

EMR Polio Bulletin

World Health Organization – Regional Office for Eastern Mediterranean Issue No. 1252, Week 39 (ending on 02/10/2022)

Highlights



Children
Paralyzed
by polio



Sewage
water
sampling

2021

- 05 cases of Wild Polio 1
 - 04 in Afghanistan
 - 01 in Pakistan

- 118 cases of cVDPV2
 - 43 in Afghanistan
 - 08 in Pakistan
 - 01 in Somalia
 - 66 in Yemen

- 03 cVDPV1 cases
 - All in Yemen

2022

- 66 samples Wild Polio 1
 - 01 in Afghanistan
 - 65 in Pakistan

- 107 samples cVDPV2
 - 40 in Afghanistan
 - 35 in Pakistan
 - 12 in Egypt
 - 01 in Iran
 - 01 in Somalia
 - 05 in Djibouti
 - 13 in Yemen

2022

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

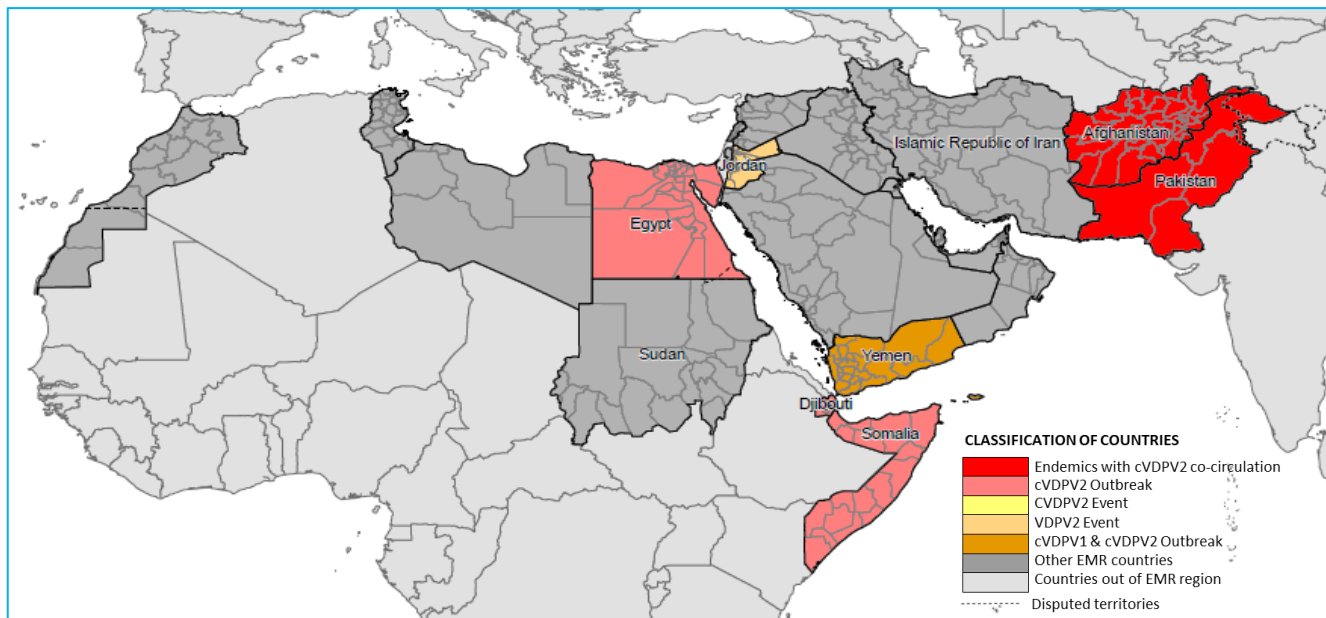
- 149 cases of cVDPV2
 - 04 in Somalia
 - 145 in Yemen

- Zero case of cVDPV1
(No cVDPV1 for the last 18 months)

2022

- 32 samples Wild Polio 1
 - 03 in Afghanistan
 - 29 in Pakistan

- 24 samples of cVDPV2
 - 06 in Egypt
 - 12 in Djibouti
 - 03 in Somalia
 - 03 in Yemen



Highlights of the week

Pakistan:

- One new WPV1 case was reported this week from North Waziristan district, Khyber Pakhtunkhwa province, with date of onset of 15th September 2022. The case is of a male child, 10 months old, with zero OPV doses. The child belongs to a vaccination refusal family.
- Two new positive WPV1 environmental samples were reported this week, one from each of Peshawar and Swat districts in Khyber Pakhtunkhwa province. The dates of specimens' collection were on 16th and 20th September 2022 respectively.

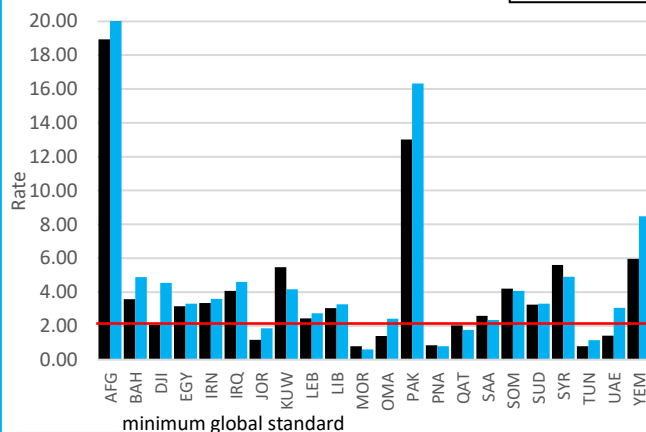
Somalia: One new cVDPV2 case and one of its close contacts were reported this week from Daynile district, Banadir province. The date of onset was 16th July 2022.

Yemen: Six new cVDPV2 cases reported this week from 4 provinces: two cases each from Sanaa and Sanaa City provinces and one case from each of Dhamar and Al Hudaidah provinces. Dates of onset ranges between 1st of July to 16th of August 2022.

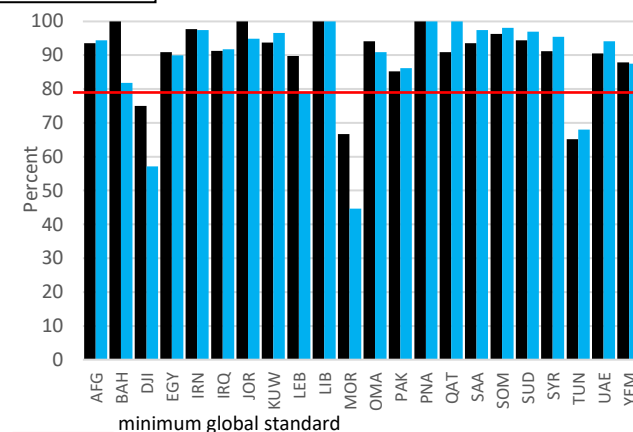
Qatar: An AFP Surveillance Review and Polio Outbreak Simulation Exercise (POSE) mission took place from 24-29 September 2022. Findings and Recommendations will be shared upon finalization.

Israel: Israel has confirmed transmission of circulating cVDPV2 on 28th September 2022.

Non polio AFP rate



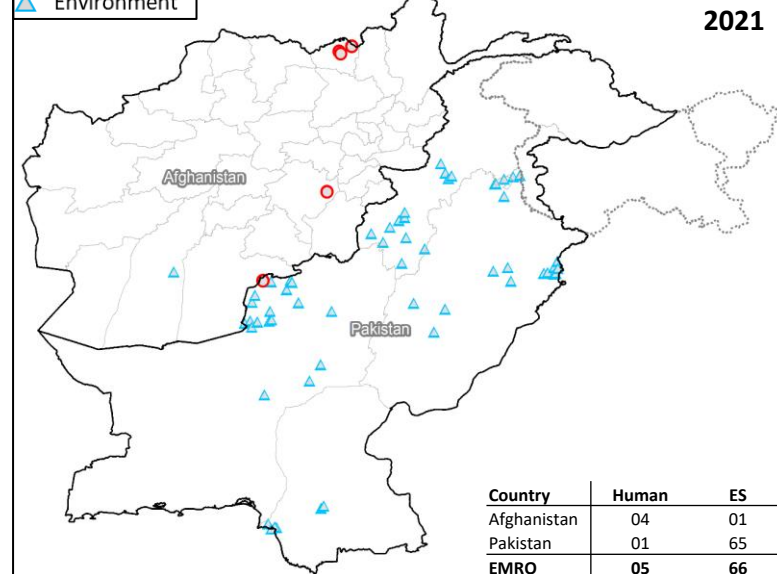
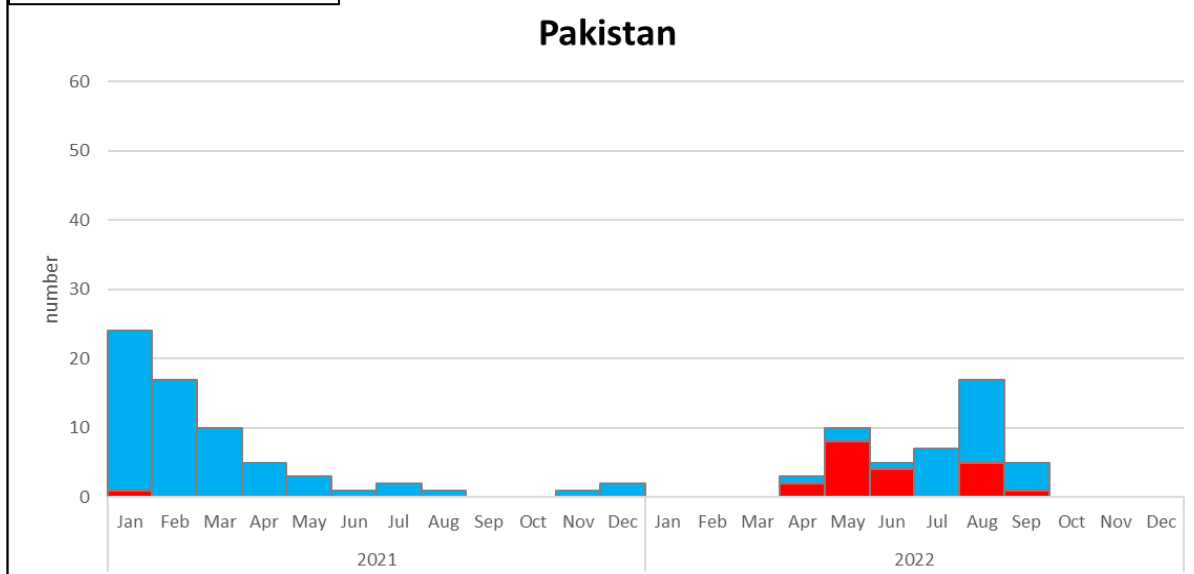
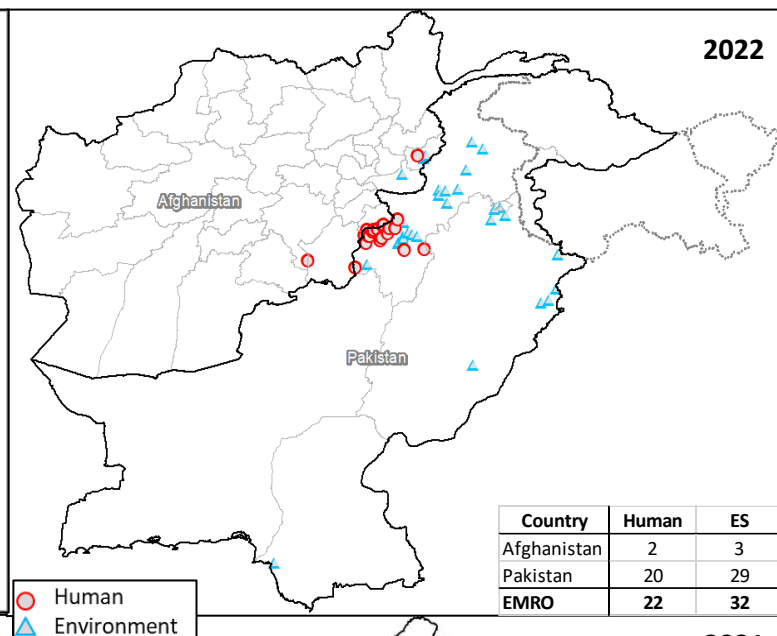
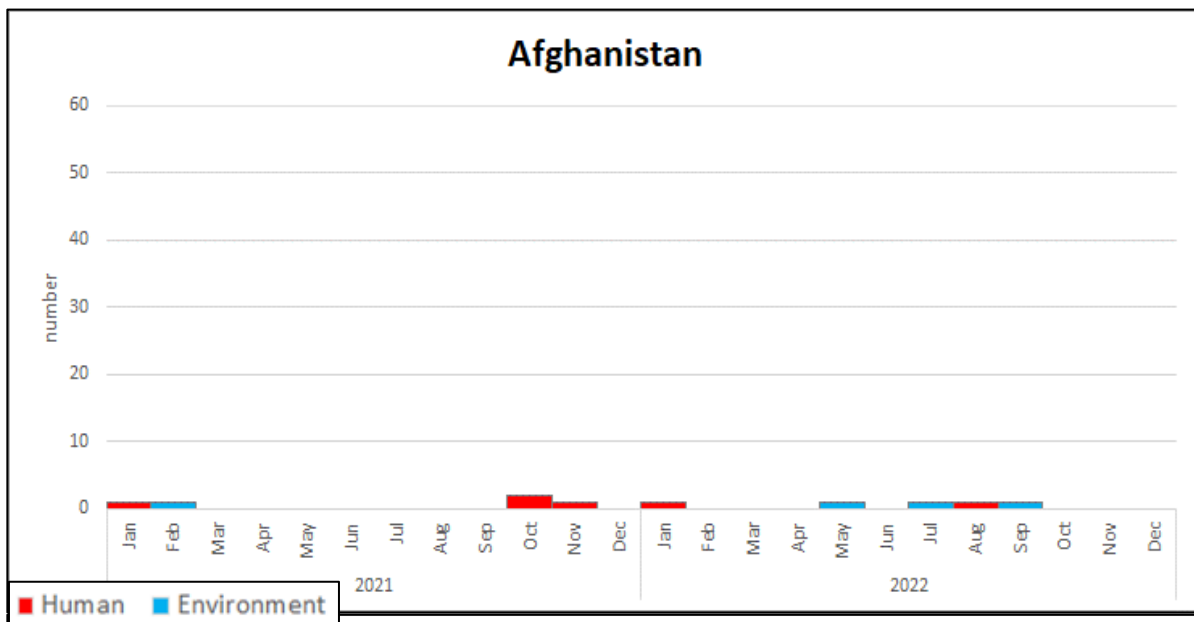
Stool adequacy



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




WPV1 Positive isolates from Afghanistan and Pakistan by source

EMR Polio Bulletin - Issue No. 1252, Week 39 (ending on 02/10/2022)



Virus isolation by country, last 12 months (Oct. 2, 2021 to Oct. 2, 2022)

EMR Polio Bulletin - Issue No. 1252, Week 39 (ending on 02/10/2022)

Source / Virus type 	AFG	DJI	PAK	EGY	IRN	JOR	SOM	YEM	Total
 Human (AFP only)	6		20				4	208	238
Wild	5		20						25
cVDPV2							4	205	209
aVDPV2	1							3	4
VDPV2									
 Environment	3	17	36	11	1	3	4	11	86
Wild	3		30						33
cVDPV2		17		7			3	11	38
aVDPV2			6						6
VDPV2				4	1	3	1		9
Total	9	17	56	11	1	3	8	219	324

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

EMR Polio Bulletin - Issue No. 1252, Week 39 (ending on 02/10/2022)

Country	Total year 2020	Total year 2021	2 Oct.		Confirmed Wild Polio 1 Cases by month of onset												Recent most Case
					2021		2022										
			2021	2022	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
Afghanistan	56	4	1	2	1	0	1	0	0	0	0	0	0	1			29-Aug-22
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	0	0		
Egypt	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				
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							
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Pakistan	84	1	1	20	0	0	0	0	0	2	8	4	0	5	1		15-Sep-22
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					
Sudan	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	0			
U.A.E	0	0	0	0	0	0	0	0	0	0	0						
Yemen	0	0	0	0	0	0	0	0	0	0	0						
EMR	140	5	2	22	1	0	1	0	0	2	8	4	0	6	1	0	15-Sep-22

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

Investigation of AFP cases with paralysis onset in 2021 & 2022

EMR Polio Bulletin - Issue No. 1252, Week 39 (ending on 02/10/2022)

COUNTRY	2021									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	4088	4	1	4038	45	0	0	18.92	93.52	3796	2	0	3534	1	30	0	23.31	94.36	25-Sep-22
BAHRAIN	11	0	0	11	0	0	0	3.58	100.00	11	0	0	7	0	2	0	4.88	81.82	25-Sep-22
DJIBOUTI	8	0	0	8	0	0	0	2.06	75.00	14	0	0	14	0	0	0	4.55	57.14	2-Oct-22
EGYPT	1251	0	0	1250	1	0	0	3.17	90.89	984	0	0	852	0	12	0	3.31	89.94	29-Sep-22
IRAN	681	0	0	680	1	0	0	3.36	97.65	550	0	0	525	0	0	0	3.59	97.45	1-Oct-22
IRAQ	709	0	0	709	0	0	0	4.08	91.26	603	0	0	544	0	22	0	4.60	91.71	1-Oct-22
JORDAN	47	0	0	47	0	0	0	1.19	100.00	58	0	0	56	0	0	0	1.87	94.83	29-Sep-22
KUWAIT	48	0	0	48	0	0	0	5.47	93.75	29	0	0	25	0	1	0	4.16	96.55	25-Sep-22
LEBANON	39	0	0	39	0	0	0	2.45	89.74	33	0	0	20	0	6	0	2.75	78.79	1-Oct-22
LIBYA	79	0	0	79	0	0	0	3.05	100.00	64	0	0	58	0	2	2	3.28	100.00	1-Oct-22
MOROCCO	78	0	0	78	0	0	0	0.80	66.67	47	0	0	18	0	19	2	0.61	44.68	16-Sep-22
OMAN	17	0	0	17	0	0	0	1.41	94.12	22	0	0	21	0	0	0	2.43	90.91	2-Oct-22
PAKISTAN	13118	1	4	13095	18	0	0	13.01	85.19	12417	20	1	11112	0	219	0	16.33	86.17	2-Oct-22
PALESTINE	16	0	0	16	0	0	0	0.85	100.00	12	0	0	7	0	0	0	0.79	100.00	2-Oct-22
QATAR	11	0	0	11	0	0	0	2.03	90.91	6	0	0	5	0	1	0	1.77	100.00	28-Sep-22
SAUDI ARABIA	217	0	0	217	0	0	0	2.59	93.55	153	0	0	115	0	0	0	2.35	97.39	2-Oct-22
SOMALIA	349	0	0	348	1	0	0	4.21	96.28	254	0	0	212	4	1	1	4.07	98.03	2-Oct-22
SUDAN	636	0	0	636	0	0	0	3.26	94.34	485	0	0	445	0	12	0	3.31	96.91	29-Sep-22
SYRIA	431	0	0	431	0	0	0	5.60	91.18	284	0	0	262	0	0	0	4.90	95.42	1-Oct-22
TUNISIA	23	0	0	23	0	0	0	0.81	65.22	25	0	0	23	0	1	0	1.15	68.00	23-Sep-22
U.A.E.	21	0	0	21	0	0	0	1.42	90.48	34	0	0	0	0	24	2	3.06	94.12	26-Sep-22
YEMEN	921	0	0	849	72	0	0	5.96	87.84	985	0	0	615	145	14	1	8.47	87.51	1-Oct-22
EMR POL	22799	5	5	22651	138	0	0	7.97	88.33	20866	22	1	18470	150	366	8	9.65	88.92	

* 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 2022

EMR Polio Bulletin - Issue No. 1252, Week 39 (ending on 02/10/2022)

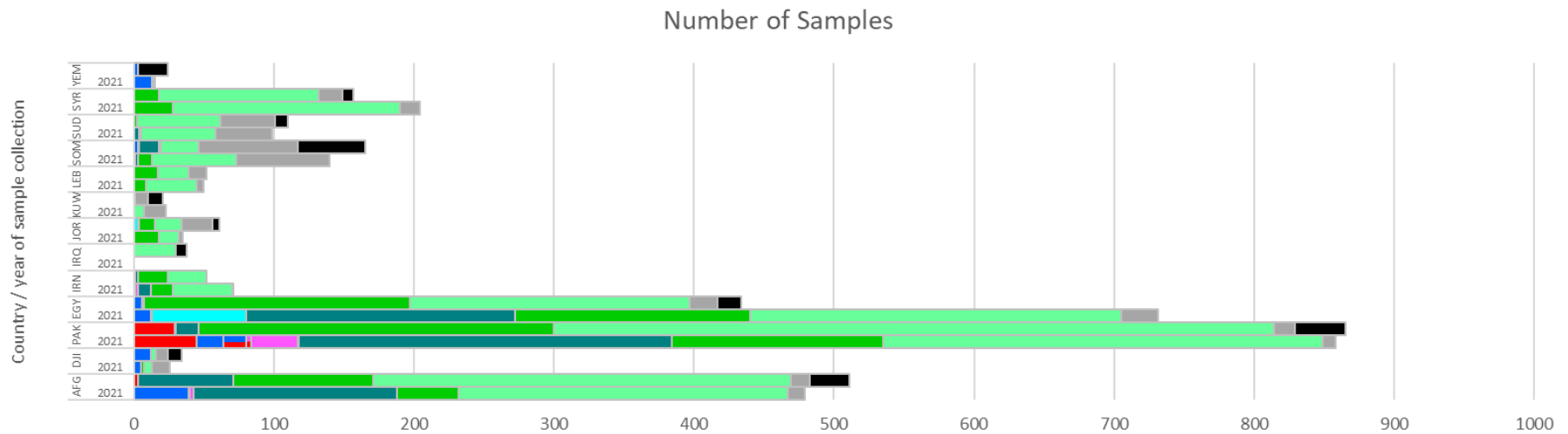
Country	Polio laboratories	AFP cases with specimens	Preliminary virus isolation results of AFP cases						Poliovirus intratypic differentiation results												Indicators				Latest report Date	
	ITD / Nucleotide Sequencing		Referred for ITD		NPEV only	Negative	Pending		Type 1			Type 2			Type 3			Discordant 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	3842	219	37	696	2760	91		2	167			8			189					1	16%	96%	100%	99%	2-Oct-22
Bahrain	NPL Oman / CDC	10				9	1															0%	100%		100%	29-Sep-22
Djibouti	NPL Kenya / CDC	14	2		4	8				2			2			2						29%	71%		71%	2-Oct-22
Egypt***	RRL Egypt	956	18	5	140	752	37	4		8						13			4	1		13%	98%	100%	99%	29-Sep-22
Iran	NPL Iran / CDC	564	10		5	537	12			4	1					6					1	1%	100%	100%	98%	1-Oct-22
Iraq	NPL Iraq, RRL Egypt	597	2		53	524	11	7								3					1	9%	100%	67%	99%	23-Sep-22
Jordan	NPL Jordan, RRL Egypt	57	2		13	37	1	4								2						26%	100%	1	100%	2-Oct-22
Kuwait	RRL Kuwait / RIVM	36	2			31	2	1		1						1		1	1		1	3%	100%	1	100%	2-Oct-22
Lebanon	NPL Jordan, NPL Syria, RRL Egypt	28	1			27																0%	100%			29-Sep-22
Libya	RRL Tunisia / RIVM	64			1	63																2%	100%		100%	14-Sep-22
Morocco	NPL Morocco, RRL Tunisia	42			4	36	2															10%	100%		90%	1-Oct-22
Oman	NPL Oman / CDC	24			4	19	1															15%	83%		100%	29-Sep-22
Pakistan	RRL Pakistan	12099	347	48	2264	8793	615	11	17*	193			1			291						16%	97%	99%	97%	2-Oct-22
Palestine & UNRWA		12				10	2															0%	30%		90%	2-Oct-22
Qatar	NPL Oman / CDC	6	1			5				1												0%	83%	0	100%	29-Sep-22
Saudi Arabia	NPL Saudi Arabia / CDC	152	3		3	142	4			1						2						3%	91%	33%	98%	25-Sep-22
Somalia	NPL Kenya / CDC	254	9	1	41	165		41		2			9	4								19%	7%		99%	2-Oct-22
Sudan	NPL Sudan / RRL Egypt	492	8		122	333	28	1										1				26%	71%	100%	22%	29-Sep-22
Syria	NPL Syria / RRL Egypt	278	2		15	238	22	1														5%	100%			29-Sep-22
Tunisia	RRL Tunisia	26				25		1														1%	100%		96%	14-Sep-22
U.A.E	NPL Oman / CDC	34				27	7															0%	81%		63%	29-Sep-22
Yemen	NPL Oman, NPL Kenya, RRL Egypt	854	164	4	123	512	50	1		8			8	141**		20		6	1	1		15%	30%	32%	5%	1-Oct-22
Total EMR 2022		20441	790	95	3488	15053	886	72	19	387	1		28	149		529		7	7	2	4	15%	92%	86%	93%	
Total EMR 2021		22113	1183	128	3874	16919		5	5	478	7		363	117		599	1	1	7	2	2	14%	97%	97%	93%	

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

** Four cVDPV2 cases are identified by positive contacts (Index cases were negative for cVDPV2)

Environmental Surveillance Isolation by Classification

EMR Polio Bulletin - Issue No. 1252, Week 39 (ending on 02/10/2022)

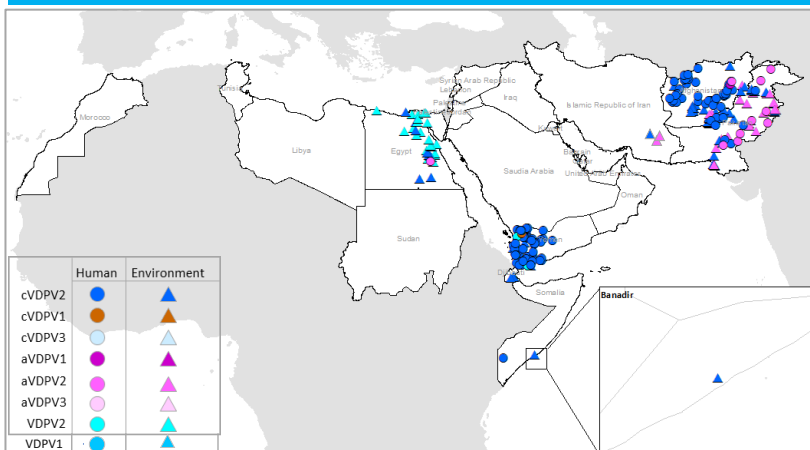


	AFG		DJI		PAK		EGY		IRN		IRQ		JOR		KUW		LEB		SOM		SUD		SYR		YEM	
	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021	2022
Wild		3			45	29																				
cVDPV2	39		5	12	19		12	6	1										1	3					13	3
Wild+cVDPV2	1				16																					
Wild+aVDPV2					4																					
Wild+aVDPV3																										
aVDPV1																										
aVDPV2	3				33	1			2																	
aVDPV3																										
VDPV1					1		1																			
VDPV2							67	1		1			3						1							
SL2	145	68			266	16	192		9	2			1					2	14	4						
SL1/3	44	100	2		151	254	168	190	16	21			18	11			9	17	10	1	1	2	28	18	1	
Entero	235	298	6	4	314	514	265	200	42	28		30	14	19	7	1	36	22	60	27	53	60	162	114	1	
Negative	12	14	13	8	9	15	26	20	1				3	22	16	9	5	13	67	71	41	39	14	17		
Pending		28		10		36		17				8		5		11				48		9		8		21

VDPVs isolations by Source and Country

EMR Polio Bulletin - Issue No. 1252 Week 39 (ending on 02/10/2022)

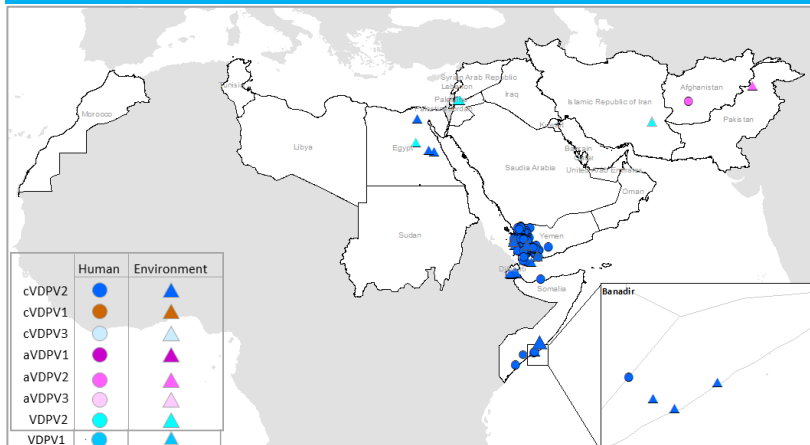
VDPV Isolates, EMR countries, 2021



VDPVs isolated from 2017-2022

VDPV Isolate type	EMR Country	Sources																											
		AFP cases(Human)						Contacts(Human)						Environment						Other Sources (Healthy Children)									
		2017	2018	2019	2020	2021	2022	Most recent	2017	2018	2019	2020	2021	2022	Most recent	2017	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		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	4		17-07-22	3	1	11		3	22-02-22	2	19	5	26	1	3	19-05-22			1	5		1	10-03-22	
	Sudan				58			18-12-20			18			08-10-20				14			09-11-20				4			24-08-21	
	Syria	74						21-09-17	63					12-09-17									4					20-08-17	
Yemen				66	145		16-08-22				23	33	21-05-22					13	3	31-01-22									
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			21-09-21								
	Iran																		2		23-09-21								
	Pakistan			7	8			24-09-21			8	19	1	28-04-21	5		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																			3	25-05-22								
	Pakistan																			1	15-02-22								

VDPV Isolates, EMR countries, 2022



Important links

EMR Polio Bulletin - Issue No. 1252, Week 39 (ending on 02/10/2022)

Important Links

- [Global Polio Eradication Initiative](#)
- [IMST – Outbreak Response Dashboard](#)
- [nOPV2 Tracker](#)
- [Pol-MIS](#) (restricted to registered users)
- [Containment](#) (restricted to registered users)