

## 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

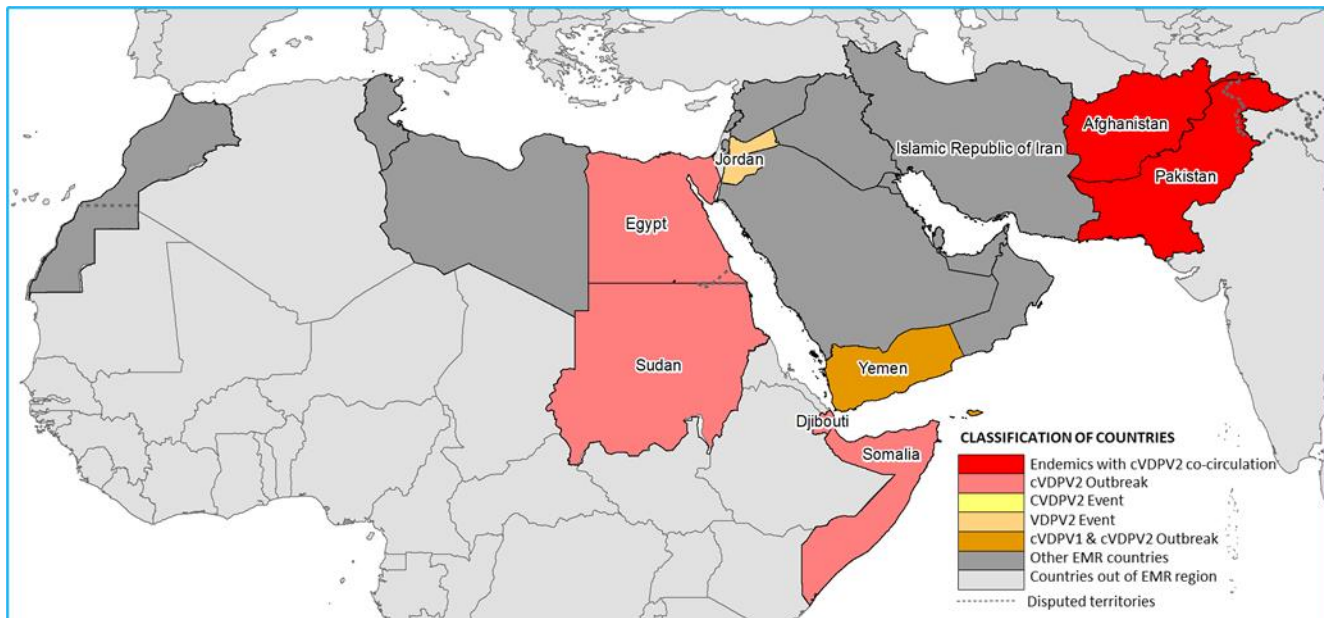
- 51 samples cVDPV2
  - 06 in Egypt
  - 12 in Djibouti
  - 06 in Somalia
  - 01 in Sudan
  - 26 in Yemen

### 2023

- 167 samples Wild Polio 1
  - 55 in Afghanistan
  - 112 in Pakistan

- 26 samples of cVDPV2
  - 09 in Somalia
  - 10 in Yemen
  - 07 in Egypt

## Classification of EMR countries by type of poliovirus circulation



## Highlights of the week

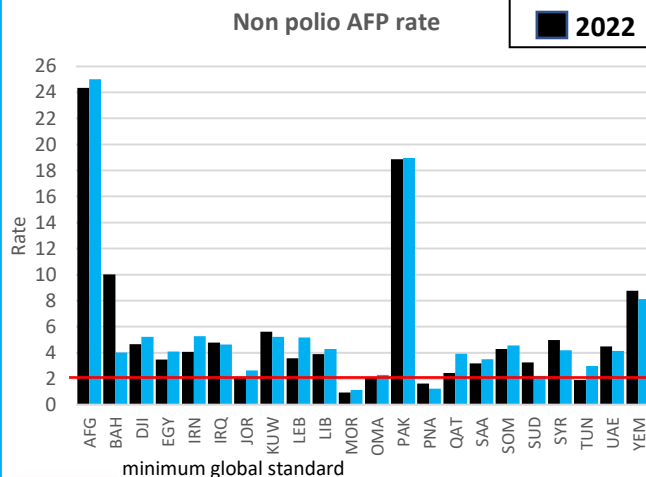
### Wild Poliovirus

- No new WPV1 cases reported this week. 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).
- Sixteen new WPV1 positive environmental samples (ES) reported this week (2 from Afghanistan and 14 from Pakistan). The two new reported WPV1 ES from Afghanistan are as follows: 1 each from Kunar province (Asadabad district) and from Nangarhar province (Batikot district), while the fourteen new reported WPV1 ES from Pakistan are as follows: 8 from Sindh province (2 each from KHIEAST Town and Hyderabad districts, and 1 each from KHIEAMARI, KHICENTRAL, KHIWEST Towns and Sukkur district), 4 from Khyber Pakhtunkhwa province (3 from Peshawar and 1 from Kohat districts), 1 each from Balochistan province (Quetta district) and Islamabad province (CDA district). Samples collection dates varies between 4<sup>th</sup> December to 13<sup>th</sup> December 2023. The WPV1 positive environmental samples' count in 2023 to date is 167 (55 in Afghanistan and 112 in Pakistan), and in 2022, the count remains to be 59 (22 in Afghanistan and 37 in Pakistan).

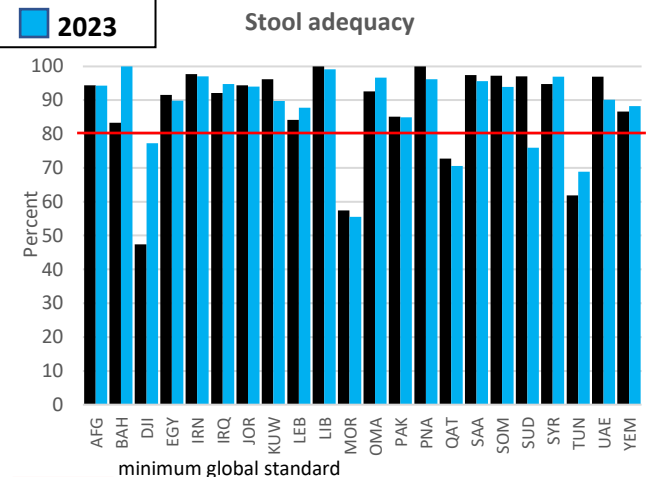
### Vaccine derived poliovirus (VDPV)

- No new cVDPV isolates 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), while the cVDPV2 positive environmental samples count in 2023 to date is 26 (10 from Yemen, 9 from Somalia and 7 from Egypt). In 2022, the count remains 51 (1 in Sudan, 6 in each of Egypt and Somalia, 12 in Djibouti and 26 in Yemen).
- One new VDPV2 positive environmental sample was reported this week from Egypt. The new ES is from North Sinai province (Dahya site), with collection date 12<sup>th</sup> December 2023. The sample is awaiting confirmation of sequencing results by CDC.

### Non polio AFP rate



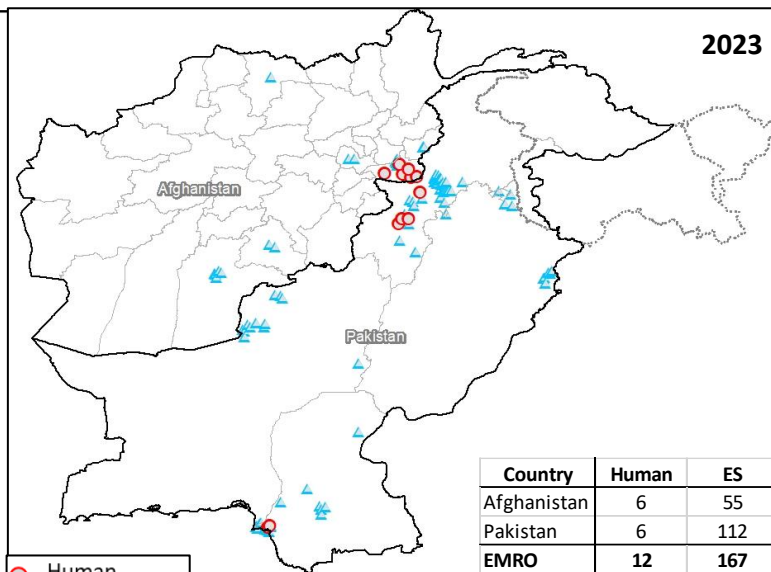
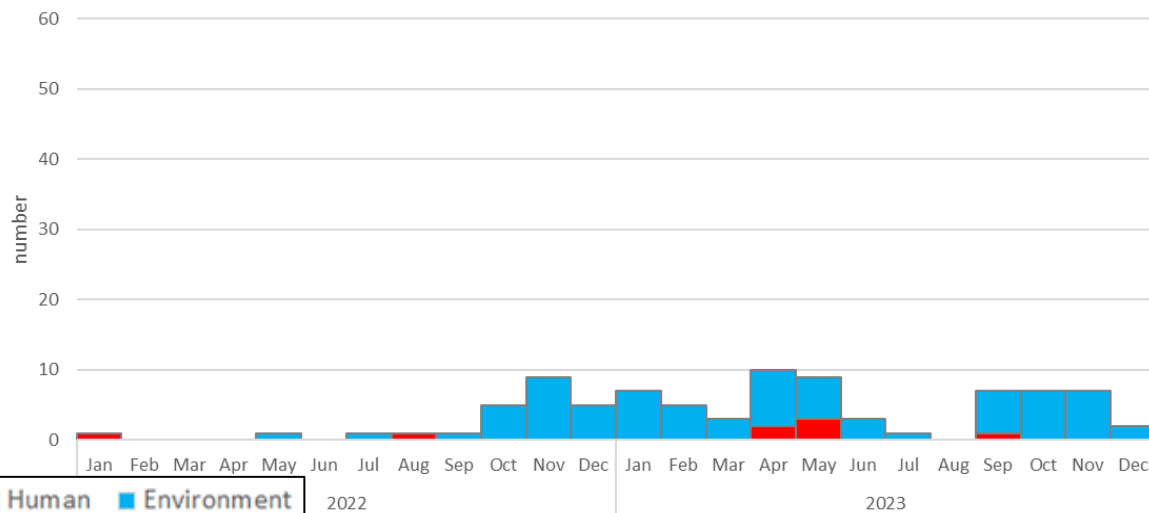
### Stool adequacy



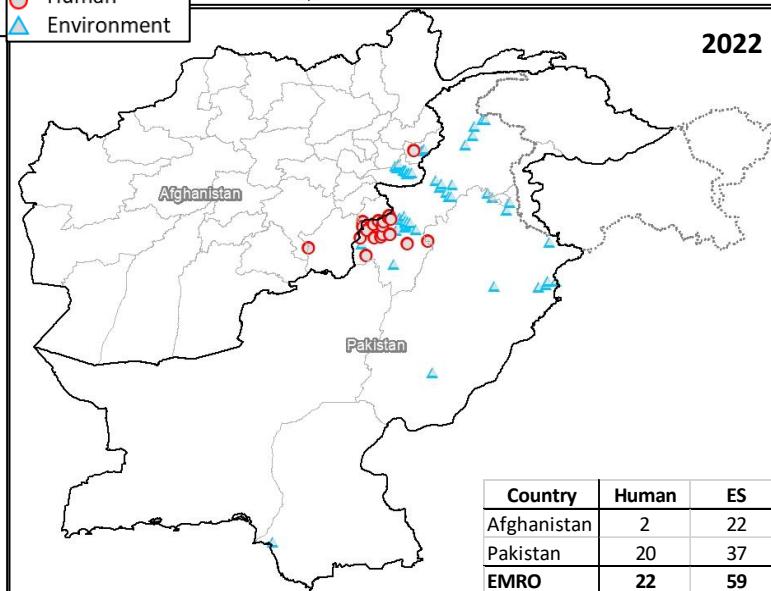
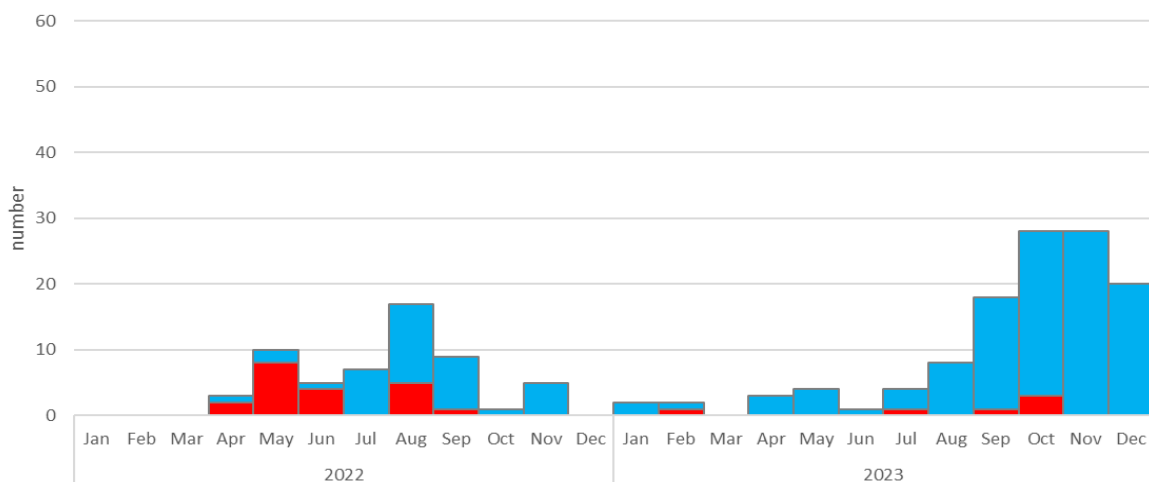
# WPV1 Positive isolates from Afghanistan and Pakistan by source

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## Afghanistan



## Pakistan



For further details on Wild Poliovirus click: [line-list of WPV isolates](#)

# Virus isolation by country, last 12 months (Jan. 07, 2023, to Jan. 07, 2024)

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Source / Virus type	AFG	PAK	EGY	SOM	SUD	YEM	Total
<b>Human (AFP only)</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>5</b>		<b>4</b>	<b>22</b>
Wild	6	6					12
cVDPV2				5		3	8
aVDPV2							
VDPV2			1			1	2
VDPV3							
<b>Environment</b>	<b>52</b>	<b>112</b>	<b>12</b>	<b>9</b>	<b>4</b>	<b>12</b>	<b>201</b>
Wild	52	111					163
cVDPV2			7	9		10	26
aVDPV2			4				4
VDPV2			1		4	2	7
VDPV3		1					1
<b>Total</b>	<b>58</b>	<b>118</b>	<b>13</b>	<b>14</b>	<b>4</b>	<b>16</b>	<b>223</b>

*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 2022	Total year 2023	7 January		Confirmed Wild Polio 1 Cases by month of onset												Recent most Case
					2023												
			2023	2024	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
Afghanistan	2	6	0	0	0	0	2	3	0	0	0	1	0	0			04-Sep-23
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				
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	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							
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Pakistan	20	6	0	0	1	0	0	0	0	1	0	1	3	0			24-Oct-23
Palestine ****	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	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	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	0					
EMR	22	12	0	0	1	0	2	3	0	1	0	2	3	0	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

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COUNTRY	2024									2023									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	2	0	0	0	0	0	0	0.46	100.00	5785	6	0	5506	0	7	0	25.66	94.30	7-Jan-24
BAHRAIN	0	0	0	0	0	0	0	0.00		12	0	0	10	0	2	1	4.01	100.00	7-Jan-24
DJIBOUTI	0	0	0	0	0	0	0	0.00		22	0	0	9	0	1	0	5.23	77.27	7-Jan-24
EGYPT	8	0	0	0	0	0	0	1.01	0.00	1711	0	0	1570	1	16	0	4.15	89.83	4-Jan-24
IRAN	0	0	0	0	0	0	0	0.00		1129	0	0	1088	0	0	0	5.35	97.08	6-Jan-24
IRAQ	0	0	0	0	0	0	0	0.00		817	0	0	782	0	8	0	4.65	94.74	4-Jan-24
JORDAN	0	0	0	0	0	0	0	0.00		116	0	0	111	0	0	0	2.68	93.97	4-Jan-24
KUWAIT	2	0	0	0	0	0	0	12.12	0.00	49	0	0	45	0	0	0	5.69	89.80	7-Jan-24
LEBANON	2	0	0	0	0	0	0	6.76	50.00	82	0	0	61	0	9	3	5.31	87.80	7-Jan-24
LIBYA	0	0	0	0	0	0	0	0.00		115	0	0	97	0	0	0	4.43	99.13	6-Jan-24
MOROCCO	0	0	0	0	0	0	0	0.00		135	0	0	42	0	63	14	1.15	55.56	18-Dec-23
OMAN	0	0	0	0	0	0	0	0.00		30	0	0	29	0	0	0	2.38	96.67	7-Jan-24
PAKISTAN	0	0	0	0	0	0	0	0.00		18958	6	0	17926	0	218	0	19.38	84.92	7-Jan-24
PALESTINE	0	0	0	0	0	0	0	0.00		26	0	0	20	0	0	0	1.25	96.15	24-Dec-23
QATAR	0	0	0	0	0	0	0	0.00		17	0	0	11	0	4	0	3.91	70.59	7-Jan-24
SAUDI ARABIA	0	0	0	0	0	0	0	0.00		299	0	0	257	0	0	0	3.58	95.65	7-Jan-24
SOMALIA	0	0	0	0	0	0	0	0.00		412	0	0	386	5	0	0	4.59	93.93	7-Jan-24
SUDAN	0	0	0	0	0	0	0	0.00		466	0	0	343	0	27	1	2.24	75.97	7-Jan-24
SYRIA	0	0	0	0	0	0	0	0.00		327	0	0	303	0	1	0	4.20	96.94	6-Jan-24
TUNISIA	0	0	0	0	0	0	0	0.00		90	0	0	83	0	0	0	3.02	68.89	5-Jan-24
U.A.E.	0	0	0	0	0	0	0	0.00		61	0	0	52	0	0	0	4.14	90.16	25-Dec-23
YEMEN	1	0	0	0	0	0	0	0.33	0.00	1321	0	0	1083	4	16	0	8.27	88.27	6-Jan-24
EMR POL	15	0	0	0	0	0	0	0.27	20.00	31980	12	0	29814	10	372	19	10.96	87.86	

\* 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)

For further details on Contacts click: [detail of contact samples](#)

# Laboratory investigation of AFP cases with paralysis onset in 2023

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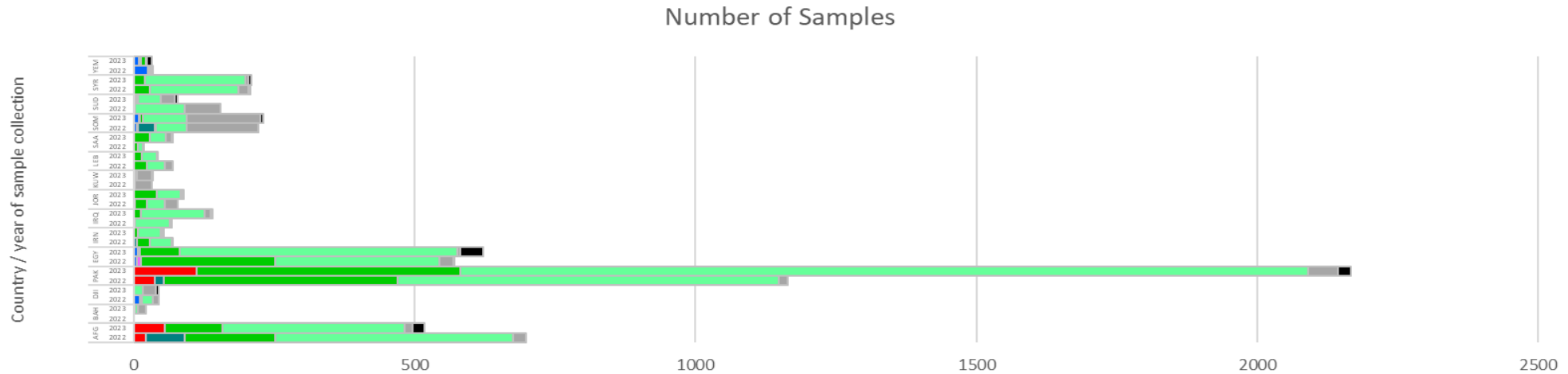
Country	Polio laboratories	AFP cases with specimens	Preliminary virus isolation results of AFP cases						Poliovirus intratypic differentiation results													Indicators				Latest report Date
	ITD / Nucleotide Sequencing		Referred for ITD		NPEV only	Negative	Pending		Type 1			Type 2			Type 3			Discordant 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	5753	298	30	781	4405	165	32	5 *	200						245			2	2	5	12%	94%	100%	98%	7-Jan-24
Bahrain	NPL Oman / CDC	11			1	10																5%	100%		45%	7-Jan-24
Djibouti	NPL Kenya / CDC	22			2	11	4	5														15%	46%		77%	7-Jan-24
Egypt	RRL Egypt	1651	17		187	1380	63	5		9				1		12				1		10%	92%	100%	99%	4-Jan-24
Iran	NPL Iran / CDC	1145	8		8	1104	25			6						3						1%	100%	100%	99%	4-Jan-24
Iraq	NPL Iraq, RRL Egypt	817	6		61	728	11	11		5						2						8%	100%	100%	99%	5-Jan-24
Jordan	NPL Jordan, RRL Egypt	115			18	95	2															15%	95%		100%	7-Jan-24
Kuwait	RRL Kuwait / RIVM	52	1		8	37	4	2													1	13%	98%		100%	7-Jan-24
Lebanon	NPL Jordan, NPL Syria, RRL Egypt	78			2	76																5%	100%			7-Jan-24
Libya	RRL Tunisia / RIVM	109	1		3	100	5			1												3%	95%	1	100%	3-Jan-24
Morocco	NPL Morocco, RRL Tunisia	126			3	118	1	4														3%	99%		94%	29-Dec-23
Oman	NPL Oman / CDC	30			1	29																7%	100%		100%	7-Jan-24
Pakistan	RRL Pakistan	18542	565	47	2791	14605	381	110	4 *	385						440						13%	94%	100%	96%	7-Jan-24
Palestine & UNRWA		26	1			23		2		1			1									0%	43%		100%	24-Dec-23
Qatar	NPL Oman / CDC	17	1			16										1						0%	100%	1	100%	7-Jan-24
Saudi Arabia	NPL Saudi Arabia / CDC	295	3		6	285		1		3						2						2%	98%	67%	100%	25-Dec-23
Somalia	NPL Kenya / CDC	411	14		62	314		21		4			2	5		2						16%	4%		95%	7-Jan-24
Sudan	NPL Sudan / RRL Egypt	443	10	1	88	326		17					3			2			2			18%	94%	100%	33%	14-Apr-23
Syria	NPL Syria / RRL Egypt	326	5	1	31	283	6															9%	100%			7-Jan-24
Tunisia	RRL Tunisia	98	1		3	91	3									1						3%	97%	1	97%	3-Jan-24
U.A.E	NPL Oman / CDC	51			3	48																6%	96%		27%	7-Jan-24
Yemen	NPLs Oman, Jordan & Kenya, RRL Egypt	1127	28	2	225	826	47			11			1	4		19					3	17%	21%	100%	21%	6-Jan-24
Total EMR 2023		31245	959	81	4284	24910	717	210	12 *	625			7	10		729			4	3	9	12%	91%	100%	93%	
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

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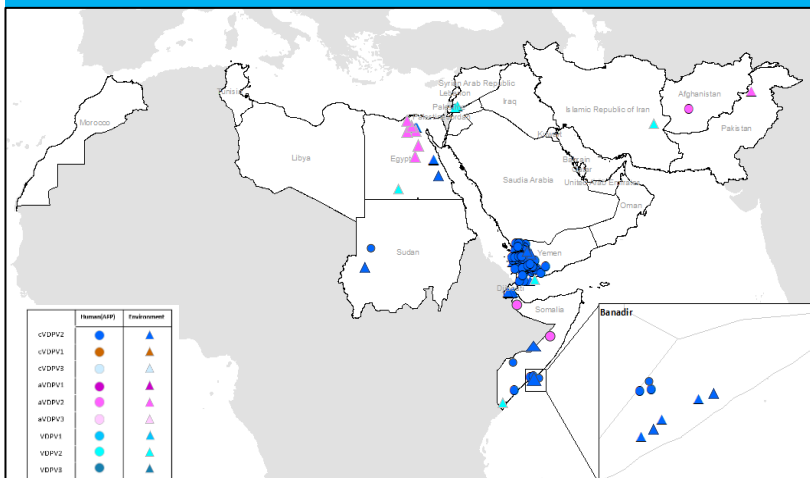


	AFG		BAH		DJI		PAK		EGY		IRN		IRQ		JOR		KUW		LEB		SAA		SOM		SUD		SYR		YEM	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
🇸🇰 Wild	22	55					37	112																						
🇸🇰 cVDPV2					12				6	7													6	9	1				26	10
🇸🇰 Wild+cVDPV2																														
🇸🇰 Wild+aVDPV2																														
🇸🇰 Wild+aVDPV3																														
🇸🇰 aVDPV1																														
🇸🇰 aVDPV2							1		7	4																				
🇸🇰 aVDPV3																														
🇸🇰 VDPV1																														
🇸🇰 VDPV2										1	1				2								1			4			3	2
🇸🇰 VDPV3								1																						
🇸🇰 SL2	68				2		16				4												30	2		1			1	1
🇸🇰 SL1/3	162	103		3		1	415	469	239	70	23	7	3	13	22	41		2	24	15	7	29	2	5	2	3	28	20	2	9
🇸🇰 Entero	424	324		5	20	15	679	1509	292	494	39	42	61	113	32	43	2	3	32	27	9	29	55	79	88	41	159	179	1	2
🇸🇰 Negative	22	14		13	11	24	17	53	25	6	1	1	4	11	23	2	31	27	13	1	2	10	128	130	63	25	18	6		
🇸🇰 Pending		21				4		23	1	41		3		3		3		3				1		5		5	3	4		8

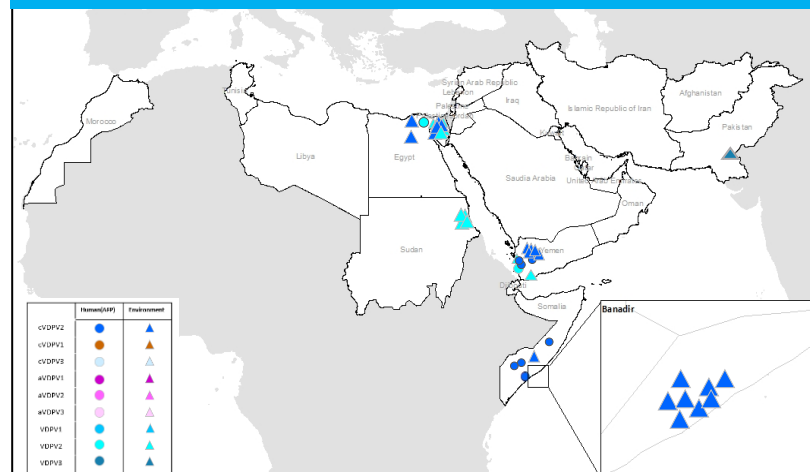
# VDPVs isolations by Source and Country

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## 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	7		13-11-23							
	Iran																	3	1			20-02-21								
	Pakistan	22	135	8				23-04-21									38	135	35											
	Somalia	6	3	14	1	5	5	16-09-23	3	1	11		6	3	03-08-23	19	5	26	1	6	9			1	5		1			10-03-22
	Sudan			58		1		31-10-22			18				08-10-20			14		1					4					24-08-20
Yemen				66	162	3	28-08-23				23	40	1	11-06-23				13	26	10										
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				1			22-08-22	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													1	12-12-23								
	Iran																			1		04-02-22								
	Jordan																			2		25-05-22								
	Somalia					1		01-09-22												1		22-04-22								
	Sudan																				4		30-11-23							
Yemen						1	09-05-23												3	2		27-05-23								
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)