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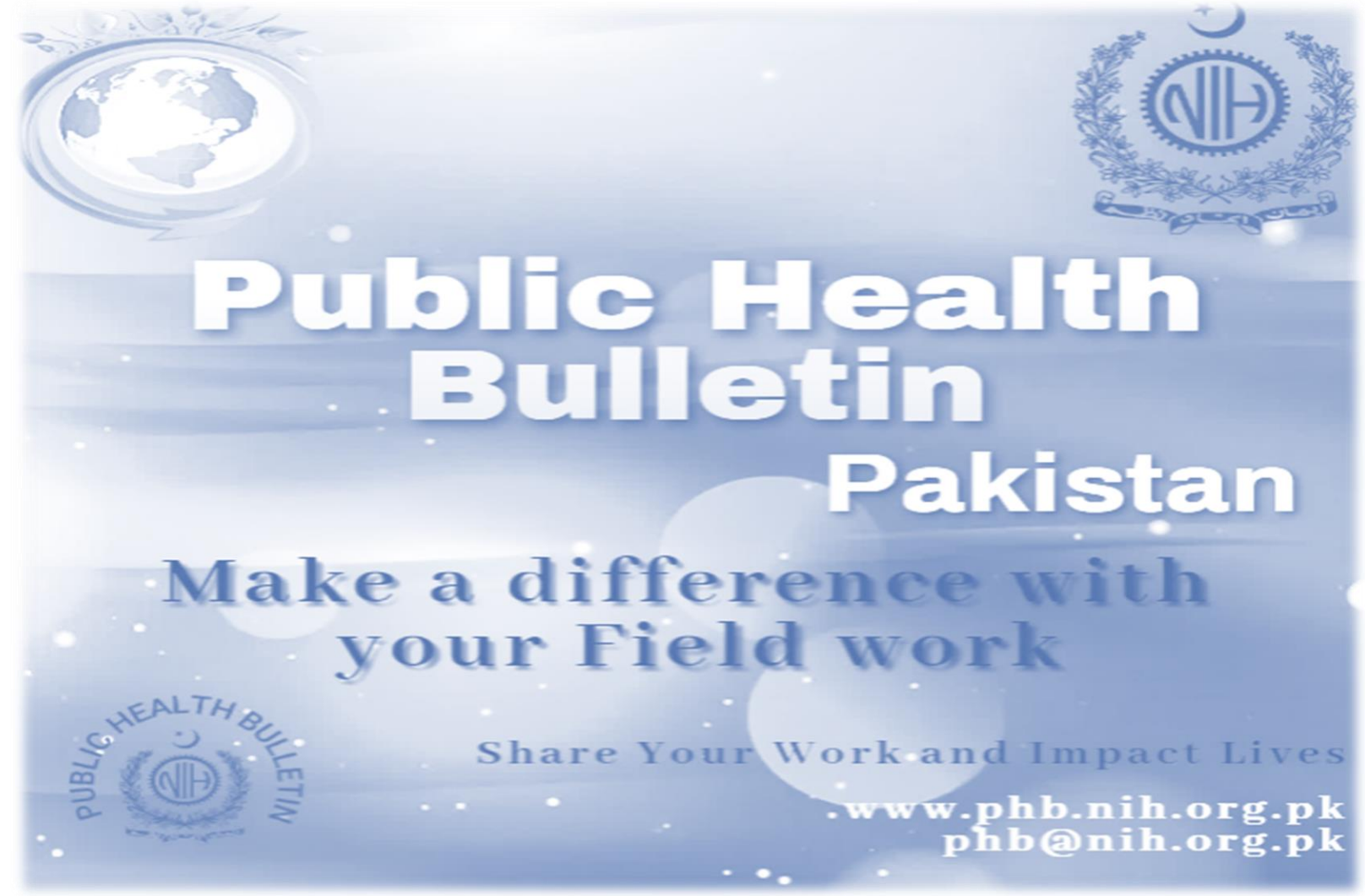
Integrated Disease Surveillance & Response (IDSR) Report

Center of Disease Control
National Institute of Health, Islamabad

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

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, Week 46, 2023

This edition of the Public Health Bulletin summarizes the most significant public health developments in Pakistan during Week 46 of 2023.

During the current reporting week, Acute Diarrhea (Non-Cholera) topped the list of reported cases, followed by Malaria, Influenza-Like Illness (ILI), Acute Lower Respiratory Infection (ALRI) in children under five, Bloody Diarrhea, Typhoid, Viral Hepatitis (B and C), Severe Acute Respiratory Infection (SARI), dog bite, and HIV/AIDS. Notably, Baluchistan reported a high number of HIV/AIDS and Gonorrhea cases. Both are sexually transmitted infections (STIs), and suspected cases require field verification for confirmation and prompt intervention. Overall, there has been an increase in cases of Acute Diarrhea, Malaria, and ALRI in children under five this week. Malaria and Acute Diarrhea are endemic diseases, and early public health interventions coupled with community awareness can aid in reducing their burden.

This issue of the Public Health Bulletin also provides updates on: Dengue Fever Outbreak Investigation in Saeedabad, District Matiari, Outbreak Investigation of Suspected Cholera Cases in Village Abul Hassan, Taluka Daur, District Shaheed Benazirabad, Field Activities from Punjab to Launch Final Polio Vaccination Campaign of the Year and Significant Decline in Dengue Fever Cases in Punjab. This issue also includes knowledge on Influenza A (H1N1): Understanding, Prevention, and Protection

The Public Health team urges the public to remain vigilant and seek immediate medical attention if they experience symptoms associated with any of the aforementioned diseases. By working together, we can effectively safeguard the health and well-being of our communities.

Working together, we can safeguard the health of our communities.

Sincerely,
The Chief Editor

- *During week 46, most frequent reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, ILI, ALRI <5 years, B. Diarrhea, Typhoid, VH (B&C), SARI, dog bite and HIV/AIDS.*
- *HIV/AIDS and Gonorrhea cases reported from Baluchistan in high numbers. Both are STIs and suspected cases, require field verification for confirmation and timely response.*
- *There is overall an increase in cases of AD, Malaria and LRTI <5 years this week. Malaria and Acute diarrhea cases are endemic, early public health intervention with community awareness can help reduce the burden*

IDSR compliance attributes

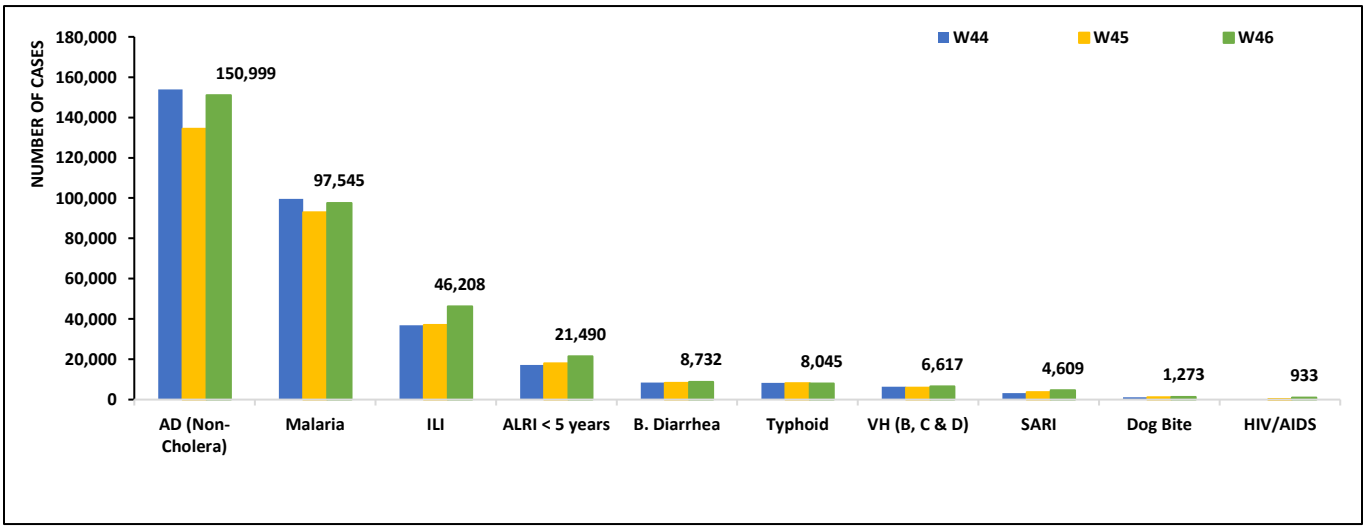
- *The national compliance rate for IDSR reporting in 121 implemented districts* is 77%
- *Sindh and AJK are the top reporting region with a compliance rate of 90% and 87% followed by Baluchistan with 77% and Khyber Pakhtunkhwa 66%*
- *The lowest compliance rate was observed in ICT and Gilgit Baltistan.*

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	2335	1547	66
Azad Jammu Kashmir	404	353	87
Islamabad Capital Territory	27	8	30
Balochistan	1182	916	77
Gilgit Baltistan	440	257	58
Sindh	2088	1885	90
National	6476	4966	77

Table 1: Province/Area wise distribution of most frequently reported cases during week 46, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	1,301	7,319	499	65	18,579	82,721	40,515	150,999
Malaria	81	11,040	0	1	5,868	3,502	77,053	97,545
ILI	3,225	9,493	498	249	5,767	5	26,971	46,208
ALRI < 5 years	1,479	2,581	733	4	2,893	NR	13,800	21,490
B. Diarrhea	53	1,981	63	0	946	2,093	3,596	8,732
Typhoid	45	972	50	0	718	4,608	1,652	8,045
VH (B, C & D)	9	151	12	0	94	NR	6,351	6,617
SARI	356	1,385	622	0	1,055	NR	1,191	4,609
Dog Bite	23	157	0	0	190	NR	903	1,273
HIV/AIDS	4	918	0	0	2	NR	9	933
AWD (S.Cholera)	44	308	119	0	38	NR	260	769
Mumps	81	173	46	0	99	NR	289	688
AVH (A&E)	26	22	9	0	197	NR	332	586
CL	1	156	3	0	319	12	2	493
Measles	8	108	2	0	214	NR	70	402
Dengue	9	20	0	2	38	NR	220	289
Pertusis	4	175	53	0	38	NR	15	285
Chickenpox/ Vericella	16	12	17	0	147	53	19	264
Gonorrhea	0	117	11	0	11	NR	32	171
Syphilis	27	3	0	0	4	NR	34	68
VL	0	8	0	0	41	NR	9	58
Meningitis	2	7	0	0	12	NR	18	39
AFP	7	1	0	0	24	NR	6	38
Diphtheria (Probable)	0	4	1	0	18	NR	0	23
Leprosy	0	1	0	0	18	NR	1	20
NT	0	0	0	0	2	NR	8	10
Rubella (CRS)	0	0	0	0	1	NR	8	9
Anthrax	0	0	0	0	0	NR	0	0
Brucellosis	0	1	0	0	4	NR	0	5
Chikungunya	0	0	0	0	0	NR	0	0
CCHF	0	0	0	0	0	NR	0	0

Figure 1: Most frequently reported suspected cases during week 46, Pakistan



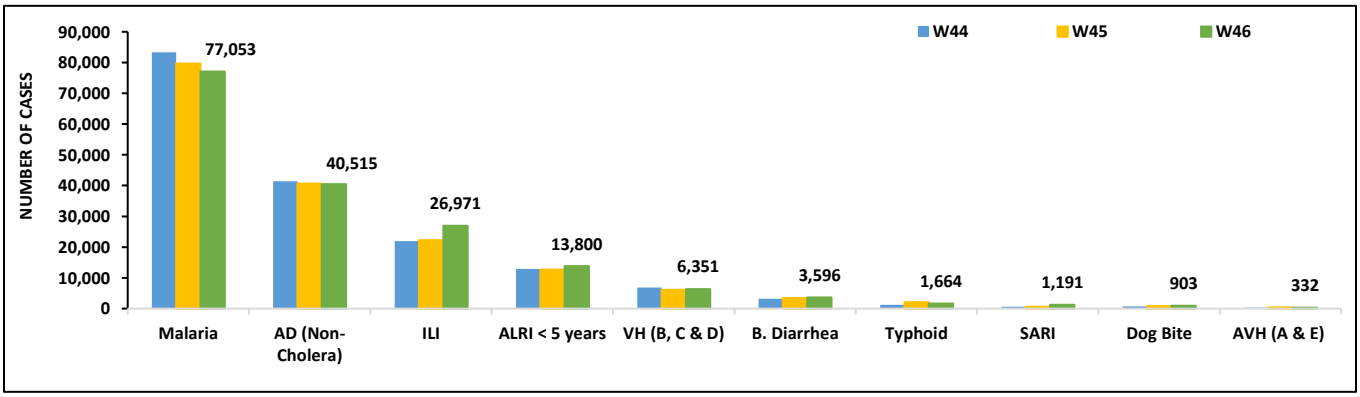
Sindh

- Malaria cases were maximum followed by AD (Non-Cholera), ILI, ALRI<5 Years, VH (B, C), B. Diarrhea, Typhoid, SARI, dog bite and AVH (A&E). There is a rising trend in ILI cases this week.
- Two hundred and fifty-one cases of AVH (A& E) reported from Thatta. All are suspected cases and need field investigation to verify cases for timely response activities.
- Typhoid cases are regularly reported and this week highest number of cases reported from Dadu and Khairpur. Field investigation is required to identify the source to control the spread of disease. Furthermore, public health labs should be on board.

Table 2: District wise distribution of most frequently reported suspected cases during week 46, Sindh

DISTRICTS	Malaria	AD (Non-Cholera)	ILI	ALRI < 5 years	VH (B, C & D)	B. Diarrhea	Typhoid	SARI	Dog Bite	AVH (A&E)
Badin	3,390	2,475	810	679	556	244	26	40	68	2
Dadu	6,250	3,315	1,831	1,432	3	504	608	9	65	10
Ghotki	1,324	958	0	729	387	145	0	0	0	2
Hyderabad	406	1,550	450	56	64	34	19	0	1	1
Jacobabad	3,594	1,238	426	1,328	278	132	40	90	49	0
Jamshoro	2,189	1,410	39	216	79	146	28	8	10	0
Kamber	4,908	1,736	0	391	323	161	24	16	24	3
Karachi Central	72	1,183	2,124	66	173	20	130	3	0	17
Karachi East	153	518	174	59	2	15	2	6	7	0
Karachi Keamari	4	367	192	56	0	1	6	0	0	2
Karachi Korangi	64	229	5	0	0	3	0	0	0	1
Karachi Malir	123	758	2,976	220	17	75	24	59	30	5
Karachi South	31	120	0	1	0	1	0	0	0	0
Karachi West	145	1,022	855	212	23	53	34	42	35	8
Kashmore	3,293	684	705	222	56	52	17	0	21	0
Khairpur	7,344	3,040	3,703	1,408	665	372	303	762	118	3
Larkana	12,215	2,018	4	574	194	365	4	0	0	6
Matiari	1,662	1,458	55	601	344	79	9	1	14	2
Mirpurkhas	3,684	2,029	4,488	894	193	115	26	0	42	5
Naushero Feroze	1,325	1,089	1,001	129	68	67	56	0	59	0
Sanghar	3,241	1,739	6	525	764	57	46	0	97	3
Shaheed Benazirabad	1,610	1,719	0	576	149	109	175	7	31	0
Shikarpur	4,324	1,127	3	184	295	151	5	8	134	0
Sujawal	2,083	888	0	473	37	32	1	0	0	0
Sukkur	4,554	1,610	2,257	489	470	214	5	0	20	0
Tando Allahyar	1,327	1,129	1,031	354	310	143	12	0	4	0
Tando Muhammad Khan	1,354	1,056	0	229	35	79	0	0	0	0
Tharparkar	2,533	1,666	2,341	1,022	168	124	48	98	5	11
Thatta	2,155	1,199	1,492	308	248	69	15	19	69	251
Umerkot	1,696	1,185	3	367	450	34	1	23	0	0
Total	77,053	40,515	26,971	13,800	6,351	3,596	1,664	1,191	903	332

Figure 2: Most frequently reported suspected cases during week 46 Sindh



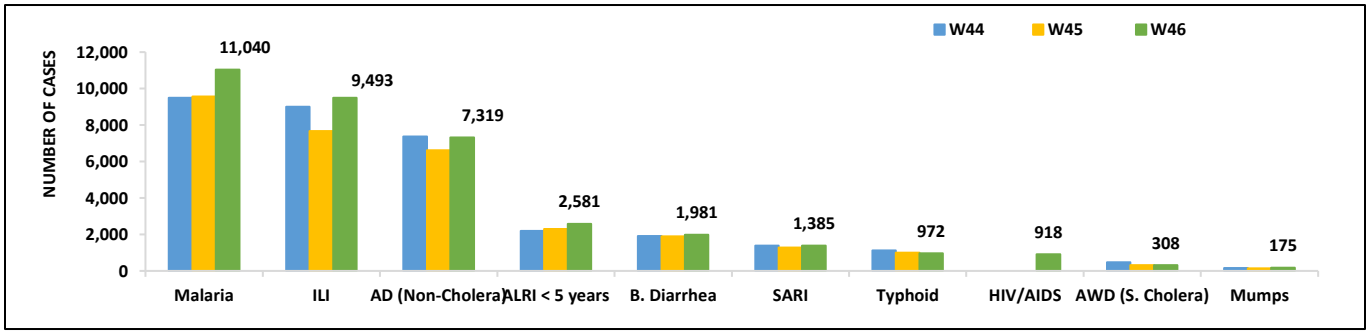
Balochistan

- Malaria, ILI, AD (Non-Cholera),ALRI <5 years, B. Diarrhea, SARI, Typhoid, HIV/AIDS, AWD (S. Cholera) and Mumps were the most frequently reported diseases from Balochistan province.
- Trend for ILI, AD and Malaria cases showed slight rise this week.
- Panjgur and Barkhan reported high number of Pertussis cases. All are suspected cases and need field investigation to verify the cases.

Table 3: District wise distribution of most frequently reported suspected cases during week 46, Balochistan

Districts	Malaria	ILI	AD (Non-Cholera)	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	HIV/AIDS	AWD (S.Cholera)	Pertussis
Barkhan	77	238	102	165	46	14	59	0	15	29
Chagai	23	310	198	0	58	0	33	0	12	0
Chaman	55	211	95	8	137	44	70	0	30	11
Dera Bugti	202	92	60	59	33	5	2	0	0	0
Duki	74	68	99	30	65	92	10	0	41	13
Gwadar	215	910	287	30	56	13	47	0	7	0
Harnai	133	42	96	292	145	0	10	0	5	0
Hub	448	149	226	61	60	71	10	2	0	0
Jaffarabad	1,258	94	540	46	52	30	3	0	0	2
Jhal Magsi	1,243	309	389	86	16	0	22	0	1	19
Kachhi (Bolan)	398	217	307	11	38	74	61	0	39	0
Kalat	35	22	53	21	22	4	47	0	0	0
Kech (Turbat)	638	1,840	448	152	91	7	NR	NR	NR	NR
Kharan	88	348	149	14	71	0	5	0	1	0
Khuzdar	81	123	58	0	38	8	8	0	0	0
Killa Saifullah	175	0	170	112	68	11	19	0	2	17
Kohlu	195	637	218	90	167	154	73	0	20	22
Lasbella	818	289	417	124	29	47	11	0	0	0
Loralai	73	383	181	70	69	135	32	0	0	4
Mastung	92	254	230	51	45	98	58	0	3	0
Musakhel	211	123	88	30	42	24	29	0	48	3
Naseerabad	898	0	296	6	14	3	50	0	0	2
Nushki	35	16	178	0	24	6	0	0	0	0
Panjgur	221	38	105	12	23	12	45	0	20	31
Pishin	6	75	23	32	11	0	5	0	0	0
Quetta	20	1,142	304	116	56	55	27	0	3	0
Sherani	1	74	55	0	11	67	3	0	0	0
Sibi	965	239	701	64	61	95	52	916	41	10
Sohbat pur	927	34	316	156	93	52	74	0	3	0
Surab	31	101	50	11	7	22	28	0	0	1
Usta Muhammad	1,088	207	401	280	40	37	9	0	0	0
Washuk	91	419	230	5	167	24	20	0	0	0
Zhob	169	200	159	377	69	161	21	0	1	8
Ziarat	56	289	90	70	57	20	29	0	16	3
Total	11,040	9,493	7,319	2581	1,981	1385	972	918	308	175

Figure 3: Most frequently reported suspected cases during week 46, Balochistan



UK Health Security Agency

World Health Organization

USAID

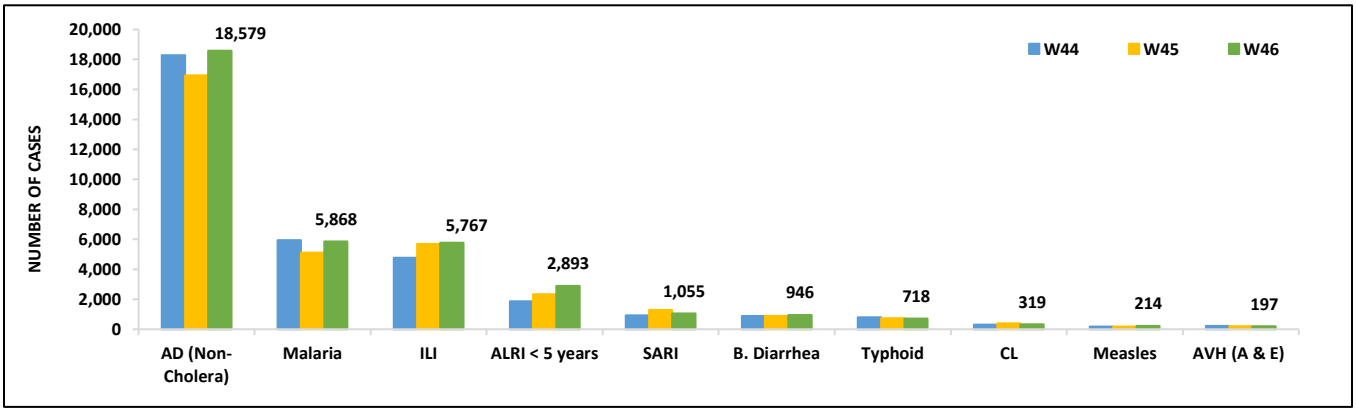
safetynet

- Cases of AD (Non-Cholera) were maximum followed by Malaria, ILI, SARI, ALRI<5 Years, B. Diarrhea, Typhoid, CL, AVH (A&E) and Measles cases.
- AD (Non-Cholera) cases showed a slight rise this week.
- SARI cases reported in high numbers (445) from Upper Kurram. These are suspected cases and a field investigation is required to verify cases.

Table 4: District wise distribution of most frequently reported suspected cases during week 46, KP

Districts	AD (Non-Cholera)	Malaria	ILI	ALRI <5 Years	SARI	B. Diarrhea	Typhoid	CL	Measles	AVH (A & E)
Abbottabad	409	3	36	19	30	1	13	2	0	0
Bajaur	267	133	41	32	15	38	4	5	4	0
Bannu	756	1260	49	26	0	16	48	1	7	7
Battagram	175	94	533	0	2	0	0	0	1	4
Buner	335	299	0	49	0	2	11	0	2	0
Charsadda	941	542	381	72	127	30	43	13	1	5
Chitral Lower	210	11	93	34	47	13	4	10	4	10
Chitral Upper	80	3	11	18	9	10	32	0	1	1
D.I. Khan	849	422	8	44	42	10	2	1	27	0
Dir Lower	1044	630	3	255	2	66	34	9	18	0
Dir Upper	286	7	35	35	0	10	27	4	8	6
Hangu	241	441	155	22	20	19	3	27	1	11
Haripur	965	28	583	318	5	3	54	0	0	23
Karak	235	184	48	7	0	0	2	41	29	0
Khyber	88	153	42	21	2	14	8	5	3	1
Kohat	60	18	2	1	0	0	0	1	2	0
Kohistan Lower	96	4	0	8	0	4	0	0	1	0
Kohistan Upper	276	16	48	33	15	8	9	0	3	0
Kolai Palas	41	2	0	4	2	8	0	0	0	0
L & C Kurram	26	8	189	0	2	4	4	0	0	0
Lakki Marwat	385	323	0	73	0	26	13	19	2	0
Malakand	516	28	0	55	11	36	15	18	26	32
Mansehra	439	7	775	102	68	25	2	0	1	10
Mardan	1087	28	0	866	0	25	0	7	4	7
Mohmand	120	106	53	4	8	24	14	70	3	0
Nowshera	1396	51	0	0	25	30	14	17	0	0
Peshawar	2916	126	1164	134	85	235	79	19	22	36
SD DI Khan	0	3	0	0	0	0	1	0	0	0
SD Peshawar	0	1	0	4	0	0	0	0	0	0
Shangla	393	187	35	11	32	2	7	0	4	0
SWA	71	78	290	116	26	13	30	32	2	1
Swabi	1051	55	555	348	21	9	27	0	7	17
Swat	1998	21	144	80	0	20	0	0	1	23
Tank	567	498	0	49	0	5	81	9	3	0
Tor Ghar	38	88	0	0	14	18	4	9	0	1
Upper Kurram	222	10	494	53	445	222	133	0	27	2
Total	18,579	5,868	5,767	2,893	1,055	946	718	319	214	197

Figure 4: Most frequently reported suspected cases during week 46, KP



ICT, AJK & GB

ICT: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera) and AWD. ILI cases showed a decreasing trend in cases this week.

AJK: ILI cases were maximum followed by ALRI <5 years, AD (Non-Cholera), SARI, Mumps, Malaria. Diarrhea, AWD (S. Cholera), Typhoid and Syphilis. ILI and ALRI <5 years cases showed an upward trend this week.

GB: ALRI<5 years, SARI, AD (Non-Cholera), ILI, AWD (S. Cholera), B. Diarrhea, Pertussis and Typhoid cases were the most frequently reported diseases from GB. There is a sharp rising trend in AD cases this week.

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

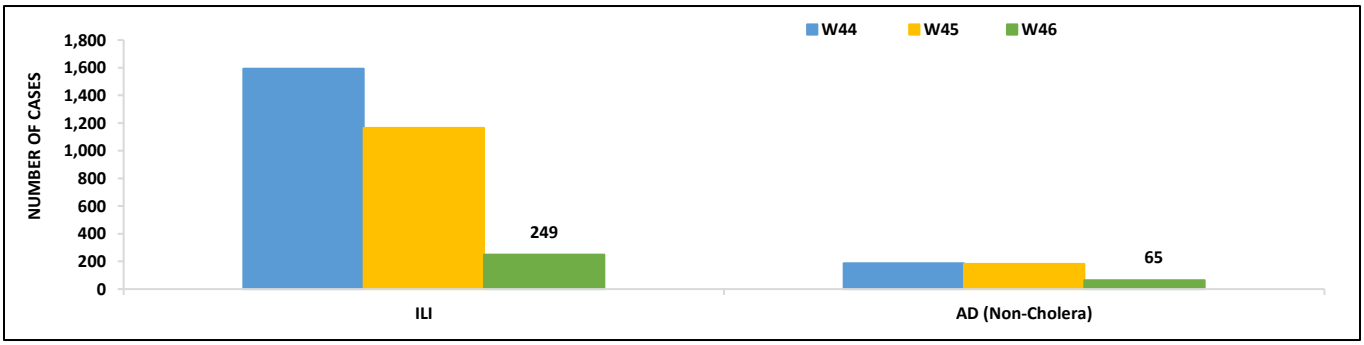


Figure 6: Week wise reported suspected cases of ILI, ICT

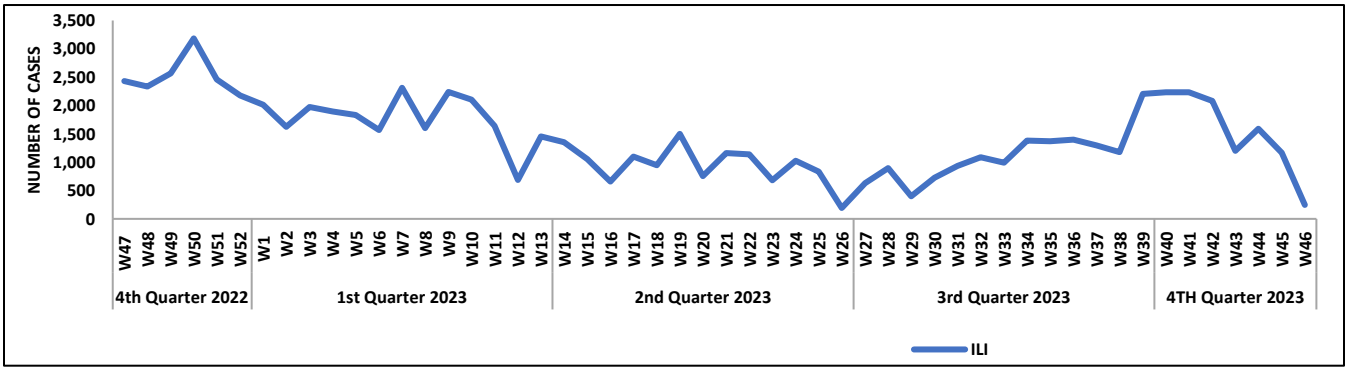


Figure 7: Most frequently reported suspected cases during week 46, AJK

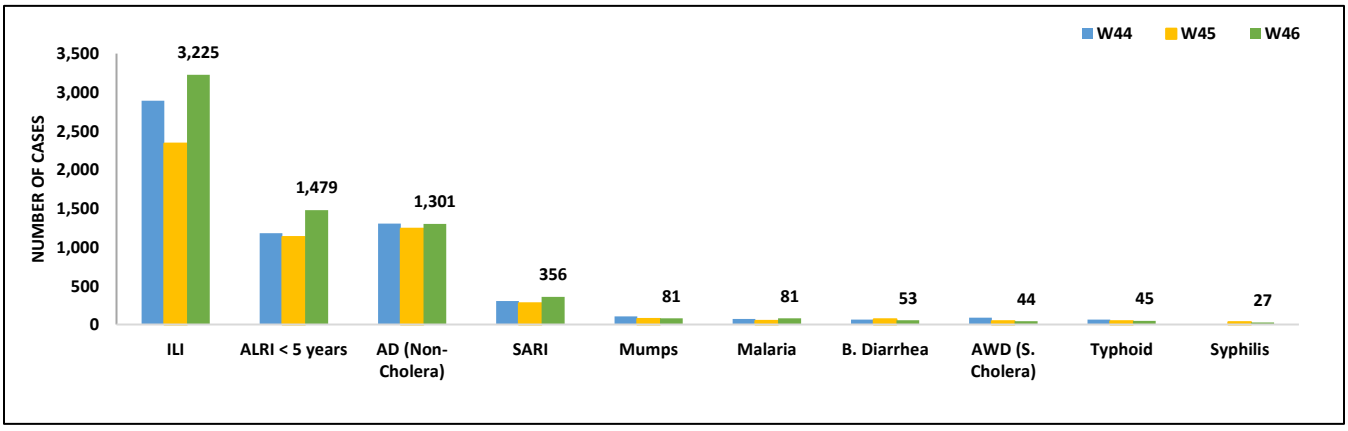


Figure 8: Week wise reported suspected cases of ILI, ALRI<5 years and AD (Non-Cholera), AJK

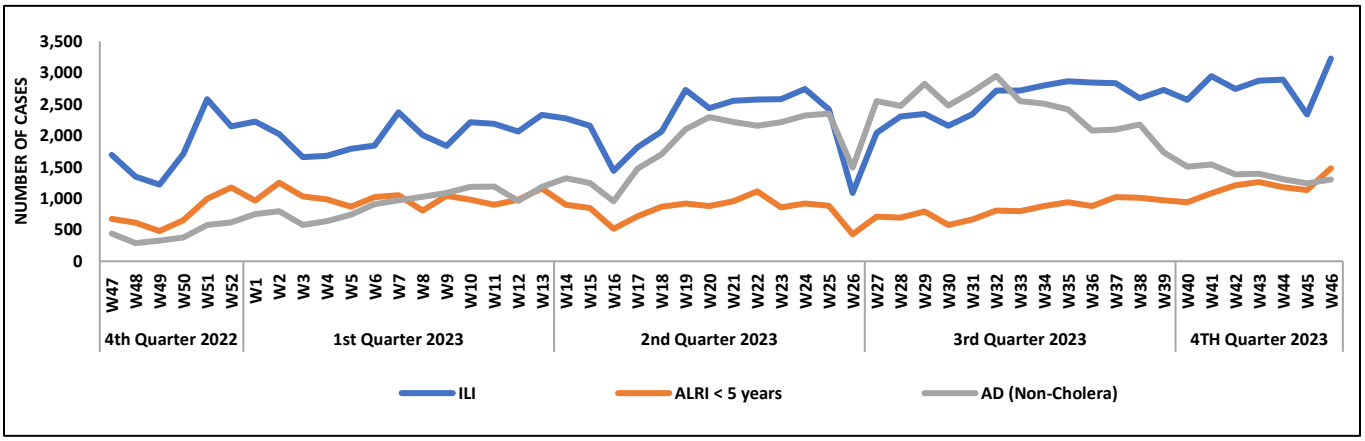


Figure 9: Most frequent cases reported during WK 46, GB

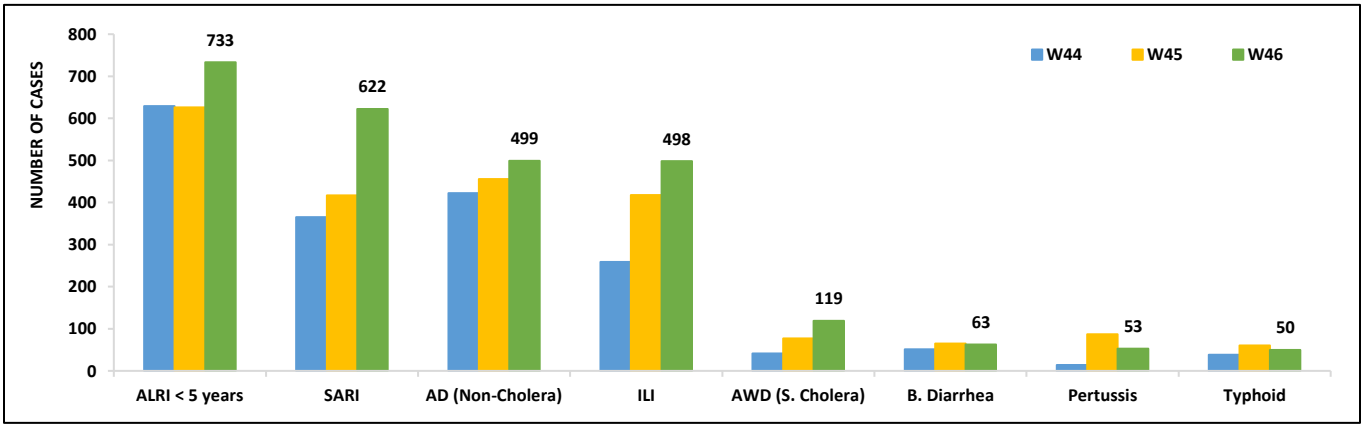
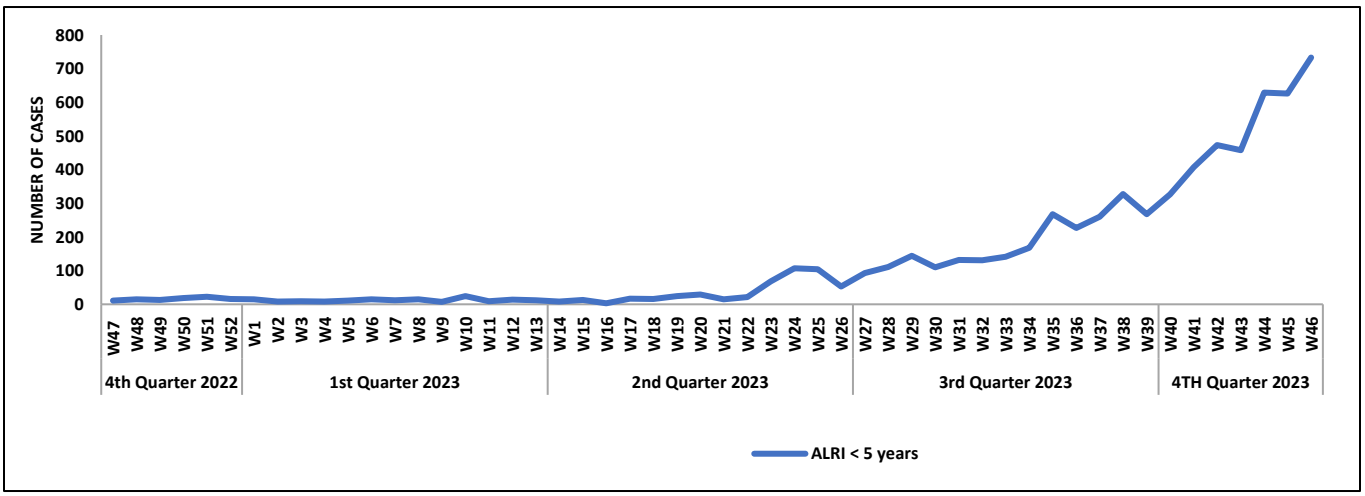


Figure 10: Week wise reported suspected cases of ALRI, GB



- Cases of AD (Non-Cholera) were the most frequently reported followed by Typhoid, Malaria and B. Diarrhea. AD (Non-cholera) cases showed a rising trend this week

Figure 11: District wise distribution of most frequently reported suspected cases during week 46, Punjab

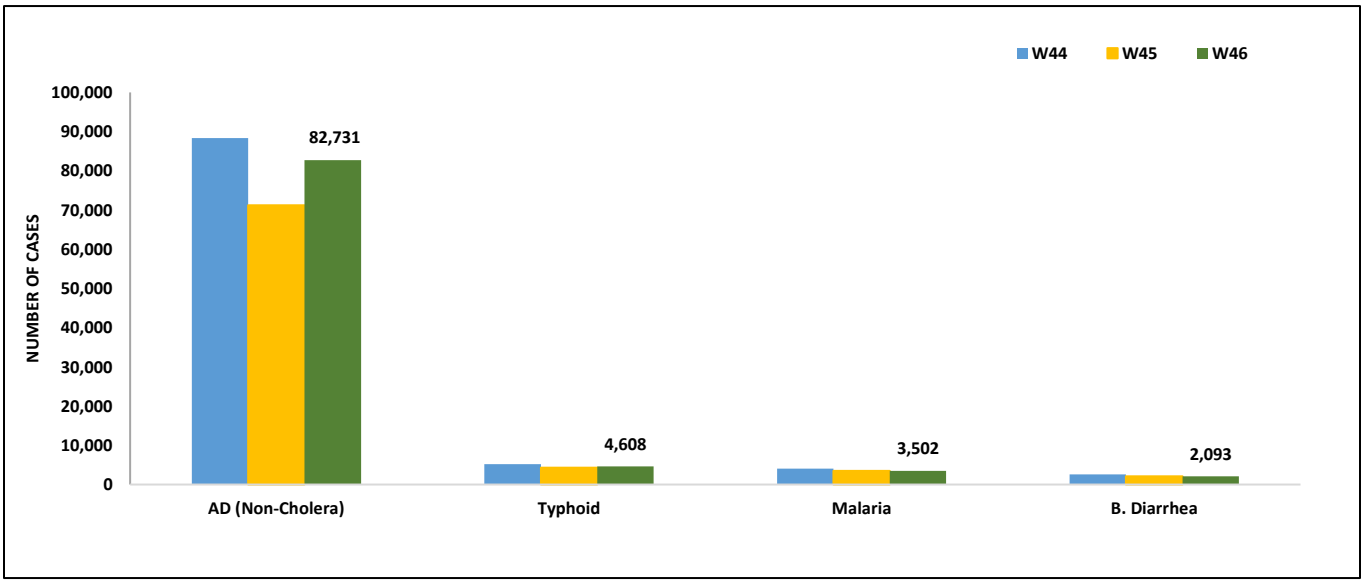


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 46

Diseases	Sindh	Balochistan	Punjab	KPK	ISL	Gilgit
Acute Watery Diarrhoea (S. Cholera)	0	-	-			
Acute diarrhea(non-cholera)	0		0			
Malaria	101					
CCHF		9		0	0	
Dengue	0	0			15	
Acute Viral Hepatitis(A)	0					1
Acute Viral Hepatitis(B)	0					0
Acute Viral Hepatitis(C)	0	8	0			
Mumps	0				8	
Typhoid	1		4	0		
Covid 19		1		0	3	0

IDSR Reports Compliance

- Out OF 121 IDSR implemented districts, compliance is low from ICT & Gilgit Baltistan districts. Green color showing >50% compliance while red color is <50% compliance

Table 6: IDSR reporting districts Week 46

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	110	99	90%
	Bannu	244	118	48%
	Battagram	63	17	27%
	Buner	33	31	94%
	Bajaur	44	33	75%
	Charsadda	59	55	93%
	Chitral Upper	34	28	82%
	Chitral Lower	35	34	97%
	D.I. Khan	94	88	94%
	Dir Lower	74	72	97%
	Dir Upper	52	42	81%
	Hangu	22	22	100%
	Haripur	71	65	92%
	Karak	39	39	100%
	Khyber	64	11	17%
	Kohat	96	61	64%
	Kohistan Lower	11	11	100%
	Kohistan Upper	20	19	95%
	Kolai Palas	10	10	100%
	Lakki Marwat	69	69	100%
	Lower & Central Kurram	40	7	18%
	Upper Kurram	42	12	29%
	Malakand	48	37	77%
	Mansehra	150	86	57%
	Mardan	80	76	95%
	Nowshera	54	52	96%
	North Waziristan	22	0	0%
	Peshawar	152	115	76%
	Shangla	65	21	32%
	Swabi	67	62	93%
	Swat	76	64	84%
	South Waziristan	133	42	32%
	Tank	34	31	91%
	Torghar	18	18	100%
	Mohmand	86	38	44%
	SD DI Khan	19	2	10%
	SD Peshawar	5	1	20%
	Mirpur	37	35	95%
	Bhimber	42	19	45%
	Kotli	60	53	88%
	Muzaffarabad	45	42	93%
	Poonch	46	46	100%
	Haveli	39	26	67%
	Bagh	40	38	95%

Azad Jammu Kashmir	Neelum	39	38	97%
	Jhelum Vellay	29	29	100%
	Sudhnooti	27	27	100%
Islamabad Capital Territory	ICT	35	4	11%
	CDA	35	4	11%
Balochistan	Gwadar	25	24	96%
	Kech	39	28	72%
	Khuzdar	20	19	95%
	Killa Abdullah	20	0	0%
	Lasbella	55	55	100%
	Pishin	62	5	8%
	Quetta	43	20	47%
	Sibi	36	33	92%
	Zhob	39	33	85%
	Jaffarabad	16	16	100%
	Naserabad	32	32	100%
	Kharan	33	30	91%
	Sherani	15	15	100%
	Kohlu	75	71	95%
	Chagi	35	28	80%
	Kalat	41	40	98%
	Harnai	17	17	100%
	Kachhi (Bolan)	35	35	100%
	Jhal Magsi	26	26	100%
	Sohbat pur	25	25	100%
	Surab	32	17	53%
	Mastung	45	45	100%
	Loralai	33	28	85%
	Killa Saifullah	28	27	96%
	Ziarat	29	24	83%
	Duki	31	30	97%
	Nushki	32	30	94%
	Dera Bugti	45	20	44%
	Washuk	46	27	59%
	Panjgur	38	8	21%
	Awaran	23	0	0%
	Chaman	24	21	88%
	Barkhan	20	20	100%
	Hub	33	33	100%
	Usta Muhammad	34	34	100%
Gilgit Baltistan	Hunza	32	32	100%
	Nagar	25	0	0%
	Ghizer	62	4	6%
	Gilgit	40	40	100%
	Diamer	78	38	49%
	Astore	54	51	94%
	Shigar	27	23	85%
	Skardu	52	42	81%
	Ganche	29	19	66%

	Kharmang	46	8	17%
Sindh	Hyderabad	73	32	44%
	Ghotki	64	64	100%
	Umerkot	43	35	81%
	Naushahro Feroze	107	62	58%
	Tharparkar	282	264	94%
	Shikarpur	60	60	100%
	Thatta	53	49	92%
	Larkana	67	67	90%
	Kamber Shadadkot	71	69	100%
	Karachi-East	23	22	96%
	Karachi-West	20	20	100%
	Karachi-Malir	37	19	51%
	Karachi-Kemari	18	10	56%
	Karachi-Central	11	11	100%
	Karachi-Korangi	18	11	61%
	Karachi-South	4	4	100%
	Sujawal	54	42	78%
	Mirpur Khas	106	105	99%
	Badin	124	111	90%
	Sukkur	64	64	100%
	Dadu	90	88	98%
	Sanghar	100	99	99%
	Jacobabad	44	43	98%
	Khairpur	168	159	95%
	Kashmore	59	58	98%
	Matiari	42	42	100%
	Jamshoro	68	68	100%
	Tando Allahyar	54	51	94%
	Tando Muhammad Khan	40	40	100%
	Shaheed Benazirabad	124	116	94%

A note from Field Activities.

Source: DHIS-2 Reports
https://dhis2.nih.org.pk/dhis-web-event-reports/

Dengue Fever Outbreak Investigation in Saeedabad, District Matiari, Sindh Pakistan October, 2023

Introduction

On October 20, 2023, social media reports indicated suspected cases of Dengue Fever in Ward No. 3, Taluka Hospital Saeedabad, District Matiari. Upon confirmation on October 21, 2023, a joint outbreak investigation team from the Provincial Disease Surveillance and Response Unit (PDSRU) and Vector Borne Diseases (VBDs) at the District Health and Surveillance System (DGHSS) was deployed to conduct a comprehensive outbreak investigation.

Objectives:

- Assess the magnitude of the outbreak
- Identify the risk factors contributing to the outbreak
- Implement effective control measures
- Formulate preventive strategies to mitigate future outbreaks

Methods:

The study was conducted in Town Committee Saeedabad, Taluka Saeedabad, District Matiari, employing a descriptive study design. A total of 26 cases were included in the analysis. Data were collected using a pretested structured questionnaire, with data collection techniques encompassing review of hospital records, active case search, and face-to-face interviews. Data analysis was performed using attack rates, frequencies, and percentages.

Results

The initial investigation revealed several factors contributing to the dengue fever outbreak in Saeedabad. Stagnant water surrounding houses provided ideal breeding grounds for Aedes aegypti mosquitoes, the primary vector of dengue fever. Moreover, the absence of mosquito nets and repellents among residents further exacerbated the risk of mosquito bites. Additionally, inadequate awareness of the outbreak within the community hindered timely preventive measures and early detection of cases.

Conclusion:

The primary source of the outbreak was stagnant water and storage containers/plastic tanks on rooftops, which provided breeding grounds for Aedes aegypti mosquito larvae/pupae and adult mosquitoes. Notably, no travel history to endemic areas was reported among suspected or confirmed cases.

A Note from Field Activities.

Outbreak Investigation of Suspected Cholera Cases in Village Abul Hassan, Taluka Daur, District Shaheed Benazirabad October, 2023

Source: DHIS-2 Reports
https://dhis2.nih.org.pk/dhis-web-event-reports/

Background:

On October 10, 2023, a rise in suspected cholera cases (n=10), including one fatality, was reported in Village Dargah Abdul Hassan, Taluka Daur, District Shaheed Benazirabad. Upon notification, a team from the Provincial Disease Surveillance and Response Unit (PDSRU) of the District Health and Surveillance System (DGHSS) was deployed to investigate the outbreak in the affected area of District Shaheed Benazirabad.

Objectives:

- Determine the extent of the outbreak
- Identify risk factors and the source of the outbreak
- Recommend control measures to prevent future outbreaks and fatalities

Methods.

In collaboration with the District Health Officer (DHO) team, the PDSRU team undertook a comprehensive investigation. This involved conducting face-to-face interviews with family members to gather details about the patients' symptoms, dietary habits, and the circumstances surrounding the death. Additionally, pre-tested

questionnaires were administered to collect further data from affected households. Active surveillance was employed to identify new suspected cholera cases and fatalities, adhering to the established case definition. Water samples were also collected from various sources for laboratory testing to confirm the presence of cholera.

Findings:

The initial investigation into the suspected cholera outbreak in Village Abul Hassan, Taluka Daur, District Shaheed Benazirabad, revealed several underlying factors. The village's primary water source, a hand pump, was contaminated, facilitating the spread of the diarrheal infection. Inadequate hygiene and sanitation practices, along with insufficient knowledge regarding safe drinking water and handwashing practices, further aggravated the situation. Moreover, the absence of a functional BHU/RHC and delayed treatment-seeking behavior contributed to the severity of the outbreak.

Conclusion:

Contaminated water from the hand pump was the primary source of the cholera outbreak. The lack of access to safe drinking water, coupled with poor hygiene and sanitation practices, exacerbated the spread of the infection. Additionally, delayed treatment-seeking behavior and inadequate knowledge of preventive measures contributed to the severity of the outbreak.

Recommendations:

- Enhance the vigilance of the District Surveillance team to ensure timely implementation of preventive measures.
- Promptly send water samples for laboratory confirmation of cholera.
- Establish mobile medical camps equipped with essential medications.
- Ensure the availability of an ambulance for emergency transportation.
- Deploy Lady Health Workers (LHWs) to the affected area to raise awareness about health and hygiene practices.

A Note from Field Activities.

Punjab Poised to Launch Final Polio Vaccination Campaign of the Year

Dr. Ehsan Ghani
District Health officer
Preventive Services

In a significant step towards eradicating polio, Punjab is gearing up to launch its final national polio vaccination campaign of the year, commencing November 27, 2023. The campaign will encompass the entire province, with a duration of seven days in high-risk districts like Lahore, Rawalpindi, and Faisalabad. In the remaining districts, the campaign will conclude on December 1 after a five-day period.

Over 204,000 polio workers and supervisors will be mobilized to immunize 21.26 million children under the age of five against polio. This formidable team comprises 16,575 area in-charges, 3,985 union council medical officers, over 169,000 mobile polio team members, 4,868 fixed team members, and over 2,700 transit team members.

Punjab has remained polio-free since October 2020, a testament to the program's unwavering commitment. However, the polio virus remains detectable in environmental samples collected in Lahore and Rawalpindi. To date in 2023, nine samples have tested positive, with six from Lahore and three from Rawalpindi.

Genomic sequencing of the virus confirms a link between eight virus samples and the YB3A virus cluster circulating in Afghanistan. "This evidence suggests that Punjab faces a risk of virus importation, yet Punjab has successfully protected children from paralysis through dedication and hard work. Through effective strategies, the province has prevented virus exportation. As long as the virus exists anywhere, it poses a threat to children everywhere.

Punjab is vigilant in shielding children from the polio virus. The polio eradication program, under the leadership of the secretary and minister of the primary and secondary healthcare department,

acknowledges the sacrifices of polio workers. Frontline workers continue to reach every child in some of the hardest-to-reach areas, driven by the unwavering goal of vaccinating every last child with the polio vaccine and ensuring a polio-free world for future generations.

Punjab's final polio vaccination campaign of the year signifies a crucial step towards achieving a polio-free world. The collective efforts of the polio program, healthcare workers, and the community will play a pivotal role in safeguarding children and eradicating this debilitating disease.

Letter to the Editor:

Punjab's Dengue Fever Crisis Subsides as Outbreak Shows Signs of Easing

Dr. Sajjad Mahmood
District Surveillance coordinator (EP&C)
Rawalpindi.

Introduction

A notable decline in dengue fever incidence has been observed in the Punjab province of Pakistan, with only 95 new cases reported in the last 24 hours. This represents a significant decrease compared to previous weeks, indicating a positive trend in the fight against the mosquito-borne disease.

Key Highlights

- Reduced Incidence: The latest data released by the Health Department on Sunday confirms a total of 13,781 confirmed dengue fever cases in Punjab this year. This figure marks a notable reduction from the peak of the outbreak.
- District-wise Breakdown: Lahore leads with 6,213 cases, followed by Rawalpindi with 2,608, Gujranwala with 1,436, Multan with 1,338, and Faisalabad with 801 cases.
- Recent Case Distribution: The updates reveal an additional 52 dengue cases in Lahore, 01 in Rawalpindi, 12 in Gujranwala, 10 in Multan, 07 in Faisalabad, 03 in Okara, 03 in Bahawalpur, and 02 in Sahiwal within the last 24 hours. Sheikhupura, Kasur, Sialkot, Khanewal, and Hafizabad each reported 1 case within the last 24 hours.
- Hospitalization and Treatment: Currently, 102 dengue patients are receiving treatment in various Punjab hospitals, with 60 of them in Lahore district hospitals.
- Preventive Measures: Secretary Health Punjab Ali Jaan Khan has urged citizens to maintain clean and dry surroundings as a preventive measure against dengue fever.
- Helpline Accessibility: For Dengue treatment, information, or complaints, a free helpline is available at 1033.

The decline in dengue fever cases in Punjab is a welcome development, indicating that control measures have been effective in curbing the spread of the disease. However, it is crucial to remain vigilant and continue preventive measures to prevent a resurgence of the outbreak. Maintaining clean and dry surroundings is essential to eliminate mosquito breeding grounds. Additionally, seeking timely medical attention upon experiencing dengue fever symptoms can help prevent complications and ensure a speedy recovery.

Knowledge Hub

Influenza A (H1N1): Understanding, Prevention, and Protection

In the realm of public health, influenza A (H1N1), commonly known as swine flu, stands as a formidable adversary. This respiratory illness, caused by the influenza virus, has the potential to cause widespread morbidity and mortality if left unchecked. To combat this threat, a comprehensive health education and awareness campaign is essential.

Understanding Influenza, A (H1N1)

Influenza A (H1N1) is a contagious viral infection that primarily attacks the respiratory system,

including the nose, throat, and lungs. The virus is transmitted through droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of nearby individuals or possibly be inhaled into the lungs.

Symptoms and Complications

Symptoms of influenza A (H1N1) typically manifest within two to seven days after exposure to the virus. The flu can cause a range of symptoms, including fever, cough, sore throat, runny or stuffy nose, muscle aches, headaches, fatigue, and vomiting and diarrhea in some cases. These symptoms may be mild or severe, and they can last for a week or more.

While most individuals recover from influenza A (H1N1) within a week or two, some may experience complications, particularly those at high risk, such as young children, the elderly, pregnant women, and individuals with chronic health conditions. These complications may include:

- Pneumonia
- Bronchitis
- Ear infections
- Sinus infections
- Worsening of chronic health conditions

Prevention Strategies

Effective prevention of influenza A (H1N1) hinges on a combination of measures, including:

- Vaccination: Annual influenza vaccination is the most effective way to protect against the virus.
- Hand Hygiene: Frequent and thorough handwashing with soap and water or using an alcohol-based hand sanitizer is crucial.
- Respiratory Hygiene: Covering the mouth and nose when coughing or sneezing and disposing of used tissues promptly are essential practices.
- Avoiding Close Contact: Maintaining a distance of at least six feet from individuals with influenza-like symptoms helps prevent transmission.
- Staying Home When Sick: If you develop influenza-like symptoms, staying home and resting is important to prevent spreading the virus to others.

Health Education and Awareness

Raising awareness about influenza A (H1N1) is paramount to empowering individuals and communities to protect themselves and others from the virus. Health education campaigns should focus on:

- Disseminating information about the virus, its symptoms, and complications
- Emphasizing the importance of vaccination and other preventive measures
- Promoting healthy lifestyle practices to strengthen the immune system
- Encouraging early diagnosis and treatment
- Dispelling myths and misconceptions about influenza A (H1N1)

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