

Highlights



Children
Paralyzed
by polio

2022

- 22 cases of Wild Polio 1
 - 02 in Afghanistan
 - 20 in Pakistan

2023

- 1 case of Wild Polio 1
 - 01 in Pakistan

- 168 cases of cVDPV2
 - 05 in Somalia
 - 162 in Yemen
 - 01 in Sudan

- 1 case of cVDPV2
 - 01 in Somalia

- Zero cVDPV1 cases

- Zero case of cVDPV1



Sewage
water
sampling

2022

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

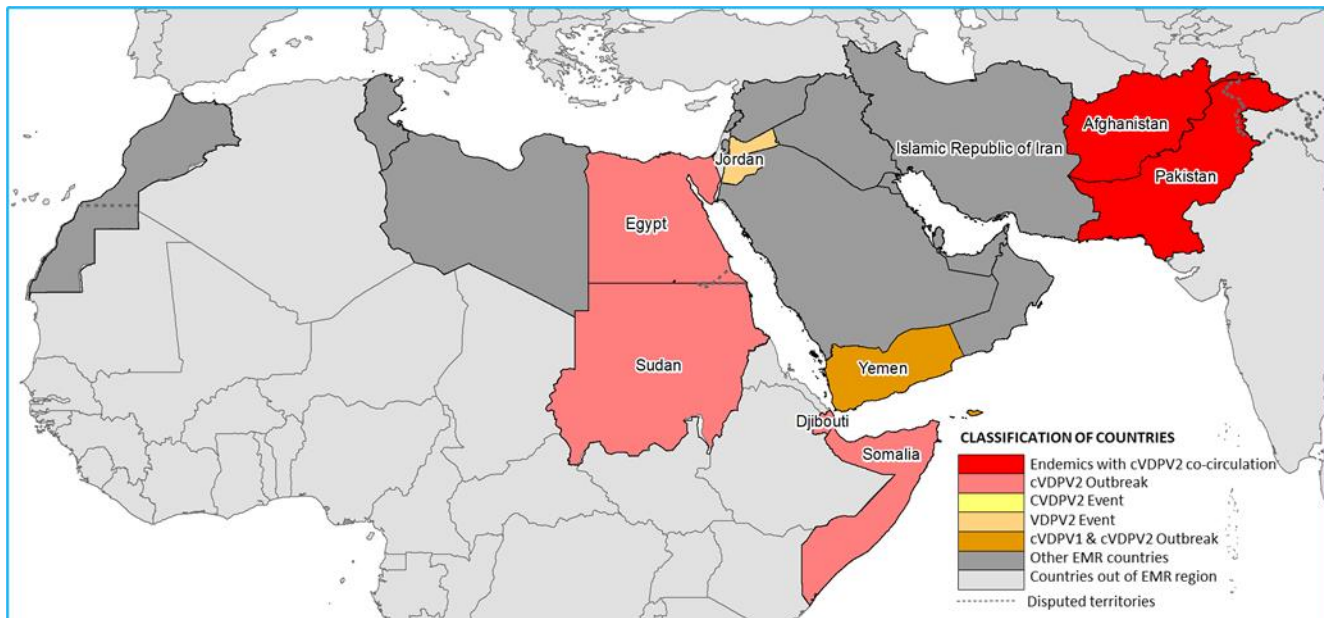
2023

- 16 samples Wild Polio 1
 - 13 in Afghanistan
 - 03 in Pakistan

- 44 samples cVDPV2
 - 06 in Egypt
 - 12 in Djibouti
 - 05 in Somalia
 - 01 in Sudan
 - 20 in Yemen

- Zero samples of cVDPV2

Classification of EMR countries by type of poliovirus circulation



Highlights of the week

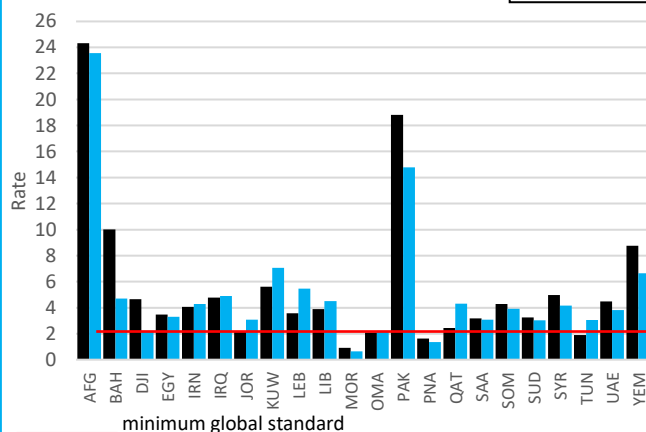
Wild Poliovirus

- One new Wild Poliovirus case reported this week – first WPV1 case in 2023 from Pakistan. The 36 old male child case was reported from Bannu district, Khyber Pakhtunkhwa province, with date of onset 20th February 2023.
- The WPV1 cases count in 2022 remains to be 22 cases (2 from Afghanistan and 20 from Pakistan).
- Four new WPV1 positive environmental samples reported this week in 2023 from Afghanistan. The new WPV1 ES(s) were reported as follows: three from Nangarhar province (1 from Batikot district and 2 from Jalalabad district) and one from Kunar province (Asadabad district) with specimens' collection date between 19th February to 1st March 2023. Accordingly, in 2023 to date, the positive WPV1 ES count is 16 (13 in Afghanistan and 3 in Pakistan) while in 2022, the count remains to be 59 (22 in Afghanistan and 37 in Pakistan).

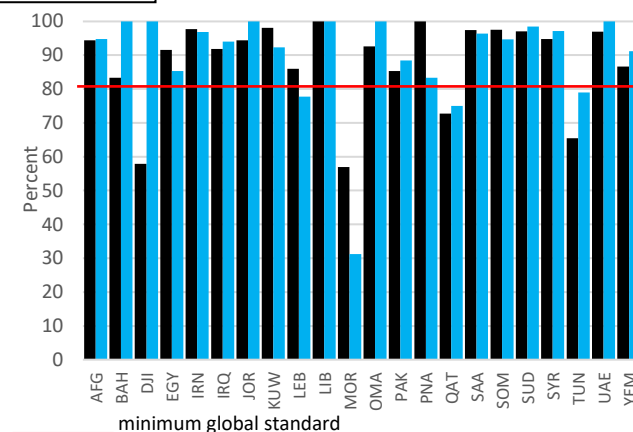
Vaccine derived poliovirus (VDPV)

- No new VDPV isolates from human or environmental samples reported this week. The cVDPV2 cases count in 2023 remains to be 1 case from Somalia while the count in 2022 remains to be 168 cases (1 from Sudan, 5 from Somalia and 162 from Yemen).
- In 2022 to date, the positive cVDPV2 ES count remains to be 44 (1 in Sudan, 5 in Somalia, 6 in Egypt, 12 in Djibouti and 20 in Yemen) and no cVDPV ES reported in 2023.

Non polio AFP rate



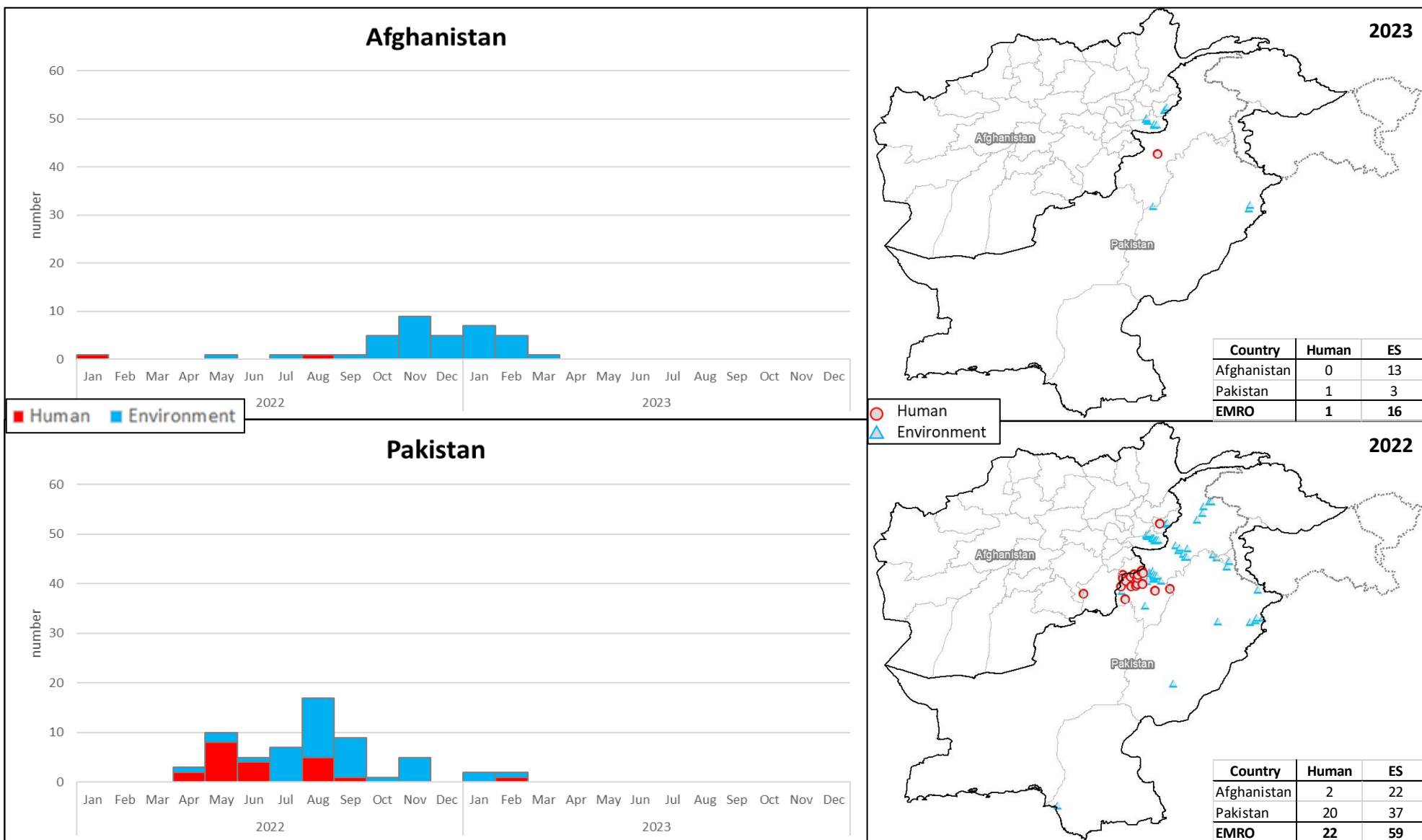
Stool adequacy



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

WPV1 Positive isolates from Afghanistan and Pakistan by source

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Virus isolation by country, last 12 months (Mar. 19, 2022 to Mar. 19, 2023)

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Source / Virus type	AFG	DJI	PAK	EGY	JOR	SOM	SUD	YEM	Total
Human (AFP only)	1		21			6	1	91	120
Wild	1		21						22
cVDPV2						4	1	91	96
aVDPV2						2			2
VDPV2									
Environment	35	5	40	4	2	5	1	22	114
Wild	35		40						75
cVDPV2		5		4		4	1	21	35
aVDPV2									
VDPV2					2	1		1	4
Total	36	5	61	4	2	11	2	113	234

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	19 March		Confirmed Wild Polio 1 Cases by month of onset												Recent most Case
					2022									2023			
			2022	2023	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Afghanistan	4	2	1	0	0	0	0	0	1	0	0	0	0				29-Aug-22
Bahrain	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	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					
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	0	0		0			
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Pakistan	1	20	0	1	2	8	4	0	5	1	0	0		0	1		20-Feb-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	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				
Sudan	0	0	0	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				
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	0					
EMR	5	22	1	1	2	8	4	0	6	1	0	0	0	0	1	0	20-Feb-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	1132	0	0	841	0	0	0	23.55	94.79	5368	2	0	5356	1	5	0	24.33	94.41	19-Mar-23
BAHRAIN	3	0	0	1	0	0	0	4.69	100.00	30	0	0	27	0	2	1	10.02	83.33	19-Mar-23
DJIBOUTI	2	0	0	0	0	0	0	2.23	100.00	19	0	0	19	0	0	0	4.65	57.89	18-Mar-23
EGYPT	292	0	0	173	0	0	0	3.31	85.27	1394	0	0	1378	0	11	0	3.48	91.54	16-Mar-23
IRAN	193	0	0	174	0	0	0	4.29	96.89	824	0	0	824	0	0	0	4.06	97.69	18-Mar-23
IRAQ	185	0	0	113	0	0	0	4.91	94.05	835	0	0	834	0	1	0	4.78	91.86	17-Mar-23
JORDAN	28	0	0	21	0	0	0	3.08	100.00	89	0	0	89	0	0	0	2.14	94.38	16-Mar-23
KUWAIT	13	0	0	7	0	0	0	7.07	92.31	52	0	0	52	0	0	0	5.62	98.08	12-Mar-23
LEBANON	18	0	0	1	0	0	0	5.46	77.78	57	0	0	49	0	7	0	3.58	85.96	12-Mar-23
LIBYA	25	0	0	17	0	0	0	4.51	100.00	101	0	0	101	0	0	0	3.89	100.00	19-Mar-23
MOROCCO	16	0	0	3	0	0	0	0.65	31.25	93	0	0	52	0	33	1	0.91	56.99	24-Feb-23
OMAN	6	0	0	5	0	0	0	2.23	100.00	27	0	0	27	0	0	0	2.10	92.59	12-Mar-23
PAKISTAN	3092	1	0	2388	0	0	0	14.78	88.45	18995	20	1	18789	0	124	0	18.82	85.30	19-Mar-23
PALESTINE	6	0	0	2	0	0	0	1.35	83.33	33	0	0	32	0	1	1	1.64	100.00	19-Mar-23
QATAR	4	0	0	0	0	0	0	4.31	75.00	11	0	0	11	0	0	0	2.44	72.73	18-Mar-23
SAUDI ARABIA	55	0	0	3	0	0	0	3.08	96.36	274	0	0	272	0	0	0	3.18	97.45	19-Mar-23
SOMALIA	75	0	0	46	1	0	0	3.91	94.67	356	0	0	349	6	0	0	4.28	97.47	19-Mar-23
SUDAN	133	0	0	105	0	0	0	3.04	98.50	650	0	0	648	1	1	0	3.25	97.08	16-Mar-23
SYRIA	69	0	0	57	0	0	0	4.17	97.10	382	0	0	382	0	0	0	4.96	94.76	17-Mar-23
TUNISIA	19	0	0	11	0	0	0	3.06	78.95	55	0	0	55	0	0	0	1.91	65.45	17-Mar-23
U.A.E.	12	0	0	0	0	0	0	3.81	100.00	66	0	0	60	0	5	0	4.47	96.97	15-Mar-23
YEMEN	226	0	0	22	0	0	0	6.63	91.15	1377	0	1	1195	162	9	1	8.76	86.64	18-Mar-23
EMR POL	5604	1	0	3990	1	0	0	9.00	90.58	31088	22	2	30601	170	199	4	10.76	88.32	

* 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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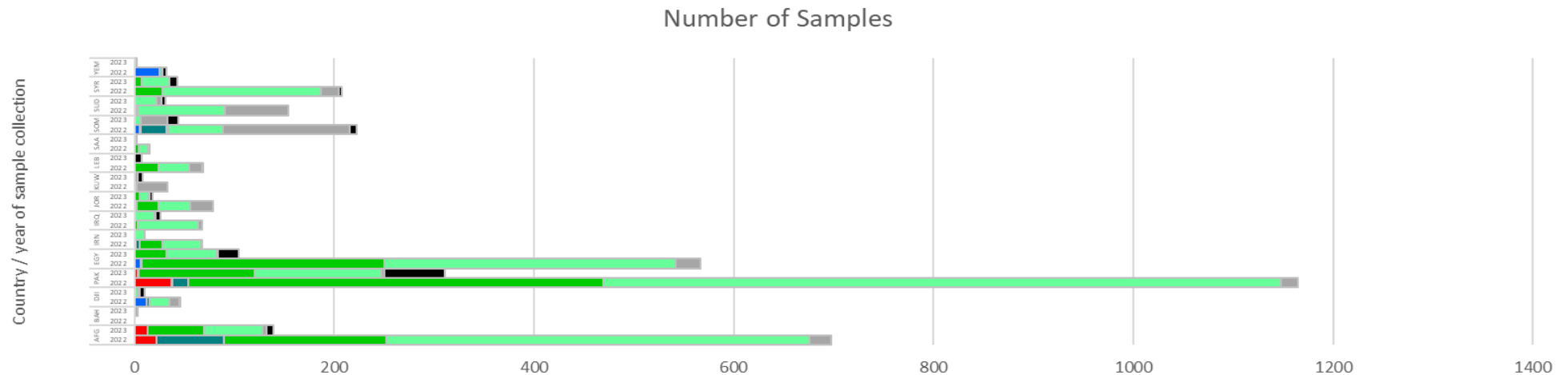
Country	Polio laboratories	AFP cases with specimens	Preliminary virus isolation results of AFP cases						Poliovirus intratypic differentiation results														Indicators				Latest report Date
	ITD / Nucleotide Sequencing		Referred for ITD		NPEV only	Negative	Pending		Type 1			Type 2			Type 3			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	1113	55	2	88	734	201	2		29						37					10	8%	100%	100%	100%	19-Mar-23	
Bahrain	NPL Oman / CDC																									19-Mar-23	
Djibouti	NPL Kenya / CDC	2						2																		18-Mar-23	
Egypt	RRL Egypt	302	3		22	183	90	4		2						2						10%	95%	100%	100%	16-Mar-23	
Iran	NPL Iran / CDC	244	1			210	32	1		1												0%	100%	100%	100%	18-Mar-23	
Iraq	NPL Iraq, RRL Egypt	186	2		10	136	34	4		1						2						6%	100%	100%	100%	16-Mar-23	
Jordan	NPL Jordan, RRL Egypt	28			6	19	3															24%	95%		100%	19-Mar-23	
Kuwait	RRL Kuwait / RIVM	15			1	9	5															11%	100%		100%	12-Mar-23	
Lebanon	NPL Jordan, NPL Syria, RRL Egypt	15				4	11															0%	100%			16-Mar-23	
Libya	RRL Tunisia / RIVM	19				17		2														0%	100%		100%	9-Mar-23	
Morocco	NPL Morocco, RRL Tunisia	26			1	18	7															3%	100%		95%	17-Mar-23	
Oman	NPL Oman / CDC	9			1	7	1															5%	100%		100%	19-Mar-23	
Pakistan	RRL Pakistan	3039	107	3	203	2318	381	14	1	63						88				3	6%	100%	100%	98%	19-Mar-23		
Palestine & UNRWA		6				5	1															0%	60%		100%	19-Mar-23	
Qatar	NPL Oman / CDC	3				3																0%	100%		100%	19-Mar-23	
Saudi Arabia	NPL Saudi Arabia / CDC	34	1		1	17		15		1												5%	100%	100%	100%	12-Feb-23	
Somalia	NPL Kenya / CDC	75	2		8	37	9	19					1	1								17%	11%		100%	19-Mar-23	
Sudan	NPL Sudan / RRL Egypt	144	1		24	91	27	1								1						20%	99%	100%	100%	18-Mar-23	
Syria	NPL Syria / RRL Egypt	68			2	55	11															4%	100%			16-Mar-23	
Tunisia	RRL Tunisia	51	1		1	43		6								1						2%	100%	1	98%	9-Mar-23	
U.A.E	NPL Oman / CDC	7					7																			19-Mar-23	
Yemen	NPLs Oman, Jordan & Kenya, RRL Egypt	87	1		12	65	1	8								1				1	13%	37%	100%	12%	18-Mar-23		
Total EMR 2023		5473	174	5	380	3971	821	78	1	97			1	1		132				14	7%	98%	100%	97%			
Total EMR 2022		30457	1065	119	4830	24420	1	18	22 *	555	1		38	169 **		721		6	8	2	3	13%	93%	89%	93%		

* In 2022 - Three WPV1 cases are 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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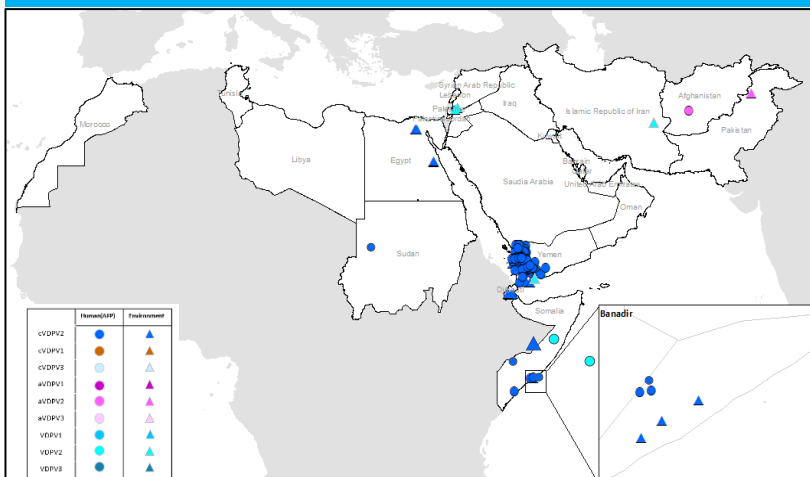


	AFG		BAH		DJI		PAK		EGY		IRN		IRQ		JOR		KUW		LEB		SAA		SOM		SUD		SYR		YEM	
	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022	2023
Wild	22	13					37	3																						
cVDPV2					12				6														5		1				25	
Wild+cVDPV2																														
Wild+aVDPV2																														
Wild+aVDPV3																														
aVDPV1																														
aVDPV2							1																							
aVDPV3																														
VDPV1																														
VDPV2									1		1				2								1						3	
VDPV3							1																							
SL2	68				3		16				4											26								
SL1/3	162	57					415	116	243	32	23		3		22	5			24		4		2		2		28	7		
Entero	424	58			20	3	679	127	292	51	39	10	61	20	32	9	2		31		9	2	55	6	88	22	159	28		
Negative	22	4		3	10	2	17	3	25	1	1		4	1	23	1	31	3	13		2		127	27	63	5	18			
Pending		7			1	5		61		20				5		3		5	1	7			6	11		4	3	8	4	2

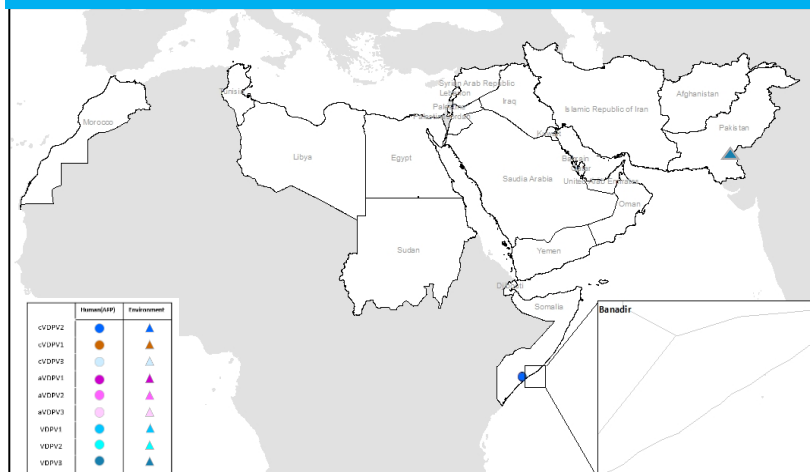
VDPVs isolations by Source and Country

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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			29-08-22							
	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	1	12-01-23	3	1	11		5		31-08-22	19	5	26	1	5			04-10-22		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		14-12-22				23	40		19-12-22				13	20			28-11-22								
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		30-05-21				1			14-06-21				1			21-09-20								
	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	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																		67	1		12-01-22								
	Iran																			1		04-02-22								
	Jordan																			2		25-05-22								
	Pakistan																			1		15-02-22								
	Somalia					1		01-09-22																						
	Yemen																		1			24-04-22								
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)