

## Highlights



Children Paralyzed by polio

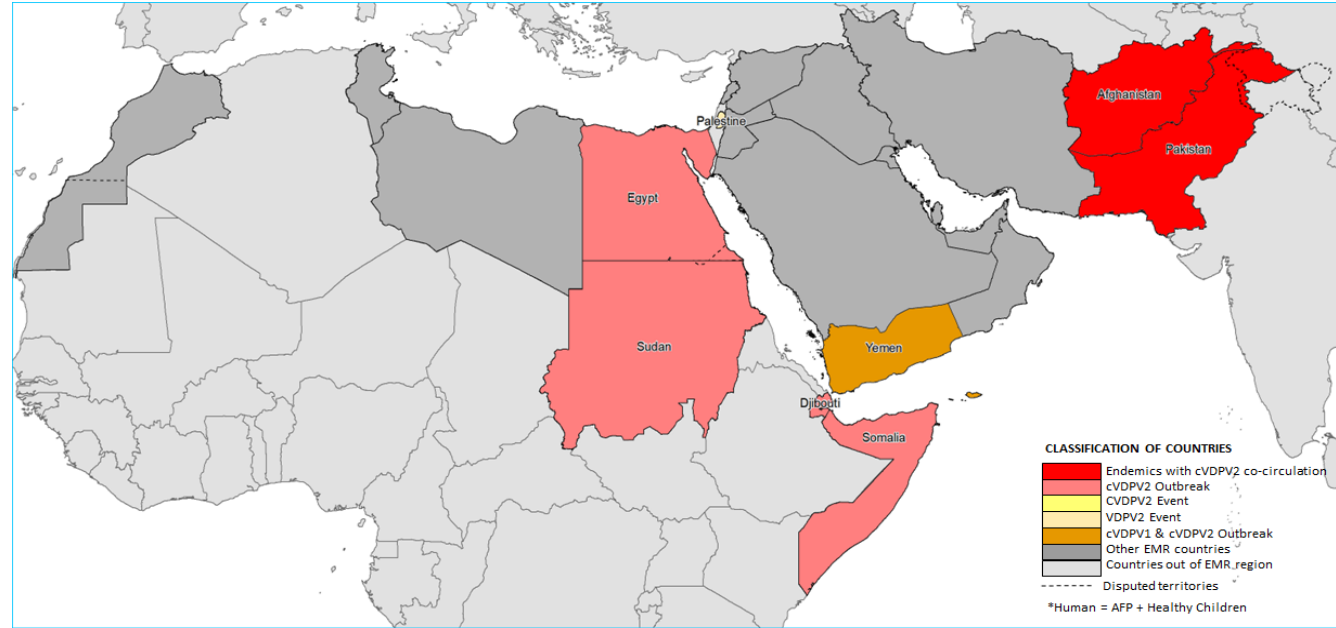
2023	2024
<ul style="list-style-type: none"> <li>12 cases of Wild Polio 1                             <ul style="list-style-type: none"> <li>06 in Afghanistan</li> <li>06 in Pakistan</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>4 cases of Wild Polio 1                             <ul style="list-style-type: none"> <li>02 in Afghanistan</li> <li>02 in Pakistan</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>16 cases of cVDPV2                             <ul style="list-style-type: none"> <li>08 in Somalia</li> <li>08 in Yemen</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>2 cases of cVDPV2                             <ul style="list-style-type: none"> <li>01 in Somalia</li> <li>01 in Yemen</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>Zero cVDPV1 cases</li> </ul>	<ul style="list-style-type: none"> <li>Zero cVDPV1 cases</li> </ul>



Sewage water sampling

2023	2024
<ul style="list-style-type: none"> <li>188 samples Wild Polio 1                             <ul style="list-style-type: none"> <li>62 in Afghanistan</li> <li>126 in Pakistan</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>110 samples Wild Polio 1                             <ul style="list-style-type: none"> <li>15 in Afghanistan</li> <li>95 in Pakistan</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>35 samples cVDPV2                             <ul style="list-style-type: none"> <li>11 in Egypt</li> <li>10 in Yemen</li> <li>09 in Somalia</li> <li>05 in Sudan</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>2 sample cVDPV2                             <ul style="list-style-type: none"> <li>1 in Sudan</li> <li>1 in Egypt</li> </ul> </li> </ul>

## Classification of EMR countries by type of poliovirus circulation



## Highlights of the week

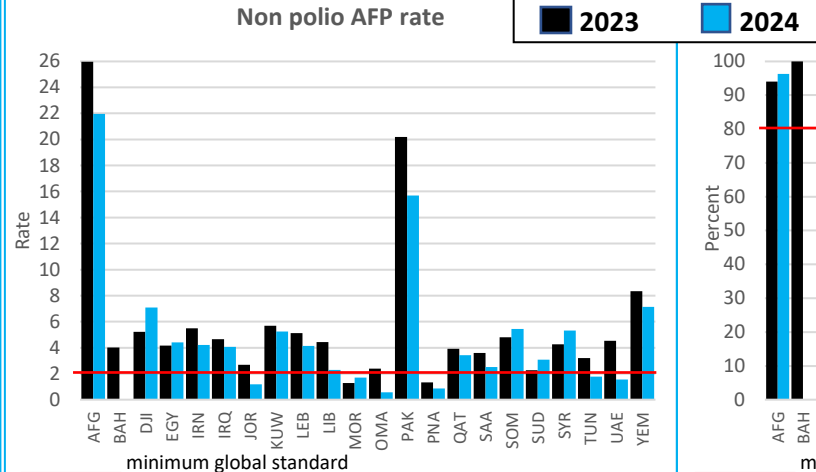
### Wild Poliovirus

- No new WPV1 isolates reported this week. The WPV1 case count in 2024 to date is 4 (2 each from Afghanistan and Pakistan), and for 2023, the count remains to be 12 (6 each from Afghanistan and Pakistan).
- The count of the WPV1 positive environmental samples in 2024 to date is 110 (15 from Afghanistan and 95 from Pakistan) and in 2023, the count remains to be 188 (62 in Afghanistan and 126 in Pakistan).
- Advance notification:** Afghanistan notified 10 new WPV1 isolates from environmental samples collected from Kandahar (5), Uruzgan (1), Laghman (1), Nangarhar (1), Paktia (1), and Hilmand (1) provinces. Details to be shared within next bulletin.

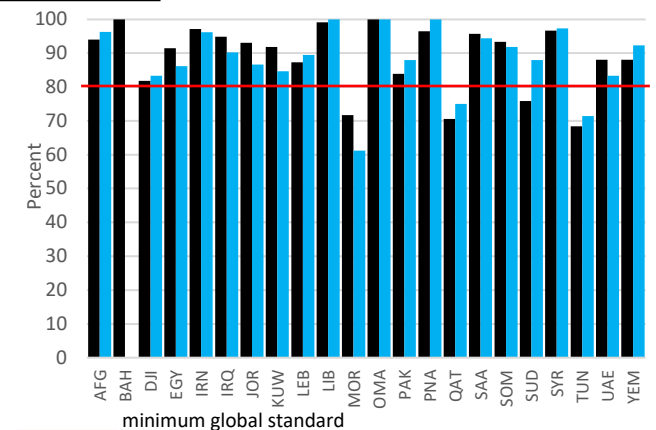
### Vaccine derived poliovirus (VDPV)

- No new cVDPV2 isolates reported this week. The total count of cVDPV2 cases to date in 2024 is 2 (1 each from Somalia and Yemen) and in 2023 the count is 16 (8 each from Somalia and Yemen).
- The count of the cVDPV2 positive environmental samples in 2024 to date is 2 (one each from Egypt and Sudan) and in 2023 the count remains 35 (11 from Egypt, 10 from Yemen, 9 from Somalia, and 5 from Sudan).

### Non polio AFP rate



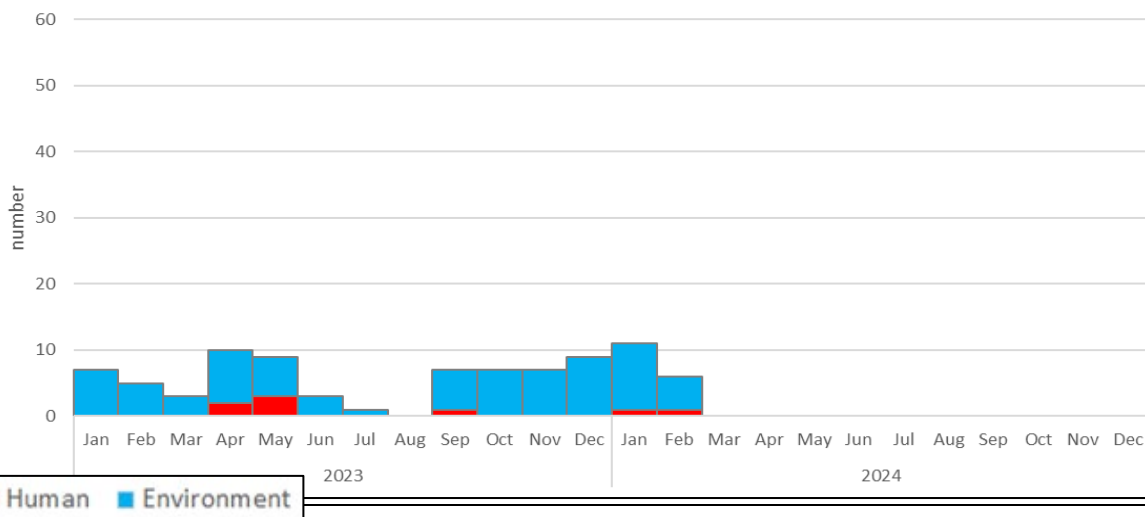
### Stool adequacy



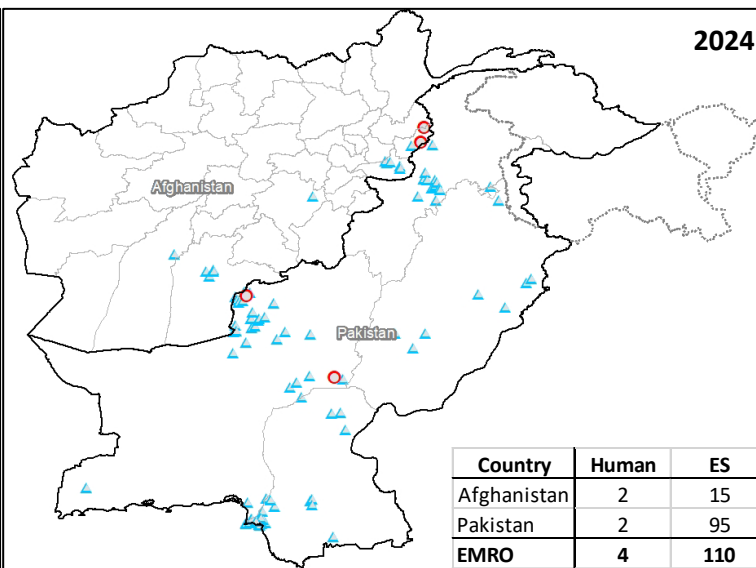
# WPV1 Positive isolates from Afghanistan and Pakistan by source

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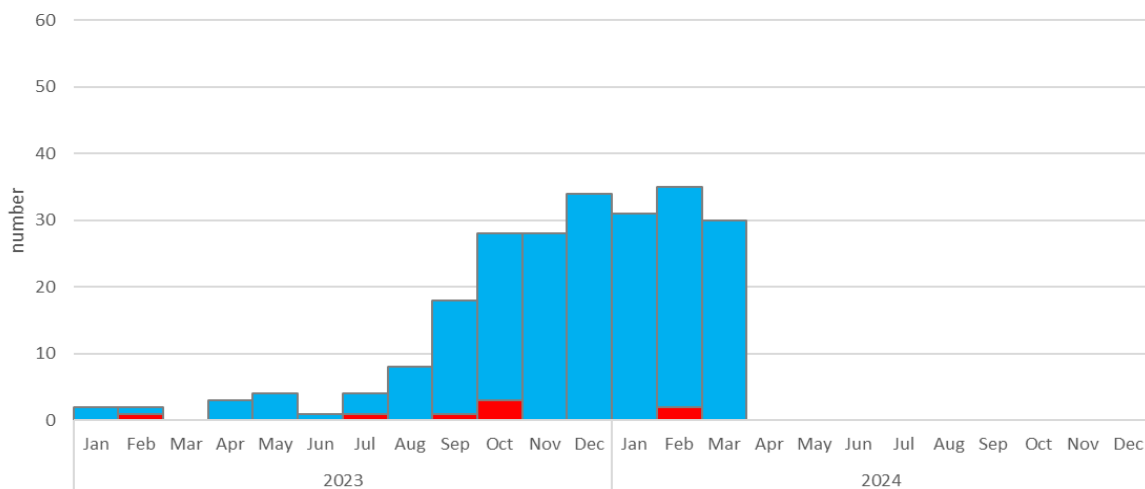
## Afghanistan



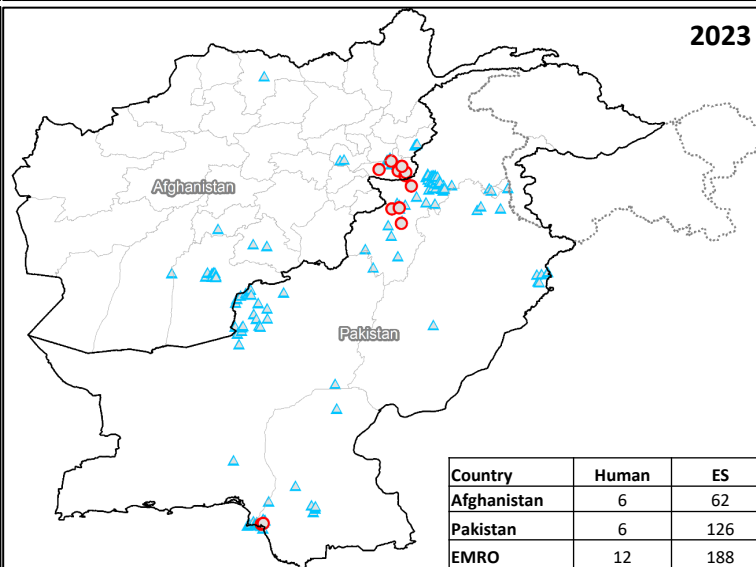
2024



## Pakistan



2023



## Virus isolation by country, last 12 months (14 Apr. 2023, to 14 Apr. 2024)

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Source / Virus type	AFG	PAK	EGY	SOM	SUD	YEM	Total
<b>Human (AFP only)</b>	<b>7</b>	<b>7</b>	<b>1</b>	<b>7</b>		<b>10</b>	<b>32</b>
Wild	7	7					14
cVDPV2				7		9	16
aVDPV2						1	1
VDPV2			1				1
VDPV3							
<b>Environment</b>	<b>59</b>	<b>216</b>	<b>12</b>	<b>9</b>	<b>7</b>	<b>10</b>	<b>313</b>
Wild	59	215					274
cVDPV2			12	9	6	8	35
VDPV2					1	2	3
Wild+VDPV1		1					1
<b>Total</b>	<b>66</b>	<b>223</b>	<b>13</b>	<b>16</b>	<b>7</b>	<b>20</b>	<b>344</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	14 April		Confirmed Wild Polio 1 Cases by month of onset												Recent most Case
			2023	2024	2023								2024				
					May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
Afghanistan	2	6	2	2	3	0	0	0	0	1	0	0	0	1	1		20-Feb-24
Bahrain	0	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			
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	0	0			
Libya	0	0	0	0	0	0	0	0	0	0	0	0					
Morocco	0	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	20	6	1	2	0	0	1	0	1	3	0	0	0	2			29-Feb-24
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				
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	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	0				
Yemen	0	0	0	0	0	0	0	0	0	0	0						
<b>EMR</b>	<b>22</b>	<b>12</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>29-Feb-24</b>

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

# Investigation of AFP cases with paralysis onset in 2023 & 2024

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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	1403	2	0	1074	0	6	0	21.66	96.36	5855	6	0	5849	0	0	0	25.97	93.99	14-Apr-24	
BAHRAIN	0	0	0	0	0	0	0	0.00		12	0	0	12	0	0	0	4.01	100.00	09-Apr-24	
DJIBOUTI	8	0	0	3	0	0	0	8.82	87.50	22	0	0	22	0	0	0	5.23	81.82	12-Apr-24	
EGYPT	502	0	0	380	0	5	0	4.13	85.86	1714	0	0	1713	1	1	0	4.16	91.48	08-Apr-24	
IRAN	266	0	0	232	0	0	0	4.39	95.86	1150	0	0	1150	0	0	0	5.48	97.13	13-Apr-24	
IRAQ	204	0	0	151	0	3	0	3.96	89.71	820	0	0	820	0	0	0	4.66	94.88	11-Apr-24	
JORDAN	15	0	0	12	0	0	0	1.10	86.67	116	0	0	116	0	0	0	2.68	93.10	04-Apr-24	
KUWAIT	13	0	0	11	0	0	0	5.31	84.62	49	0	0	49	0	0	0	5.69	91.84	14-Apr-24	
LEBANON	25	0	0	13	0	0	0	5.07	88.00	79	0	0	79	0	0	0	5.11	87.34	13-Apr-24	
LIBYA	16	0	0	2	0	1	1	2.15	100.00	115	0	0	115	0	0	0	4.43	99.13	23-Mar-24	
MOROCCO	54	0	0	0	0	11	1	1.75	61.11	150	0	0	150	0	0	0	1.28	72.67	08-Apr-24	
OMAN	2	0	0	2	0	0	0	0.55	100.00	30	0	0	30	0	0	0	2.38	100.00	11-Apr-24	
PAKISTAN	4272	2	0	3296	0	62	0	15.19	87.69	19752	6	0	19716	0	30	0	20.20	83.85	14-Apr-24	
PALESTINE	5	0	0	1	0	0	0	0.82	100.00	28	0	0	26	0	2	1	1.35	96.43	31-Mar-24	
QATAR	4	0	0	0	0	0	0	3.20	75.00	17	0	0	17	0	0	0	3.91	70.59	31-Mar-24	
SAUDI ARABIA	53	0	0	14	0	2	0	2.34	94.34	301	0	0	301	0	0	0	3.60	95.68	14-Apr-24	
SOMALIA	142	0	0	122	1	0	0	5.37	92.25	433	0	0	425	8	0	0	4.81	93.30	14-Apr-24	
SUDAN	93	0	0	1	0	7	0	3.50	90.32	473	0	0	452	0	21	1	2.28	75.90	14-Apr-24	
SYRIA	112	0	0	92	0	0	0	5.01	98.21	332	0	0	332	0	0	0	4.27	96.69	13-Apr-24	
TUNISIA	14	0	0	9	0	0	0	1.65	71.43	95	0	0	95	0	0	0	3.20	68.42	05-Apr-24	
U.A.E.	6	0	0	0	0	0	0	1.46	83.33	67	0	0	67	0	0	0	4.54	88.06	01-Apr-24	
YEMEN	314	0	0	117	1	5	1	6.73	93.95	1331	0	0	1311	9	11	1	8.33	88.05	13-Apr-24	
EMR POL	7523	4	0	5532	2	102	3	9.31	89.91	32941	12	0	32847	18	65	3	11.30	87.25		

\* 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 2024

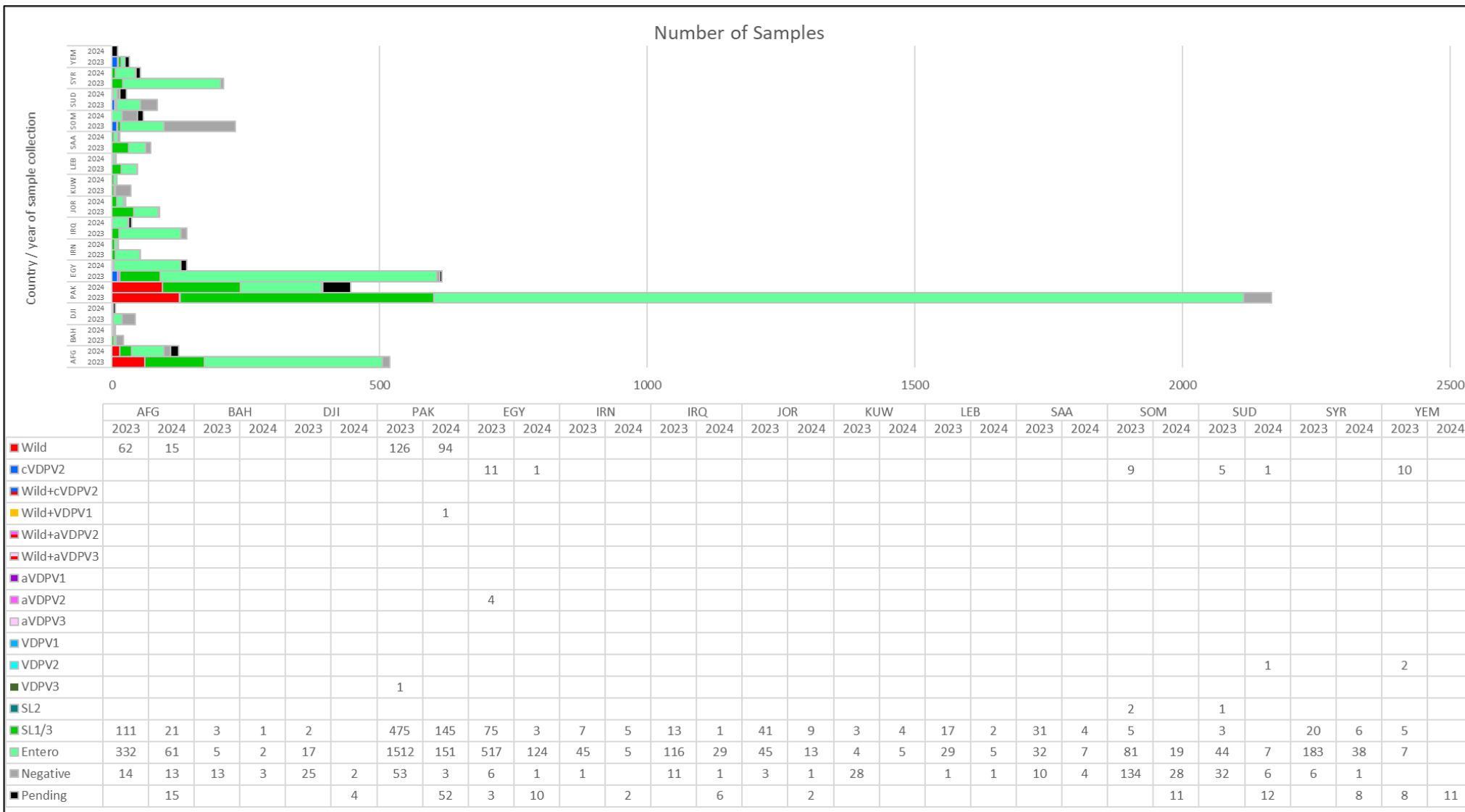
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Country	Polio laboratories		Preliminary virus isolation results of AFP cases						Poliovirus intratypic differentiation results											Indicators				Latest report Date		
	ITD / Nucleotide Sequencing		Referred for ITD		NPEV only	Negative	Pending		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		1383	58	8	107	929	108	108	2	32					47					7%	98%	100%	63%	14-Apr-24	
Bahrain	NPL Oman / CDC																							11-Apr-24		
Djibouti	NPL Kenya / CDC		8				3	1	4												0%	33%		100%	12-Apr-24	
Egypt	RRL Egypt		452	4		16	364	28	40		1					2					4%	97%	100%	100%	8-Apr-24	
Iran	NPL Iran / CDC		282	2		3	258	19			1										1%	100%	100%	99%	13-Apr-24	
Iraq	NPL Iraq, RRL Egypt		211	7		25	145	27	7		2					5					13%	100%	100%	99%	12-Apr-24	
Jordan	NPL Jordan, RRL Egypt		15			3	12														20%	80%		93%	14-Apr-24	
Kuwait	RRL Kuwait / RIVM		13	1		1	11												1		4%	85%		100%	14-Apr-24	
Lebanon	NPL Syria, RRL Egypt		13				13														0%	100%			4-Apr-24	
Libya	RRL Tunisia / RIVM		13				13														0%	100%		38%	4-Apr-24	
Morocco	NPL Morocco, RRL Tunisia		43				36	1	6												0%	100%		100%	5-Apr-24	
Oman	NPL Oman / CDC		3				2	1													5%	100%		100%	11-Apr-24	
Pakistan	RRL Pakistan		4239	249	7	346	3001	290	331	2	143					174			1		7%	97%	100%	98%	14-Apr-24	
Palestine & UNRWA			5				5														0%	20%		100%	31-Mar-24	
Qatar	NPL Oman / CDC		4				3	1													0%	100%		100%	11-Apr-24	
Saudi Arabia	NPL Saudi Arabia / CDC		41	2		5	32		2							1			1		12%	90%	50%	100%	17-Mar-24	
Somalia	NPL Kenya / CDC		142	3		14	106	7	12		2					1					11%	3%		90%	14-Apr-24	
Sudan	NPL Sudan / RRL Egypt		53			3	10		40												23%	100%		69%	14-Apr-23	
Syria	NPL Syria / RRL Egypt		109			2	92	6	9												3%	100%			4-Apr-24	
Tunisia	RRL Tunisia		13				10	1	2												0%	100%		100%	4-Apr-24	
U.A.E	NPL Oman / CDC																				0%				11-Apr-24	
Yemen	NPLs Oman, Jordan & Kenya, RRL Egypt		143	4		24	93	23	1		1					1				1	21%	49%	100%	24%	13-Apr-24	
<b>Total EMR 2024</b>			<b>7185</b>	<b>330</b>	<b>15</b>	<b>549</b>	<b>5138</b>	<b>513</b>	<b>562</b>	<b>4</b>	<b>182</b>				<b>2</b>	<b>233</b>		<b>1</b>		<b>1</b>	<b>2</b>	<b>7%</b>	<b>95%</b>	<b>100%</b>	<b>90%</b>	
<b>Total EMR 2023</b>			<b>32170</b>	<b>1012</b>	<b>81</b>	<b>4527</b>	<b>26506</b>	<b>1</b>	<b>36</b>	<b>12</b>	<b>656</b>			<b>8</b>	<b>22</b>	<b>766</b>		<b>4</b>		<b>3</b>	<b>1</b>	<b>12%</b>	<b>90%</b>	<b>100%</b>	<b>93%</b>	

\* Two WPV1 cases are confirmed due to positive contacts (Index cases were negative for WPV1)

# Environmental Surveillance Isolation by Classification

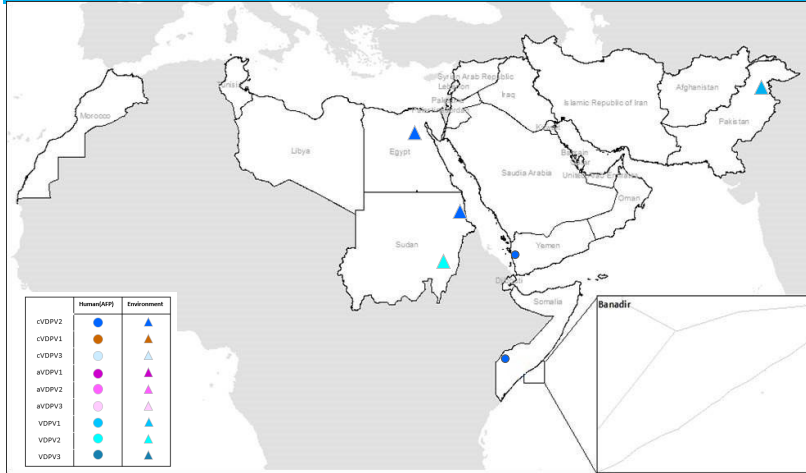
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# VDPVs isolations by Source and Country

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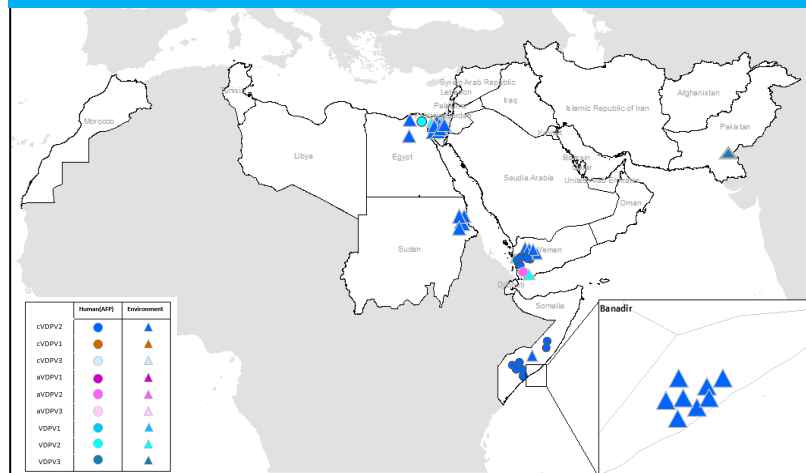
## VDPV Isolates, EMR countries, 2024



## VDPVs isolated from 2019-2024

Isolate type	EMR Country	Sources																																		
		AFP cases(Human)						Contacts(Human)						Environment						Other Sources (Healthy Children)																
		2019	2020	2021	2022	2023	2024	Most recent	2019	2020	2021	2022	2023	2024	Most recent	2019	2020	2021	2022	2023	2024	Most recent	2019	2020	2021	2022	2023	Most recent								
cVDPV2	Afghanistan	307	43					09-07-21															174	40					23-06-21							
	Djibouti																							5	12				22-05-22							
	Egypt																							12	6	11	1		31-01-24							
	Iran																							3	1				20-02-21							
	Pakistan	22	135	8				23-04-21															38	135	35				11-08-21							
	Somalia	3	14	1	5	8	1	20-01-24	1	11		6	3		03-08-23	5	26	1	6	9			26-10-23	1	5		1			10-03-22						
	Sudan		58		1			31-10-22	18						08-10-20		14		1	5	1		11-01-24		4					24-08-20						
	Yemen			66	162	8	1	17-01-24			23	40	1		11-06-23		13	26	10				25-09-23													
cVDPV1	Yemen	1	31	3				27-03-21	2						10-07-19																					
cVDPV3	Somalia							07-09-18							30-06-18														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	1													03-02-19								
	Yemen			3	1			05-09-23			1			09-12-21																						
aVDPV3	Afghanistan			1				23-06-20																												
	Egypt														2													30-09-20								
	Pakistan															1												05-04-21								
VDPV1	Egypt														1													11-07-21								
	Pakistan																									1		14-02-24								
VDPV2	Egypt					1		17-07-23																												
	Iran																1											04-02-22								
	Jordan																2											25-05-22								
	Somalia					1		01-09-22									1											22-04-22								
	Sudan																									1		24-01-24								
VDPV3	Yemen																								3	2		27-05-23								
	Pakistan																									1		14-02-23								

## VDPV Isolates, EMR countries, 2023





# 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)