

## Highlights



**Children Paralyzed by polio**

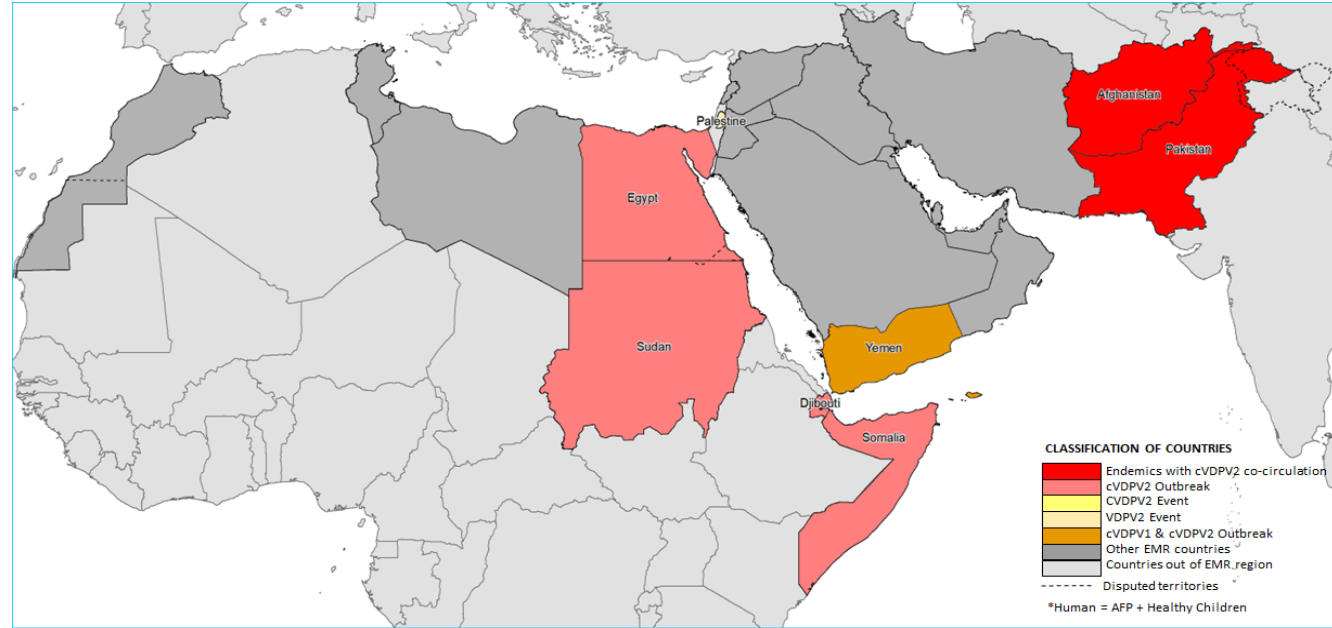
2023	2024
<ul style="list-style-type: none"> <li>12 cases of Wild Polio 1               <ul style="list-style-type: none"> <li>06 in Afghanistan</li> <li>06 in Pakistan</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>4 cases of Wild Polio 1               <ul style="list-style-type: none"> <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>4 cases of cVDPV2               <ul style="list-style-type: none"> <li>02 in Somalia</li> <li>02 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>122 samples Wild Polio 1               <ul style="list-style-type: none"> <li>25 in Afghanistan</li> <li>97 in Pakistan</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>41 samples cVDPV2               <ul style="list-style-type: none"> <li>11 in Egypt</li> <li>16 in Yemen</li> <li>09 in Somalia</li> <li>05 in Sudan</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>4 sample cVDPV2               <ul style="list-style-type: none"> <li>1 in Sudan</li> <li>1 in Egypt</li> <li>2 in Yemen</li> </ul> </li> </ul>

## Classification of EMR countries by type of poliovirus circulation

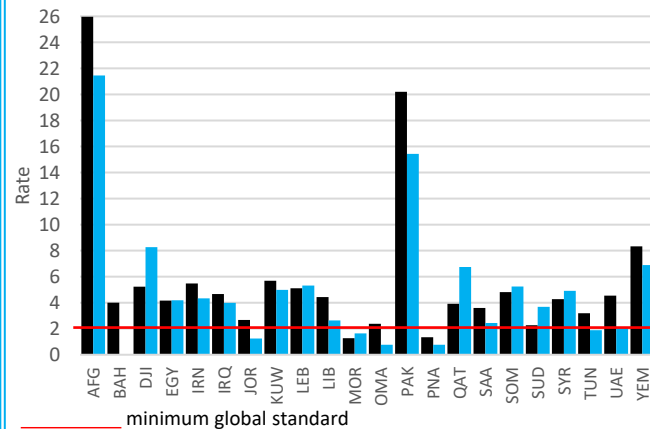


## Highlights of the week

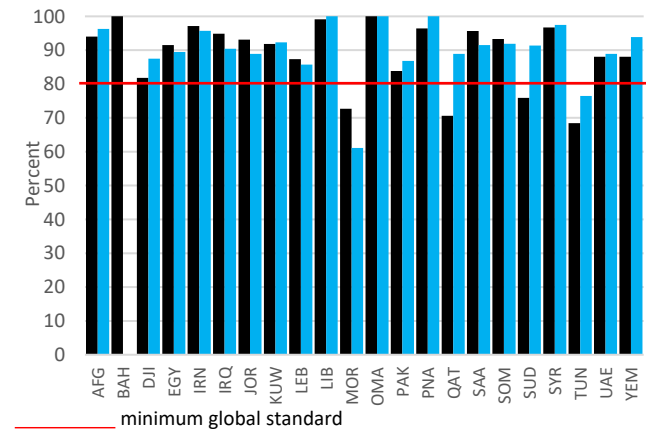
- Wild Poliovirus**
- No new WPV1 cases reported this week. The WPV1 case count in 2024 to date is 4 (2 each from Afghanistan and Pakistan), and for 2023, the count remains to be 12 (6 each from Afghanistan and Pakistan).
  - Twelve new WPV1 positive environmental samples (ES) in 2024 reported this week - 10 from Afghanistan and 2 from Pakistan.
  - Afghanistan reported 10 WPV1 isolates from environmental samples, 5 collected from Kandahar province (all from Kandahar district), 1 from Uruzgan province (Tirinkot district), 1 from Laghman province (Mehtarlam district), 1 from Nangarhar province (Jalalabad district), 1 from Paktia province (Gardez district), and 1 from Hilmand province (Lashkargah district). Collection dates vary between 21<sup>st</sup> February to 24<sup>th</sup> March 2024.
  - Pakistan reported 2 WPV1 isolates, one from Quetta district of Balochistan province, and another from Karachi Keamari town of Sindh province, the dates of collection are 26<sup>th</sup> March 2024 and 1<sup>st</sup> April 2024 respectively.
  - ES count to date is 122 (25 from Afghanistan and 97 from Pakistan) and in 2023, the count remains to be 188 (62 in Afghanistan and 126 in Pakistan).
  - Advance notification:** (Details will be included in the next weekly polio bulletin)
    - 2 new WPV1 positive environmental samples were reported this week from Afghanistan. The positive samples details are one from Herat district of Herat province with a date of sample collection on 25<sup>th</sup> March 2024 and the other is from Kandahar district of Kandahar province with a date of sample collection on 21<sup>st</sup> February 2024.

- Vaccine derived poliovirus (VDPV)**
- Two new cVDPV2 cases reported this week. One from Yemen, Al Hudaidah province (Allahya district), with a date of onset on 13<sup>th</sup> February 2024, and the other is from Somalia, Bay province (Baidda district), with date of onset on 8<sup>th</sup> March 2024. The total count of cVDPV2 cases to date in 2024 is 4 (2 each from Somalia and Yemen) and in 2023 the count remains to be 16 (8 each from Somalia and Yemen).
  - Eight new cVDPV2 positive ES samples reported from Yemen this week (6 in 2023 and 2 in 2024). The reported ES are 4 each from Sana'a City province (all from Bani El Harith district) and Al Hudaidah province (all from Al Meina district). Collection dates vary between 21<sup>st</sup> October 2023 to 22<sup>nd</sup> January 2024.
  - The count of the cVDPV2 positive environmental samples in 2024 to date is 4 (2 from Yemen and 1 each from Egypt and Sudan) and in 2023 the count remains to be 41 (16 from Yemen, 11 from Egypt, 9 from Somalia, and 5 from Sudan).
  - Advance notification:** (Details will be included in the next weekly polio bulletin)
    - Three new cVDPV2 cases were reported this week from Yemen with dates of onset ranging between 3<sup>rd</sup> – 14<sup>th</sup> February 2024. The cases' details are as follows: 2 from Al Hudaidah province (one each from Alzeidyah and Alghanawis districts), and 1 case from Bani-Elharith district of Sanaa city province.

### Non polio AFP rate



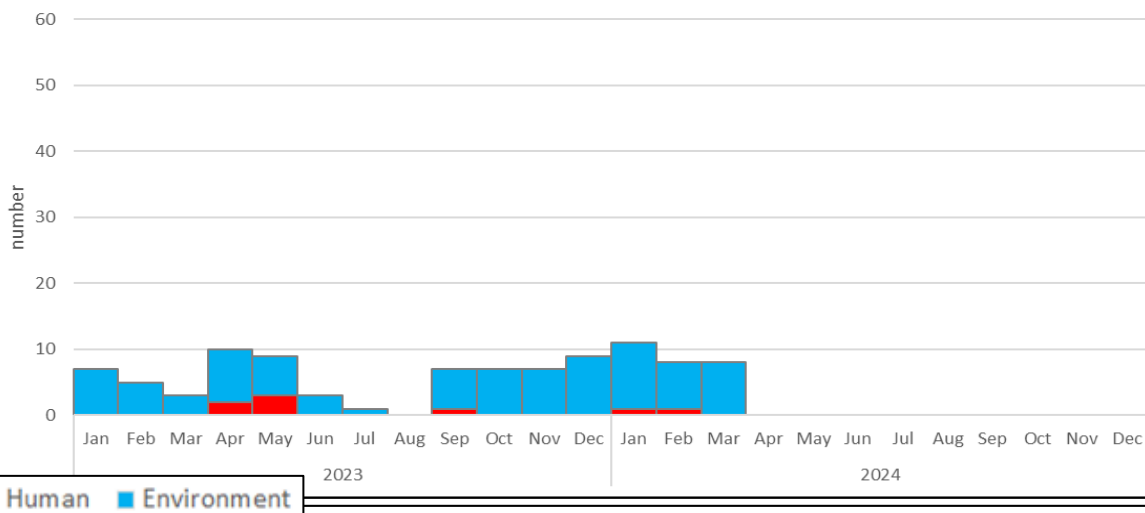
### Stool adequacy



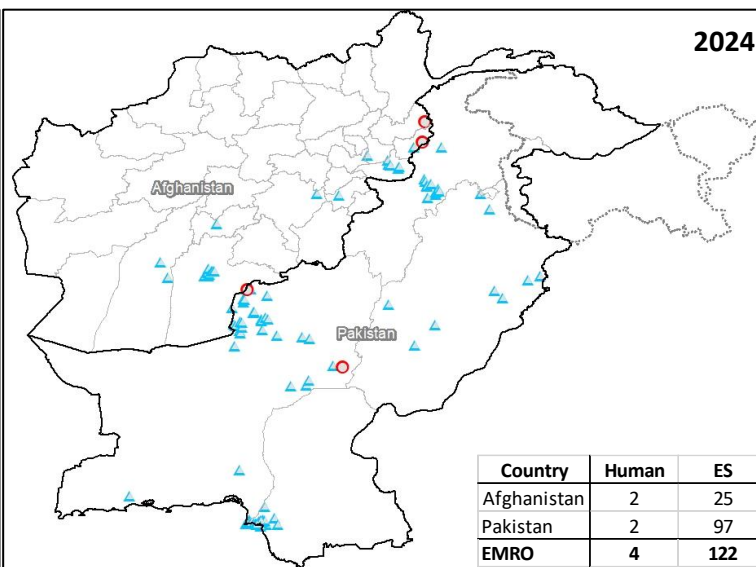
# WPV1 Positive isolates from Afghanistan and Pakistan by source

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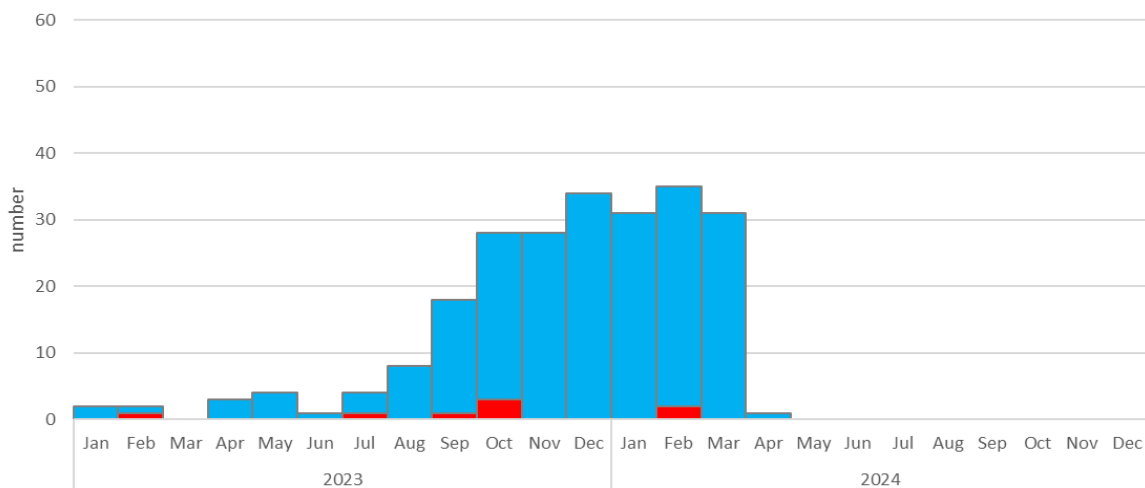
## Afghanistan



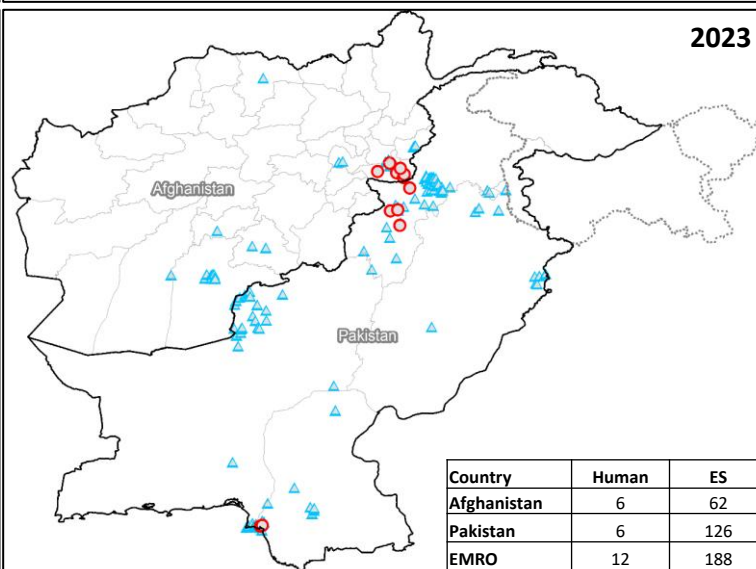
2024



## Pakistan



2023



## Virus isolation by country, last 12 months (21 Apr. 2023, to 21 Apr. 2024)

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Source / Virus type	AFG	PAK	EGY	SOM	SUD	YEM	Total
<b>Human (AFP only)</b>	<b>6</b>	<b>7</b>	<b>1</b>	<b>8</b>		<b>10</b>	<b>32</b>
Wild	6	7					13
cVDPV2				8		9	17
aVDPV2						1	1
VDPV2			1				1
<b>Environment</b>	<b>69</b>	<b>217</b>	<b>12</b>	<b>9</b>	<b>7</b>	<b>17</b>	<b>331</b>
Wild	69	216					285
cVDPV2			12	9	6	15	42
VDPV2					1	2	3
Wild+VDPV1		1					1
<b>Total</b>	<b>75</b>	<b>224</b>	<b>13</b>	<b>17</b>	<b>7</b>	<b>27</b>	<b>363</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	21 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	0	0		
Kuwait	0	0	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	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	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	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	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	1483	2	0	1211	0	11	0	21.45	96.29	5855	6	0	5849	0	0	0	25.97	93.99	21-Apr-24
BAHRAIN	0	0	0	0	0	0	0	0.00		12	0	0	12	0	0	0	4.01	100.00	21-Apr-24
DJIBOUTI	8	0	0	3	0	0	0	8.27	87.50	22	0	0	22	0	0	0	5.23	81.82	20-Apr-24
EGYPT	542	0	0	384	0	7	0	4.18	89.48	1714	0	0	1713	1	1	0	4.16	91.48	18-Apr-24
IRAN	280	0	0	259	0	1	0	4.33	95.71	1150	0	0	1150	0	0	0	5.48	97.13	20-Apr-24
IRAQ	219	0	0	175	0	8	0	3.99	90.41	820	0	0	820	0	0	0	4.66	94.88	19-Apr-24
JORDAN	18	0	0	14	0	0	0	1.25	88.89	116	0	0	116	0	0	0	2.68	93.10	18-Apr-24
KUWAIT	13	0	0	13	0	0	0	4.98	92.31	49	0	0	49	0	0	0	5.69	91.84	21-Apr-24
LEBANON	28	0	0	13	0	0	0	5.32	85.71	79	0	0	79	0	0	0	5.11	87.34	21-Apr-24
LIBYA	21	0	0	13	0	0	0	2.64	100.00	115	0	0	115	0	0	0	4.43	99.13	20-Apr-24
MOROCCO	54	0	0	0	0	14	1	1.64	61.11	150	0	0	150	0	0	0	1.28	72.67	8-Apr-24
OMAN	3	0	0	2	0	0	0	0.77	100.00	30	0	0	30	0	0	0	2.38	100.00	18-Apr-24
PAKISTAN	4629	2	0	3714	0	93	0	15.43	86.82	19754	6	0	19723	0	25	0	20.20	83.85	21-Apr-24
PALESTINE	5	0	0	1	0	0	0	0.77	100.00	28	0	0	26	0	2	1	1.35	96.43	31-Mar-24
QATAR	9	0	0	0	0	0	0	6.74	88.89	17	0	0	17	0	0	0	3.91	70.59	21-Apr-24
SAUDI ARABIA	59	0	0	21	0	0	0	2.44	91.53	301	0	0	301	0	0	0	3.60	95.68	21-Apr-24
SOMALIA	148	0	0	132	2	0	0	5.25	91.89	433	0	0	425	8	0	0	4.81	93.30	21-Apr-24
SUDAN	104	0	0	1	0	15	1	3.68	91.35	473	0	0	452	0	21	1	2.28	75.90	21-Apr-24
SYRIA	117	0	0	92	0	0	0	4.91	97.44	332	0	0	332	0	0	0	4.27	96.69	20-Apr-24
TUNISIA	17	0	0	9	0	0	0	1.88	76.47	95	0	0	95	0	0	0	3.20	68.42	20-Apr-24
U.A.E.	9	0	0	0	0	0	0	2.05	88.89	67	0	0	67	0	0	0	4.54	88.06	15-Apr-24
YEMEN	343	0	0	117	2	7	1	6.90	93.88	1331	0	0	1311	9	11	1	8.33	88.05	20-Apr-24
EMR POL	8109	4	0	6174	4	156	3	9.41	89.64	32943	12	0	32854	18	60	3	11.30	87.24	

\* 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

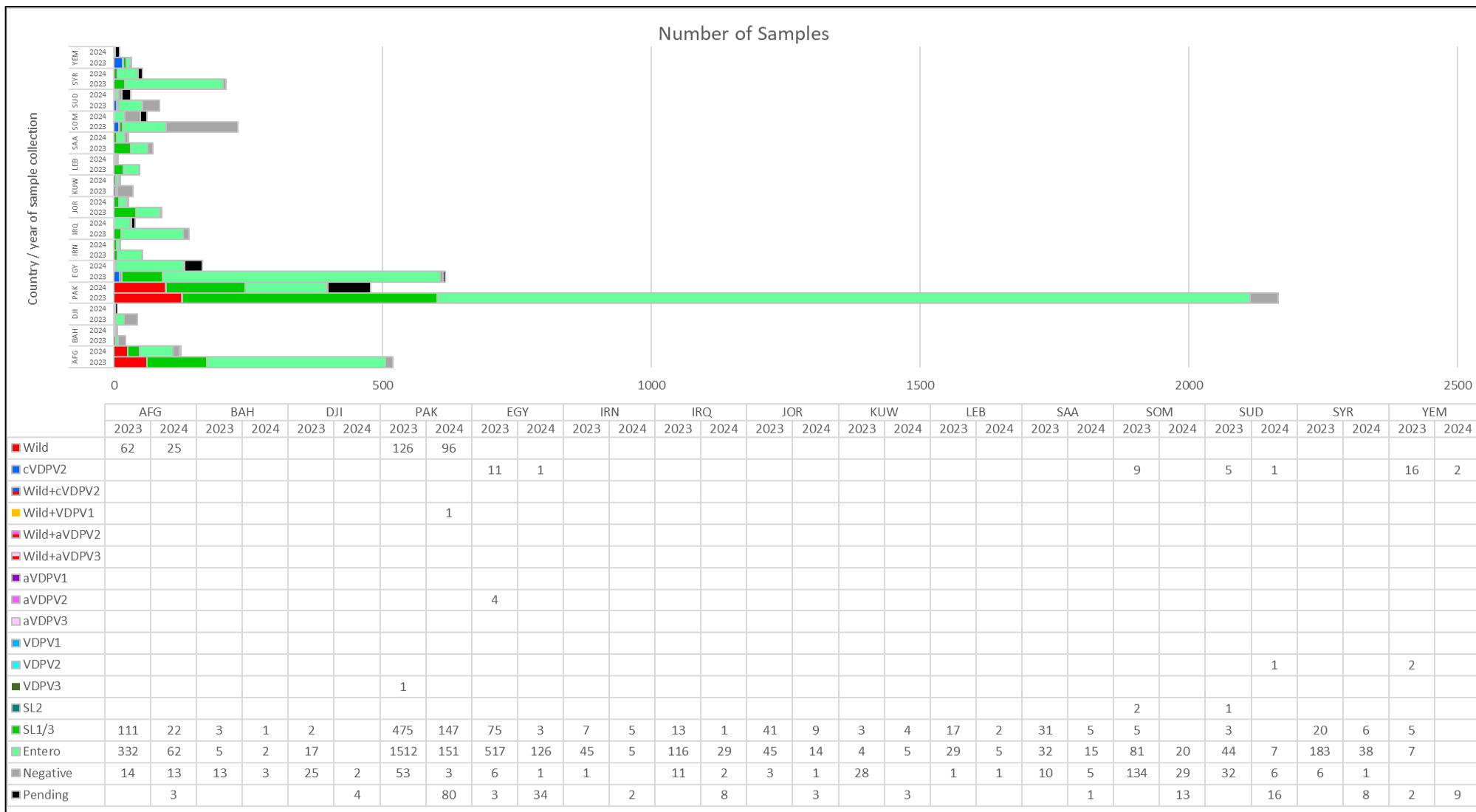
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Country	Polio laboratories		Preliminary virus isolation results of AFP cases						Poliovirus intratypic differentiation results											Indicators				Latest report Date	
	ITD / Nucleotide Sequencing		Referred for ITD		NPEV only	Negative	Pending		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									
Afghanistan	RRL Pakistan		1470	61	10	131	1042	93	75	2	36					51					8%	91%	100%	65%	21-Apr-24
Bahrain	NPL Oman / CDC																							18-Apr-24	
Djibouti	NPL Kenya / CDC		8				3		5												0%	33%		100%	20-Apr-24
Egypt	RRL Egypt		512	5		18	398	50	41		1					3					4%	97%	100%	100%	18-Apr-24
Iran	NPL Iran / CDC		306	2		3	272	29			1					2					1%	100%	100%	99%	20-Apr-24
Iraq	NPL Iraq, RRL Egypt		226	9		27	161	24	5		3					7					12%	100%	100%	99%	19-Apr-24
Jordan	NPL Jordan, RRL Egypt		15			3	12														20%	80%		93%	21-Apr-24
Kuwait	RRL Kuwait / RIVM		13	1		1	11												1		4%	85%		100%	18-Apr-24
Lebanon	NPL Syria, RRL Egypt		13				13														0%	100%			04-Apr-24
Libya	RRL Tunisia / RIVM		13				13														0%	100%		38%	21-Apr-24
Morocco	NPL Morocco, RRL Tunisia		43				36		7												0%	100%		100%	21-Apr-24
Oman	NPL Oman / CDC		3				2	1													5%	100%		100%	18-Apr-24
Pakistan	RRL Pakistan		4541	265	9	415	3352	203	263	2	155					185		1			7%	92%	100%	97%	21-Apr-24
Palestine & UNRWA			5				5														0%	20%		100%	31-Mar-24
Qatar	NPL Oman / CDC		8				4	4													0%	100%		100%	18-Apr-24
Saudi Arabia	NPL Saudi Arabia / CDC		53	3		5	42		3		1					1			1		9%	86%	67%	100%	16-Apr-24
Somalia	NPL Kenya / CDC		148	4		14	116	1	13		2				2	1					10%	3%		91%	21-Apr-24
Sudan	NPL Sudan / RRL Egypt		53			5	48														8%	100%		36%	14-Apr-23
Syria	NPL Syria / RRL Egypt		109			2	92		15												3%	100%			04-Apr-24
Tunisia	RRL Tunisia		19				16	3													0%	100%		100%	21-Apr-24
U.A.E	NPL Oman / CDC																				0%				18-Apr-24
Yemen	NPLs Oman, Jordan & Kenya, RRL Egypt		155	7		25	99	12	13		1				2	1		4			20%	53%	100%	22%	20-Apr-24
<b>Total EMR 2024</b>			<b>7713</b>	<b>357</b>	<b>19</b>	<b>649</b>	<b>5737</b>	<b>420</b>	<b>440</b>	<b>4</b>	<b>200</b>				<b>4</b>	<b>251</b>		<b>5</b>	<b>1</b>	<b>1</b>	<b>7%</b>	<b>90%</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>26507</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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# Important links

EMR Polio Bulletin - Issue No. 1333, Week 16 (ending on 21/04/2024)

## 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)