

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

- 10 cases of Wild Polio 1
 - 06 in Afghanistan
 - 04 in Pakistan

- 6 cases of cVDPV2
 - 03 in Somalia
 - 03 in Yemen

- Zero case of cVDPV1



Sewage
water
sampling

2022

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

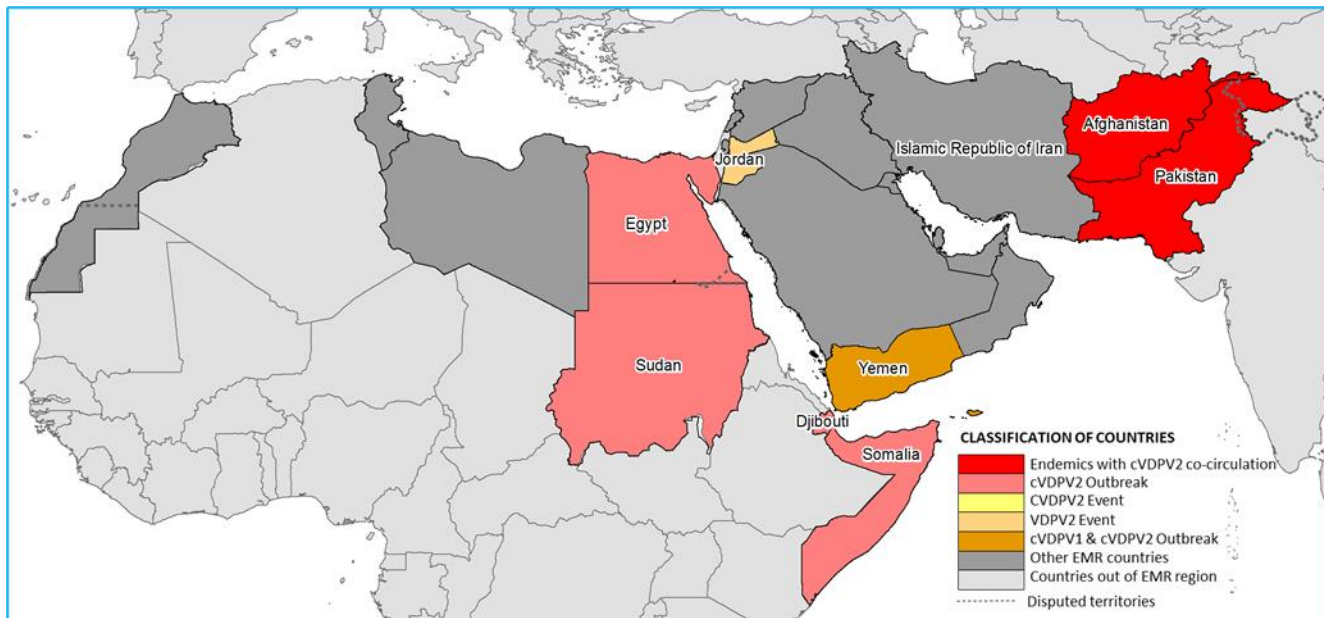
- 52 samples cVDPV2
 - 06 in Egypt
 - 12 in Djibouti
 - 06 in Somalia
 - 01 in Sudan
 - 27 in Yemen

2023

- 93 samples Wild Polio 1
 - 39 in Afghanistan
 - 54 in Pakistan

- 14 samples of cVDPV2
 - 05 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 from Pakistan reported this week. The new WPV1 case is from KHIEAST town, Sindh province, with date of onset 3rd October 2023. The index case was identified as wild by a positive contact. The WPV1 cases count in 2023 to date is 10 (6 from Afghanistan and 4 from Pakistan) while in 2022, the WPV1 cases count remains to be 22 cases (2 from Afghanistan and 20 from Pakistan).
- Seventeen newly WPV1 positive environmental samples were reported this week from Pakistan. The newly reported positive samples are: seven from Khyber Pakhtunkhwa province (6 from Peshawar district and 1 from Bannu district), four each from Balochistan province (2 from Chaman district and 1 each from Pishin and Quetta districts) and from Sindh province (2 from KHIGADAP town and 1 each from KHISITE and KHILAQAT towns) and two from Punjab province (1 each from Lahore and Rawalpindi districts). Dates of collection vary between 20th September to 5th October 2023. The positive WPV1 ES count in 2023 to date is 93 (39 in Afghanistan and 54 in Pakistan), while in 2022, the count remains to be 59 (22 in Afghanistan and 37 in Pakistan).

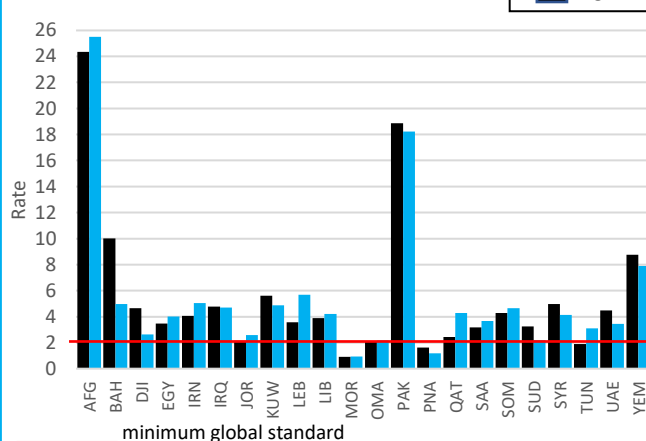
Circulating Vaccine derived poliovirus (cVDPV)

- No new cVDPV isolates reported this week. The count of cVDPV2 cases in 2023 remains to be 6 (3 each from Somalia and Yemen) and in 2022 is 168 cases (1 from Sudan, 5 from Somalia and 162 from Yemen). While the positive cVDPV2 environmental samples count in 2023 to date is 14 (6 from Egypt, 5 from Somalia and 3 from Yemen) and in 2022, the count remains 52 (1 in Sudan, 6 in each of Egypt and Somalia, 12 in Djibouti and 27 in Yemen).

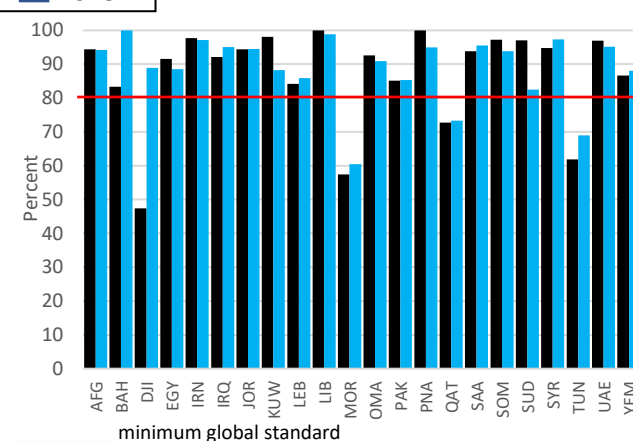
Events

- Celebration of the "World Polio Day" is on 24th October 2023 with this year's slogan "Make Polio History".

Non polio AFP rate



Stool adequacy

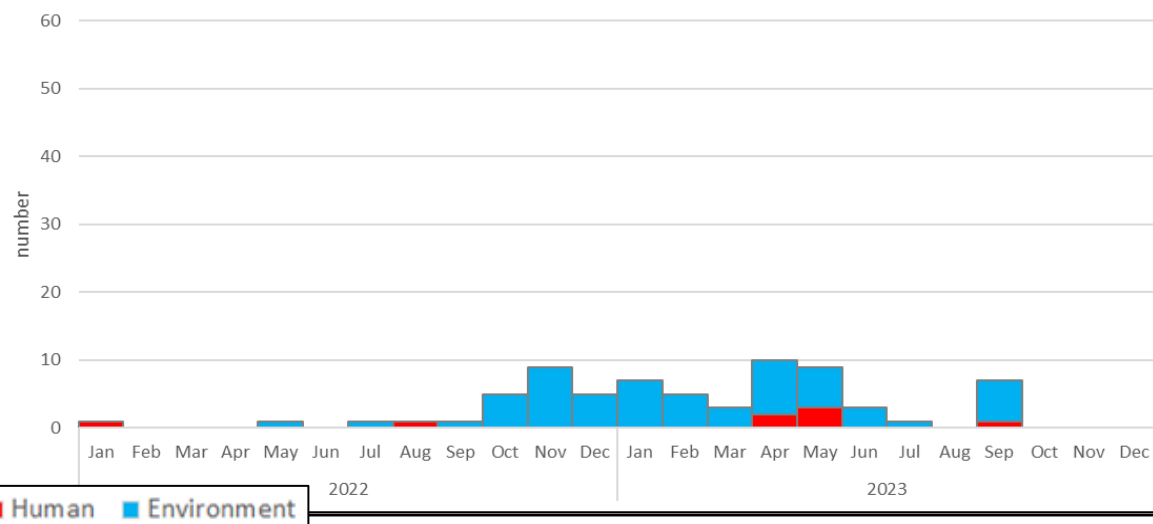


Wild Poliovirus type-1 (WPV1) Vaccine-derived Poliovirus (VDPV)

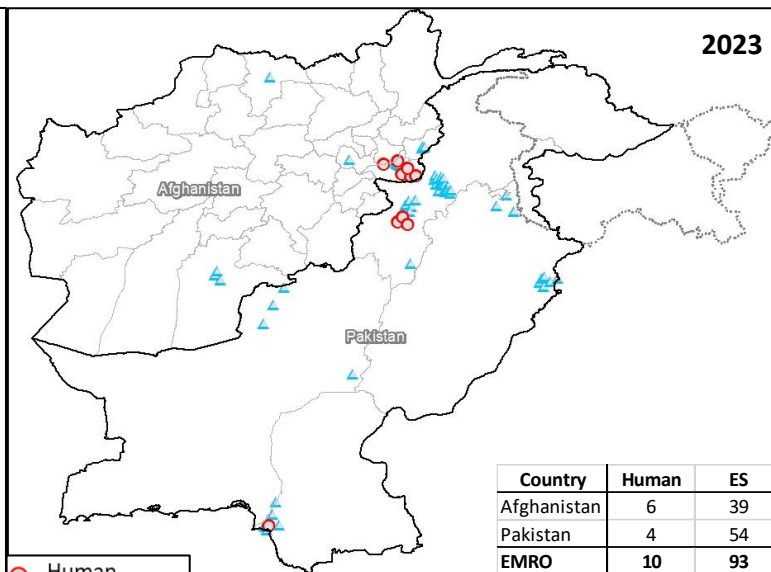
WPV1 Positive isolates from Afghanistan and Pakistan by source

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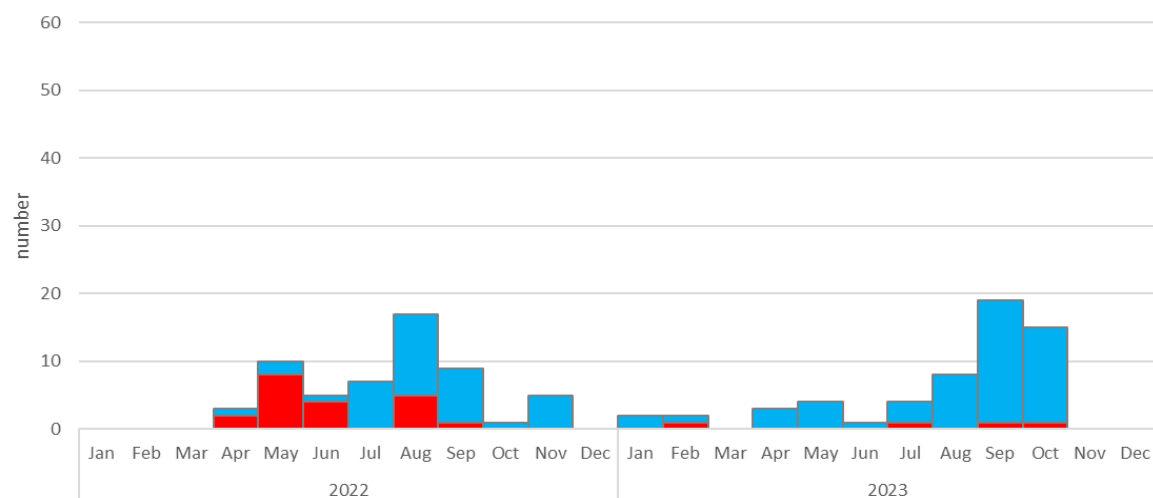
Afghanistan



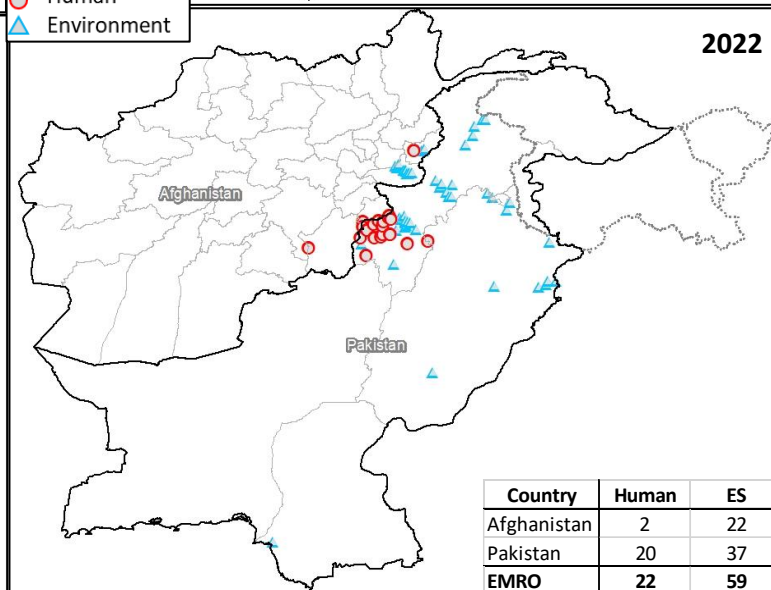
2023



Pakistan



2022



Virus isolation by country, last 12 months (Oct. 22, 2022, to Oct. 22, 2023)

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Source / Virus type	AFG	PAK	EGY	SOM	SUD	YEM	Total
Human (AFP only)	6	4	1	3	1	7	22
Wild	6	4					10
cVDPV2				3	1	6	10
aVDPV2							
VDPV2			1			1	2
VDPV3							
Environment	53	60	10	6	1	9	139
Wild	53	59					112
cVDPV2			6	6	1	8	21
aVDPV2			4				4
VDPV2						1	1
VDPV3		1					1
Total	59	64	11	9	2	16	161

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. 1307, Week 42 (ending on 22/10/2023)

Country	Total year 2021	Total year 2022	22 October		Confirmed Wild Polio 1 Cases by month of onset												Recent most Case
					2022		2023										
			2022	2023	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
Afghanistan	4	2	2	6	0	0	0	0	0	2	3	0	0	0	1		04-Sep-23
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				
Iran	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			
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	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	0	0				
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Pakistan	1	20	20	4	0		0	1	0	0	0	0	1	0	1	1	03-Oct-23
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	0	0	0			
Sudan	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		0				
Yemen	0	0	0	0	0	0	0	0	0	0	0						
EMR	5	22	22	10	0	0	0	1	0	2	3	0	1	0	2	1	03-Oct-23

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

Investigation of AFP cases with paralysis onset in 2022 & 2023

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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	4643	6	0	4327	0	9	0	25.50	94.18	5368	2	0	5365	1	0	0	24.34	94.41	22-Oct-23
BAHRAIN	12	0	0	9	0	2	0	4.96	100.00	30	0	0	30	0	0	0	10.02	83.33	22-Oct-23
DJIBOUTI	9	0	0	9	0	0	0	2.65	88.89	19	0	0	19	0	0	0	4.65	47.37	21-Oct-23
EGYPT	1335	0	0	1184	1	15	0	4.01	88.54	1394	0	0	1394	0	0	0	3.48	91.54	19-Oct-23
IRAN	862	0	0	828	0	0	0	5.05	97.10	824	0	0	824	0	0	0	4.06	97.69	21-Oct-23
IRAQ	667	0	0	630	0	13	0	4.69	95.05	835	0	0	835	0	0	0	4.78	92.10	20-Oct-23
JORDAN	90	0	0	79	0	0	0	2.59	94.44	89	0	0	89	0	0	0	2.14	94.38	19-Oct-23
KUWAIT	34	0	0	33	0	0	0	4.89	88.24	52	0	0	52	0	0	0	5.62	98.08	15-Oct-23
LEBANON	71	0	0	58	0	6	0	5.69	85.92	57	0	0	57	0	0	0	3.58	84.21	22-Oct-23
LIBYA	88	0	0	77	0	0	0	4.20	98.86	101	0	0	101	0	0	0	3.89	100.00	21-Oct-23
MOROCCO	91	0	0	42	0	35	2	0.95	60.44	94	0	0	89	0	5	0	0.92	57.45	5-Oct-23
OMAN	22	0	0	19	0	0	0	2.16	90.91	27	0	0	27	0	0	0	2.10	92.59	15-Oct-23
PAKISTAN	14403	4	0	13323	0	159	0	18.23	85.32	19032	20	1	19011	0	0	0	18.86	85.14	22-Oct-23
PALESTINE	20	0	0	16	0	1	0	1.19	95.00	33	0	0	32	1	0	0	1.64	100.00	15-Oct-23
QATAR	15	0	0	11	0	2	0	4.27	73.33	11	0	0	11	0	0	0	2.44	72.73	15-Oct-23
SAUDI ARABIA	248	0	0	165	0	0	0	3.67	95.56	274	0	0	274	0	0	0	3.18	93.80	22-Oct-23
SOMALIA	338	0	0	313	3	0	0	4.66	93.79	356	0	0	349	6	0	0	4.30	97.19	22-Oct-23
SUDAN	371	0	0	154	0	116	33	2.20	82.48	650	0	0	649	1	0	0	3.25	97.08	22-Oct-23
SYRIA	260	0	0	227	0	0	0	4.14	97.31	382	0	0	382	0	0	0	4.96	94.76	21-Oct-23
TUNISIA	74	0	0	73	0	0	0	3.11	68.92	55	0	0	55	0	0	0	1.91	61.82	20-Oct-23
U.A.E.	41	0	0	29	0	7	0	3.44	95.12	66	0	0	66	0	0	0	4.47	96.97	2-Oct-23
YEMEN	1018	0	0	837	4	4	2	7.89	88.02	1377	0	1	1214	162	0	0	8.77	86.64	21-Oct-23
EMR POL	24712	10	0	22443	8	369	37	10.49	88.22	31126	22	2	30925	171	5	0	10.77	88.18	

* 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. 1307, Week 42 (ending on 22/10/2023)

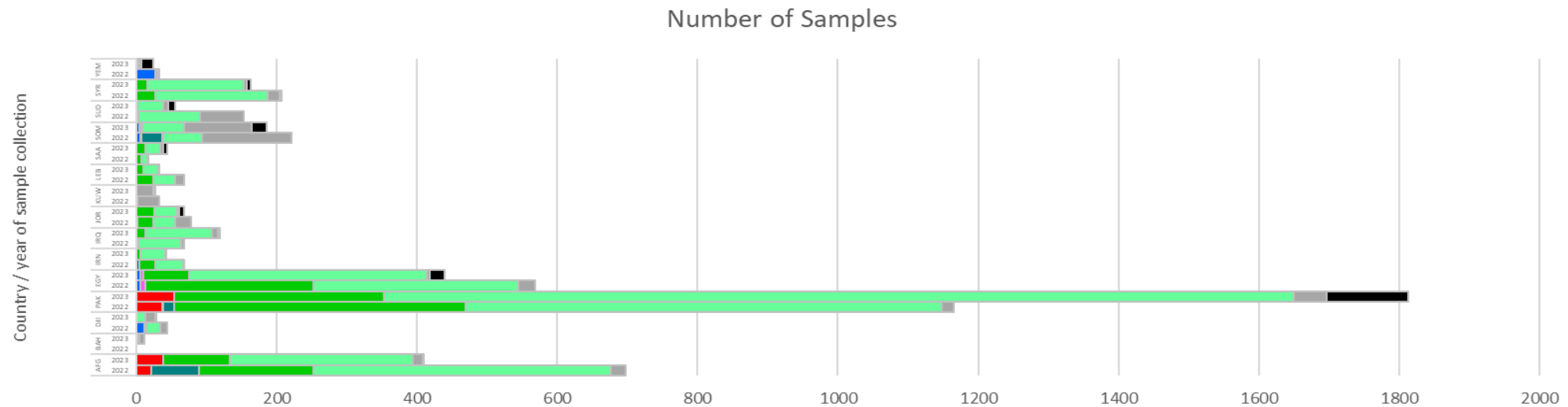
Country	Polio laboratories	AFP cases with specimens	Preliminary virus isolation results of AFP cases						Poliovirus intratypic differentiation results												Indicators				Latest report Date	
	ITD / Nucleotide Sequencing		Referred for ITD		NPEV only	Negative	Pending		Type 1			Type 2			Type 3			Discordant pending sequence	NPEV by PCR	Non-EV	Pending ITD	% specimens positive for NPEV*	% AFP cases with culture results within 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	4600	233	26	618	3468	163	22	5 *	158						191			2	2	5	12%	93%	100%	98%	22-Oct-23
Bahrain	NPL Oman / CDC	11			1	10																5%	100%		45%	19-Oct-23
Djibouti	NPL Kenya / CDC	9			2	7																22%	67%		78%	21-Oct-23
Egypt	RRL Egypt	1276	13		138	1053	69	4		7				1		8				1		10%	96%	100%	99%	19-Oct-23
Iran	NPL Iran / CDC	894	7		9	849	29			5						3						1%	100%	100%	99%	21-Oct-23
Iraq	NPL Iraq, RRL Egypt	670	6		47	586	21	10		5						2						8%	100%	100%	99%	20-Oct-23
Jordan	NPL Jordan, RRL Egypt	88			14	69	5															16%	94%		100%	22-Oct-23
Kuwait	RRL Kuwait / RIVM	35	1		3	31														1		9%	97%		100%	22-Oct-23
Lebanon	NPL Jordan, NPL Syria, RRL Egypt	70			1	67	1	1														5%	100%			17-Oct-23
Libya	RRL Tunisia / RIVM	84	1		2	76	3	2		1												2%	97%	1	100%	13-Oct-23
Morocco	NPL Morocco, RRL Tunisia	98			3	89	6															4%	99%		93%	20-Oct-23
Oman	NPL Oman / CDC	22			1	21																11%	100%		100%	19-Oct-23
Pakistan	RRL Pakistan	14060	319	28	2174	10995	469	51	3 *	211						251						13%	92%	100%	96%	22-Oct-23
Palestine & UNRWA		20	1			18		1		1			1									0%	44%		100%	15-Oct-23
Qatar	NPL Oman / CDC	15	1			14										1						0%	100%	1	100%	19-Oct-23
Saudi Arabia	NPL Saudi Arabia / CDC	186	1		5	180				1												2%	97%	100%	99%	21-Sep-23
Somalia	NPL Kenya / CDC	337	9		53	255	11	10		4			2	3		2				1		17%	5%		95%	22-Oct-23
Sudan	NPL Sudan / RRL Egypt	368	10		39	197	105	17					3			1			2			15%	99%	100%	30%	14-Apr-23
Syria	NPL Syria / RRL Egypt	250	4	1	16	207	9	13														7%	100%			17-Oct-23
Tunisia	RRL Tunisia	79	1		3	74	1									1						3%	96%	1	97%	13-Oct-23
U.A.E	NPL Oman / CDC	42			2	40																5%	95%		24%	19-Oct-23
Yemen	NPLs Oman, Jordan & Kenya, RRL Egypt	829	24	2	174	629				11			1	4		18						18%	20%	100%	22%	21-Oct-23
Total EMR 2023		24043	631	57	3305	18935	892	131	10 *	404			7	8		478			4	3	7	12%	89%	100%	94%	
Total EMR 2022		30461	1066	119	4831	24432		9	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. 1307, Week 42 (ending on 22/10/2023)

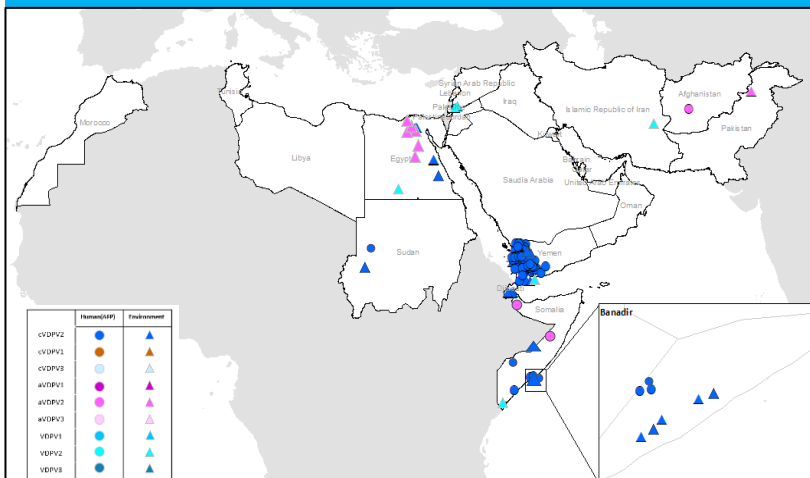


	AFG		BAH		DJI		PAK		EGY		IRN		IRQ		JOR		KUW		LEB		SAA		SOM		SUD		SYR		YEM	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
🇺🇸 Wild	22	39					37	54																						
🇧🇮 cVDPV2					12				6	6													6	5	1				28	3
🇧🇮 Wild+cVDPV2																														
🇺🇸 Wild+aVDPV2																														
🇺🇸 Wild+aVDPV3																														
🇺🇸 aVDPV1																														
🇺🇸 aVDPV2							1		7	4																				
🇺🇸 aVDPV3																														
🇧🇮 VDPV1																														
🇧🇮 VDPV2											1				2								1						1	1
🇺🇸 SL2	68				2		16				4												30	2		1			1	
🇺🇸 SL1/3	162	95		2			415	299	239	66	23	6	3	13	22	26			24	10	7	13	2	2	2	1	28	16	2	2
🇺🇸 Entero	424	260		2	20	13	679	1296	292	338	39	35	61	95	32	33	2		32	22	9	21	55	60	88	36	159	137	1	2
🇺🇸 Negative	22	14		8	11	14	17	47	25	5	1	1	4	8	23	2	31	24	13	1	2	5	128	96	63	8	18	4		
🇺🇸 Pending		1			2		116			21				3		8		3				5		21		10	3	7		16

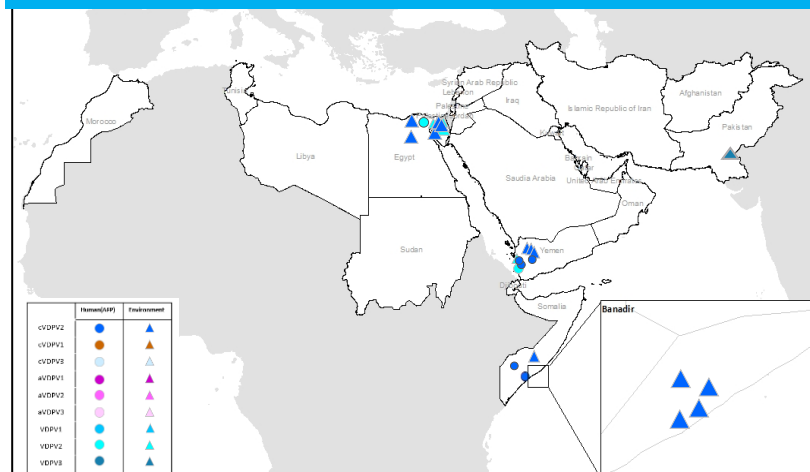
VDPVs isolations by Source and Country

EMR Polio Bulletin - Issue No. 1307 Week 42 (ending on 22/10/2023)

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	Most recent	2018	2019	2020	2021	2022	Most recent	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	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	3	29-07-23	3	1	11		5		31-08-22	19	5	26	1	6	5	27-07-23		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	27	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								
	Yemen						1	09-05-23											2	1	26-04-23								
VDPV3	Pakistan																		1	14-02-23									

Important links

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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)