

Highlights



Children Paralyzed by polio

2023

- **12 cases of Wild Polio 1**
 - 06 in Afghanistan
 - 06 in Pakistan

- **16 cases of cVDPV2**
 - 08 in Somalia
 - 08 in Yemen

- **Zero cVDPV1 cases**

2024

- **84 cases of Wild Polio 1**
 - 25 in Afghanistan
 - 59 in Pakistan

- **39 cases of cVDPV2**
 - 03 in Somalia
 - 35 in Yemen
 - 01 in Occupied Palestinian Territory

- **Zero cVDPV1 cases**



Sewage water sampling

2023

- **188 samples Wild Polio 1**
 - 62 in Afghanistan
 - 126 in Pakistan

- **41 samples cVDPV2**
 - 11 in Egypt
 - 16 in Yemen
 - 09 in Somalia
 - 05 in Sudan

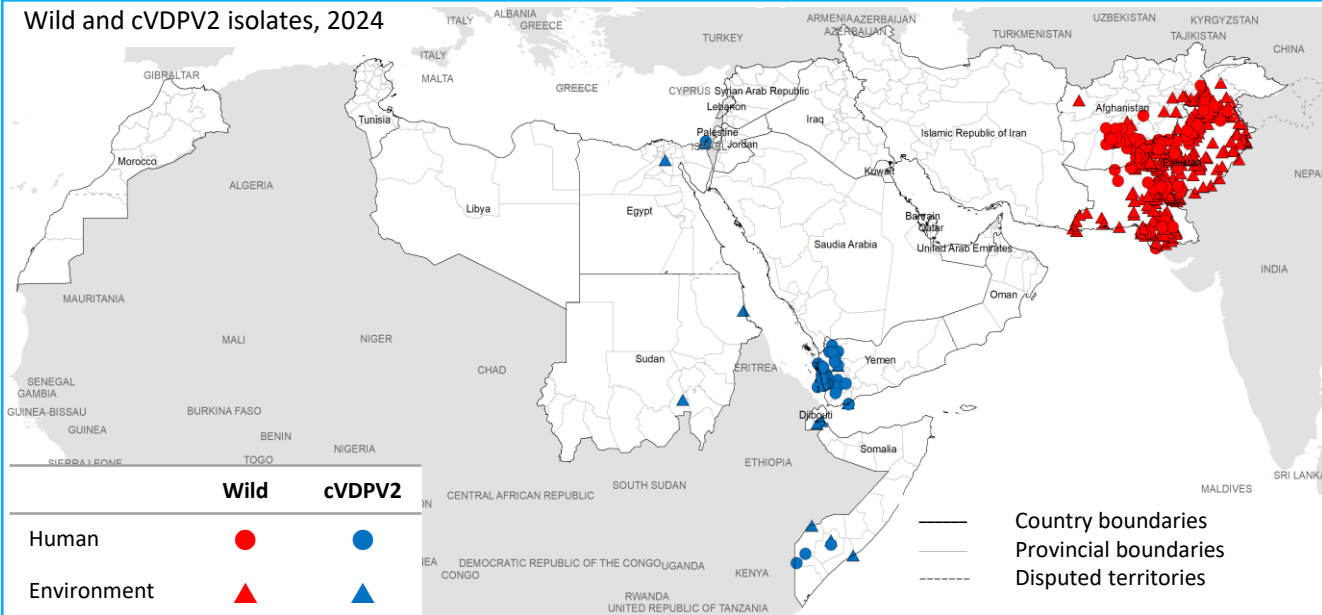
2024

- **622 samples Wild Polio 1**
 - 91 in Afghanistan
 - 531 in Pakistan

- **28 sample cVDPV2**
 - 3 in Djibouti
 - 2 in Egypt
 - 3 in Somalia
 - 2 in Sudan
 - 7 in Yemen
 - 17 in Occupied Palestinian Territory

Classification of EMR countries by type of poliovirus circulation

Wild and cVDPV2 isolates, 2024



Highlights of the week

Wild Poliovirus

- Three new WPV1 cases reported this week; all from Pakistan. The new WPV1 cases are: two from Sindh province (Karachi Keamari town and Kashmore district) and one from Khyber Pakhtunkhwa province (Dera Ismail Khan district) with dates of onset between 5th – 11th November 2024. The WPV1 case count in 2024 to date is 84 (25 from Afghanistan and 59 from Pakistan). In 2023, the count remains 12 (6 each from Afghanistan and Pakistan).
- Fifteen new WPV1 ES reported this week; all from Pakistan. The newly reported ES are: 7 from Punjab province (Bahawalpur, Dera Ghazi Khan, Gujranwala, Multan, Okara, Rahimyar Khan, and Gujrat districts), 5 from Balochistan province (2 from Quetta and 1 each from Dera Bugti, Usta Muhammad, and Nsirabad districts), 2 from Khyber Pakhtunkhwa province (Bajour and Tank districts) and 1 from Islamabad province (Capital Developmental Authority district) with samples collection dates between 11th – 19th November 2024. The ES count to date in 2024 is 622 (91 from Afghanistan and 531 from Pakistan). In 2023, the count remains 188 (62 from Afghanistan and 126 from Pakistan).

Vaccine derived poliovirus (VDPV)

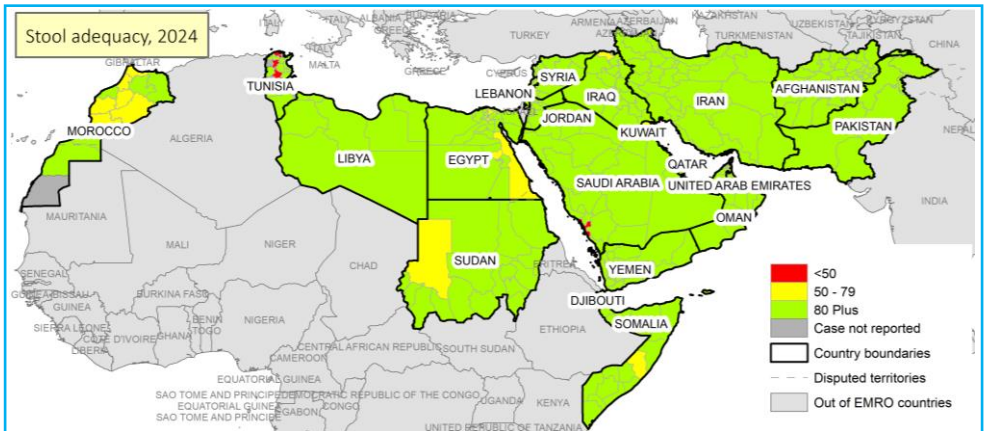
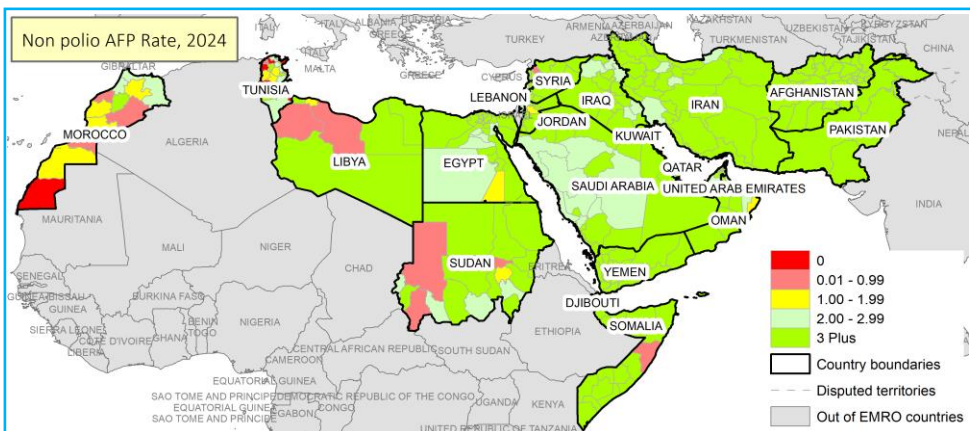
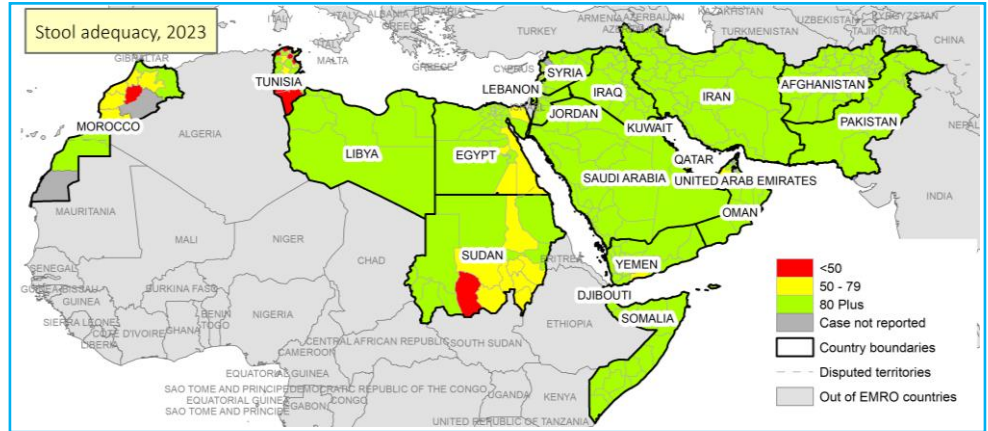
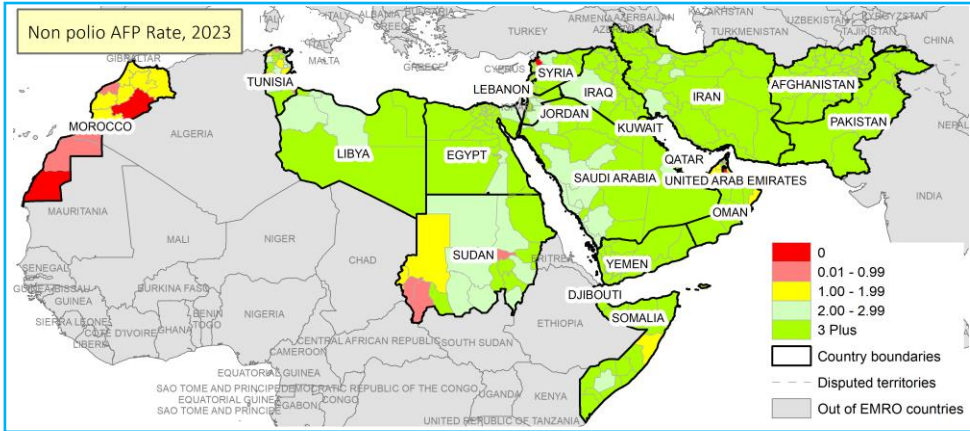
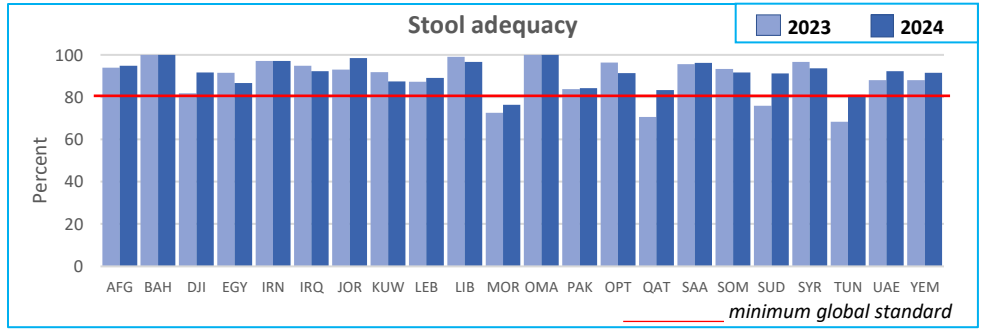
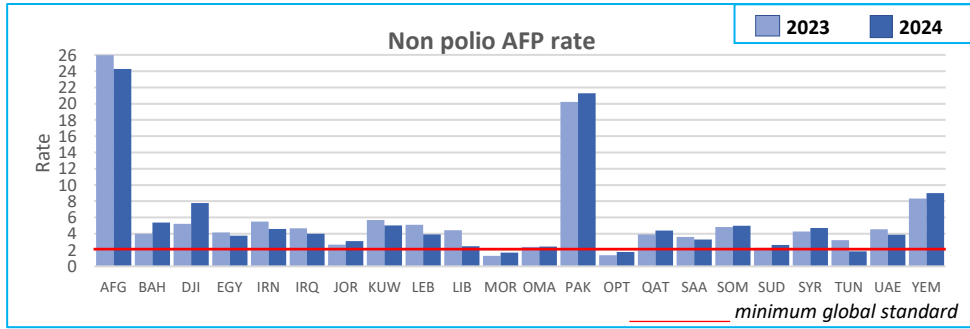
- No new cVDPV cases reported this week. The cVDPV2 cases count in 2024 to date remains 39 (35 from Yemen, 3 from Somalia, and 1 from Occupied Palestinian Territory). In 2023, the count remains 16 (8 each from Somalia and Yemen)
- Eight new cVDPV2 positive ES reported this week – 2 from Djibouti and 6 from Occupied Palestinian Territory. The newly reported cVDPV2 ES from Djibouti are one each from Arta province (Douda site) and Djibouti province (Arhiba site), the dates of collection of both samples is on 20th October 2024, while all the new cVDPV2 ES from Occupied Palestinian Territory were reported from Gaza Strip province (4 from Deir Al-Balah and 2 from Khan Younis districts) with collection dates between 8th October – 4th November 2024. The cVDPV2 positives ES in 2024 to date is 34 (17 from the Occupied Palestinian Territory, 7 from Yemen, 3 each from Somalia and Djibouti, and 2 each from Sudan and Egypt). In 2023, the count remains 41 (16 from Yemen, 11 from Egypt, 9 from Somalia, and 5 from Sudan).
- Two new VDPV2 positive ES reported from Sudan this week. The newly reported VDPV2 ES are both from White Nile province (Kosti district) with collection dates 25th September 2024 and 25th October 2024.

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

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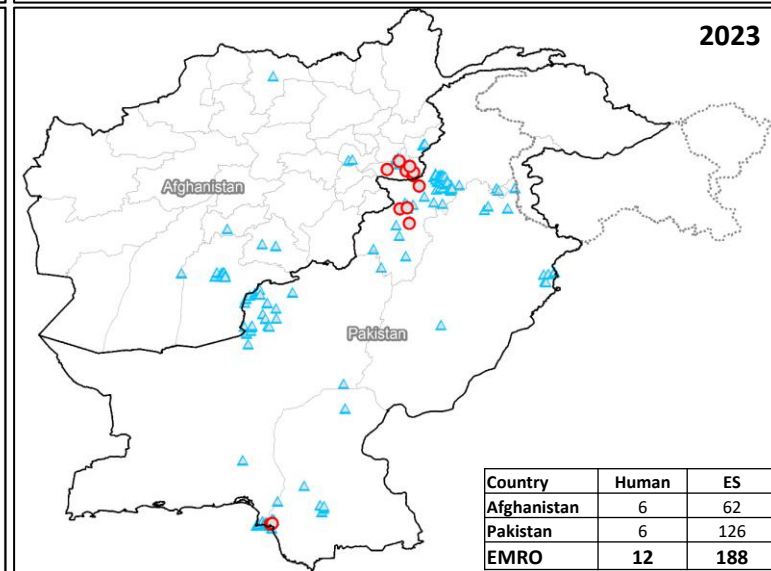
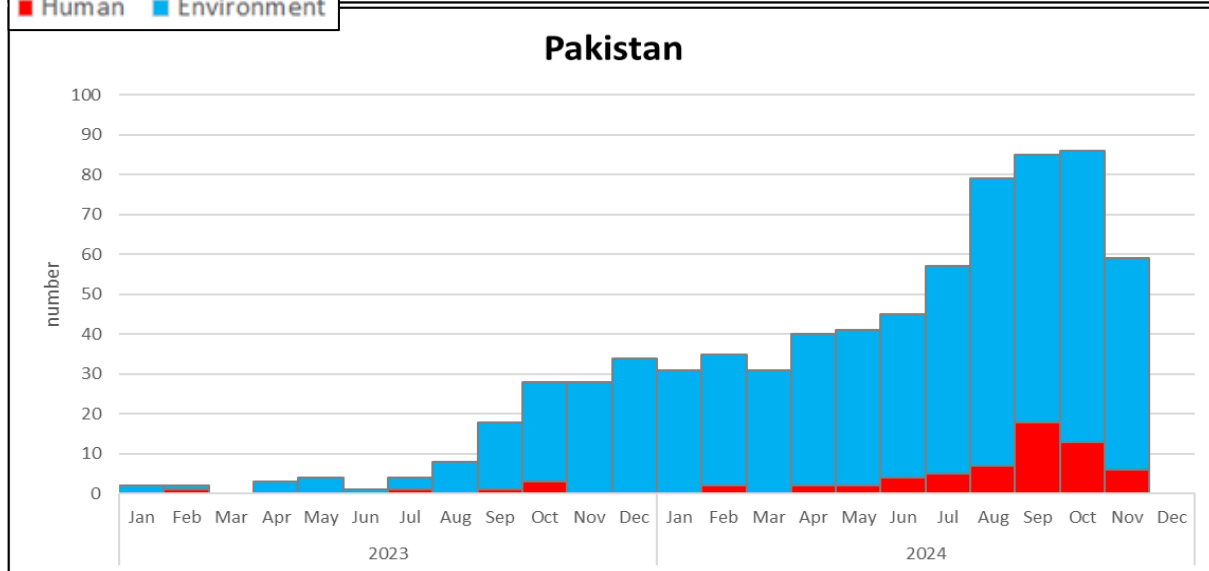
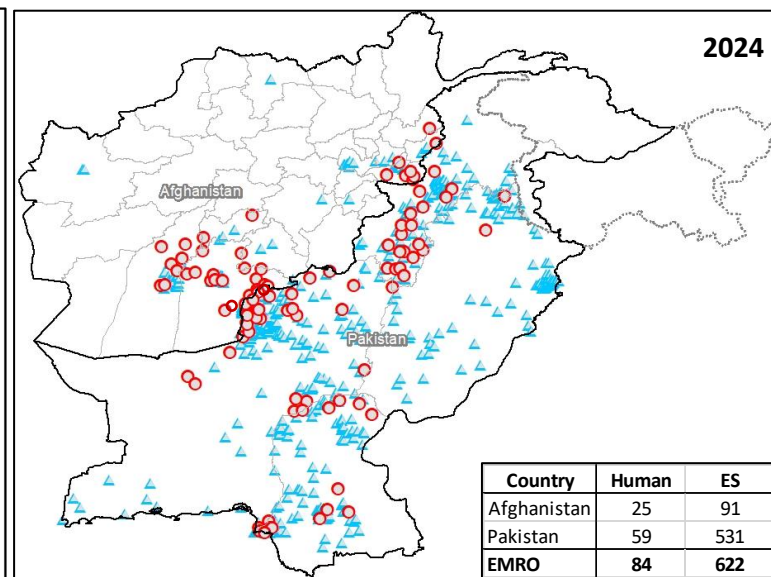
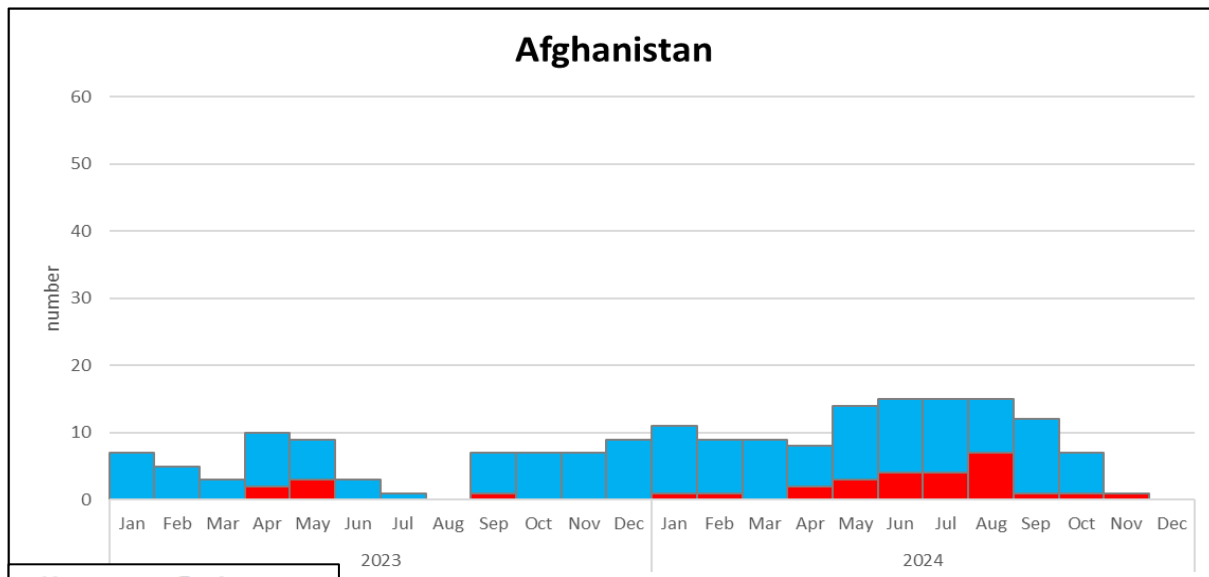
World Health Organization – Regional Office for Eastern Mediterranean Issue No. 1366, Week 49 (ending on 08/12/2024)

Key surveillance indicators



WPV1 Positive isolates from Afghanistan and Pakistan by source

EMR Polio Bulletin - Issue No. 1366, Week 49 (ending on 08/12/2024)



Virus isolation by country, last 12 months (08 December 2023, to 08 December 2024)

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Source / Virus type	AFG	DJI	PAK	EGY	OPT	SOM	SUD	YEM	Total
Human (AFP only)	25	0	59	0	1	6	1	38	130
Wild	25		59						84
cVDPV2					1	6		38	45
VDPV2							1		1
Environment	100	3	549	7	17	3	6	9	694
Wild	100		548						648
cVDPV2		3		6	17	3	3	8	40
VDPV2							3		3
VDPV1				1					1
cVDPV2+VDPV1								1	1
Wild+VDPV1			1						1
Total	125	3	608	7	18	9	7	47	824

Note: Viruses isolated from 'other' sources (example healthy children) are not included in this analysis; they are shown in page No. (9)

Confirmed Wild Polio 1 Cases by month of onset

EMR Polio Bulletin - Issue No. 1365, Week 48 (ending on 01/12/2024)

Country	Total year 2022	Total year 2023	08 Dec.		Confirmed Wild Polio 1 Cases by month of onset												Recent most Case
			2023	2024	2024												
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Afghanistan	2	6	6	25	1	1	0	2	3	4	4	7	1	1	1		05-Nov-24
Bahrain	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		
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				
Jordan ****	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		
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				
Morocco	0	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	20	6	6	59	0	2	0	2	2	4	5	7	18	13	6		11-Nov-24
Occupied Palestinian Territory ****	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										
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				
United Arab Emirates	0	0	0	0	0	0	0	0	0	0	0	0	0				
Yemen	0	0	0	0	0		0	0									
EMR	22	12	12	84	1	3	0	4	5	8	9	14	19	14	7	0	11-Nov-24

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

Investigation of AFP cases with paralysis onset in 2023 & 2024

EMR Polio Bulletin - Issue No. 1366, Week 49 (ending on 08/12/2024)

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	5267	25	0	5023	0	2	0	24.27	94.89	5856	6	0	5850	0	0	0	25.98	93.97	8-Dec-24
BAHRAIN	15	0	0	5	0	6	0	5.36	100.00	12	0	0	12	0	0	0	4.01	100.00	8-Dec-24
DJIBOUTI	24	0	0	20	0	0	0	7.76	91.67	22	0	0	22	0	0	0	5.23	81.82	8-Dec-24
EGYPT	1490	0	0	1306	0	26	0	3.77	86.64	1714	0	0	1714	0	0	0	4.16	91.48	5-Dec-24
IRAN	912	0	0	873	0	0	0	4.60	97.15	1150	0	0	1150	0	0	0	5.48	97.13	7-Dec-24
IRAQ	670	0	0	627	0	2	0	3.99	92.24	820	0	0	820	1	0	0	4.66	94.88	5-Dec-24
JORDAN	130	0	0	95	0	0	0	3.08	98.46	116	0	0	116	0	0	0	2.68	93.10	5-Dec-24
KUWAIT	40	0	0	40	0	0	0	5.00	87.50	49	0	0	49	0	0	0	5.69	91.84	8-Dec-24
LEBANON	64	0	0	54	0	5	0	3.91	89.06	79	0	0	79	0	0	0	5.11	87.34	1-Dec-24
LIBYA	60	0	0	50	0	0	0	2.46	96.67	115	0	0	115	0	0	0	4.43	99.13	3-Dec-24
MOROCCO	174	0	0	89	0	42	0	1.69	76.44	150	0	0	150	0	0	0	1.28	72.67	6-Dec-24
OMAN	30	0	0	29	0	0	0	2.43	100.00	30	0	0	30	0	0	0	2.38	100.00	5-Dec-24
PAKISTAN	19572	59	0	18463	0	195	0	21.26	84.32	19771	6	0	19765	0	0	0	20.22	83.78	8-Dec-24
OCCUPIED PALESTINIAN TERRITORY	35	0	0	19	1	5	1	1.75	91.43	28	0	0	28	0	0	0	1.35	96.43	1-Dec-24
QATAR	18	0	0	15	0	0	0	4.40	83.33	17	0	0	17	0	0	0	3.91	70.59	8-Dec-24
SAUDI ARABIA	244	0	0	176	0	0	0	3.30	96.31	301	0	0	301	0	0	0	3.60	95.68	8-Dec-24
SOMALIA	430	0	0	403	3	0	0	4.98	91.63	433	0	0	425	8	0	0	4.84	93.30	8-Dec-24
SUDAN	514	0	0	339	1	38	20	2.62	91.25	473	0	0	473	0	0	0	2.28	75.90	8-Dec-24
SYRIA	345	0	0	327	0	0	0	4.72	93.62	332	0	0	332	0	0	0	4.27	96.69	1-Dec-24
TUNISIA	53	0	0	45	0	0	0	1.85	81.13	95	0	0	95	0	0	0	3.20	68.42	7-Dec-24
UNITED ARAB EMIRATES	52	0	0	36	0	6	0	3.88	92.31	67	0	0	67	0	0	0	4.54	88.06	29-Nov-24
YEMEN	1374	0	1	583	35	438	393	9.01	91.56	1331	0	0	1322	9	0	0	8.33	88.05	1-Dec-24
EMR POL	31513	84	1	28617	40	765	414	11.43	87.56	32961	12	0	32932	18	0	0	11.31	87.20	

* 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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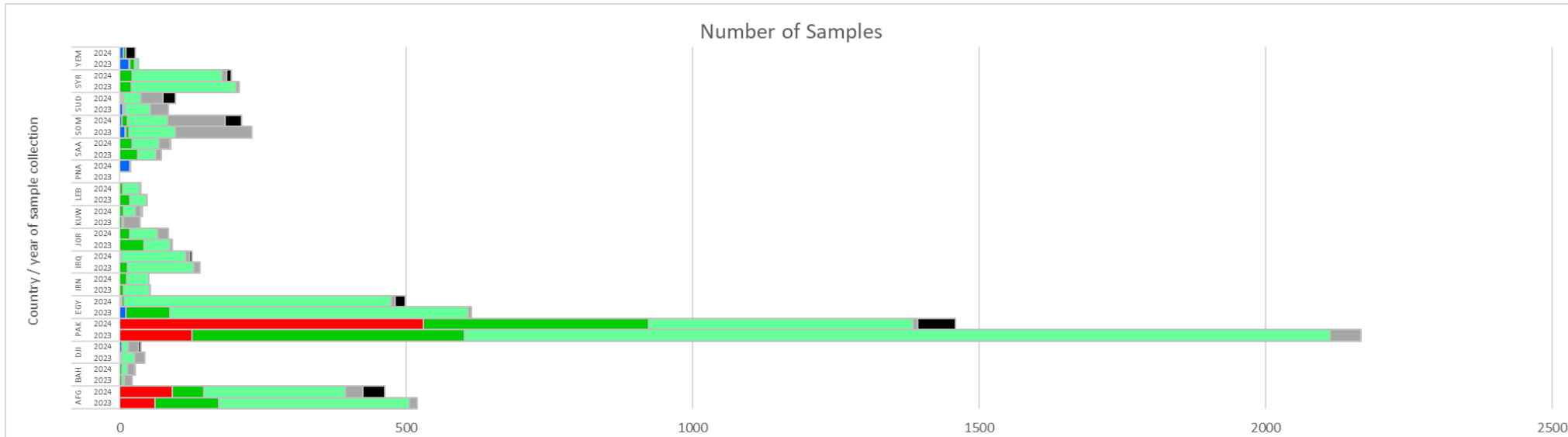
Country	Polio laboratories		AFP cases with specimens	Preliminary virus isolation results of AFP cases					Poliovirus intratypic differentiation results										Indicators				Latest report Date				
	ITD / Nucleotide Sequencing			Referred for ITD		Negative	Pending		Type 1			Type 2			Type 3			Discordant 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		NPEV only	received within last 14 days	received more than 14 days ago	Wild	Sabin	VDPV	Wild	Sabin	VDPV	Wild	Sabin										VDPV
Afghanistan	RRL Pakistan		5252	274	26	725	4030	144	1	18*	180					200							11%	94%	100%	90%	8-Dec-24
Bahrain	NPL Oman / CDC		15	1		1	11	2			1					1							8%	100%	1	100%	5-Dec-24
Djibouti	NPL Kenya / CDC		24			3	17		4														15%	25%		90%	8-Dec-24
Egypt	RRL Egypt		1415	13		145	1161	78	18		6					8							9%	96%	100%	99%	6-Dec-24
Iran	NPL Iran / CDC		932	9		12	883	28			2					9							1%	100%	100%	98%	7-Dec-24
Iraq	NPL Iraq, RRL Egypt		674	15		94	540	21	4		5					12							13%	100%	100%	97%	6-Dec-24
Jordan	NPL Jordan, RRL Egypt		131	6		23	95	7			1								4	1			16%	90%	0.6	99%	5-Dec-24
Kuwait	RRL Kuwait / RIVM		42	2		1	39													2			1%	93%		100%	2-Dec-24
Lebanon	NPL Syria, RRL Egypt		60			1	57	2															2%	100%			30-Nov-24
Libya	RRL Tunisia / RIVM		49			1	48																2%	100%		45%	6-Dec-24
Morocco	NPL Morocco, RRL Tunisia		163			3	149	8	3														2%	98%		97%	6-Dec-24
Oman	NPL Oman / CDC		32				29	3															5%	76%		100%	5-Dec-24
Pakistan	RRL Pakistan		19036	757	41	2740	15016	432	22	44*	460					519							12%	95%	100%	96%	8-Dec-24
Occupied Palestinian Territory & UNRWA			41	2	1	8	24	1	6									1	1				25%	44%	1	85%	1-Dec-24
Qatar	NPL Oman / CDC		17	1			16									1							0%	100%	1	100%	5-Dec-24
Saudi Arabia	NPL Saudi Arabia / CDC		219	4		9	194		12		2					1			1				4%	91%	75%	100%	14-Nov-24
Somalia	NPL Kenya / CDC		430	15		54	337	6	18		6				3	5							13%	2%		90%	8-Dec-24
Sudan	NPL Sudan / RRL Egypt		415	7		77	261	69			2		1	1		1			2				21%	93%	100%	23%	14-Apr-23
Syria	NPL Syria / RRL Egypt		337	6		19	303	2	7														5%	99%			30-Nov-24
Tunisia	RRL Tunisia		58			2	52	4															3%	100%		98%	6-Dec-24
U.A.E	NPL Oman / CDC		45			3	42																5%	49%		22%	5-Dec-24
Yemen	NPLs Oman, Jordan & Kenya, RRL Egypt		617	42	2	109	464		1		5		1	34**		6							17%	13%	95%	14%	1-Dec-24
Total EMR 2024			30004	1154	70	4030	23768	807	96	84*	670		2	40**		764		3	6	3			11%	92%	100%	92%	
Total EMR 2023			32172	1012	81	4533	26509		30	12*	656		8	22		766		4	3	1			12%	90%	100%	92%	

* In 2024 – Twenty-Two WPV1 cases (7 from Afghanistan and 15 from Pakistan) are confirmed due to positive contact (Index cases were negative for WPV1)
 In 2023 - Two WPV1 cases are confirmed due to positive contacts (Index cases were negative for WPV1)

** In 2024 – One cVDPV2 case was confirmed due to two positive contacts (Index case was negative for cVDPV2)

Environmental Surveillance Isolation by Classification

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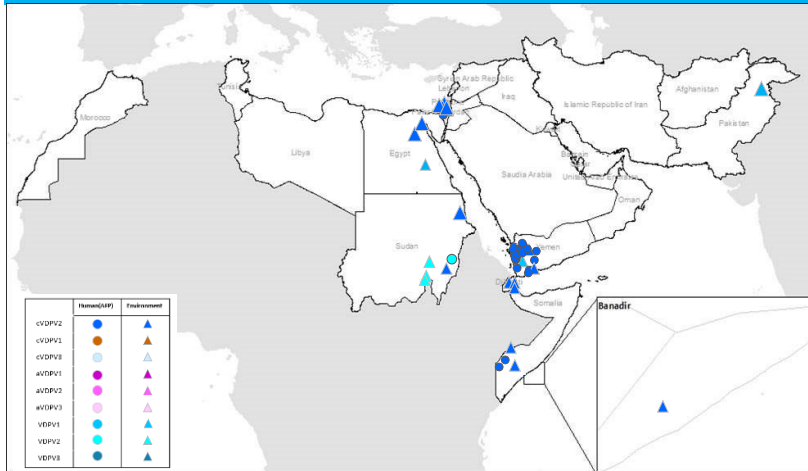


	AFG		BAH		DJI		PAK		EGY		IRN		IRQ		JOR		KUW		LEB		OPT		SAA		SOM		SUD		SYR		YEM	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024		
■ Wild	62	91					126	530																								
■ Wild+VDPV1							1																									
■ cVDPV2						3			11	2											17			9	3	5	2			16	6	
■ Wild+cVDPV2																																
■ cVDPV2+VDPV1																															1	
■ Wild+aVDPV2																																
■ Wild+aVDPV3																																
■ aVDPV1																																
■ aVDPV2																																
■ aVDPV3																																
■ VDPV1										1																						
■ VDPV2																																
■ SL2																									2		1	2				
■ SL1/3	111	56	3	3	2	1	475	393	76	5	7	12	13	2	42	18	3	6	17	5			31	21	5	10	3					
■ Entero	332	247	5	10	23	10	1512	462	521	466	45	38	116	113	46	48	4	21	29	29			32	47	81	70	44	29	183	157	7	
■ Negative	14	30	13	13	19	18	53	8	6	6	1		11	7	3	19	28	9	1	3		1	10	19	134	100	32	39	6	8		
■ Pending		39		1		4		66		19				4				3						1		29		22		8		17

VDPVs isolations by Source and Country

EMR Polio Bulletin - Issue No. 1366 Week 49 (ending on 08/12/2024)

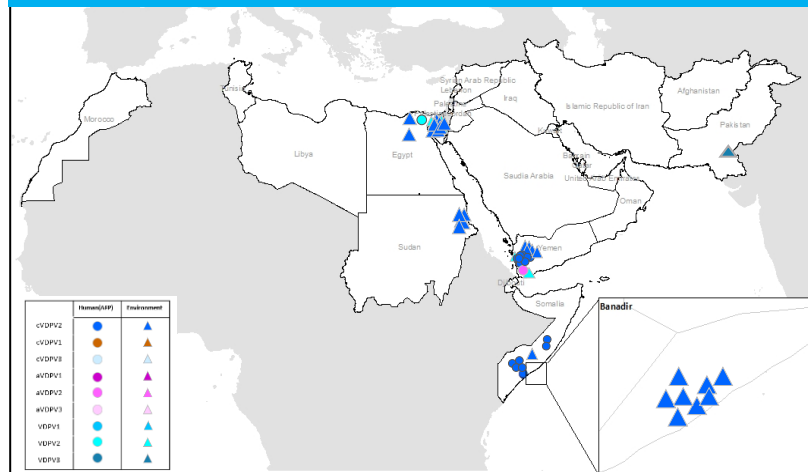
VDPV Isolates, EMR countries, 2024



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	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	Most recent		
cVDPV2	Afghanistan	307	43				09-07-21																				
	Djibouti																										
	Egypt																										
	Iran																										
	Pakistan	22	135	8			23-04-21																				
	OPT						1	25-07-24																			
	Somalia	3	14	1	5	8	3	05-06-24	1	11		6	3	3	12-03-24	5	26	1	6	9	3	14-05-24	1	5	1		10-03-22
	Sudan		58		1			31-10-22		18					08-10-20		14		1	5	2	24-01-24		4			24-08-20
Yemen				66	162	8	35	16-09-24			23	40	1	2	09-03-24			13	26	16	7	25-06-24					
cVDPV1	Yemen	1	31	3			27-03-21	2						10-07-19													
cVDPV3	Somalia						07-09-18																				
aVDPV1	Afghanistan			1			22-02-21																				
	Egypt																										
	Pakistan																										
	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																								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																								30-09-20		
	Pakistan																								05-04-21		
	Libya		1				15-01-20																				
VDPV1	Egypt																								21-09-24		
	Pakistan																								14-02-24		
	Yemen																								20-03-24		
VDPV2	Egypt					1	17-07-23																				
	Iran																								04-02-22		
	Jordan																								25-05-22		
	Somalia					1	01-09-22																		22-04-22		
	Sudan						1	24-05-24																	25-10-24		
	Yemen																								27-05-23		
VDPV3	Pakistan																								14-02-23		

VDPV Isolates, EMR countries, 2023



Important links

EMR Polio Bulletin - Issue No. 1366, Week 49 (ending on 08/12/2024)

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)