

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

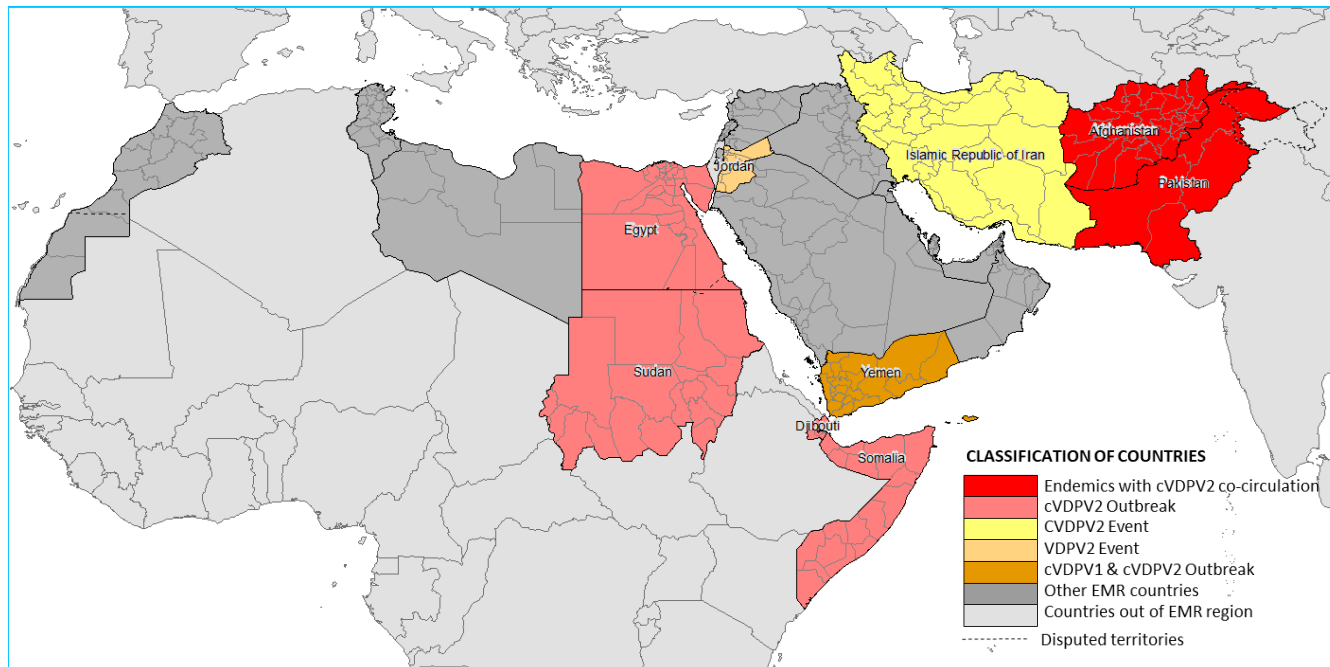
- 51 cases of cVDPV2
 - 02 in Somalia
 - 49 in Yemen

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

2022

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

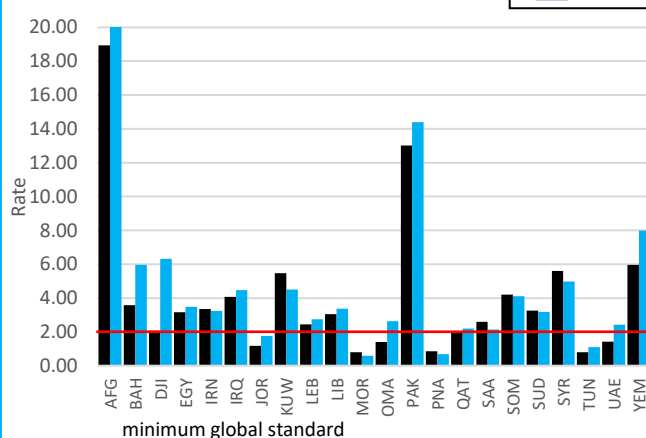
- 19 samples of cVDPV2
 - 05 in Egypt
 - 11 in Djibouti
 - 02 Somalia



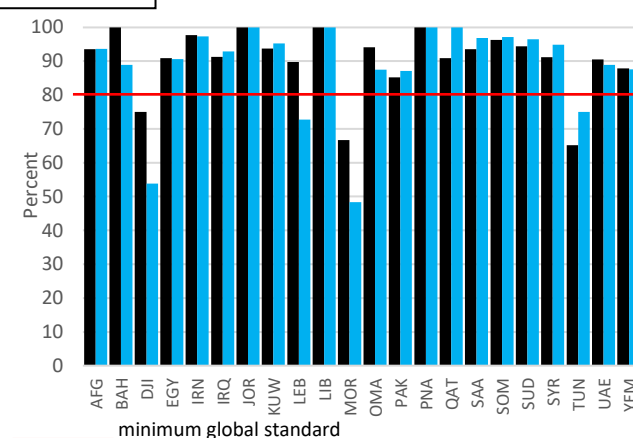
Highlights of the week

- No newly reported wild poliovirus isolates from human or environment was reported this week.
- 4 new cVDPV2 cases from Yemen in 2022 reported this week, from 4 provinces (Marib, Al Baidah, Ibb and Sana'aa) with dates of onset varies between 27 February to 21 March 2022.
- The Global Certification Commission Meeting took place last week in Geneva, 28-29 June 2022 with participation from HQ and all regions. Meeting highlights to be updates in subsequent bulletins.

Non polio AFP rate



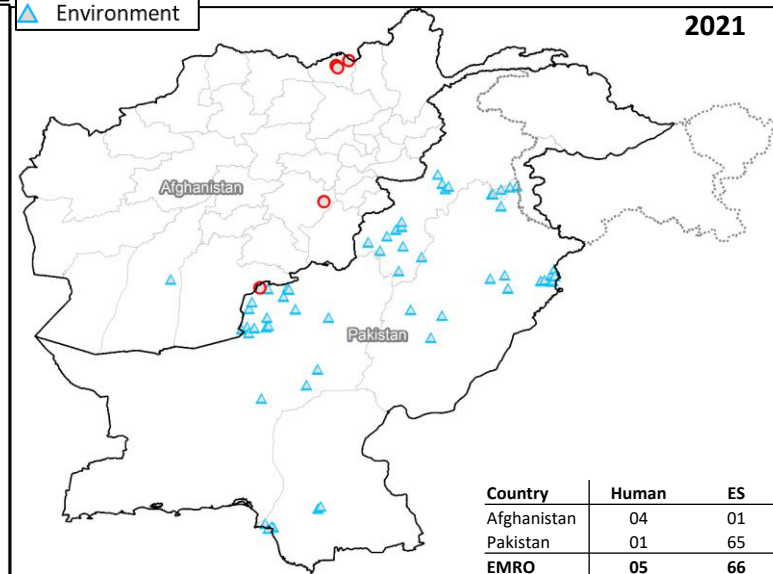
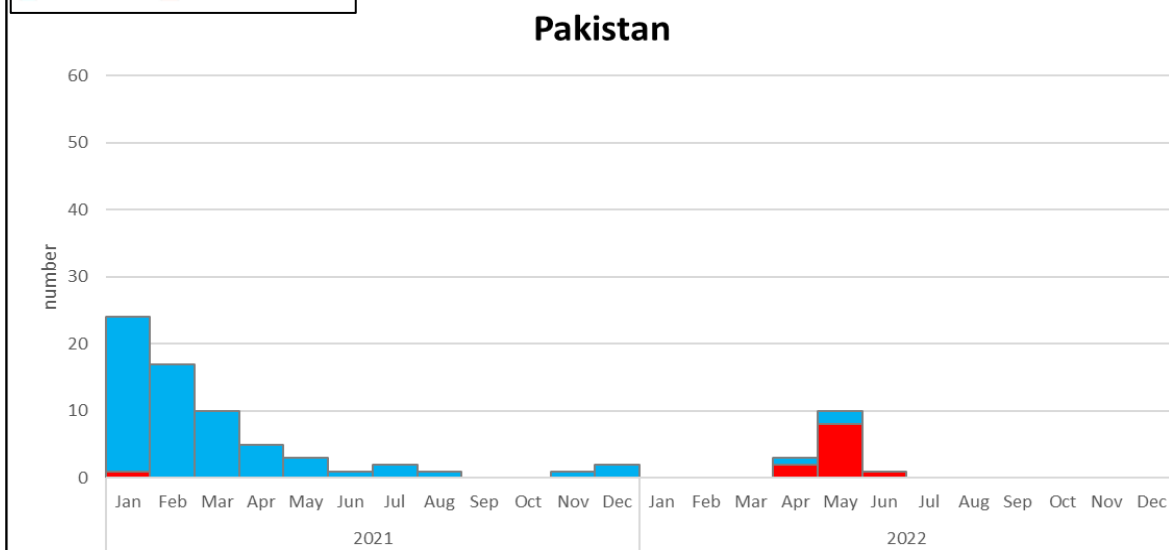
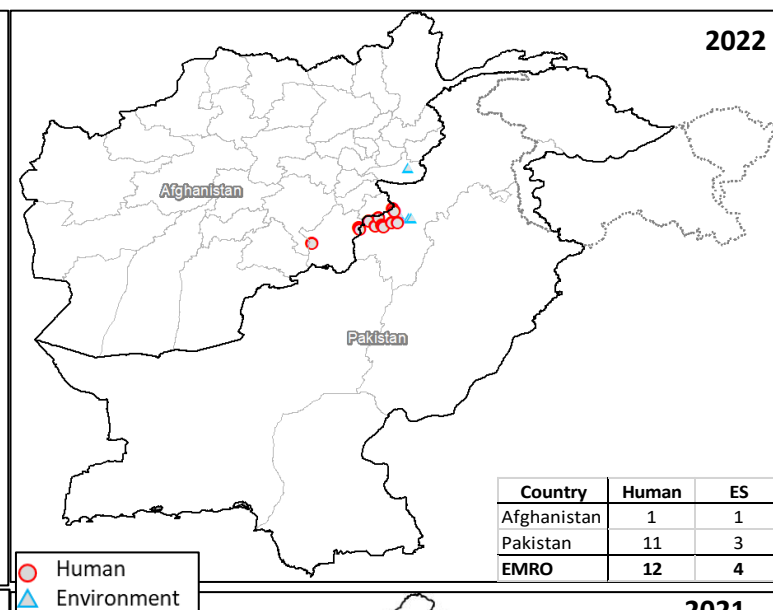
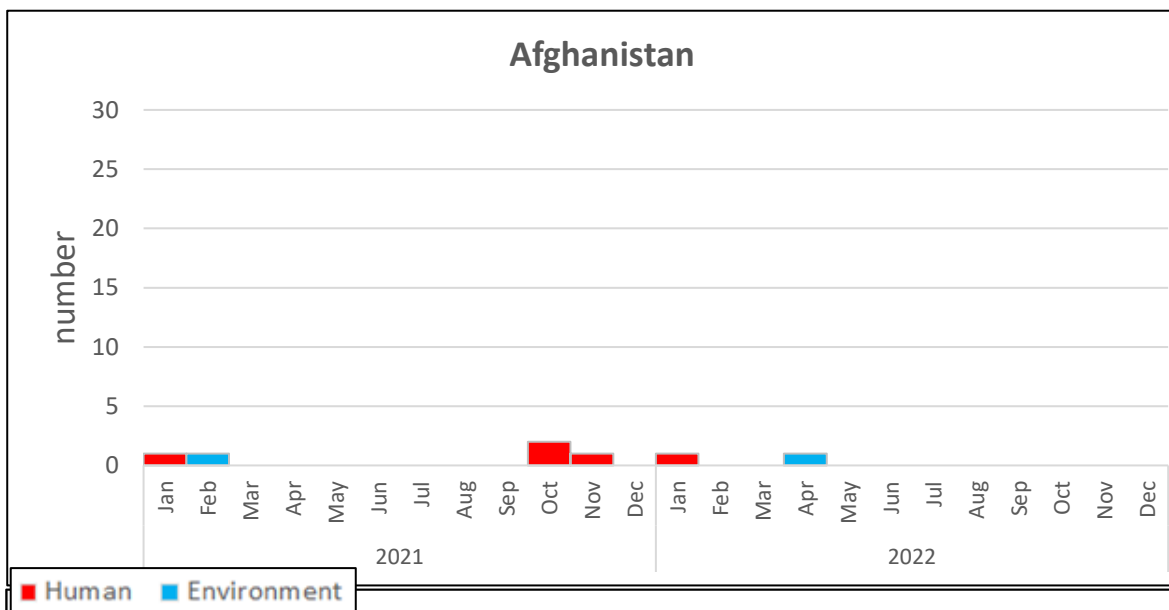
Stool adequacy



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 3, 2021 to Jul 3, 2022)

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Source / Virus type	AFG	DJI	PAK	EGY	IRN	JOR	SOM	YEM	Total
Human (AFP only)	6		12				2	117	137
Wild	4		11						15
cVDPV2	1						2	114	117
aVDPV2	1		1						2
VDPV1									
VDPV2								3	3
Environment	2	16	25	47	3	4	3	10	110
Wild	1		9						10
cVDPV2		16	2	6			2	10	36
aVDPV2	1		14		2				17
VDPV1				1					1
VDPV2				40	1	4	1		46
Total	8	16	37	47	3	4	5	127	247

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
	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	2516	1	0	2174	1	21	0	23.09	93.64	3-Jul-22
BAHRAIN	11	0	0	11	0	0	0	3.58	100.00	9	0	0	3	0	0	0	5.97	88.89	3-Jul-22
DJIBOUTI	8	0	0	4	0	4	3	2.06	75.00	13	0	0	3	0	0	0	6.32	53.85	3-Jul-22
EGYPT	1251	0	0	1247	1	3	0	3.17	90.89	693	0	0	574	0	6	0	3.49	90.62	29-Jun-22
IRAN	681	0	0	680	1	0	0	3.36	97.65	332	0	0	304	0	0	0	3.25	97.29	2-Jul-22
IRAQ	709	0	0	709	0	0	0	4.08	91.26	392	0	0	319	0	31	0	4.48	92.86	11-Jun-22
JORDAN	47	0	0	47	0	0	0	1.19	100.00	37	0	0	33	0	0	0	1.76	100.00	12-Jun-22
KUWAIT	48	0	0	48	0	0	0	5.47	93.75	21	0	0	17	0	0	0	4.50	95.24	26-Jun-22
LEBANON	39	0	0	39	0	0	0	2.45	89.74	22	0	0	11	0	4	0	2.74	72.73	26-Jun-22
LIBYA	79	0	0	79	0	0	0	3.05	100.00	44	0	0	31	0	0	0	3.37	100.00	2-Jul-22
MOROCCO	78	0	0	78	0	0	0	0.80	66.67	31	0	0	13	0	8	0	0.60	48.39	1-Jul-22
OMAN	17	0	0	17	0	0	0	1.41	94.12	16	0	0	15	0	0	0	2.64	87.50	13-Jun-22
PAKISTAN	13119	1	4	13094	18	2	0	13.01	85.18	7323	11	0	6391	0	83	0	14.39	87.07	3-Jul-22
PALESTINE	16	0	0	16	0	0	0	0.85	100.00	7	0	0	3	0	3	0	0.69	100.00	12-Jun-22
QATAR	11	0	0	11	0	0	0	2.03	90.91	5	0	0	1	0	4	0	2.20	100.00	19-Jun-22
SAUDI ARABIA	217	0	0	217	0	0	0	2.59	93.55	94	0	0	56	0	0	0	2.15	96.81	26-Jun-22
SOMALIA	349	0	0	348	1	0	0	4.21	96.28	172	0	0	154	2	1	1	4.12	97.09	3-Jul-22
SUDAN	637	0	0	637	0	0	0	3.26	94.35	312	0	0	267	0	7	0	3.18	96.47	28-Jun-22
SYRIA	431	0	0	431	0	0	0	5.60	91.18	193	0	0	179	0	0	0	4.98	94.82	2-Jul-22
TUNISIA	23	0	0	23	0	0	0	0.81	65.22	16	0	0	11	0	0	0	1.10	75.00	1-Jul-22
U.A.E.	21	0	0	21	0	0	0	1.42	90.48	18	0	0	0	0	9	2	2.42	88.89	28-Jun-22
YEMEN	921	0	0	849	72	0	0	5.96	87.84	621	0	0	205	49	104	76	7.98	87.60	2-Jul-22
EMR POL	22801	5	5	22644	138	9	3	7.97	88.33	12887	12	0	10764	52	281	79	8.91	89.50	

* 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

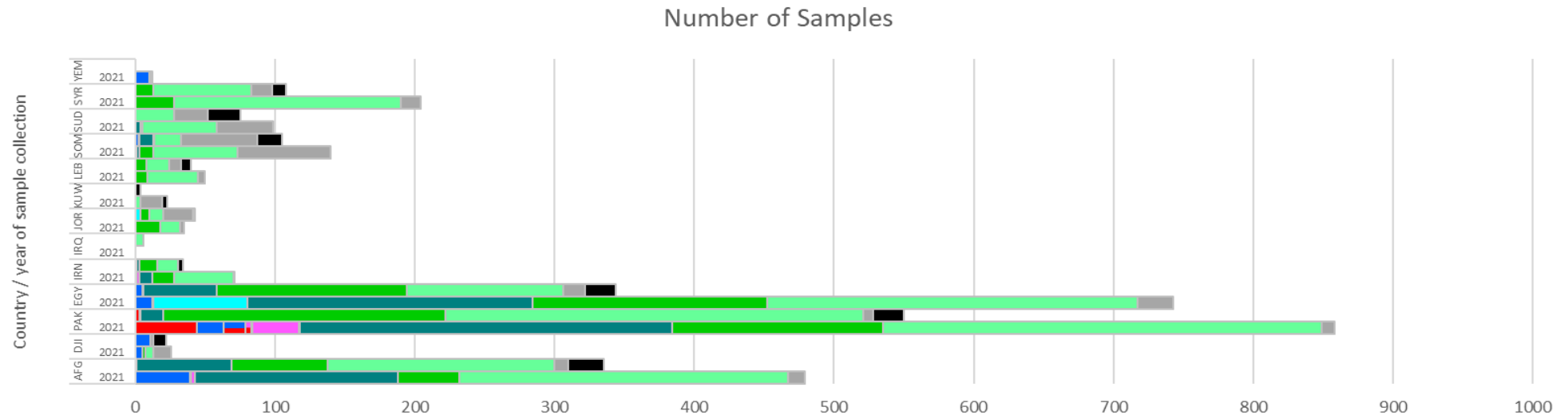
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Country	Polio laboratories		AFP cases with specimens	Preliminary virus isolation results of AFP cases						Poliovirus intratypic differentiation results												Indicators					Latest report Date
	ITD / Nucleotide Sequencing			Referred for ITD		NPEV 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	Wild	Sabin	VDPV	Wild	Sabin	VDPV	Wild									
Afghanistan	RRL Pakistan		2481	152	23	405	1650	208	3	1	111			8			128						15%	95%	100%	99%	3-Jul-22
Bahrain	NPL Oman / CDC		9				8	1															0%	100%		100%	30-Jun-22
Djibouti	NPL Kenya / CDC		13	2		1	2	2	6								2						33%	0.4		33%	3-Jul-22
Egypt***	RRL Egypt		692	17	2	84	503	68	18		6						12			3	1		11%	98%	100%	99%	30-Jun-22
Iran	NPL Iran / CDC		351	4		4	312	31			2	1					3						1%	100%	100%	99%	2-Jul-22
Iraq	NPL Iraq, RRL Egypt		457	1		40	379	35	2								2						10%	100%	50%	100%	2-Jul-22
Jordan	NPL Jordan, RRL Egypt		64	2		18	40	1	3								2						29%	100%	1	100%	3-Jul-22
Kuwait	RRL Kuwait / RIVM		19	1			15		3		1						1		1	1			5%	100%	1	100%	3-Jul-22
Lebanon	NPL Jordan, NPL Syria, RRL Egypt		20	1			19																0%	100%			30-Jun-22
Libya	RRL Tunisia / RIVM		44				38	6															0%	100%		100%	1-Jul-22
Morocco	NPL Morocco, RRL Tunisia		27			3	23	1															11%	100%		92%	1-Jul-22
Oman	NPL Oman / CDC		20			2	16	2															14%	78%		100%	30-Jun-22
Pakistan	RRL Pakistan		7222	266	35	1140	5219	554	11	11 *	138			1			222					12	13%	96%	100%	96%	3-Jul-22
Palestine & UNRWA		7				7																	0%	14%		86%	12-Jun-22
Qatar	NPL Oman / CDC		5	1			4				1												0%	80%	0	100%	30-Jun-22
Saudi Arabia	NPL Saudi Arabia / CDC		91	1		3	82		5								1						4%	86%	0%	97%	27-Jun-22
Somalia	NPL Kenya / CDC		172	7		31	119	4	13		2			7									20%	6%		99%	3-Jul-22
Sudan	NPL Sudan / RRL Egypt		317	8		78	202	27	2														27%	57%		100%	29-Jun-22
Syria	NPL Syria / RRL Egypt		187	2		12	160	13															6%	99%			30-Jun-22
Tunisia	RRL Tunisia		17				14	3															0%	100%		93%	1-Jul-22
U.A.E	NPL Oman / CDC		18				18																0%	100%		72%	30-Jun-22
Yemen	NPL Oman, NPL Kenya, RRL Egypt		375	83		27	171	59	37		3		30		26		5					23	10%	55%	37%	0%	2-Jul-22
Total EMR 2022			12608	548	60	1848	9001	1015	103	12	264	1	30	16	26		378		1	4	1	35	13%	93%	92%	95%	
Total EMR 2021			22112	1183	128	3873	16915		9	5	478	7	10	363	107		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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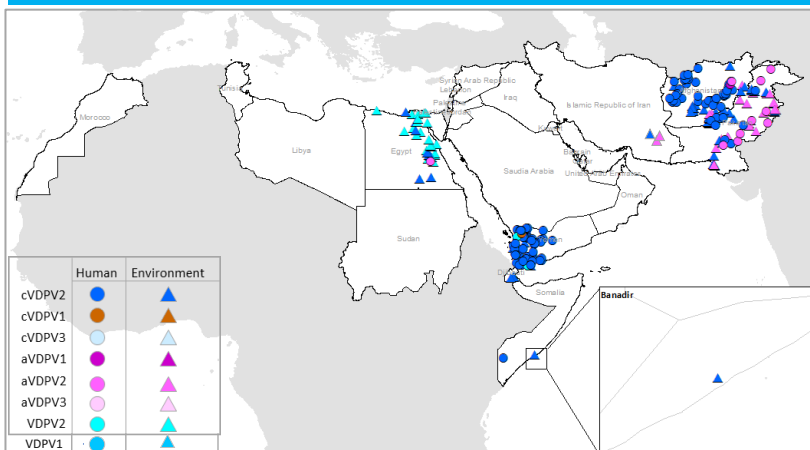


	AFG		DJI		PAK		EGY		IRN		IRQ		JOR		KUW		LEB		SOM		SUD		SYR		YEM	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
🇺🇦 Wild		1			44	3																				
🇧🇪 cVDPV2	39		5	11	19		12	5	1										1	2					10	
🇧🇪 Wild+cVDPV2	1				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	52	9	2									2	10	4					
🇸🇩 SL1/3	44	69	2		151	202	168	136	16	13			18	6			9	8	10	1	1			28	13	1
🇸🇩 Entero	235	162	6		314	299	265	112	42	15		6	14	10	4		36	16	60	19	53	28	162	70	1	
🇸🇩 Negative	12	10	13	2	9	7	26	16	1				3	21	15		5	9	67	54	41	24	14	15		
🇸🇩 Pending		25		9		22		22		3				2	4	4		7		18		23		10		

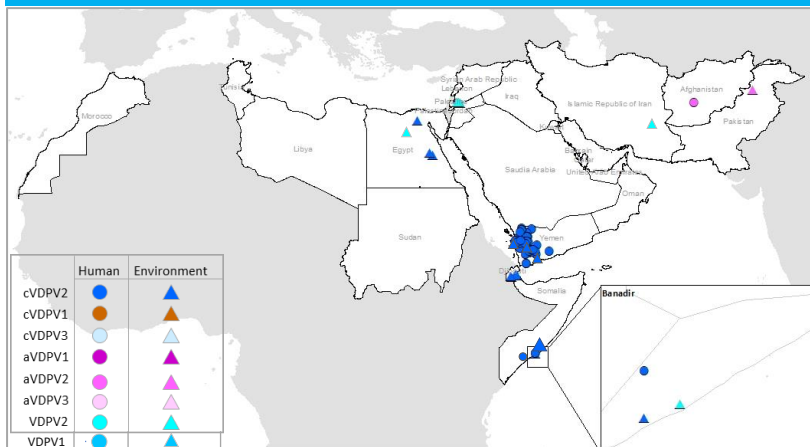
VDPVs isolations by Source and Country

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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)