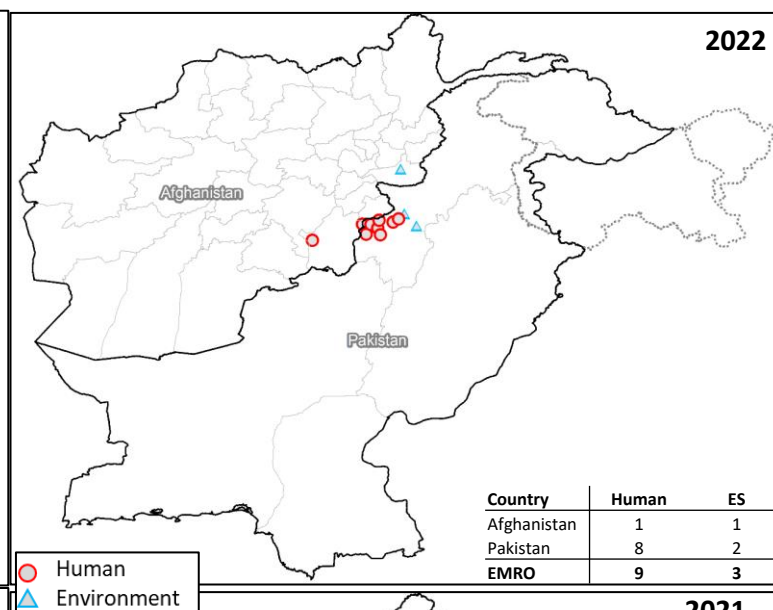
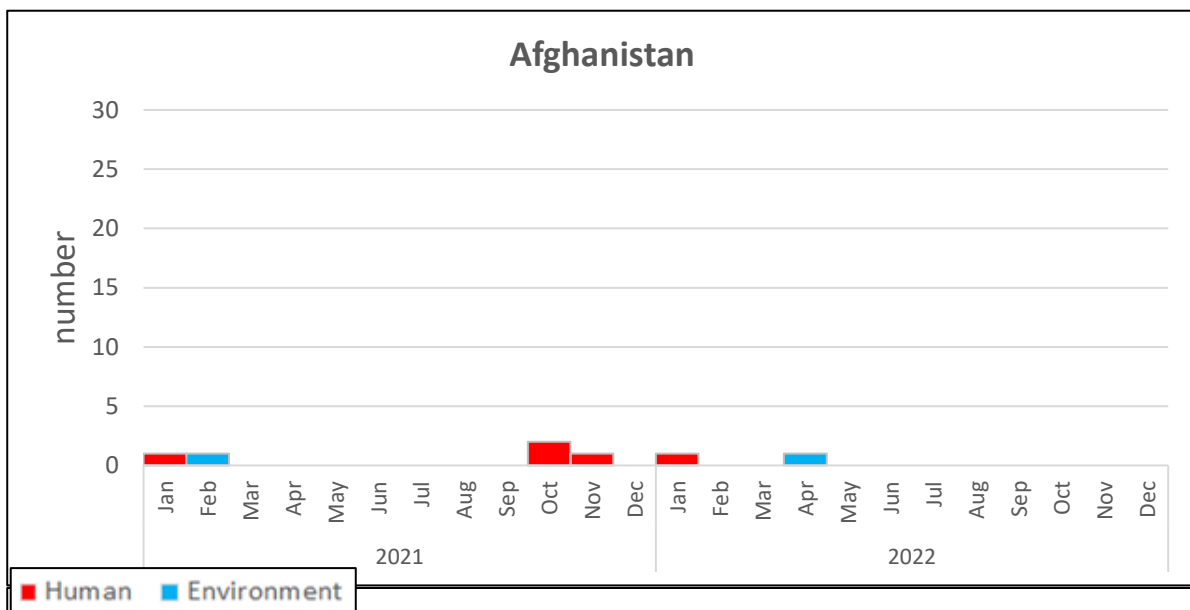


Stool adequacy






WPV1 Positive isolates from Afghanistan and Pakistan by source

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

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Source / Virus type 	AFG	DJI	PAK	EGY	IRN	SOM	YEM	Total
 Human (AFP only)	6		9			2	113	130
Wild	4		8					12
cVDPV2	1					2	110	113
aVDPV2	1		1					2
VDPV1								
VDPV2							3	3
 Environment	3	14	26	59	3	1	6	112
Wild	1		9					10
cVDPV2	1	14	3	6		1	6	31
aVDPV2	1		14		2			17
VDPV1				1				1
VDPV2				52	1			53
Total	9	14	35	59	3	3	119	242

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

EMR Polio Bulletin - Issue No. 1236, Week 23 (ending on 12/06/2022)

Country	Total year 2020	Total year 2021	12 June		Confirmed Wild Polio 1 Cases by month of onset												Recent most Case
					2021						2022						
			2021	2022	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
Afghanistan	56	4	1	1	0	0	0	2	1	0	1		0	0			14-Jan-22
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	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	0			
Jordan ****	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				
Lebanon ****	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			
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	84	1	1	8	0	0	0	0	0	0	0	0	0	2	6		15-May-22
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			
Somalia	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				
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				
U.A.E	0	0	0	0	0	0	0	0	0	0	0	0					
Yemen	0	0	0	0	0	0	0	0	0	0	0						
EMR	140	5	2	9	0	0	0	2	1	0	1	0	0	2	6	0	15-May-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
	AFP cases	Case classification						Surveillance Indicators		AFP cases	Case classification						Surveillance indicators		Date of latest
		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		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	18.92	93.52	2143	1	0	1840	1	33	3	22.19	94.03	12-Jun-22
BAHRAIN	11	0	0	11	0	0	0	3.58	100.00	7	0	0	3	0	0	0	5.24	85.71	12-Jun-22
DJIBOUTI	8	0	0	4	0	4	3	2.06	75.00	5	0	0	0	0	3	0	2.74	0.00	5-Jun-22
EGYPT	1251	0	0	1245	1	5	0	3.17	90.89	586	0	0	434	0	11	0	3.33	86.52	9-Jun-22
IRAN	681	0	0	680	1	0	0	3.36	97.65	266	0	0	259	0	0	0	2.94	98.50	11-Jun-22
IRAQ	709	0	0	709	0	0	0	4.08	91.26	392	0	0	319	0	26	0	5.05	92.86	11-Jun-22
JORDAN	47	0	0	47	0	0	0	1.19	100.00	37	0	0	33	0	0	0	1.99	100.00	12-Jun-22
KUWAIT	48	0	0	48	0	0	0	5.47	93.75	18	0	0	11	0	0	0	4.36	100.00	12-Jun-22
LEBANON	39	0	0	39	0	0	0	2.45	89.74	21	0	0	11	0	3	0	2.95	66.67	5-Jun-22
LIBYA	79	0	0	79	0	0	0	3.05	100.00	38	0	0	24	0	0	0	3.28	100.00	10-Jun-22
MOROCCO	78	0	0	78	0	0	0	0.80	66.67	25	0	0	6	0	8	3	0.53	44.00	3-Jun-22
OMAN	17	0	0	17	0	0	0	1.41	94.12	16	0	0	15	0	0	0	2.98	87.50	12-Jun-22
PAKISTAN	13119	1	4	13088	18	8	0	13.01	85.18	6245	8	0	5234	0	82	0	13.86	87.37	12-Jun-22
PALESTINE	16	0	0	16	0	0	0	0.85	100.00	7	0	0	3	0	3	0	0.78	100.00	12-Jun-22
QATAR	11	0	0	11	0	0	0	2.03	90.91	5	0	0	0	0	5	0	2.48	100.00	12-Jun-22
SAUDI ARABIA	217	0	0	217	0	0	0	2.59	93.55	83	0	0	46	0	0	0	2.14	96.39	12-Jun-22
SOMALIA	349	0	0	348	1	0	0	4.21	96.28	150	0	0	131	2	1	1	4.05	98.00	12-Jun-22
SUDAN	637	0	0	637	0	0	0	3.26	94.35	267	0	0	188	0	5	0	3.07	96.63	9-Jun-22
SYRIA	431	0	0	431	0	0	0	5.60	91.18	175	0	0	137	0	0	0	5.10	94.29	11-Jun-22
TUNISIA	23	0	0	23	0	0	0	0.81	65.22	11	0	0	6	0	0	0	0.86	72.73	10-Jun-22
U.A.E.	21	0	0	21	0	0	0	1.42	90.48	18	0	0	0	0	7	1	2.73	88.89	7-Jun-22
YEMEN	921	0	0	849	72	0	0	5.96	87.84	535	0	0	164	45	74	52	7.77	87.29	11-Jun-22
EMR POL	22801	5	5	22636	138	17	3	7.97	88.33	11050	9	0	8864	48	261	60	8.63	89.55	

* 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)

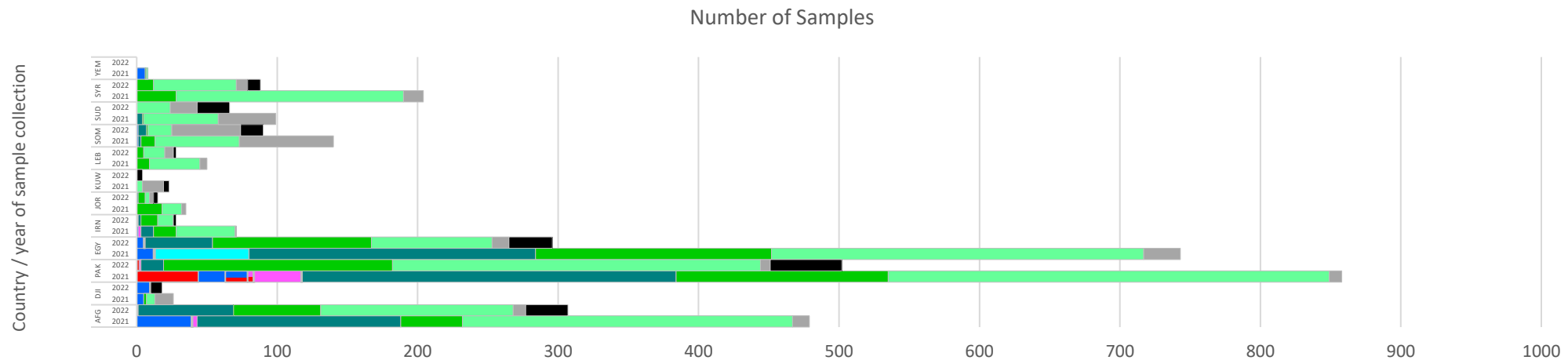
Laboratory investigation of AFP cases with paralysis onset in 2022

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Country	Polio 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**	
	Sequencing performed by CDC and RIVM laboratories		L20B+	L20B+ / NPEV			received within last 14 days	received more than 14 days ago	Wild	Sabin	VDPV	Wild	Sabin	VDPV	Wild	Sabin	VDPV									
Afghanistan	RRL Pakistan	2093	133	19	345	1381	138	2	1	94			8			108					2	15%	94%	100%	99%	12-Jun-22
Bahrain	NPL Oman / CDC	6				5	1															0%	100%		100%	7-Jun-22
Djibouti	NPL Kenya / CDC	5	2					3								2							0			5-Jun-22
Egypt***	RRL Egypt	562	16	2	54	409	34	47		6						12			3	1		10%	97%	100%	100%	12-Jun-22
Iran	NPL Iran / CDC	288	4		4	273	7			2	1					3						1%	100%	100%	99%	11-Jun-22
Iraq	NPL Iraq, RRL Egypt	397	1		34	332	28	2								2						9%	100%	50%	99%	10-Jun-22
Jordan	NPL Jordan, RRL Egypt	50	1		8	22	16	3								1						26%	100%	1	100%	12-Jun-22
Kuwait	RRL Kuwait / RIVM	17	1			15	1			1						1		1	1			5%	100%	1	100%	11-Jun-22
Lebanon	NPL Jordan, NPL Syria, RRL Egypt	17				17																0%	100%			4-Jun-22
Libya	RRL Tunisia / RIVM	38				33	5															0%	100%		100%	10-Jun-22
Morocco	NPL Morocco, RRL Tunisia	23			3	19	1															13%	100%		91%	10-Jun-22
Oman	NPL Oman / CDC	18			2	15	1															11%	76%		100%	7-Jun-22
Pakistan	RRL Pakistan	6166	212	25	969	4254	697	26	7	115			1			179					8	14%	95%	100%	97%	12-Jun-22
Palestine & UNRWA		7				7																0%	14%		86%	12-Jun-22
Qatar	NPL Oman / CDC	5	1			4				1												0%	80%	0	100%	7-Jun-22
Saudi Arabia	NPL Saudi Arabia / CDC	81			3	68	7	3														4%	83%		98%	5-Jun-22
Somalia	NPL Kenya / CDC	150	4		28	104	4	13		2			4									21%	7%		100%	12-Jun-22
Sudan	NPL Sudan / RRL Egypt	267			46	148	36	37														23%	74%		100%	11-Jun-22
Syria	NPL Syria / RRL Egypt	155	2		6	125	8	14														3%	99%			4-Jun-22
Tunisia	RRL Tunisia	13				12	1															0%	100%		100%	10-Jun-22
U.A.E	NPL Oman / CDC	13				6	7															0%	100%		83%	7-Jun-22
Yemen	NPL Oman, NPL Kenya, RRL Egypt	315	56		23	135		101		2		47		5		4					1	11%	71%	33%	0%	11-Jun-22
Total EMR 2022		10686	433	46	1525	7384	992	251	8	223	1	47	13	5		312		1	4	1	11	13%	93%	92%	95%	
Total EMR 2021		22112	1183	128	3873	16915		9	5	478	7	14	363	103		599	1	1	7	2	2	14%	97%	97%	93%	

Environmental Surveillance Isolation by Classification

EMR Polio Bulletin - Issue No. 1236, Week 23 (ending on 12/06/2022)

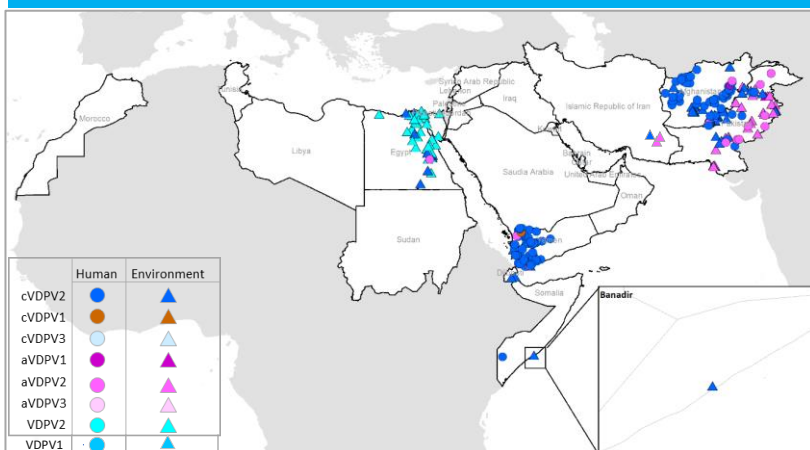


	AFG		DJI		PAK		EGY		IRN		JOR		KUW		LEB		SOM		SUD		SYR		YEM	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
🔴 Wild		1			44	2																		
🔵 cVDPV2	39		5	9	19		12	5	1								1	1					6	
🚩 Wild+cVDPV2	1				16																			
🚩 Wild+aVDPV2					4																			
🚩 Wild+aVDPV3					1																			
🟪 aVDPV1																								
🟪 aVDPV2	3				33	1			2															
🟫 aVDPV3																								
🟢 VDPV1					1		1																	
🟡 VDPV2							67	1		1														
🟦 SL2	145	68			266	16	204	48	9	2		1					2	6	4					
🟩 SL1/3	44	62	2		151	163	168	113	16	12	18	5			9	5	10	1	1		28	12	1	
🟨 Entero	235	137	6		314	262	265	86	42	11	14	3	4		36	15	60	17	53	24	162	59	1	
⚪ Negative	12	9	13	1	9	7	26	12	1		3	3	15		5	6	67	49	41	19	14	8		
⚫ Pending		30		8		51		31		2		3	4	4		2		16		23		9		

VDPVs isolations by Source and Country

EMR Polio Bulletin - Issue No. 1236 Week 23 (ending on 12/06/2022)

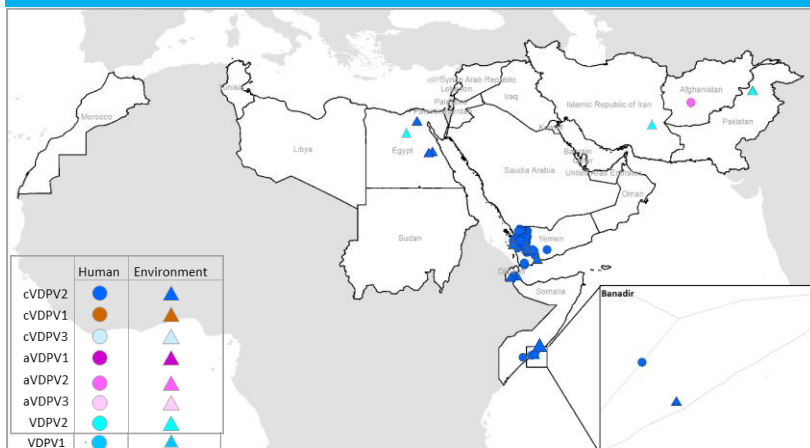
VDPV Isolates, EMR countries, 2021



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	9	27-03-22							
	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	1	10-03-22			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	45	03-03-22				23	5	17-01-22					6		17-10-21								
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								
	Pakistan																			1	15-02-22								

VDPV Isolates, EMR countries, 2022



Important links

EMR Polio Bulletin - Issue No. 1236, Week 23 (ending on 12/06/2022)

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