

PUBLIC HEALTH BULLETIN-PAKISTAN

Integrated Disease Surveillance & Response (IDSR) Report

**Center of Disease Control
National Institute of Health, Islamabad**

<http://www.phb.nih.org.pk/>

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Integrated Disease Surveillance & Response (IDSR) Weekly Public Health Bulletin is your go-to resource for disease trends, outbreak alerts, and crucial public health information. By reading and sharing this bulletin, you can help increase awareness and promote preventive measures within your community.



Public Health Bulletin

Pakistan

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Public Health Bulletin - Pakistan, Week 10, 2024

Overview

IDSR Reports

Ongoing Events

Field Reports

This edition of the Public Health Bulletin delves into the current health landscape of Pakistan, providing critical information for healthcare professionals and the public alike. The report identifies prevalent illnesses like acute diarrhea, respiratory infections, malaria, and tuberculosis, allowing stakeholders to tailor preventative efforts. However, the bulletin also highlights the detection of suspected cases Acute Flaccid Paralysis (AFP), HIV/AIDS, Typhoid, Leprosy and Brucellosis. These findings underscore the importance of continued vigilance and prompt investigation to safeguard public health.

Building upon this foundation, this public health bulletin disseminates critical information on several fronts. First, it issues an alert regarding the detection of poliovirus in multiple districts. Additionally, it details a mission undertaken by the FAO's Emergency Management Centre to the National Institutes of Health in Pakistan to address ongoing concerns about Crimean-Congo hemorrhagic fever (CCHF).

Highlighting the importance of public engagement, the issue concludes by exploring the threat of acute flaccid paralysis in Pakistan, emphasizing the role of both environmental factors and vaccination in mitigating this disease. This comprehensive approach empowers the public to take preventative measures and actively support public health initiatives.

This edition of the Public Health Bulletin serves as a valuable resource, fostering collaboration and action towards safeguarding public health in Pakistan.

Sincerely,

The Chief Editor



- During week 10, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by ILI, Malaria, ALRI <5 years, TB, VH (B, C & D), B. Diarrhea, Typhoid, SARI, and dog bite.
- Twenty-six cases of AFP reported from KP, ten from Sindh and four from Balochistan. All are suspected cases and need field verification.
- Nine suspected cases of HIV/ AIDS reported from KP. Field investigation required to verify the cases.
- Seven cases of Brucellosis reported from AJK. All are suspected cases and require field verification.
- There is an increasing trend observed for Acute Diarrhea (Non-Cholera), ILI, Malaria, ALRI <5 years, TB, VH (B, C & D) and B. Diarrhea cases this week.

IDSR compliance attributes

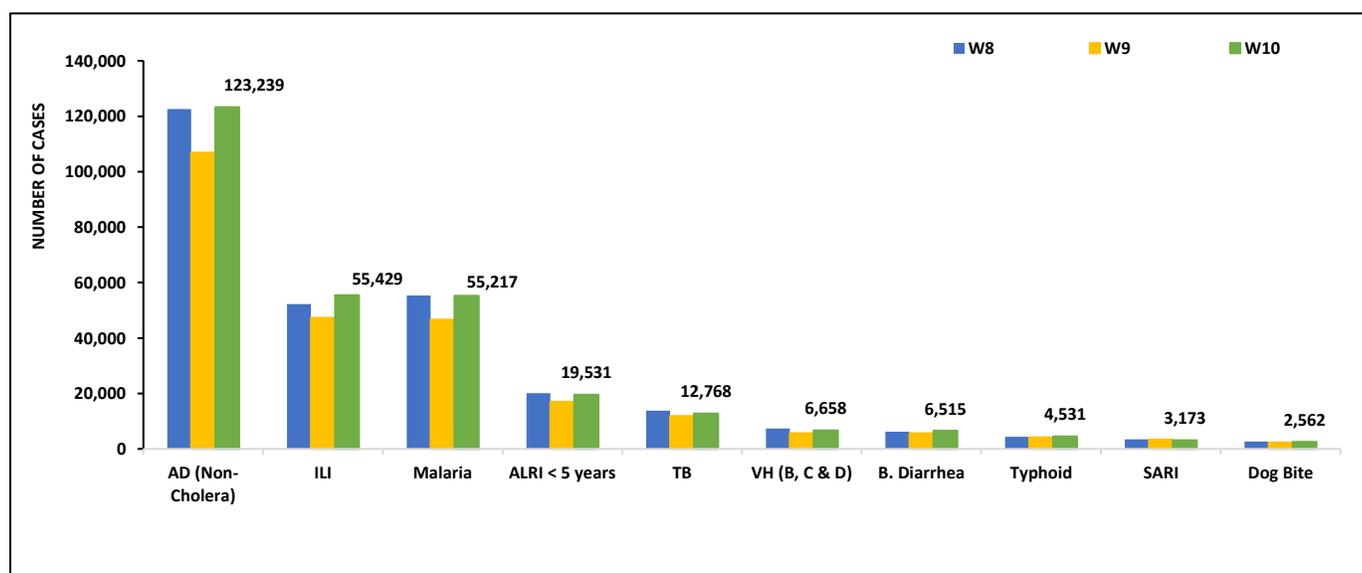
- The national compliance rate for IDSR reporting in 149 implemented districts is 76%
- Gilgit Baltistan and AJK are the top reporting regions with a compliance rate of 100% and 99%, followed by Sindh 94% and ICT 83%
- The lowest compliance rate was observed in KPK.

Region	Expected Reports	Received Reports	Compliance (%)
<i>Khyber Pakhtunkhwa</i>	2750	1607	58
<i>Azad Jammu Kashmir</i>	382	379	99
<i>Islamabad Capital Territory</i>	35	29	83
<i>Balochistan</i>	1220	887	73
<i>Gilgit Baltistan</i>	374	374	100
<i>Sindh</i>	2088	1957	94
<i>National</i>	6849	5233	76

Table 1: Province/Area wise distribution of most frequently reported suspected cases during week 10, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	1,261	5,659	325	286	12,879	67,969	34,860	123,239
ILI	2,344	9,360	489	1,481	6,639	44	35,072	55,429
Malaria	1	3,750	1	1	2,836	3,153	45,475	55,217
ALRI < 5 years	1,318	2,318	705	4	2,275	NR	12,911	19,531
TB	45	149	40	12	454	NR	12,068	12,768
VH (B, C & D)	12	86	1	0	159	NR	6,400	6,658
B.Diarrhea	69	1,379	50	6	604	1,351	3,056	6,515
Typhoid	24	538	27	1	496	2,313	1,132	4,531
SARI	379	1,010	313	0	1,054	NR	417	3,173
Dog Bite	36	95	1	0	244	NR	2,186	2,562
Measles	4	31	28	0	485	NR	134	682
AVH(A&E)	17	17	3	0	158	NR	386	581
CL	0	187	0	0	315	35	2	539
Mumps	20	50	7	1	69	NR	271	418
AWD (S. Cholera)	24	190	43	0	54	NR	5	316
Chickenpox/ Varicella	9	9	6	0	49	41	92	206
Pertussis	0	80	1	0	34	NR	3	118
Gonorrhea	0	50	1	0	14	NR	11	76
Dengue	0	3	0	0	1	NR	46	50
AFP	2	4	1	0	26	NR	10	43
Syphilis	0	23	0	0	0	1	11	34
VL	0	2	0	0	22	NR	0	24
NT	0	1	0	0	19	NR	1	21
Diphtheria (Probable)	0	9	0	0	5	NR	0	14
Leprosy	0	0	0	0	8	NR	4	12
Meningitis	7	1	0	0	0	NR	3	11
Brucellosis	0	0	0	0	9	NR	0	9
HIV/AIDS	0	3	0	0	2	NR	1	6
Chikungunya	0	2	0	0	0	NR	0	2

Figure 1: Most frequently reported suspected cases during week 10, Pakistan.

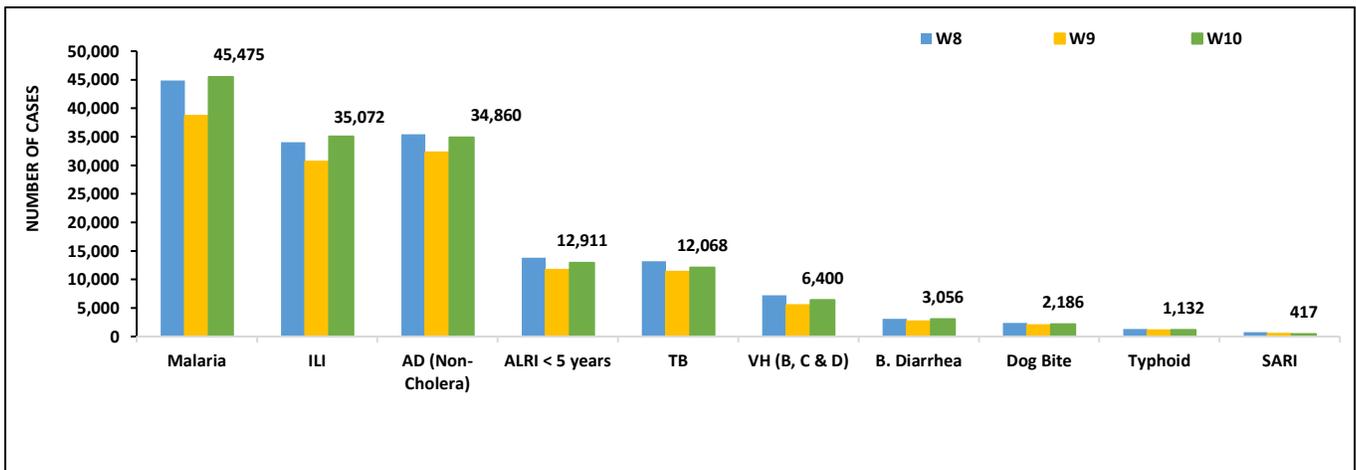


- Malaria cases were maximum followed by ILI, AD (Non-Cholera), ALRI<5 Years, TB, VH (B, C, D), B. Diarrhea, dog bite, Typhoid and SARI.
- Malaria cases are from Larkana, Khairpur and Kamber whereas ILI cases are mostly from Mirpurkhas, Khairpur, Badin and Karachi Malir.
- Ten cases of AFP reported from Sindh. All are suspected cases and need field verification.
- There is an increasing trend observed for Malaria, ILI, AD (Non-Cholera), ALRI<5 Years, TB, VH (B, C, D) and B. Diarrhea cases this week.

Table 2: District wise distribution of most frequently reported suspected cases during week 10, Sindh

Districts	Malaria	ILI	AD (Non-Cholera)	ALRI < 5 years	TB	VH (B, C & D)	B. Diarrhea	Dog Bite	Typhoid	SARI
Badin	2,039	474	2,482	683	792	371	203	44	45	1
Dadu	4,785	0	2,091	873	483	15	327	289	90	30
Ghotki	465	0	514	651	203	346	84	226	0	0
Hyderabad	405	3,318	1,251	275	361	224	76	40	15	0
Jacobabad	1,290	776	779	705	271	175	158	146	12	26
Jamshoro	835	24	1,127	278	427	62	66	10	72	3
Kamber	3,698	10	1,269	459	857	422	157	126	41	0
Karachi Central	51	2,634	1,048	97	567	551	14	1	81	4
Karachi East	101	406	819	99	26	0	25	13	1	1
Karachi Keamari	5	110	231	33	0	0	1	0	4	0
Karachi Korangi	44	0	253	3	2	0	0	0	1	0
Karachi Malir	67	3,352	920	312	38	21	63	23	24	0
Karachi South	39	0	110	0	0	0	0	0	0	0
Karachi West	135	2,862	989	107	198	140	55	174	78	54
Kashmore	1,806	938	491	288	352	318	38	275	16	0
Khairpur	3,741	5,168	2,627	1,340	1057	311	397	154	313	38
Larkana	5,811	5	1,570	684	879	178	225	0	6	0
Matiari	1,285	14	1,435	666	659	604	67	41	8	0
Mirpurkhas	2,434	5,475	2,253	727	756	436	136	32	22	88
Naushero Feroze	921	976	542	151	334	73	47	103	49	0
Sanghar	3,196	2	1,194	600	1034	879	26	56	16	18
Shaheed Benazirabad	1,266	0	1,670	588	365	102	79	141	134	2
Shikarpur	2,542	3	1,157	167	159	594	118	155	4	4
Sujawal	1,172	0	680	225	141	37	74	18	0	0
Sukkur	1,591	2,604	1,391	411	544	204	167	31	21	0
Tando Allahyar	1,237	1,312	859	440	331	75	115	5	3	0
Tando Muhammad Khan	809	0	803	195	326	49	69	0	3	2
Tharparkar	1,548	2,777	2,155	1,208	468	67	154	0	38	144
Thatta	1,009	1,832	1,020	207	24	87	73	83	17	2
Umerkot	1,148	0	1,130	439	414	59	42	0	18	0
Total	45,475	35,072	34,860	12,911	12,068	6,400	3,056	2,186	1,132	417

Figure 2: Most frequently reported suspected cases during week 10 Sindh

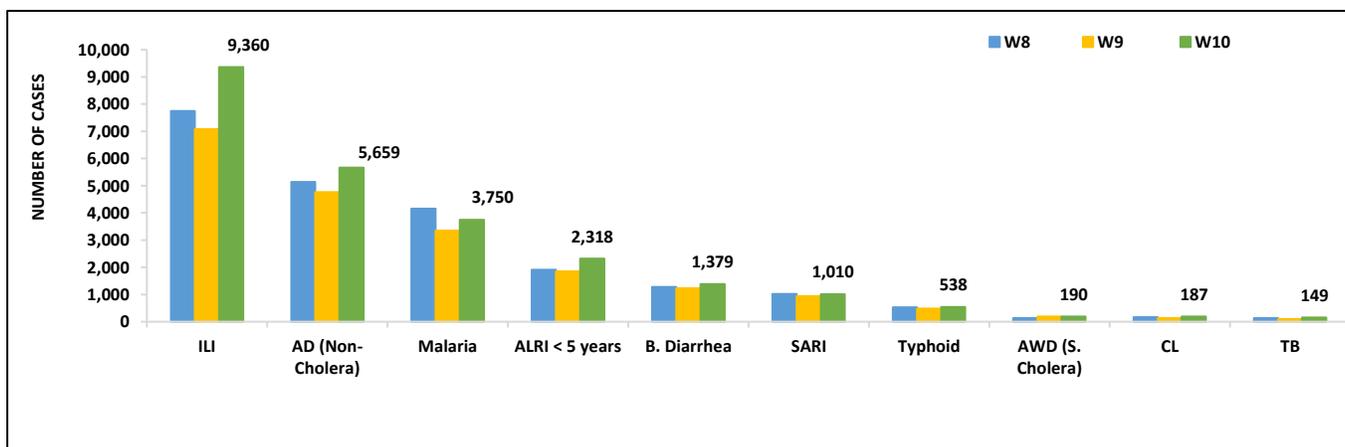


- ILI, AD (Non-Cholera), Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, AWD (S. Cholera), CL and TB cases were the most frequently reported diseases from Balochistan province.
- ILI cases are mostly reported from Gwadar and Quetta while AD (Non-Cholera) cases are mostly reported from Gwadar and Kech (Turbat).
- ILI, AD (Non-Cholera), Malaria, ALRI <5 years, B. Diarrhea, SARI and Typhoid cases showed an increasing trend this week.
- AD (S. cholera) cases mostly reported from Sibi and Kachi(Bolan). All are suspected and needs field verification.

Table 3: District wise distribution of most frequently reported suspected cases during week 10, Balochistan

Districts	ILI	AD Non-Cholera)	Malaria	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	AWD (S.Cholera)	CL	Dog Bite
Awaran	57	14	35	3	15	3	3	17	0	0
Barkhan	69	71	11	46	2	10	25	0	0	0
Chagai	303	124	13	0	54	0	23	12	0	0
Chaman	263	22	0	10	99	16	27	0	5	1
Dera Bugti	37	32	59	24	25	23	3	0	0	0
Duki	64	119	14	45	67	50	8	10	1	0
Gwadar	1,180	524	74	19	44	0	18	0	4	0
Harnai	27	78	34	165	38	0	0	10	0	1
Hub	134	262	228	27	25	15	6	0	4	3
Jaffarabad	169	428	558	32	35	8	4	0	54	65
Jhal Magsi	289	395	496	33	21	0	19	2	5	11
Kachhi (Bolan)	60	127	77	18	30	90	47	28	2	0
Kalat	8	10	12	7	11	0	17	0	0	0
Kech (Turbat)	1,143	489	123	207	94	2	1	NR	NR	NR
Kharan	396	133	23	12	46	0	1	7	0	0
Khuzdar	100	63	52	0	33	17	6	4	0	0
Killa Saifullah	2	114	100	192	65	33	18	1	5	0
Kohlu	644	230	106	41	128	97	29	22	0	1
Lasbella	90	306	364	106	22	15	5	0	26	0
Loralai	422	158	33	54	49	134	25	0	0	0
Mastung	157	149	35	67	39	41	12	5	4	2
Naseerabad	2	290	242	40	22	1	34	0	11	1
Nushki	50	85	9	0	40	0	0	12	0	0
Panjgur	94	138	100	138	42	9	12	26	0	1
Pishin	175	26	9	18	23	0	5	0	10	0
Quetta	1,165	335	20	104	52	27	19	0	27	4
Sherani	246	49	2	0	16	213	10	0	3	0
Sibi	1,064	222	205	79	45	34	46	30	19	3
Sohbat pur	62	228	330	214	84	46	43	1	7	10
Surab	138	29	3	0	0	0	41	0	0	0
Usta Muhammad	126	254	305	214	25	23	7	0	0	0
Washuk	245	68	29	10	56	10	6	0	0	0
Zhob	379	87	49	393	32	93	18	3	0	46
Total	9,360	5,659	3,750	2,318	1,379	1,010	538	190	187	149

Figure 3: Most frequently reported suspected cases during week 10, Baluchistan

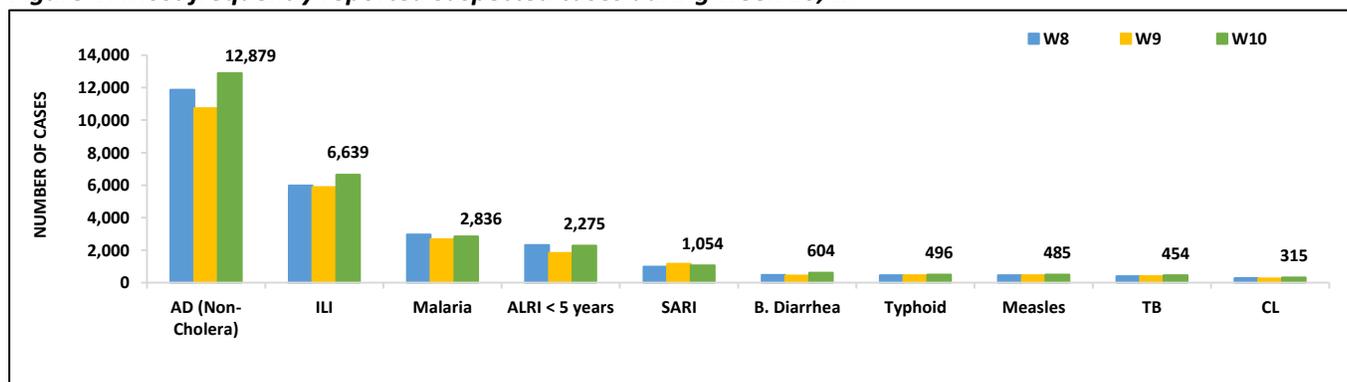


- Cases of AD (Non-Cholera) were maximum followed by ILI, Malaria, ALRI<5 Years, SARI, B. Diarrhea, Typhoid, Measles, TB, and CL cases.
- AD (Non-Cholera), ILI, Malaria, ALRI<5 Years and B. Diarrhea cases showed an increasing trend this week.
- Twenty-six cases of AFP reported from KP. All are suspected cases and need field verification.
- Nine suspected cases of HIV/ AIDS reported from KP. Field investigation required to verify the cases.

Table 4: District wise distribution of most frequently reported suspected cases during week 10, KP

Districts	AD (Non-Cholera)	ILI	Malaria	ALRI <5 Years	SARI	Measles	Typhoid	B. Diarrhea	TB	CL
Abbottabad	331	104	3	20	22	1	8	7	8	0
Bajaur	95	29	22	19	25	10	1	2	2	2
Bannu	738	4	886	80	8	8	64	30	28	2
Battagram	77	240	13	0	0	0	0	0	0	2
Buner	186	0	93	78	0	0	3	0	0	0
Charsadda	634	813	316	192	30	40	25	16	0	2
Chitral Lower	94	47	2	60	35	8	10	1	6	5
Chitral Upper	50	3	0	10	6	3	5	0	2	0
D.I. Khan	637	0	82	31	19	12	0	90	32	2
Dir Lower	623	8	418	216	0	79	42	22	16	2
Dir Upper	141	124	3	15	0	5	37	11	28	7
Hangu	145	273	307	36	4	23	8	14	7	12
Haripur	808	540	7	83	29	60	56	6	35	0
Karak	216	68	57	24	0	0	9	69	13	78
Khyber	116	55	14	38	1	11	0	5	9	10
Kohat	58	65	35	6	3	2	2	0	0	2
Kohistan Lower	114	0	0	6	100	7	0	0	0	0
Kohistan Upper	252	35	0	1	0	39	20	10	0	0
Kolai Palas	54	4	0	7	3	3	0	0	0	0
L & C Kurram	0	45	0	0	0	0	0	0	0	0
Lakki Marwat	280	8	95	37	2	8	8	13	26	0
Malakand	248	170	14	29	26	38	3	18	2	33
Mansehra	400	452	0	41	19	3	3	3	18	0
Mardan	508	23	19	652	3	13	0	0	0	0
Mohmand	78	42	75	9	10	18	8	5	0	63
Nowshera	961	42	18	0	10	13	8	38	5	9
Orakzai	8	16	3	0	10	2	0	2	0	0
Peshawar	2,195	876	16	190	103	112	77	58	48	23
SD DI Khan	0	0	0	0	0	0	0	0	0	0
SD Peshawar	1	0	0	0	0	0	0	0	0	0
SD Tank	1	0	1	0	0	1	0	2	0	0
Shangla	352	0	183	18	0	4	29	6	66	2
SWA	21	375	20	51	54	10	12	0	1	27
Swabi	640	1,321	21	219	112	5	10	19	58	0
Swat	1,431	396	6	65	5	16	2	7	30	1
Tank	273	239	80	13	0	1	39	19	9	17
Tor Ghar	40	0	15	3	25	19	3	0	1	14
Upper Kurram	73	222	12	26	390	30	4	12	4	0
Total	12,879	6,639	2,836	2,275	1,054	604	496	485	454	315

Figure 4: Most frequently reported suspected cases during week 10, KP



ICT: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera). Cases showed slightly increasing trend this week.

AJK: ILI cases were maximum followed by ALRI <5 years, AD (Non-Cholera), SARI, B. Diarrhea, TB, dog bite, AWD (S. Cholera), Typhoid and Mumps cases. Cases of ILI and ALRI <5 years showed a decreasing trend while cases of AD (Non-Cholera) and B. Diarrhea showed an increasing trend this week. Seven cases of Brucellosis reported from AJK. All are suspected cases and require field verification.

GB: ALRI <5 years cases were the most frequently reported diseases followed by ILI, AD (Non-Cholera), SARI, B. Diarrhea, AWD (S. Cholera), TB and Measles. Increasing trend for ALRI <5 years, ILI, AD (Non-Cholera) and B. Diarrhea cases while a decreasing trend for SARI and AWD (S. Cholera) cases observed this week

ICT, AJK & GB

Figure 5: Week wise reported suspected cases of ILI, ICT

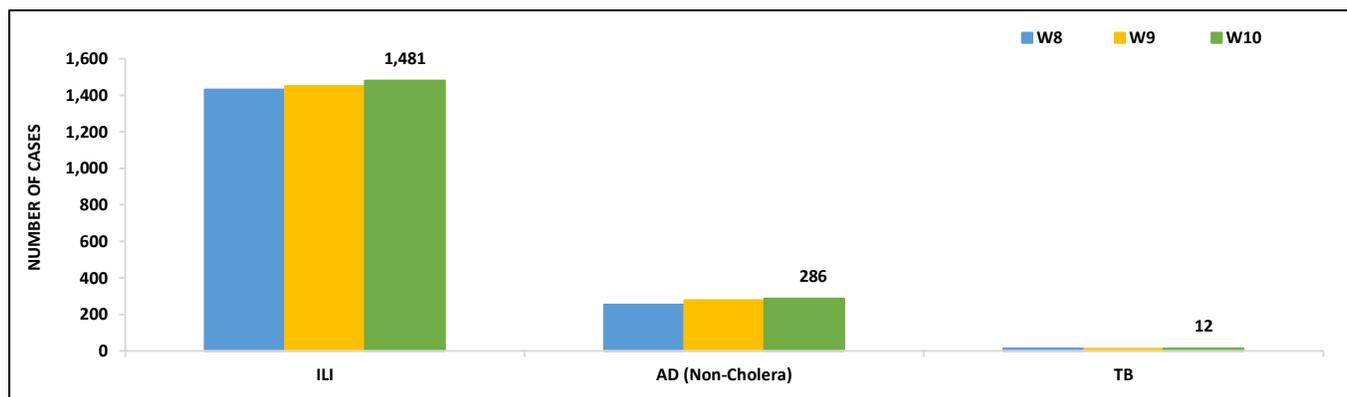


Figure 6: Week wise reported suspected cases of ILI, ICT

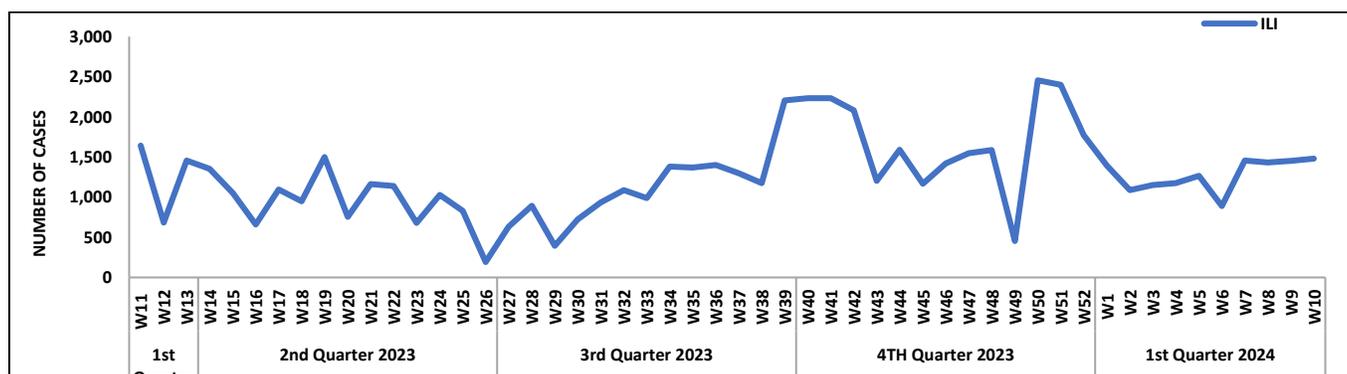


Figure 7: Most frequently reported suspected cases during week 10, AJK

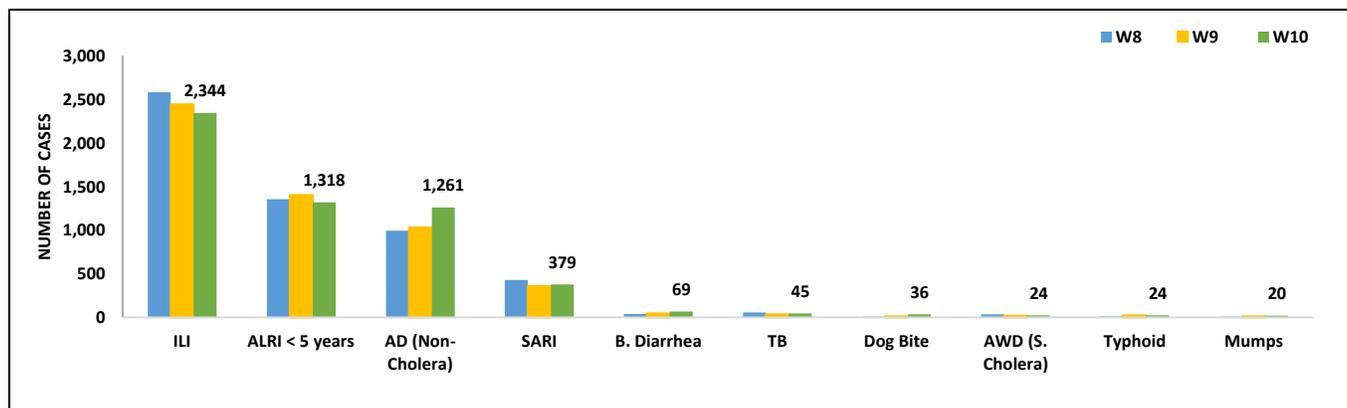


Figure 8: Week wise reported suspected cases of ILI and ALRI < 5 years AJK

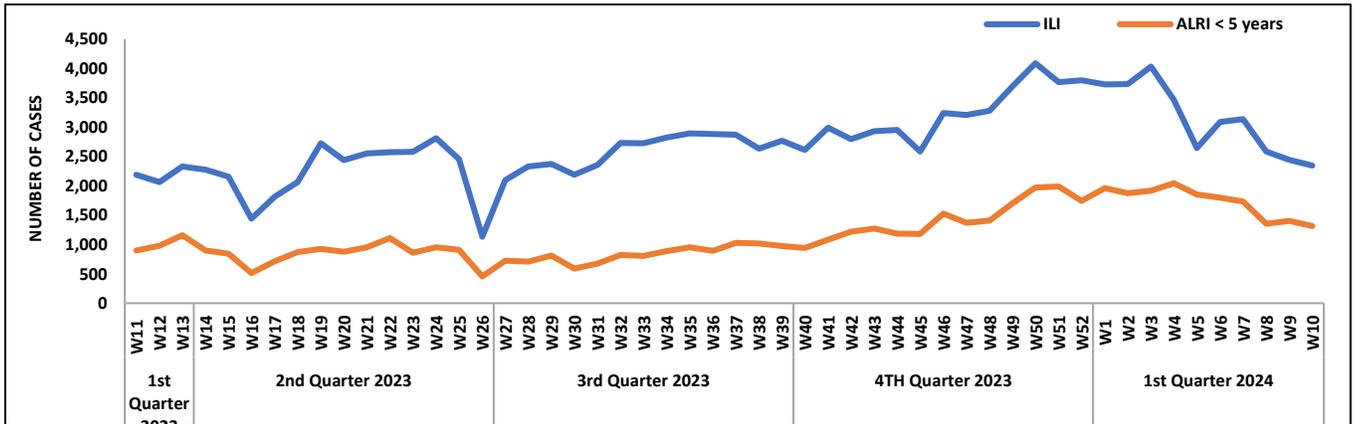


Figure 9: Most frequent cases reported during Week 10, GB

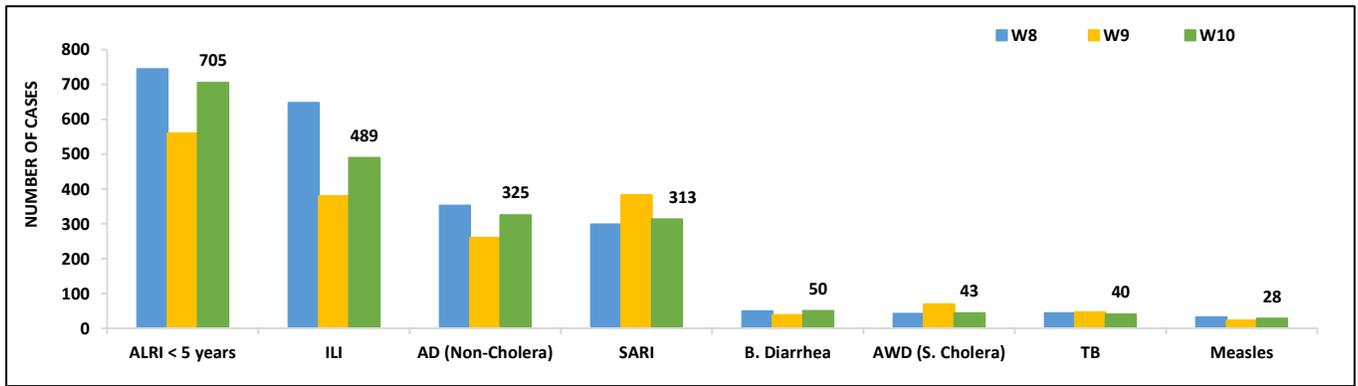
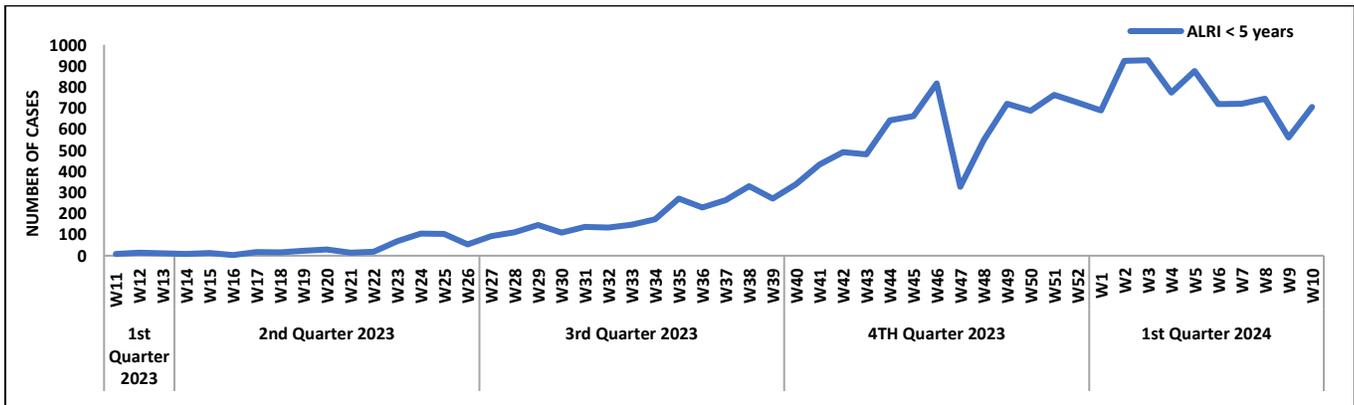


Figure 10: Week wise reported suspected cases of ALRI, GB



- Cases of AD (Non-Cholera) were maximum followed by Malaria, Typhoid, B. Diarrhea, ILI and CL. AD (Non-Cholera), Malaria, B. Diarrhea, ILI and CL cases showed a decreasing trend this week.

Figure 11: District wise distribution of most frequently reported suspected cases during week 10, Punjab

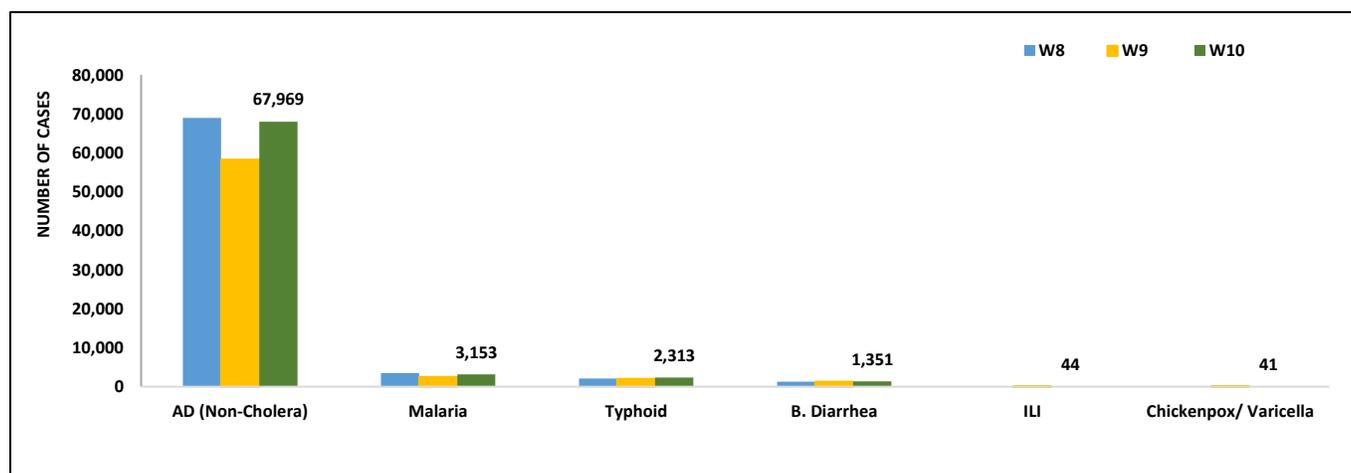


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 10

Diseases	Sindh		Balochistan		KPK		ISL		GB	
	Total Test	Total Positive	Total Test	Total Positive	Total Test	Total Positive	Total Test	Total Positive	Total Test	Total Positive
AWD (S. Cholera)	114	0	-	-	-	-	0	0	-	-
AD (Non-Cholera)	114	0	-	-	-	-	0	0	-	-
Malaria	2,409	128	-	-	-	-	0	0	2	0
CCHF	0	0	5	3	1	0	0	0	-	-
Dengue	26	1	-	-	-	-	1	0	-	-
VH (B)	840	71	109	90	-	-	13	0	114	0
VH (C)	1,903	186	104	33	-	-	13	0	114	0
Covid-19	-	-	-	-	5	1	106	10	-	-
HIV	117	0	-	-	-	-	2	0	-	-
Diphtheria	-	-	-	-	-	-	7	0	-	-
Influenza A	-	-	-	-	1	0	25	0	-	-
TB	200	9	-	-	-	-	-	-	-	-
Syphilis	176	0	-	-	-	-	0	0	-	-
Pertussis	-	-	-	-	-	-	0	0	-	-
Typhoid	-	-	-	-	-	-	5	0	-	-
Mumps	-	-	-	-	-	-	1	0	-	-
Measles	-	-	-	-	-	-	1	0	-	-

IDSR Reports Compliance

- Out OF 149 IDSR implemented districts, compliance is low from KPK. Green color showing >50% compliance while red color is <50% compliance

Table 6: IDSR reporting districts Week 10, 2024

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	110	105	95%
	Bannu	234	127	54%
	Battagram	63	19	30%
	Buner	34	23	68%
	Bajaur	44	23	52%
	Charsadda	59	53	90%
	Chitral Upper	34	27	79%
	Chitral Lower	35	34	97%
	D.I. Khan	94	92	98%
	Dir Lower	74	72	97%
	Dir Upper	52	41	79%
	Hangu	22	21	95%
	Haripur	71	57	80%
	Karak	35	35	100%
	Khyber	64	15	23%
	Kohat	61	61	100%
	Kohistan Lower	11	11	100%
	Kohistan Upper	20	20	100%
	Kolai Palas	10	10	100%
	Lakki Marwat	70	70	100%
	Lower & Central Kurram	40	3	8%
	Upper Kurram	42	15	36%
	Malakand	42	40	95%
	Mansehra	136	79	58%
	Mardan	80	76	95%
	Nowshera	55	53	96%
	North Waziristan	380	0	0%
	Peshawar	153	129	84%
	Shangla	65	15	23%
	Swabi	63	60	95%
	Swat	76	72	95%
	South Waziristan	134	52	39%
	Tank	34	33	97%
	Torghar	14	14	100%
Mohmand	86	32	37%	
SD DI Khan	19	1	5%	
SD Peshawar	5	2	40%	
SD Tank	58	3	5%	
Orakzai	68	12	18%	
	Mirpur	37	37	100%
	Bhimber	20	20	100%
	Kotli	60	60	100%
	Muzaffarabad	45	45	100%
	Poonch	46	46	100%



Azad Jammu Kashmir	Haveli	39	38	97%
	Bagh	40	38	95%
	Neelum	39	39	100%
	Jhelum Vellay	29	29	100%
	Sudhnooti	27	27	100%
Islamabad Capital Territory	ICT	21	21	100%
	CDA	14	8	57%
Balochistan	Gwadar	25	25	100%
	Kech	40	33	83%
	Khuzdar	20	18	90%
	Killa Abdullah	20	0	0%
	Lasbella	55	55	100%
	Pishin	62	8	13%
	Quetta	43	17	40%
	Sibi	36	36	100%
	Zhob	39	31	79%
	Jaffarabad	16	16	100%
	Naserabad	32	32	100%
	Kharan	30	30	100%
	Sherani	15	15	100%
	Kohlu	75	72	96%
	Chagi	35	25	71%
	Kalat	41	40	98%
	Harnai	17	13	76%
	Kachhi (Bolan)	35	12	34%
	Jhal Magsi	26	26	100%
	Sohbat pur	25	25	100%
	Surab	32	32	100%
	Mastung	45	45	100%
	Loralai	33	27	82%
	Killa Saifullah	28	27	96%
	Ziarat	29	0	0%
	Duki	31	30	97%
	Nushki	32	29	91%
	Dera Bugti	45	13	29%
	Washuk	46	16	35%
	Panjgur	38	19	50%
	Awaran	23	7	30%
	Chaman	24	21	88%
	Barkhan	20	16	80%
Hub	33	33	100%	
Musakhel	41	0	0%	
Usta Muhammad	34	33	97%	
Gilgit Baltistan	Hunza	32	32	100%
	Nagar	20	20	100%
	Ghizer	40	40	100%
	Gilgit	40	40	100%
	Diامر	62	62	100%



	Astore	54	54	100%
	Shigar	27	27	100%
	Skardu	52	52	100%
	Ganche	29	29	100%
	Kharmang	18	18	100%
Sindh	Hyderabad	73	60	82%
	Ghotki	64	63	98%
	Umerkot	43	43	100%
	Naushahro Feroze	107	62	58%
	Tharparkar	282	260	92%
	Shikarpur	60	60	100%
	Thatta	52	52	100%
	Larkana	67	67	100%
	Kamber Shadadkot	71	71	100%
	Karachi-East	23	21	91%
	Karachi-West	20	20	100%
	Karachi-Malir	37	21	57%
	Karachi-Kemari	18	8	44%
	Karachi-Central	11	10	91%
	Karachi-Korangi	18	12	67%
	Karachi-South	4	4	100%
	Sujawal	54	54	100%
	Mirpur Khas	106	104	98%
	Badin	123	118	96%
	Sukkur	64	64	100%
	Dadu	90	90	100%
	Sanghar	100	100	100%
	Jacobabad	44	44	100%
	Khairpur	169	163	96%
	Kashmore	59	59	100%
	Matiari	42	41	98%
	Jamshoro	68	68	100%
	Tando Allahyar	54	54	100%
	Tando Muhammad Khan	40	40	100%
	Shaheed Benazirabad	124	124	100%



Public Health Bulletin Pakistan

The Public Health Bulletin Pakistan (PHBP) seeks valuable contributions from Pakistan's dedicated field epidemiologists. Your expertise in disease investigation, outbreak response, and program evaluation is crucial for informing public health policy. Sharing your experiences and insights through case studies, short reports, perspectives, or opinion pieces will:

- **Broaden the Impact:** Reach fellow professionals, policymakers, and the public, fostering collaboration and shaping national public health practices.
- **Enhance Public Understanding:** Translate complex information into accessible language, raise awareness, and dispel myths about public health issues.
- **Inspire the Next Generation:** Showcase your passion and dedication, potentially inspiring future generations to join the fight for a healthier Pakistan.
- **Refine Writing Skills:** Hone your communication and advocacy abilities by contributing to a respected publication.

The PHBP welcomes diverse perspectives on current challenges and potential solutions.

Visit the PHBP website (<https://www.nih.org.pk/>)

or

email phb@nih.org.pk for submission information.

Together, let's build a healthier future through informed public health discourse.

Public Health Alert: Poliovirus Detection in Multiple Districts

Pakistan faces a renewed challenge from poliovirus, with detections in over 56 environmental samples across 25 districts so far in 2024. This builds upon over 100 positive sewage samples identified last year, highlighting the ongoing threat to children's health.

Poliovirus preys on vulnerable children, particularly those suffering from malnutrition or weakened immunity due to incomplete or absent vaccinations against polio and other childhood illnesses. These children lack the necessary defenses to fight off polio, leading to lifelong paralysis from the virus.

The Pakistan Polio Program urges immediate action from all sectors of society. Parents, caregivers, religious leaders, teachers, community elders – everyone has a crucial role to play. Together, we must ensure all children under five receive multiple doses of the polio vaccine.

The Polio Program has already conducted two nationwide vaccination campaigns in 2024, reaching over 45 million children and bolstering their immunity. As a targeted response to recent detections, a dedicated polio drive will commence on March 25th in all affected districts. This campaign aims to vaccinate over 6 million children.

In their recent update, The National Institute of Health's (NIH) Regional Reference Laboratory confirmed the presence of WPV1 in environmental samples collected between February 13th and 20th, 2024. These samples originated from Kohat,



Islamabad, Karachi (Keamari and Central districts), Sibi, Quetta, and Okara. Notably, all positive samples contained the imported YB3A poliovirus cluster.

Federal Health Secretary, expressed concern regarding the widespread presence of the virus. "The detection of poliovirus in multiple samples is a serious public health threat," he stated. "This virus can cause lifelong paralysis in children, and we urge all parents and caregivers to prioritize their children's complete vaccination schedule during every polio campaign."

The oral polio vaccine offers effective protection against the debilitating effects of polio. Multiple doses ensure sustained immunity in children. The public health department urges unwavering vigilance against poliovirus. Complete polio vaccination is critical for protecting children from this devastating disease.

N.B: *As of March 19, 2024, Pakistan has reported 2 polio cases, underlining the continued need for vigilance. Poliovirus detected in environmental samples across 25 districts suggests a broader risk.*

A note from Field Activities.

Food and Agriculture Organization (FAO) Emergency Centre for Monitoring (EMC) Mission to the National Institutes of Health (NIH) Pakistan: Assessment of Crimean-Congo Hemorrhagic Fever (CCHF) Vector Control Programs.

Introduction

Crimean-Congo Hemorrhagic Fever (CCHF) is a viral hemorrhagic disease transmitted primarily through tick bites. It poses a significant public health threat in many regions, including Pakistan. In response to ongoing concerns about CCHF, a team from the Emergency Management Centre (EMC) of the Food and Agriculture Organization of the United Nations (FAO) undertook a mission to the National Institutes of Health Pakistan (NIH)

Objectives

The primary objective of the mission is to evaluate the current approaches and methods employed by the NIH for vector (tick) control in the context of CCHF prevention. This evaluation aimed to:

- Assess the existing tick surveillance and monitoring programs.
- Review the current methods used for tick control in livestock and animal reservoirs.
- Evaluate the effectiveness of public health education and awareness campaigns regarding CCHF and tick control.
- Identify potential gaps or areas for improvement in Pakistan's CCHF vector control strategies.

Mission Activities

The FAO EMC team met with NIH Experts, veterinarians, and public health specialists at the NIH and gained insights into current strategies and challenges faced in controlling CCHF. The team also attended to advance FETP Pakistan training session. Team was updated on ongoing tick surveillance and control activities firsthand and Community Engagement activities for awareness about CCHF and current tick control practices.

Expected Outcomes

The FAO EMC mission is expected to deliver a comprehensive report outlining the findings of the evaluation. This report will include:

- A detailed assessment of Pakistan's current CCHF vector control strategies.
- Identification of strengths and weaknesses in existing programs.
- Recommendations for potential improvements and best practices for tick control in the context of CCHF prevention.

Conclusion

The FAO EMC mission to the NIH Pakistan represents a significant step towards strengthening CCHF prevention efforts in the country. The evaluation findings and recommendations will be valuable tools



for the NIH and relevant stakeholders in developing and implementing more effective tick control strategies to protect public health from CCHF.

Knowledge Hub

Acute Flaccid Paralysis (AFP): A Global Public Health Concern

Clinical Presentation and Importance:

Acute Flaccid Paralysis (AFP) manifests as a sudden onset of weakness or paralysis, typically affecting the limbs. However, it's crucial to recognize AFP as a clinical syndrome, signifying a collection of signs and symptoms rather than a specific diagnosis. This distinction underscores the need for thorough investigation to determine the underlying cause.

Etiological Spectrum:

A diverse array of pathogens and conditions can contribute to AFP. The most concerning etiology, particularly in regions where polio transmission persists, is the poliovirus. However, other notable causes include:

- **Guillain-Barre syndrome (GBS):** An autoimmune disorder affecting the peripheral nervous system, leading to rapid weakness and potential paralysis.
- **Vaccine-derived poliovirus (VDPV):** A mutated form of the live polio vaccine virus with the ability to spread and cause illness, primarily in populations with low vaccination coverage.
- **Non-polio enteroviruses:** A group of viruses distinct from poliovirus but capable of causing AFP.
- **Adenoviruses:** Viruses responsible for respiratory and other illnesses, with potential neurological complications like AFP.
- **West Nile Virus:** A mosquito-borne virus that can cause various neurological symptoms, including AFP.

- **Bacterial Infections:** Campylobacter species, for instance, can trigger AFP as a complication.
- **Inflammatory Conditions:** Transverse myelitis involves inflammation of the spinal cord, potentially leading to AFP.
- **Peripheral Neuropathies:** Damage to peripheral nerves can manifest as AFP.
- **Aseptic Meningitis:** Viral or non-bacterial meningitis may present with AFP in some cases.
- **Tick Paralysis:** A specific form of AFP caused by tick neurotoxins.
- **Central Nervous System Infections:** Brain abscesses can cause paralysis and mimic AFP.

Shifting Etiological Landscape:

In regions where polio eradication programs have achieved success, non-polio causes become the predominant contributors to AFP. Nevertheless, meticulous investigation of every AFP case remains paramount to rule out polio resurgence. This vigilance is essential for maintaining global polio eradication efforts.

Surveillance Strategies:

Effective public health interventions rely heavily on robust AFP surveillance. This involves actively identifying cases of acute-onset weakness or paralysis, particularly in children under 15 years of age. Each identified case undergoes a comprehensive investigation to determine the responsible etiology. Classifying non-polio cases is crucial for understanding the overall AFP burden and guiding public health strategies.

Global Polio Eradication Efforts:

AFP surveillance serves as a cornerstone for the global initiative to eradicate polio. Early detection of polio outbreaks through prompt identification of AFP cases allows for rapid implementation of containment measures. This ultimately protects vulnerable populations from the devastating consequences of polio.



Understanding Specific Conditions:

What is polio?

Polio is a highly contagious disease that can cause paralysis or death. It is caused by a virus that can spread through contact with the saliva or stool of an infected person. Polio can affect people of all ages, but it is most dangerous for children under the age of 5. There is no cure for polio, but it can be prevented with vaccination. The polio vaccine is safe and effective, and it is the best way to protect your child from this devastating disease.

What is Guillain-Barre syndrome (GBS)?

Guillain-Barre syndrome (GBS) is a rare disorder that affects the nerves in the peripheral nervous system. It can cause a rapid onset of weakness or paralysis, usually in the legs and then spreading to the arms and face. In severe cases, GBS can be fatal. The cause of GBS is unknown, but it is thought to be triggered by an infection, such as the flu

or a cold. GBS is not contagious. There is no cure for GBS, but most people make a full recovery. Treatment is aimed at managing the symptoms and preventing complications.

What is vaccine-derived polio virus (VDPV)?

Vaccine-derived polio virus (VDPV) is a type of polio virus that can occur when the live polio vaccine mutates. VDPV can spread from person to person, just like wild polio virus. However, VDPV is much less likely to cause paralysis than wild polio virus. VDPV is most likely to occur in countries with low vaccination rates. This is because the vaccine does not provide lifelong immunity to polio. People who are not vaccinated or who have not received a booster dose of the vaccine are at risk of getting VDPV.

Acute flaccid paralysis (AFP) is a serious condition that can have a devastating impact on children. However, it is a preventable disease. By getting vaccinated, you can help to protect your child from AFP and other serious diseases.



FOR A NEW TOMORROW
FOR A NEW BEGINNING

LET'S MAKE PAKISTAN POLIO FREE



No child left behind:
This Resolution Day, commit to a polio-free
Pakistan for all.
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