

Highlights



Children
Paralyzed
by polio

2022

- 22 cases of Wild Polio 1
 - 02 in Afghanistan
 - 20 in Pakistan

- 168 cases of cVDPV2
 - 05 in Somalia
 - 162 in Yemen
 - 01 in Sudan

- Zero cVDPV1 cases

2023

- 12 cases of Wild Polio 1
 - 06 in Afghanistan
 - 06 in Pakistan

- 8 cases of cVDPV2
 - 05 in Somalia
 - 03 in Yemen

- Zero case of cVDPV1



Sewage
water
sampling

2022

- 59 samples Wild Polio 1
 - 22 in Afghanistan
 - 37 in Pakistan

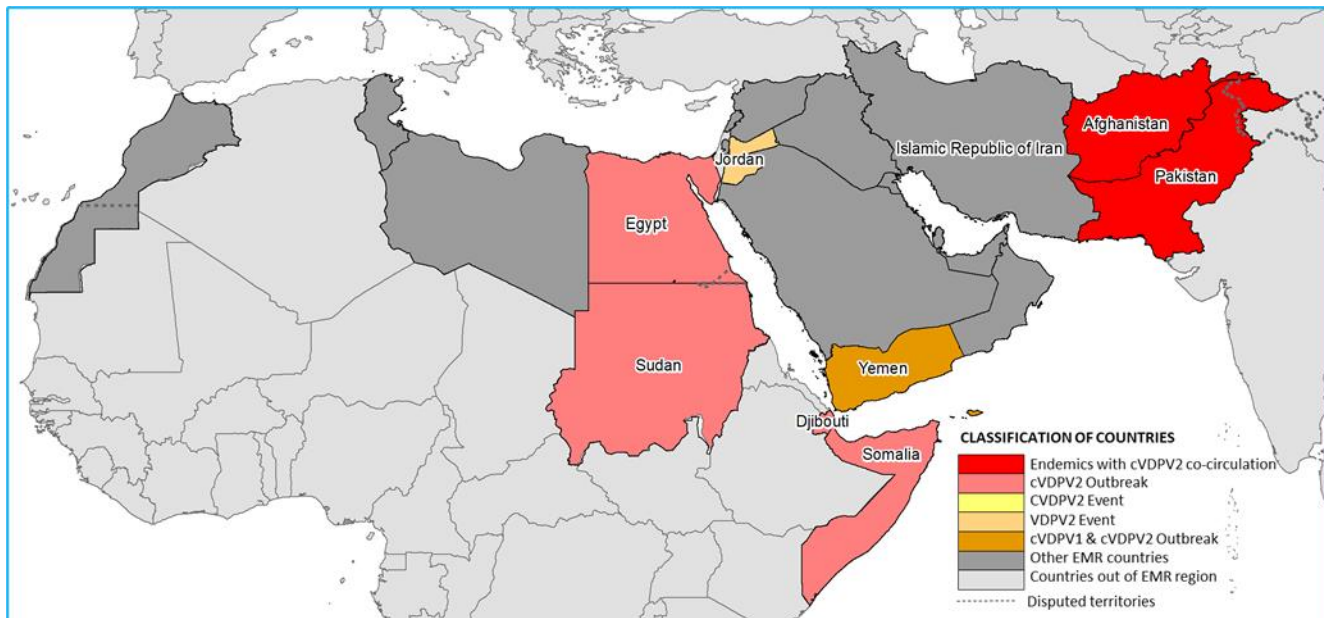
- 51 samples cVDPV2
 - 06 in Egypt
 - 12 in Djibouti
 - 06 in Somalia
 - 01 in Sudan
 - 26 in Yemen

2023

- 130 samples Wild Polio 1
 - 46 in Afghanistan
 - 84 in Pakistan

- 16 samples of cVDPV2
 - 07 in Somalia
 - 03 in Yemen
 - 06 in Egypt

Classification of EMR countries by type of poliovirus circulation



Highlights of the week

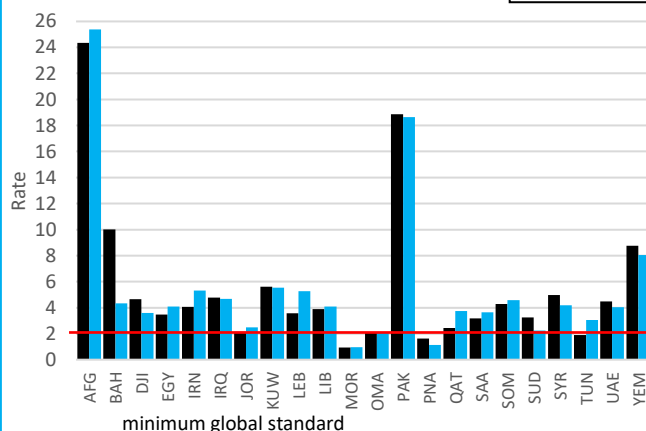
Wild Poliovirus

- One new WPV1 case reported this week from Pakistan. The case is from Orakzai district, Khyber Pakhtunkhwa province, with date of onset 24th October 2023. The WPV1 cases count in 2023 to date is 12 (6 each from Afghanistan and Pakistan) and in 2022, the WPV1 cases count remains to be 22 cases (2 from Afghanistan and 20 from Pakistan).
- Twenty new WPV1 positive environmental samples (ES) reported this week from Pakistan. The newly reported WPV1 ES are: nine from Sindh province (7 from Karachi Towns and 1 each from Hyderabad and Jamshoro districts); six from Khyber Pakhtunkhwa province (4 from Peshawar and 1 each from Kohat and Bannu districts); and five from Balochistan province (2 each from Quetta and Chaman and 1 from Pishin districts). Dates of collection vary between 1st to 15th November 2023. The positive WPV1 ES count in 2023 to date is 130 (46 in Afghanistan and 84 in Pakistan), and in 2022, the count remains to be 59 (22 in Afghanistan and 37 in Pakistan).

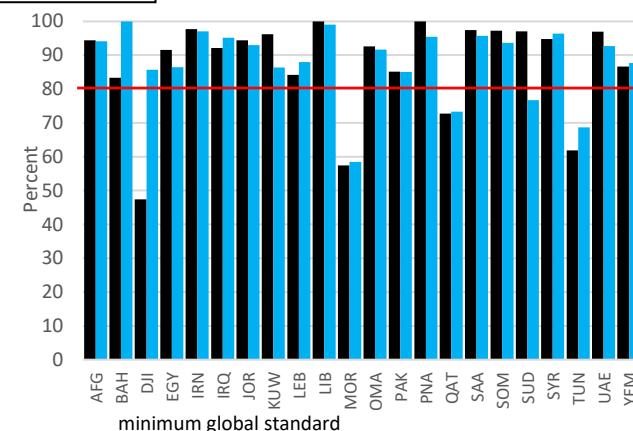
Circulating Vaccine derived poliovirus (cVDPV)

- No new cVDPV2 cases reported this week. The count of cVDPV2 cases in 2023 to date is 8 (5 from Somalia and 3 from Yemen) and in 2022 the count remains to be 168 cases (1 from Sudan, 5 from Somalia and 162 from Yemen).
- One new cVDPV2 positive environmental sample (ES) reported this week from Somalia. The new cVDPV2 ES is from Waberi district of Banadir province, with collection date 21st September 2023. The cVDPV2 positive environmental samples count in 2023 to date is 16 (7 from Somalia, 6 from Egypt and 3 from Yemen) and in 2022, the count remains 51 (1 in Sudan, 6 in each of Egypt and Somalia, 12 in Djibouti and 26 in Yemen).

Non polio AFP rate



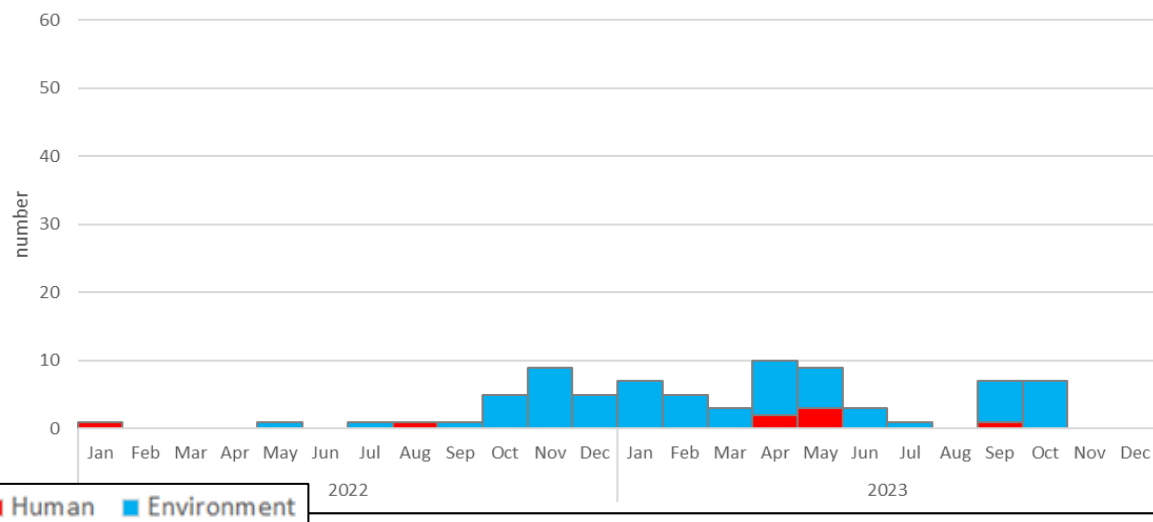
Stool adequacy



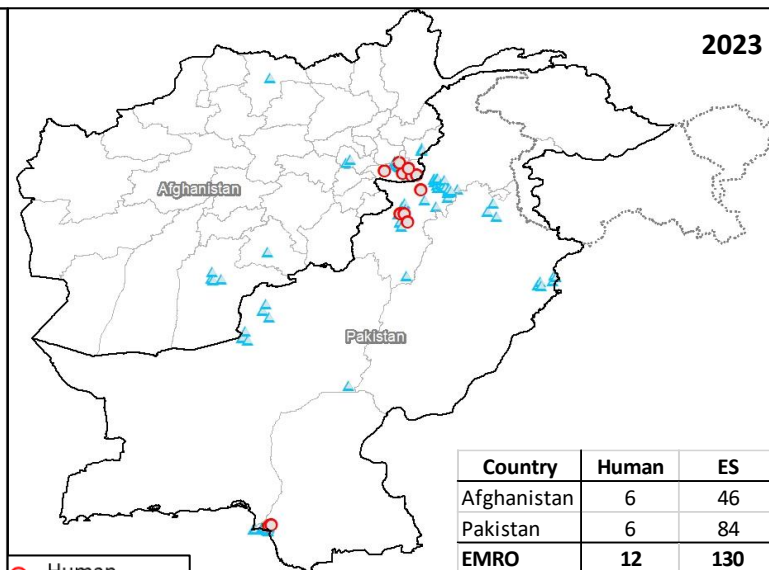
WPV1 Positive isolates from Afghanistan and Pakistan by source

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Afghanistan

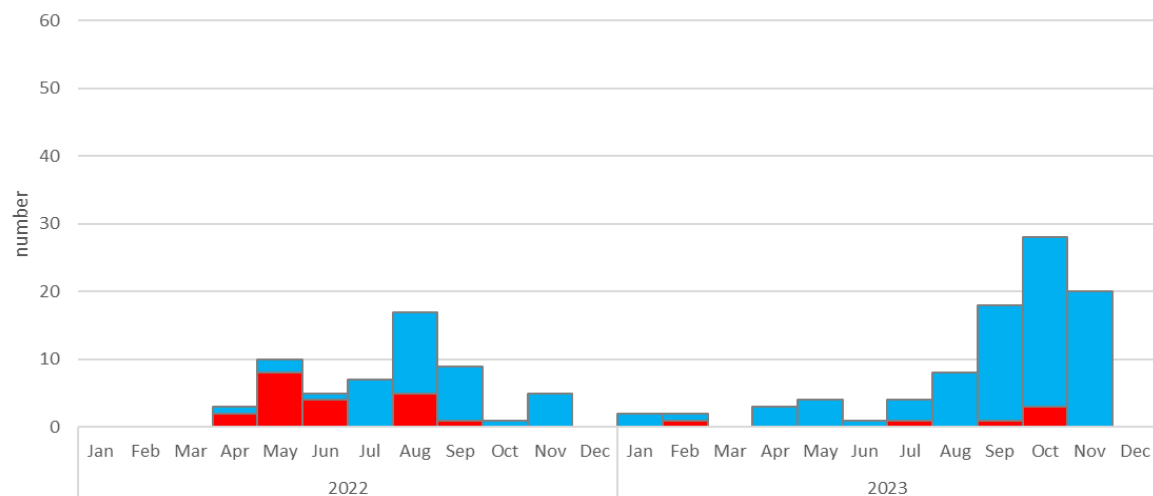


2023

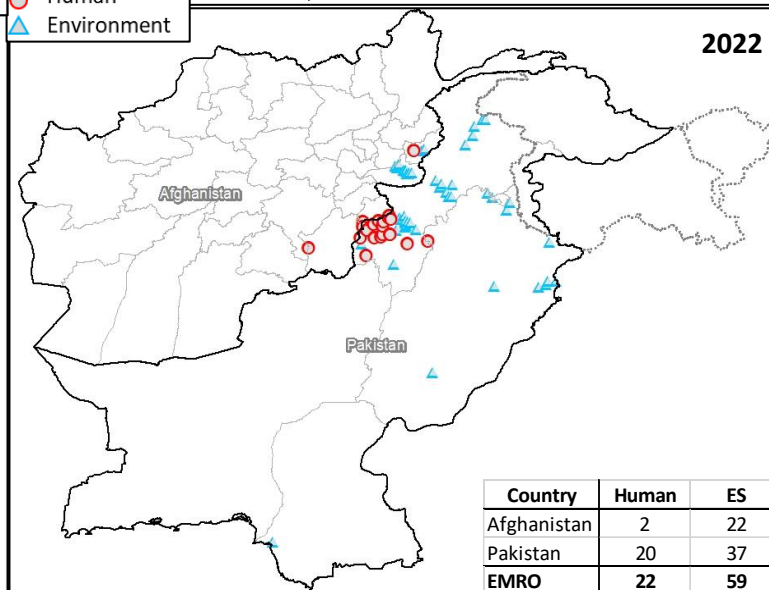


○ Human
△ Environment

Pakistan



2022



Virus isolation by country, last 12 months (Dec. 03, 2022, to Dec. 03, 2023)

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Source / Virus type	AFG	PAK	EGY	SOM	SUD	YEM	Total
Human (AFP only)	6	6	1	5		5	23
Wild	6	6					12
cVDPV2				5		4	9
aVDPV2							
VDPV2			1			1	2
VDPV3							
Environment	49	85	10	8	1	4	157
Wild	49	84					133
cVDPV2			6	8		3	17
aVDPV2			4				4
VDPV2					1	1	2
VDPV3		1					1
Total	55	91	11	13	1	9	180

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. 1313, Week 48 (ending on 03/12/2023)

Country	Total year 2021	Total year 2022	3 December		Confirmed Wild Polio 1 Cases by month of onset												Recent most Case
					2023												
			2022	2023	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Afghanistan	4	2	2	6	0	0	0	2	3	0	0	0	1	0			04-Sep-23
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	0			
Egypt	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				
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	1	20	20	6	0	1	0	0	0	0	1	0	1	3			24-Oct-23
Palestine ****	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	0					
Sudan	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				
Tunisia	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								
EMR	5	22	22	12	0	1	0	2	3	0	1	0	2	3	0	0	24-Oct-23

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

Investigation of AFP cases with paralysis onset in 2022 & 2023

EMR Polio Bulletin - Issue No. 1313, Week 48 (ending on 03/12/2023)

COUNTRY	2023									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	5279	6	0	5006	0	7	0	25.38	94.09	5368	2	0	5365	1	0	0	24.34	94.41	3-Dec-23
BAHRAIN	12	0	0	10	0	1	0	4.34	100.00	30	0	0	30	0	0	0	10.02	83.33	3-Dec-23
DJIBOUTI	14	0	0	9	0	0	0	3.61	85.71	19	0	0	19	0	0	0	4.65	47.37	2-Dec-23
EGYPT	1554	0	0	1381	1	24	0	4.09	86.49	1394	0	0	1394	0	0	0	3.48	91.54	30-Nov-23
IRAN	1037	0	0	999	0	0	0	5.32	97.01	824	0	0	824	0	0	0	4.06	97.69	2-Dec-23
IRAQ	759	0	0	717	0	12	0	4.68	95.13	835	0	0	835	0	0	0	4.78	92.10	2-Dec-23
JORDAN	100	0	0	98	0	0	0	2.49	93.00	89	0	0	89	0	0	0	2.14	94.38	3-Dec-23
KUWAIT	44	0	0	36	0	0	0	5.54	86.36	52	0	0	52	0	0	0	5.62	96.15	3-Dec-23
LEBANON	75	0	0	61	0	6	0	5.26	88.00	57	0	0	57	0	0	0	3.58	84.21	26-Nov-23
LIBYA	98	0	0	88	0	0	0	4.10	98.98	101	0	0	101	0	0	0	3.89	100.00	2-Dec-23
MOROCCO	106	0	0	42	0	42	4	0.97	58.49	94	0	0	92	0	2	0	0.93	57.45	27-Nov-23
OMAN	24	0	0	23	0	0	0	2.07	91.67	27	0	0	27	0	0	0	2.10	92.59	3-Dec-23
PAKISTAN	16826	6	0	15859	0	136	0	18.65	84.99	19033	20	1	19012	0	0	0	18.86	85.13	3-Dec-23
PALESTINE	22	0	0	16	0	1	0	1.15	95.45	33	0	0	32	1	0	0	1.64	100.00	19-Nov-23
QATAR	15	0	0	11	0	2	0	3.74	73.33	11	0	0	11	0	0	0	2.44	72.73	3-Dec-23
SAUDI ARABIA	281	0	0	216	0	0	0	3.64	95.73	274	0	0	274	0	0	0	3.18	97.45	3-Dec-23
SOMALIA	379	0	0	366	5	0	0	4.58	93.67	356	0	0	349	6	0	0	4.28	97.19	3-Dec-23
SUDAN	429	0	0	340	0	21	1	2.23	76.69	650	0	0	649	1	0	0	3.25	97.08	3-Dec-23
SYRIA	300	0	0	272	0	0	0	4.18	96.33	382	0	0	382	0	0	0	4.96	94.76	2-Dec-23
TUNISIA	83	0	0	75	0	1	1	3.05	68.67	55	0	0	55	0	0	0	1.91	61.82	1-Dec-23
U.A.E.	55	0	0	46	0	0	0	4.04	92.73	66	0	0	66	0	0	0	4.47	96.97	28-Nov-23
YEMEN	1186	0	0	914	4	30	22	8.04	87.69	1377	0	1	1214	162	0	0	8.77	86.64	2-Dec-23
EMR POL	28678	12	0	26585	10	283	28	10.66	87.75	31127	22	2	30929	171	2	0	10.77	88.20	

* 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 2023

EMR Polio Bulletin - Issue No. 1313, Week 48 (ending on 03/12/2023)

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 45 days of onset**	% 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	5213	271	26	713	4015	141	2	5 *	183					221			2	2	2	12%	94%	100%	98%	3-Dec-23		
Bahrain	NPL Oman / CDC	11			1	10															5%	100%		45%	26-Nov-23		
Djibouti	NPL Kenya / CDC	13			2	7		4													22%	67%		78%	2-Dec-23		
Egypt	RRL Egypt	1484	14		159	1232	75	5		8				1	9				1		10%	92%	100%	99%	30-Nov-23		
Iran	NPL Iran / CDC	1049	7		8	1009	25			5					3						1%	100%	100%	99%	2-Dec-23		
Iraq	NPL Iraq, RRL Egypt	759	6		51	667	24	11		5					2						7%	100%	100%	99%	2-Dec-23		
Jordan	NPL Jordan, RRL Egypt	98			18	80															17%	95%		100%	3-Dec-23		
Kuwait	RRL Kuwait / RIVM	46	1		5	33	4	3												1	11%	97%		100%	3-Dec-23		
Lebanon	NPL Jordan, NPL Syria, RRL Egypt	74			1	69		4													4%	100%			16-Nov-23		
Libya	RRL Tunisia / RIVM	96	1		3	89	3			1											3%	98%	1	100%	1-Dec-23		
Morocco	NPL Morocco, RRL Tunisia	114			3	103	7	1													3%	99%		93%	1-Dec-23		
Oman	NPL Oman / CDC	24			1	23															10%	100%		100%	26-Nov-23		
Pakistan	RRL Pakistan	16388	466	39	2505	12852	422	52	5 *	314					366						13%	93%	100%	96%	3-Dec-23		
Palestine & UNRWA		20	1			18		1		1			1								0%	44%		100%	19-Nov-23		
Qatar	NPL Oman / CDC	15	1			14									1						0%	100%	1	100%	26-Nov-23		
Saudi Arabia	NPL Saudi Arabia / CDC	271	2		5	255		9		2					1						2%	98%	100%	100%	29-Oct-23		
Somalia	NPL Kenya / CDC	365	10		55	282		19		4			2	5	2						16%	5%		95%	3-Dec-23		
Sudan	NPL Sudan / RRL Egypt	368	10	1	73	266		17					3		2			2			19%	99%	100%	31%	14-Apr-23		
Syria	NPL Syria / RRL Egypt	283	5	1	22	244		11													8%	100%			16-Nov-23		
Tunisia	RRL Tunisia	87	1		3	83									1						3%	97%	1	98%	1-Dec-23		
U.A.E	NPL Oman / CDC	51			3	48															6%	96%		27%	26-Nov-23		
Yemen	NPLs Oman, Jordan & Kenya, RRL Egypt	925	24	2	183	687	29			11			1	4	18						17%	19%	100%	23%	2-Dec-23		
Total EMR 2023		27754	820	69	3814	22086	730	139	12 *	534			7	10		626			4	3	3	12%	90%	100%	94%		
Total EMR 2022		30461	1068	119	4831	24435		2	22 *	556	2		38	169 **		723		6	8	2	1	13%	93%	89%	92%		

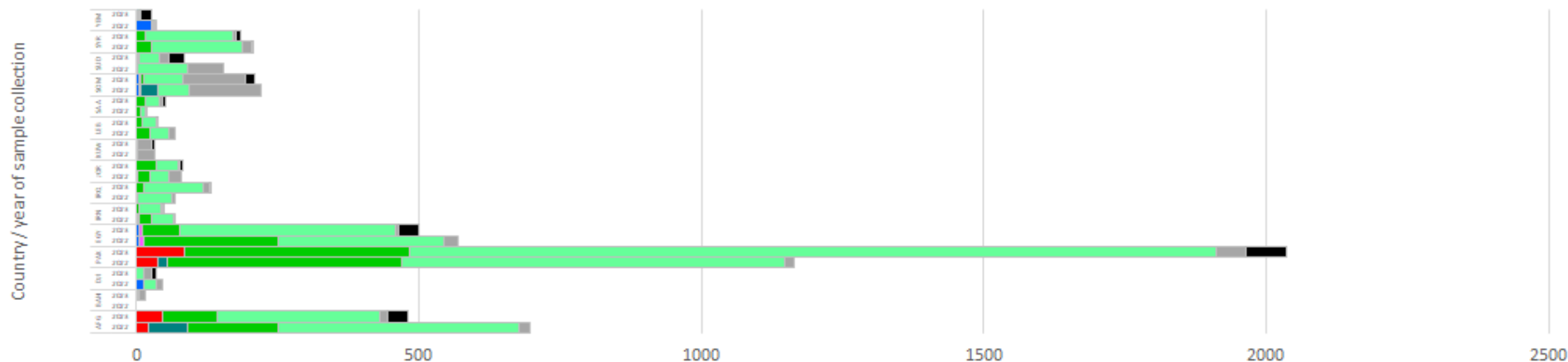
* In 2023 – Two WPV1 cases are confirmed due to positive contacts while in 2022 - three WPV1 cases were confirmed due to positive contacts (Index cases were negative for WPV1)

** In 2022 – Five cVDPV2 cases are identified by positive contacts (Index cases were negative for cVDPV2)

Environmental Surveillance Isolation by Classification

EMR Polio Bulletin - Issue No. 1313, Week 48 (ending on 03/12/2023)

Number of Samples

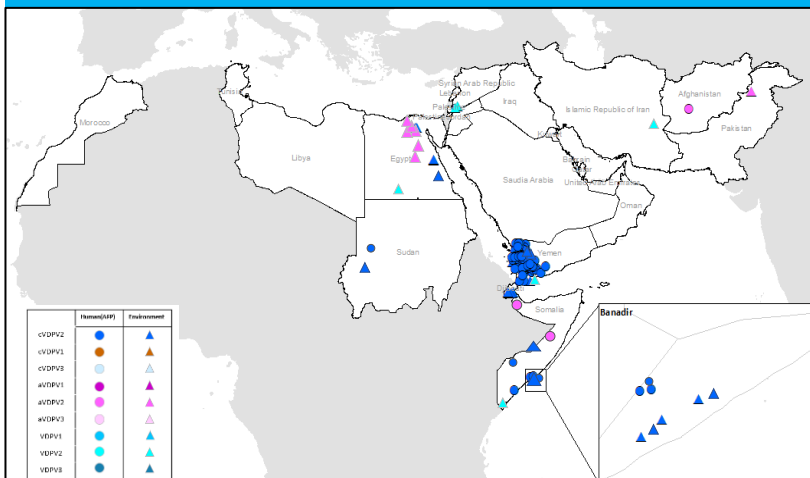


	AFG		BAH		DJI		PAK		EGY		IRN		IRQ		JOR		KUW		LEB		SAA		SOM		SUD		SYR		YEM	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
🇸🇰 Wild	22	46					37	84																						
🇸🇰 cVDPV2					12				6	6													6	7	1				26	3
🇸🇰 Wild+cVDPV2																														
🇸🇰 Wild+aVDPV2																														
🇸🇰 Wild+aVDPV3																														
🇸🇰 aVDPV1																														
🇸🇰 aVDPV2							1		7	4																				
🇸🇰 aVDPV3																														
🇸🇰 VDPV1																														
🇸🇰 VDPV2											1				2								1			1			3	1
🇸🇰 SL2	68				2		16				4											30	2		1			1	1	
🇸🇰 SL1/3	162	98		2			415	400	239	67	23	6	3	13	22	35			24	10	7	15	2	4	2	2	28	16	2	2
🇸🇰 Entero	424	287		3	20	13	679	1428	292	383	39	38	61	106	32	40	2	1	32	24	9	25	55	71	88	38	159	154	1	1
🇸🇰 Negative	22	14		10	11	15	17	52	25	5	1	1	4	10	23	2	31	27	13	1	2	7	128	111	63	15	18	5		
🇸🇰 Pending		36			8		72		35		3		2		4		4		4		4		15		27	3	10		19	

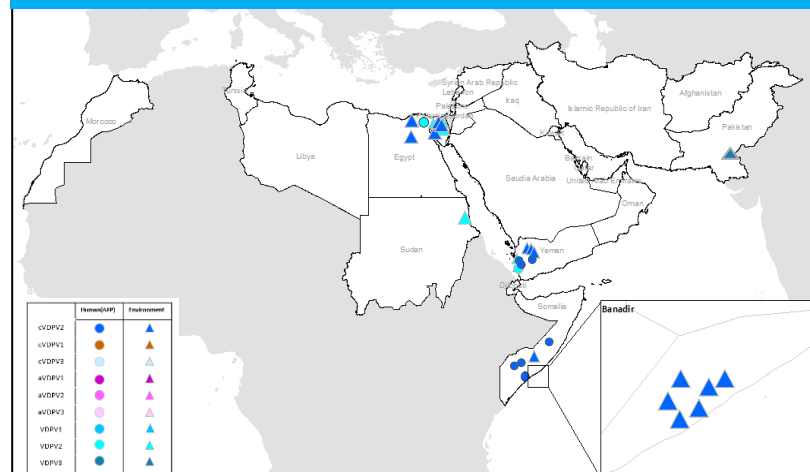
VDPVs isolations by Source and Country

EMR Polio Bulletin - Issue No. 1313 Week 48 (ending on 03/12/2023)

VDPV Isolates, EMR countries, 2022



VDPV Isolates, EMR countries, 2023



VDPVs isolated from 2018-2023

VDPV Isolate type	EMR Country	Sources																												
		AFP cases(Human)						Contacts(Human)						Environment						Other Sources (Healthy Children)										
		2018	2019	2020	2021	2022	2023	Most recent	2018	2019	2020	2021	2022	2023	Most recent	2018	2019	2020	2021	2022	2023	Most recent	2017	2018	2019	2020	2021	2022	Most recent	
cVDPV2	Afghanistan			307	43			09-07-21										174	40			23-06-21								
	Djibouti																		5	12			22-05-22							
	Egypt																		12	6	6		13-09-23							
	Iran																	3	1			20-02-21								
	Pakistan		22	135	8			23-04-21										38	135	35		11-08-21								
	Somalia	6	3	14	1	5	5	16-09-23	3	1	11		5		31-08-22	19	5	26	1	6	7	21-09-23			1	5		1		10-03-22
	Sudan			58		1		31-10-22			18				08-10-20			14		1		28-11-22				4				24-08-20
Yemen				66	162	3	28-08-23				23	40		19-12-22				13	26	3	29-05-23									
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			14-06-21				1	67	7	4	13-04-23							
	Iran																		2			23-09-21								
	Pakistan			7	8			24-09-21		8	19	1			28-04-21			3	22	37	1	15-02-22								
	Somalia					2		01-09-22								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						1	17-07-23																						
	Iran																			1		04-02-22								
	Jordan																			2		25-05-22								
	Somalia					1		01-09-22												1		22-04-23								
	Sudan																				1	18-09-23								
	Yemen						1	09-05-23												3	1	26-04-23								
VDPV3	Pakistan																			1	14-02-23									

Important Links

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