

## 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

- 9 cases of Wild Polio 1
  - 06 in Afghanistan
  - 03 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

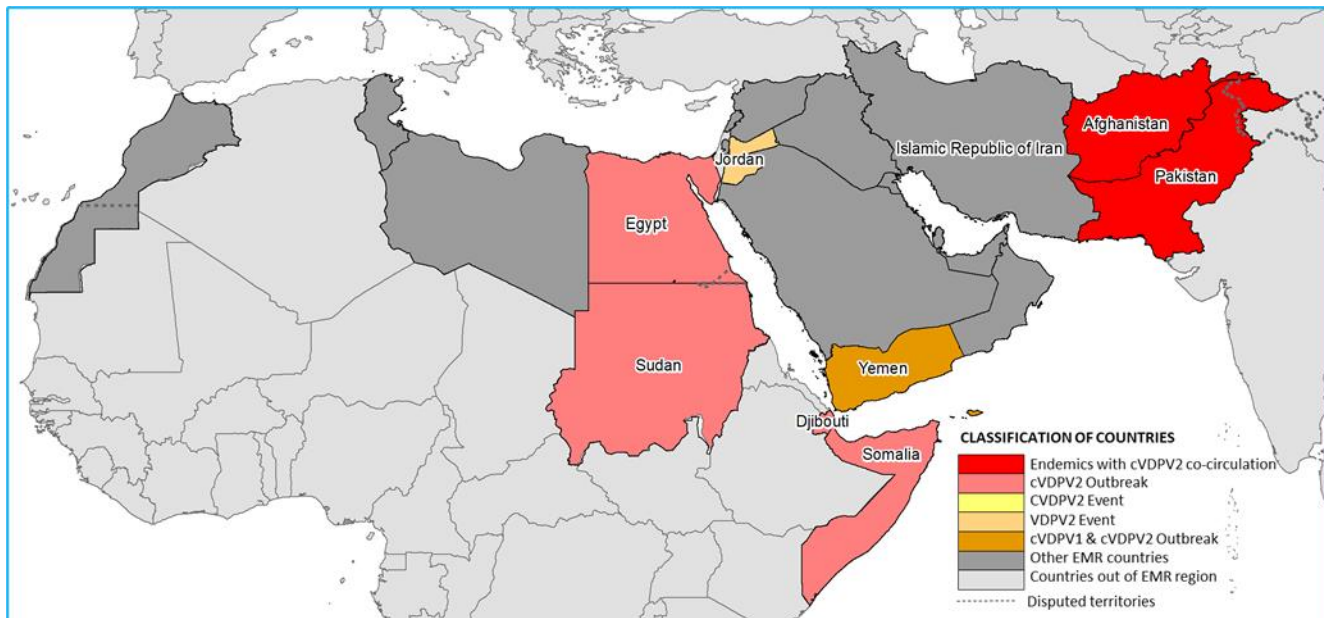
- 52 samples cVDPV2
  - 06 in Egypt
  - 12 in Djibouti
  - 06 in Somalia
  - 01 in Sudan
  - 27 in Yemen

### 2023

- 76 samples Wild Polio 1
  - 39 in Afghanistan
  - 37 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

- No new WPV1 cases reported this week. The WPV1 cases count in 2023 to date is 9 (6 from Afghanistan and 3 from Pakistan) while in 2022, the WPV1 cases count remains to be 22 cases (2 from Afghanistan and 20 from Pakistan).
- Two newly WPV1 positive environmental samples were reported this week from Pakistan. The two reported positive samples are one each from Hub district of Balochistan province and Lahore district of Punjab province with dates of collection on 20<sup>th</sup> and 26<sup>th</sup> September 2023 respectively. The positive WPV1 ES count in 2023 to date is 76 (39 in Afghanistan and 37 in Pakistan), while in 2022, the count remains to be 59 (22 in Afghanistan and 37 in Pakistan).

### Circulating Vaccine derived poliovirus (cVDPV)

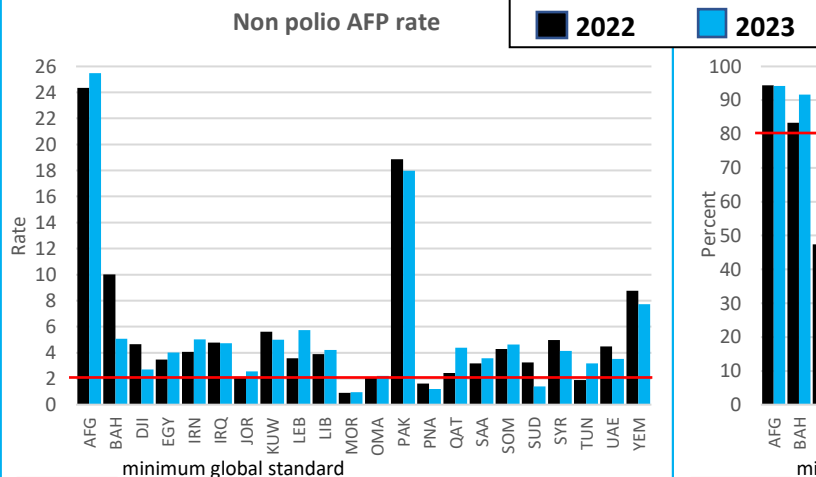
- One new cVDPV2 case reported this week from Yemen. The cVDPV2 case is from Bani El Harith district of Sanaa City province, with date of onset on 28<sup>th</sup> August 2023. In 2023 the count of cVDPV2 cases to date is 6 (3 each from Somalia and Yemen) and in 2022 the count remains to be 168 cases (1 from Sudan, 5 from Somalia and 162 from Yemen).
- Three cVDPV2 positive environmental isolates reported from Egypt. The cVDPV2 positive samples are all from North Sinai province (2 from Dahsia site and 1 from Masaeed site). The dates of collection vary between 28<sup>th</sup> August and 13<sup>th</sup> September 2023. The positive cVDPV2 ES 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

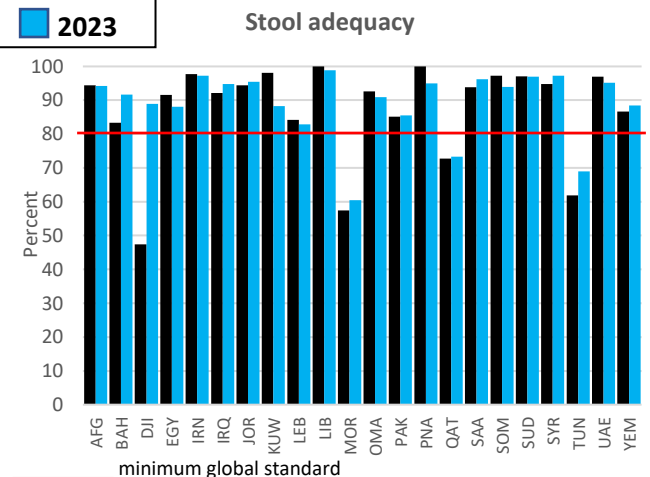
- The following Polio events are taking place during the current week in Cairo, Egypt, as follows:
  - Anti Fraud and Anti Corruption Training, 15-16 October 2023
  - Regional Meeting on GPEI Operational Planning for the EMR, 17-19 October 2023

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

### Non polio AFP rate



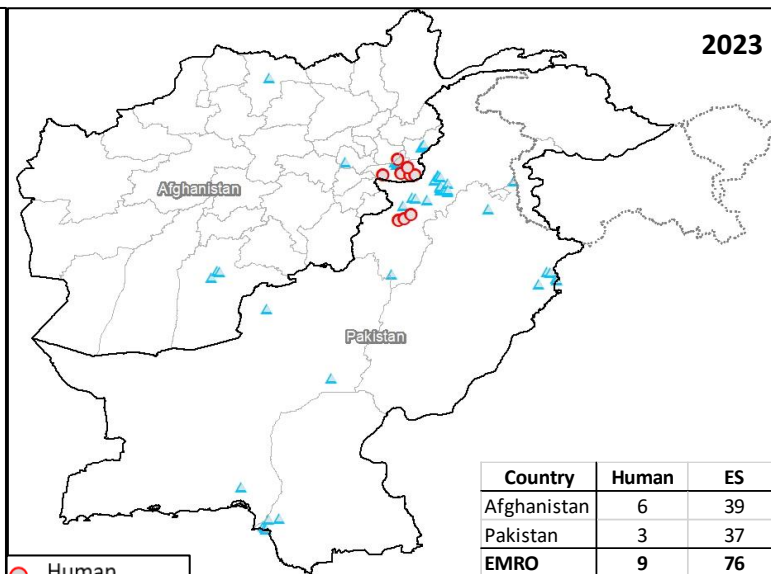
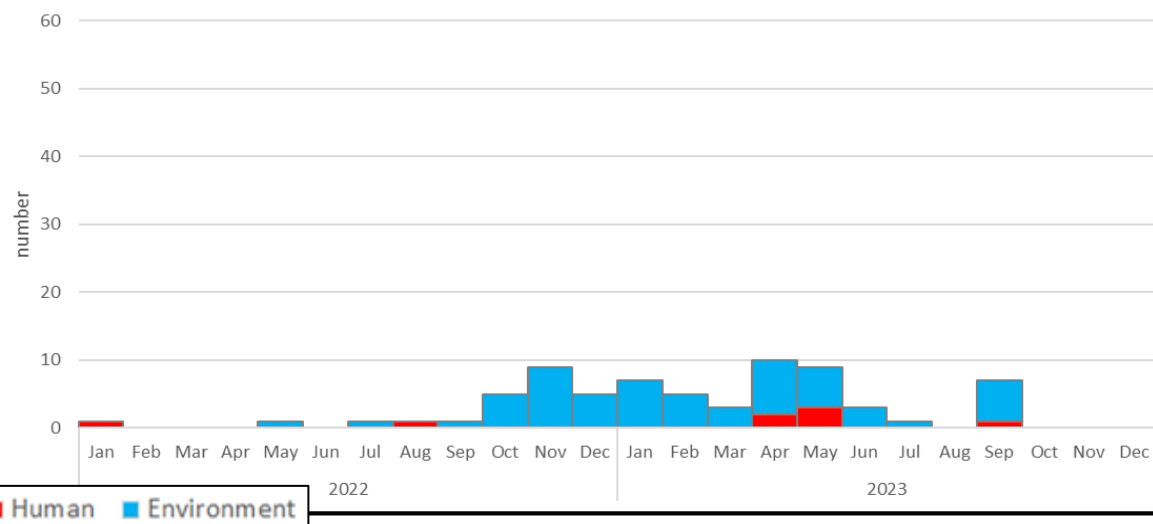
### Stool adequacy



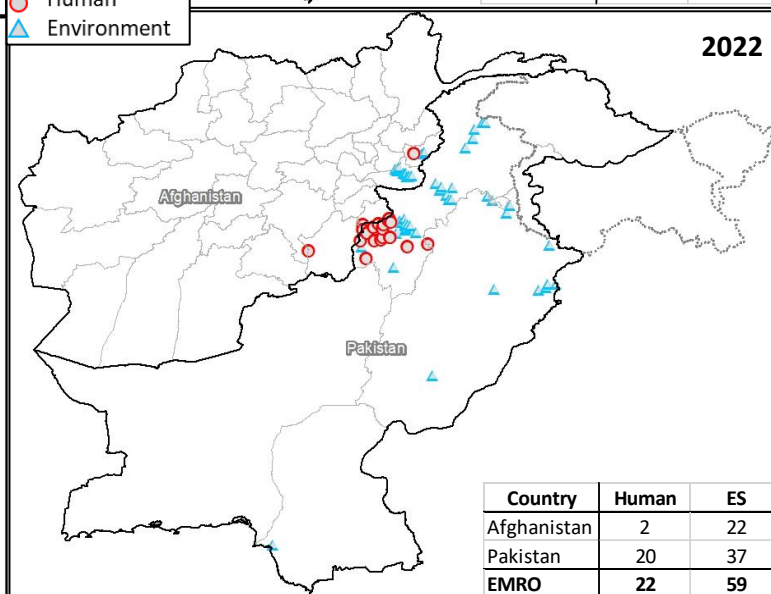
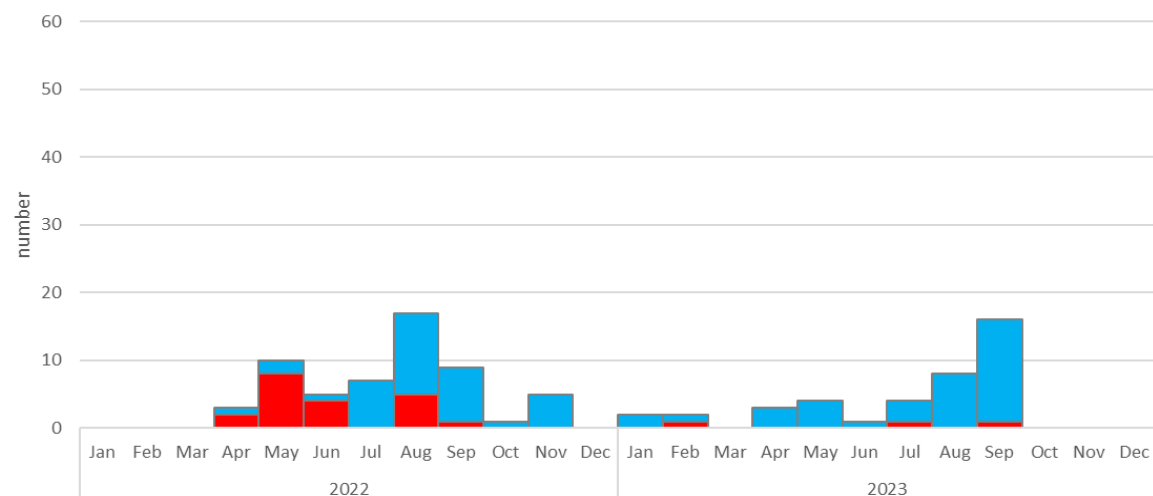
# WPV1 Positive isolates from Afghanistan and Pakistan by source

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## Afghanistan



## Pakistan



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

# Virus isolation by country, last 12 months (Oct. 15, 2022, to Oct. 15, 2023)

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Source / Virus type	AFG	PAK	EGY	SOM	SUD	YEM	Total
<b>Human (AFP only)</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>8</b>	<b>22</b>
Wild	6	3					9
cVDPV2				3	1	7	11
aVDPV2							
VDPV2			1			1	2
VDPV3							
<b>Environment</b>	<b>57</b>	<b>43</b>	<b>10</b>	<b>6</b>	<b>1</b>	<b>8</b>	<b>125</b>
Wild	57	42					99
cVDPV2			6	6	1	8	21
aVDPV2			4				4
VDPV2							
VDPV3		1					1
<b>Total</b>	<b>63</b>	<b>46</b>	<b>11</b>	<b>9</b>	<b>2</b>	<b>16</b>	<b>147</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 2021	Total year 2022	15 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				
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	0		
Pakistan	1	20	20	3	0		0	1	0	0	0	0	1	0	1		13-Sep-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	9	0	0	0	1	0	2	3	0	1	0	2	0	13-Sep-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	4528	6	0	4183	0	3	0	25.47	94.17	5368	2	0	5365	1	0	0	24.34	94.41	15-Oct-23
BAHRAIN	12	0	0	9	0	1	0	5.08	91.67	30	0	0	30	0	0	0	10.02	83.33	15-Oct-23
DJIBOUTI	9	0	0	9	0	0	0	2.71	88.89	19	0	0	19	0	0	0	4.65	47.37	14-Oct-23
EGYPT	1305	0	0	1124	1	15	0	4.01	88.05	1394	0	0	1394	0	0	0	3.48	91.54	12-Oct-23
IRAN	838	0	0	816	0	0	0	5.03	97.26	824	0	0	824	0	0	0	4.06	97.69	14-Oct-23
IRAQ	655	0	0	613	0	13	0	4.72	94.81	835	0	0	835	0	0	0	4.78	92.10	12-Oct-23
JORDAN	87	0	0	79	0	0	0	2.56	95.40	89	0	0	89	0	0	0	2.14	94.38	15-Oct-23
KUWAIT	34	0	0	33	0	0	0	5.01	88.24	52	0	0	52	0	0	0	5.62	98.08	15-Oct-23
LEBANON	70	0	0	58	0	6	0	5.75	82.86	57	0	0	57	0	0	0	3.58	84.21	15-Oct-23
LIBYA	86	0	0	77	0	0	0	4.21	98.84	101	0	0	101	0	0	0	3.89	100.00	14-Oct-23
MOROCCO	91	0	0	42	0	32	2	0.97	60.44	94	0	0	89	0	5	0	0.92	57.45	5-Oct-23
OMAN	22	0	0	19	0	0	0	2.22	90.91	27	0	0	27	0	0	0	2.10	92.59	15-Oct-23
PAKISTAN	13864	3	0	12695	0	166	0	17.98	85.47	19032	20	1	19011	0	0	0	18.86	85.14	15-Oct-23
PALESTINE	20	0	0	16	0	1	0	1.22	95.00	33	0	0	32	1	0	0	1.64	100.00	15-Oct-23
QATAR	15	0	0	11	0	2	0	4.38	73.33	11	0	0	11	0	0	0	2.44	72.73	15-Oct-23
SAUDI ARABIA	236	0	0	160	0	0	0	3.58	96.19	274	0	0	274	0	0	0	3.18	93.80	15-Oct-23
SOMALIA	328	0	0	307	3	1	0	4.63	93.90	356	0	0	349	6	0	0	4.30	97.19	15-Oct-23
SUDAN	229	0	0	154	0	75	68	1.41	96.94	650	0	0	649	1	0	0	3.25	97.08	15-Oct-23
SYRIA	254	0	0	212	0	0	0	4.14	97.24	382	0	0	382	0	0	0	4.96	94.76	14-Oct-23
TUNISIA	74	0	0	72	0	0	0	3.18	68.92	55	0	0	55	0	0	0	1.91	61.82	13-Oct-23
U.A.E.	41	0	0	29	0	7	0	3.53	95.12	66	0	0	66	0	0	0	4.47	96.97	2-Oct-23
YEMEN	973	0	0	788	4	9	2	7.73	88.39	1377	0	1	1214	162	0	0	8.77	86.64	14-Oct-23
EMR POL	23771	9	0	21506	8	331	72	10.34	88.48	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

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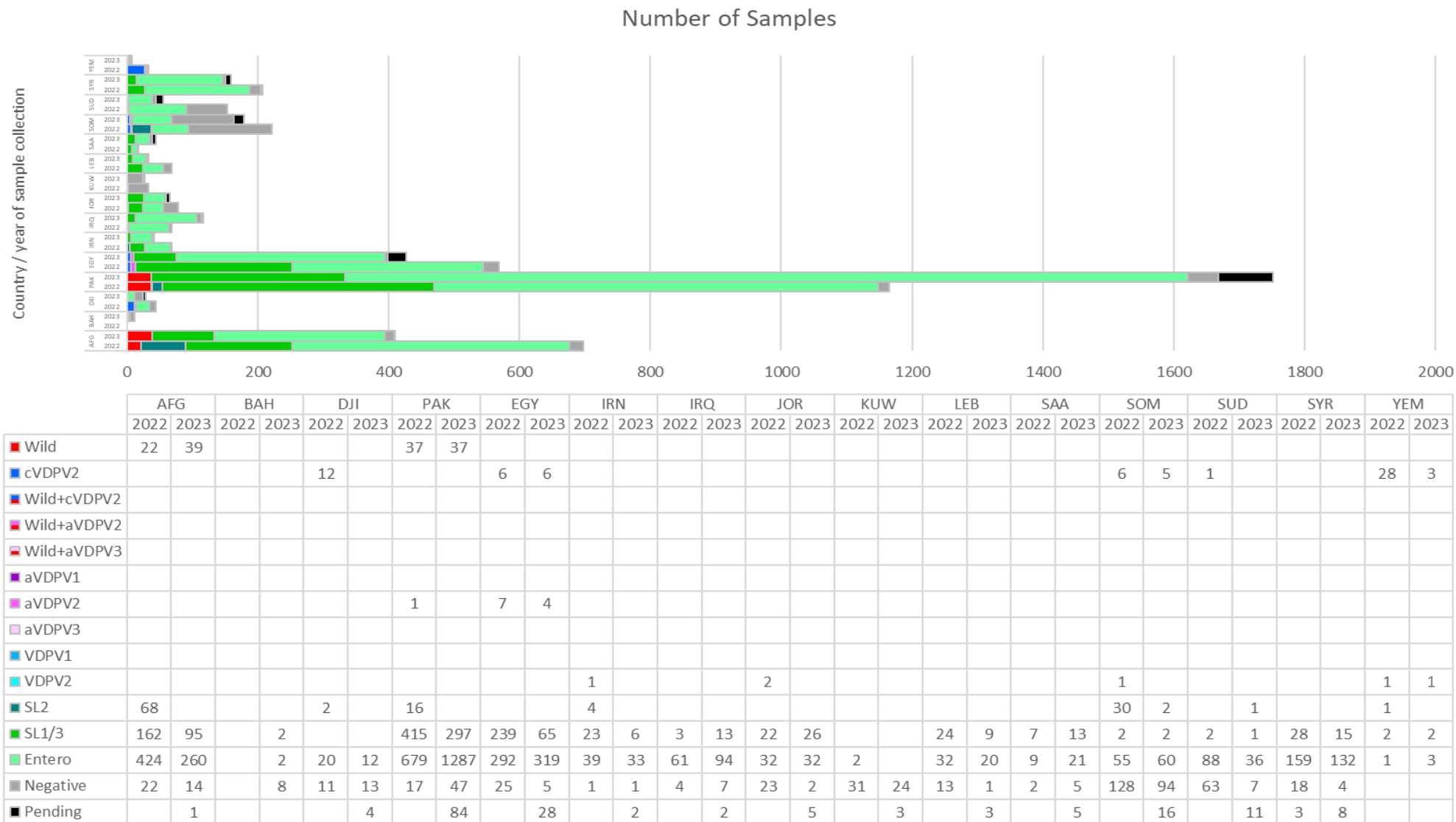
Country	Polio laboratories	AFP cases with specimens	Preliminary virus isolation results of AFP cases						Poliovirus intratypic differentiation results													Indicators				Latest report Date
	ITD / Nucleotide Sequencing		Referred for ITD		NPEV only	Negative	Pending		Type 1			Type 2			Type 3			Discordant 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	4489	226	25	600	3346	147	37	5 *	149						183			2	2	9	12%	93%	100%	98%	15-Oct-23
Bahrain	NPL Oman / CDC	11			1	10																5%	100%		45%	15-Oct-23
Djibouti	NPL Kenya / CDC	9			2	7																22%	67%		78%	14-Oct-23
Egypt	RRL Egypt	1236	12		132	1016	46	31		6				1		7				1		10%	97%	100%	99%	15-Oct-23
Iran	NPL Iran / CDC	853	7		9	816	18	3		5						3						1%	100%	100%	99%	13-Oct-23
Iraq	NPL Iraq, RRL Egypt	659	5		47	580	18	9		4						2						8%	100%	100%	99%	13-Oct-23
Jordan	NPL Jordan, RRL Egypt	85			14	66	5															16%	95%		100%	12-Oct-23
Kuwait	RRL Kuwait / RIVM	35	1		3	29	1	1												1		10%	100%		100%	15-Oct-23
Lebanon	NPL Jordan, NPL Syria, RRL Egypt	69			1	66		2														4%	100%			9-Oct-23
Libya	RRL Tunisia / RIVM	84	1		2	76	5			1												2%	97%	1	100%	13-Oct-23
Morocco	NPL Morocco, RRL Tunisia	92			3	86	3															4%	99%		94%	13-Oct-23
Oman	NPL Oman / CDC	22			1	20	1															11%	100%		100%	15-Oct-23
Pakistan	RRL Pakistan	13682	304	28	2120	10693	487	18	3	198						240						14%	92%	100%	96%	15-Oct-23
Palestine & UNRWA		20	1			18		1		1			1									0%	44%		100%	15-Oct-23
Qatar	NPL Oman / CDC	15	1			13	1									1						0%	100%	1	100%	15-Oct-23
Saudi Arabia	NPL Saudi Arabia / CDC	186	1		5	180				1												2%	97%	100%	99%	21-Sep-23
Somalia	NPL Kenya / CDC	328	9		52	250	6	11		4			2	3		2				1		17%	5%		95%	15-Oct-23
Sudan	NPL Sudan / RRL Egypt	263	10		39	197		17					3			1			2			15%	99%	100%	30%	14-Apr-23
Syria	NPL Syria / RRL Egypt	240	4	1	16	200	11	8														7%	100%			9-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	32	8															6%	94%		21%	6-Oct-23
Yemen	NPLs Oman, Jordan & Kenya, RRL Egypt	829	24	2	174	628	2			11			1	4		18						18%	20%	100%	22%	14-Oct-23
Total EMR 2023		23328	607	56	3226	18403	760	138	9 *	380			7	8		458			4	3	11	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 – one WPV1 case is confirmed due to positive contact 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

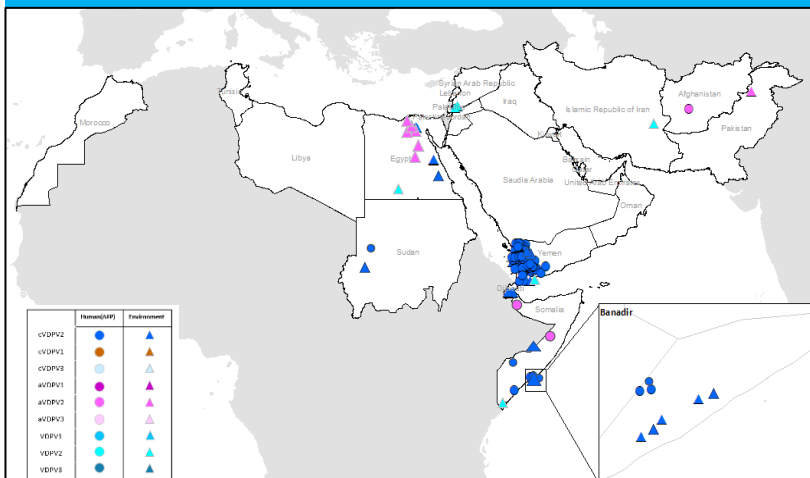
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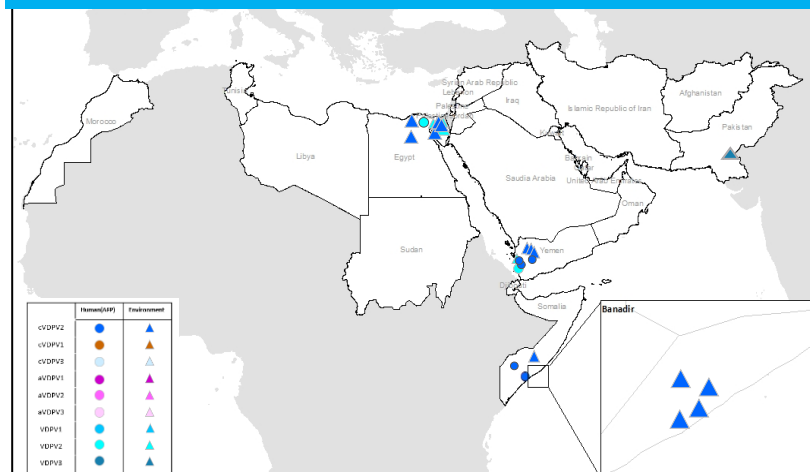
# VDPVs isolations by Source and Country

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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	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)