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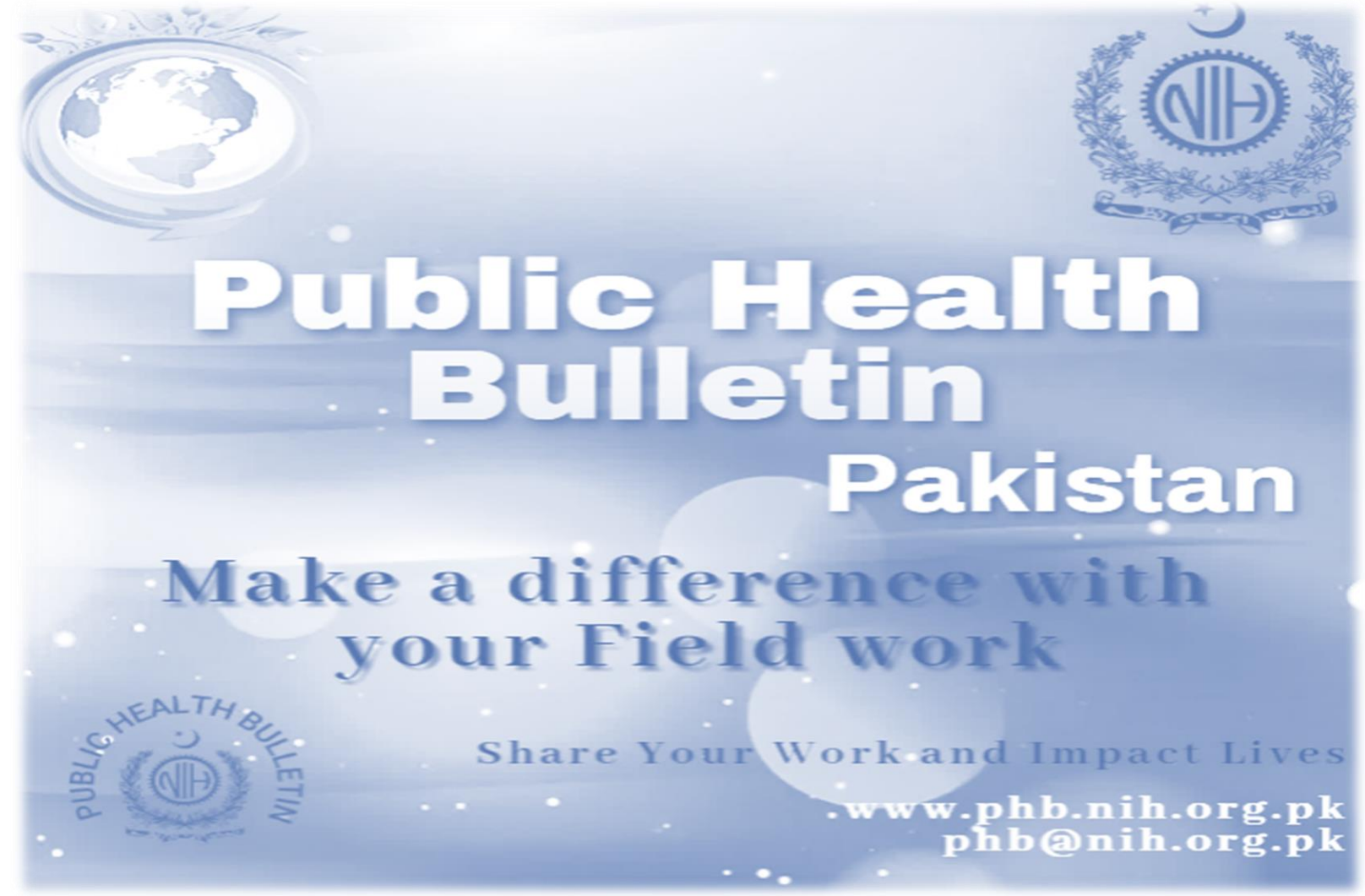
Integrated Disease Surveillance & Response (IDSR) Report

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 50, 2023

This edition of the Public Health Bulletin provides a comprehensive overview of key public health developments in Pakistan during week 50 of 2023.

Disease trends: Acute Diarrhea (Non-Cholera) emerged as the most frequently reported illness, followed by Malaria, Influenza-like Illness (ILI), Acute Lower Respiratory Infection in children under 5 (ALRI <5 years), Tuberculosis (TB), Viral Hepatitis (B&C), Bacterial Diarrhea, Typhoid, Severe Acute Respiratory Infection (SARI), and dog bites.

Regional focus: High numbers of TB cases are reported from Khyber Pakhtunkhwa (KPK), Sindh, and Balochistan, requiring field verification to confirm suspicions. Increased reports of Viral Hepatitis (B&C) from Sindh also warrant investigation. Measles cases, primarily in KPK, demand confirmation for timely and effective interventions.

Special reports: This edition features insights from two studies: Epidemiological Investigation of a Laboratory-Confirmed Diphtheria Case in Rawalpindi and Gujranwala's Dengue Fight with Third-Party Case Verification.

Public awareness: Recognizing the crucial role of individual responsibility, the closing section explores the ongoing debate on whether COVID-19 is fading or will become a seasonal threat. Emphasizing the importance of understanding and prioritizing respiratory health, the article encourages the public to practice good hygiene and seek medical attention when experiencing symptoms.

The Public Health team reiterates the importance of vigilance and prompt medical attention for individuals experiencing symptoms associated with any of the reported diseases. Through a collective effort, we can safeguard the health and well-being of our communities.

Sincerely,
The Chief Editor

- *During week 50, most frequent reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, ILI, ALRI <5 years, TB, VH (B&C), B. Diarrhea, Typhoid, SARI and dog bite.*
- *TB cases are reported in high numbers from KPK, Sindh and Balochistan. All are suspected cases and need field verification.*
- *Cases of VH (B&C) reported in increased numbers from Sindh. Field investigation required to verify cases.*
- *Measles cases are reported mainly from KPK, case confirmation is required for timely and appropriate actions.*

IDSR compliance attributes

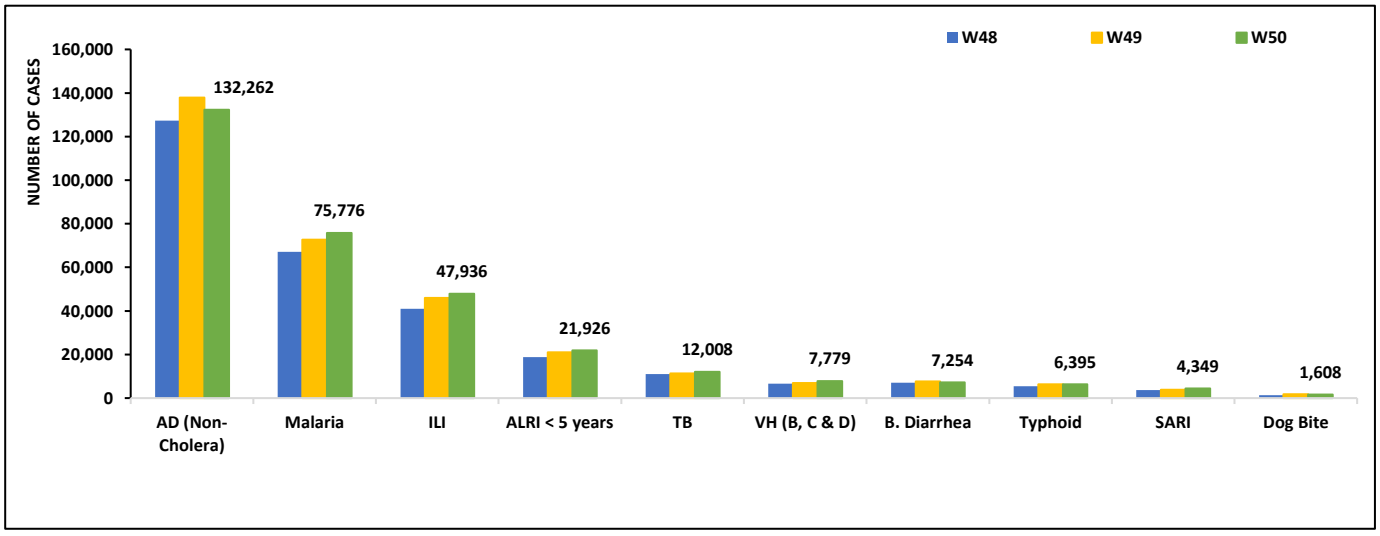
- *The national compliance rate for IDSR reporting in 124 implemented districts* is 74%
- *Sindh and AJK are the top reporting region with a compliance rate of 91% and 88% followed by Baluchistan with 77% and Gilgit Baltistan 72%*
- *The lowest compliance rate was observed in ICT.*

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	*2658*	*1555*	*59*
Azad Jammu Kashmir	*382*	*335*	*88*
Islamabad Capital Territory	*70*	*40*	*57*
Balochistan	*1178*	*911*	*77*
Gilgit Baltistan	*440*	*318*	*72*
Sindh	*2088*	*1906*	*91*
National	*6816*	*5065*	*74*

Table 1: Province/Area wise distribution of most frequently reported suspected cases during week 50, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	1,263	5,948	437	232	14,274	73,759	36,349	132,262
Malaria	77	8,029	0	2	4,374	3,860	59,434	75,776
ILI	3,928	10,418	342	2,456	7,614	NR	23,178	47,936
ALRI < 5 years	1,846	2,720	678	6	3,409	NR	13,267	21,926
TB	120	158	42	10	413	NR	11,265	12,008
VH (B, C & D)	13	118	1	0	104	NR	7,543	7,779
B.Diarrhea	66	1,614	49	1	591	1,860	3,073	7,254
Typhoid	26	733	47	2	606	2,726	2,255	6,395
SARI	491	1,412	316	0	1,851	NR	279	4,349
Dog Bite	11	130	2	0	160	NR	1,305	1,608
Mumps	55	112	33	1	87	NR	341	629
AWD (S. Cholera)	31	270	91	0	46	NR	141	579
CL	0	207	0	0	313	22	1	543
Measles	4	55	4	0	258	NR	73	394
AVH(A&E)	16	29	4	0	164	NR	110	323
Pertussis	2	180	34	0	36	NR	6	258
Chickenpox/ Varicella	8	24	13	2	88	97	25	257
Dengue	98	2	0	0	6	NR	99	205
Gonorrhea	0	99	6	0	15	NR	32	152
Syphilis	0	5	0	0	0	3	41	49
Meningitis	4	7	0	0	21	NR	5	37
AFP	5	2	3	0	16	NR	10	36
HIV/AIDS	0	22	0	0	1	NR	9	32
Brucellosis	0	10	0	0	7	NR	0	17
VL	0	6	0	0	8	NR	0	14
Diphtheria (Probable)	0	6	0	0	7	NR	0	13
NT	0	0	0	0	11	NR	0	11
Leprosy	0	1	1	0	8	NR	0	10
Rubella (CRS)	0	2	1	0	1	NR	0	4

Figure 1: Most frequently reported suspected cases during week 50, Pakistan.



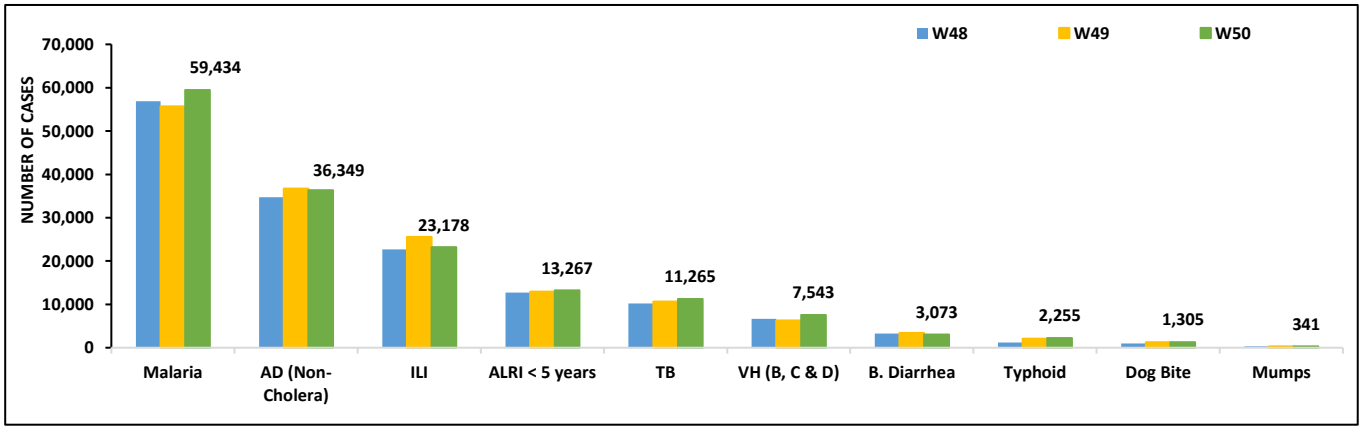
Sindh

- Malaria cases were maximum followed by AD (Non-Cholera), ILI, ALRI<5 Years, TB, VH (B, C, D), B. Diarrhea, Typhoid, dog bite and Mumps.
- There is an overall increase in Malaria and VH (B&C) cases. Larkana Dadu and Kambar reported cases in huge numbers.
- Typhoid cases reported Dadu in increased numbers. Field investigation is required to identify the source to control the spread of disease.

Table 2: District wise distribution of most frequently reported suspected cases during week 50, Sindh

DISTRICTS	Malaria	AD (Non-Cholera)	ILI	ALRI < 5 years	TB	VH (B, C & D)	B. Diarrhea	Typhoid	Dog Bite	Mumps
Badin	2,767	2,532	680	628	796	443	214	45	60	36
Dadu	6,141	2,933	30	1,445	529	17	320	1,346	49	8
Ghotki	575	650	0	705	258	315	121	0	131	0
Hyderabad	177	718	332	45	106	70	11	18	0	15
Jacobabad	2,660	1,006	517	799	210	310	188	37	114	12
Jamshoro	2,372	1,304	69	227	333	105	99	34	24	4
Kamber	4,319	1,733	0	499	832	601	166	37	50	3
Karachi Central	91	807	2,284	101	795	318	16	65	0	0
Karachi East	122	540	362	45	4	0	14	2	4	0
Karachi Keamari	5	274	127	36	2	0	4	5	0	1
Karachi Korangi	60	231	0	1	0	0	2	2	0	0
Karachi Malir	36	408	1,392	102	19	13	42	6	25	4
Karachi South	39	74	0	0	0	0	0	0	0	0
Karachi West	156	861	801	233	109	30	41	30	32	0
Kashmore	2,506	643	1,081	308	250	55	59	11	215	3
Khairpur	6,356	2,830	3,138	1,261	758	1,000	359	196	119	3
Larkana	7,402	1,921	0	664	845	200	304	7	0	0
Matiari	1,424	1,425	16	537	610	363	53	11	25	12
Mirpurkhas	3,380	2,205	4,597	912	782	960	96	13	72	23
Naushero Feroze	964	802	1,158	213	305	83	69	55	100	1
Sanghar	3,340	1,708	33	687	1155	835	57	61	87	21
Shaheed Benazirabad	1,626	1,678	0	549	275	114	85	168	22	8
Shikarpur	2,857	1,260	3	220	28	326	140	1	70	8
Sujawal	539	574	0	138	48	18	33	8	34	0
Sukkur	3,246	1,303	2,204	524	492	240	192	4	60	2
Tando Allahyar	1,168	1,174	1,252	349	333	242	99	15	5	11
Tando Muhammad Khan	993	828	0	238	524	205	74	2	1	7
Tharparkar	2,338	2,553	3,102	1,235	505	68	116	48	0	143
Thatta	388	336	0	249	0	29	39	0	6	0
Umerkot	1,387	1,038	0	317	362	583	60	28	0	16
Total	59,434	36,349	23,178	13,267	11,265	7,543	3,073	2,255	1,305	341

Figure 2: Most frequently reported suspected cases during week 50 Sindh



Balochistan

- ILI, Malaria, AD (Non-Cholera), ALRI <5 years, B. Diarrhea, SARI, Typhoid, AWD (S. Cholera), CL and Pertussis were the most frequently reported diseases from Balochistan province.
- Trends for ILI showed a sharp rise in cases this week.
- Pertussis cases reported in high numbers from Panjgur and Duki. All are suspected cases and need field investigation to verify the cases.

Districts Jafferabad and Quetta reported cases of CL in 41 and 33 numbers respectively. Cases are need to be confirmed.

Table 3: District wise distribution of most frequently reported suspected cases during week 50, Balochistan

Districts	ILI	Malaria	AD Non-Cholera)	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	AWD (S.Cholera)	CL	Pertussis
Barkhan	221	60	97	169	21	53	40	4	0	11
Chagai	372	55	165	0	60	2	24	18	1	3
Chaman	163	5	50	9	42	29	42	40	5	18
Dera Bugti	41	148	47	37	21	3	6	0	0	0
Duki	118	39	137	43	77	87	9	18	5	22
Gwadar	921	138	381	36	79	0	8	0	7	0
Harnai	36	96	116	274	102	0	1	10	0	0
Hub	94	327	184	30	32	57	6	0	3	0
Jaffarabad	180	1,340	405	31	50	40	2	0	41	2
Jhal Magsi	237	932	322	115	15	0	8	2	2	5
Kachhi (Bolan)	160	244	158	6	56	119	42	18	8	10
Kalat	27	29	40	19	23	5	54	0	2	0
Kech (Turbat)	1,119	322	290	100	36	2	NR	NR	NR	NR
Kharan	383	95	117	0	64	7	4	12	0	0
Khuzdar	129	104	82	0	49	4	24	0	12	0
Killa Saifullah	6	127	117	189	53	13	26	2	11	3
Kohlu	742	182	262	89	175	204	56	44	25	31
Lasbella	68	492	239	97	16	47	11	0	11	0
Loralai	397	64	181	70	63	120	37	1	1	3
Mastung	226	24	153	90	34	132	24	1	3	9
Musa Khel	104	148	84	28	33	39	25	20	2	12
Naseerabad	0	556	263	14	7	0	61	0	3	0
Nushki	23	7	143	0	45	0	0	4	0	0
Panjgur	202	301	128	116	63	15	6	26	5	24
Pishin	121	2	31	44	16	0	3	0	3	0
Quetta	1,248	18	307	112	53	2	18	12	33	0
Sherani	156	2	20	4	18	139	11	0	0	0
Sibi	1,582	492	365	73	47	111	44	29	17	14
Sohbat pur	27	903	272	130	86	34	54	1	4	0
Surab	144	30	68	44	4	17	36	0	0	0
Usta Muhammad	206	600	376	311	47	5	14	0	2	0
Washuk	335	43	131	1	54	21	3	0	0	0
Zhob	289	79	130	394	47	90	17	2	0	6
Ziarat	341	25	87	45	26	15	17	6	1	7
Total	10,418	8,029	5,948	2,720	1,614	1,412	733	270	207	180

Figure 3: Most frequently reported suspected cases during week 50, Balochistan

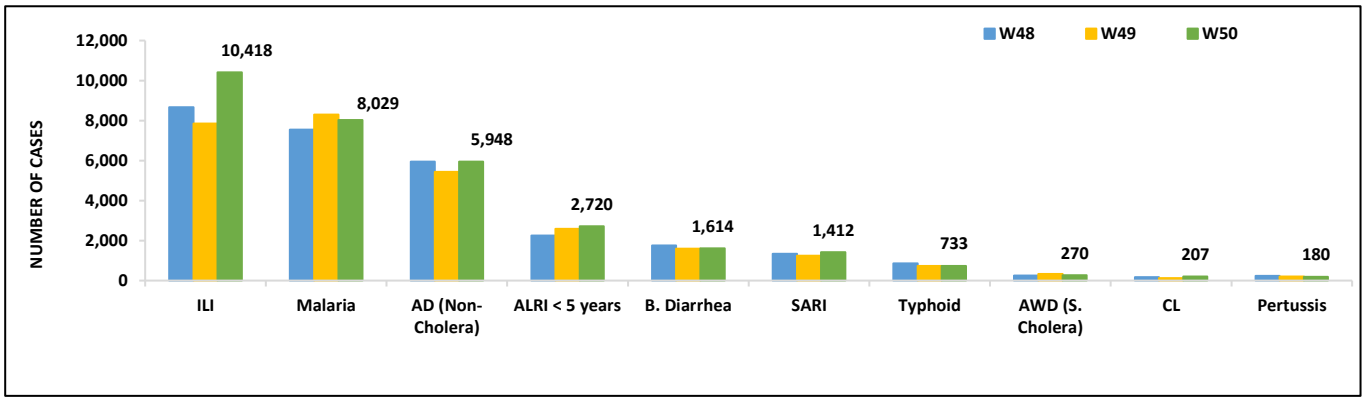
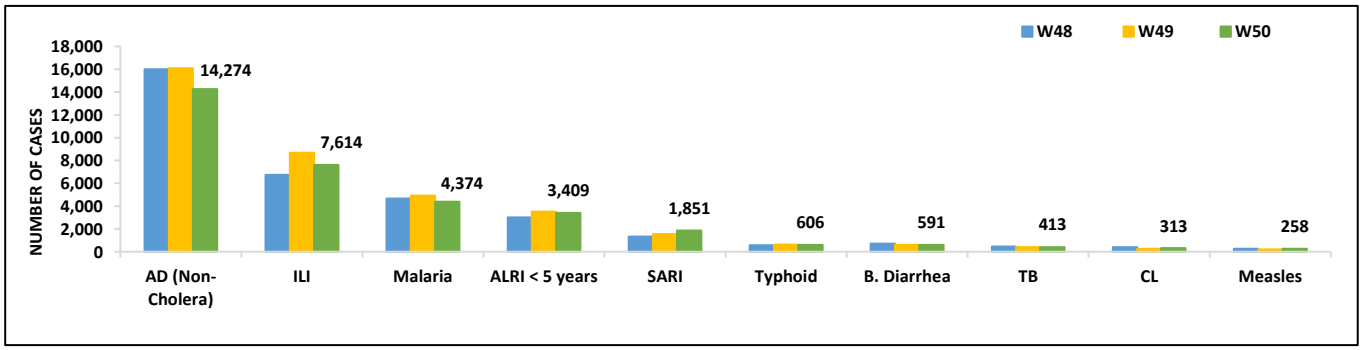


Table 4: District wise distribution of most frequently reported suspected cases during week 50, KP

Districts	AD (Non-Cholera)	ILI	Malaria	ALRI <5 Years	SARI	Typhoid	B. Diarrhea	TB	CL	Measles
Abbottabad	324	58	4	24	23	10	2	22	0	0
Bajaur	168	79	96	2	15	0	34	1	0	2
Bannu	650	26	953	36	23	77	6	38	0	4
Battagram	126	614	0	0	0	0	3	0	0	0
Buner	292	0	280	72	0	5	5	4	0	2
Charsadda	805	509	306	165	141	25	22	0	1	4
Chitral Lower	183	130	7	44	40	19	17	10	2	0
Chitral Upper	89	21	8	25	11	21	5	4	0	0
D.I. Khan	803	0	360	53	45	0	19	15	2	47
Dir Lower	846	0	525	446	3	26	76	20	3	15
Dir Upper	222	499	4	48	20	27	4	18	10	2
Hangu	172	308	355	2	23	15	4	11	35	7
Haripur	767	734	19	226	9	78	7	56	0	3
Karak	136	82	146	12	0	5	0	8	45	40
Khyber	46	125	37	19	0	2	15	11	24	1
Kohat	44	42	13	0	1	0	2	0	0	3
Kohistan Lower	41	0	3	3	0	0	6	0	0	1
Kohistan Upper	189	64	6	19	12	0	10	0	0	7
Kolai Palas	58	0	4	4	18	0	0	1	0	0
L & C Kurram	14	143	0	0	0	2	4	0	0	0
Lakki Marwat	346	0	204	92	0	15	12	2	18	2
Malakand	385	0	20	74	34	19	36	4	14	15
Mansehra	411	889	0	89	74	3	8	8	0	3
Mardan	899	101	43	969	3	0	25	7	3	2
Mohmand	116	109	111	11	20	16	19	0	83	0
Nowshera	1,026	415	40	3	21	7	14	2	6	4
Peshawar	2,143	1,027	63	462	453	86	130	13	20	28
SD DI Khan	0	0	0	0	0	10	0	0	0	0
SD Peshawar	0	0	5	2	0	0	0	0	0	0
SD Tank	1	0	2	0	0	0	0	0	0	0
Shangla	312	0	164	9	58	13	0	24	0	4
SWA	127	71	76	96	92	30	27	0	28	21
Swabi	791	881	18	235	82	16	16	80	0	15
Swat	1,339	333	13	83	88	9	6	41	0	13
Tank	271	19	432	13	0	23	5	7	11	0
Tor Ghar	58	8	45	48	29	2	22	0	8	3
Upper Kurram	74	327	12	23	513	45	30	6	0	10
Total	14,274	7,614	4,374	3,409	1,851	606	591	413	313	258

Figure 4: Most frequently reported suspected cases during week 50, KP



ICT, AJK & GB

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

AJK: ILI cases were maximum followed by ALRI <5 years, AD (Non-Cholera), SARI, TB, Dengue, Malaria, B. Diarrhea, Mumps and AWD (S. Cholera). ILI and ARTI <5 years cases showed a upward trend in cases this week.

GB: ALRI<5 years cases were the most frequently reported diseases followed by AD (Non. Cholera), ILI, SARI, AWD, B. Diarrhea, Typhoid and TB. There is a decline trend in ARTI < 5years cases this week.

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

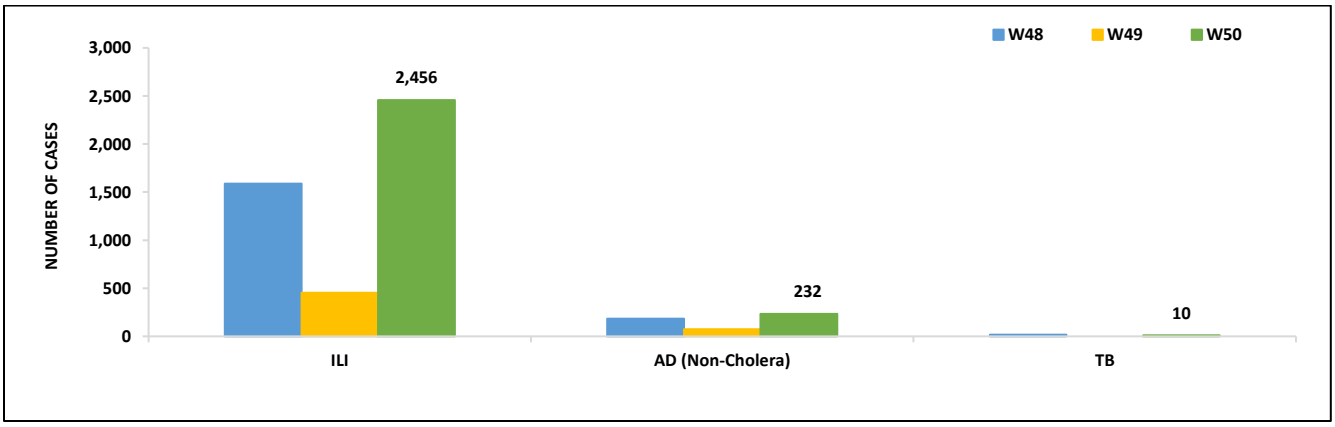


Figure 6: Week wise reported suspected cases of ILI, ICT

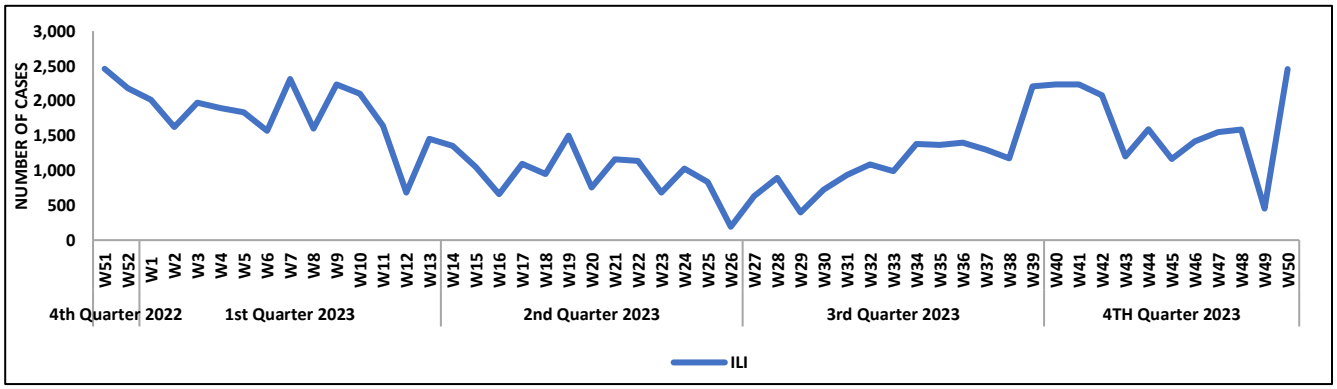


Figure 7: Most frequently reported suspected cases during week 50, AJK

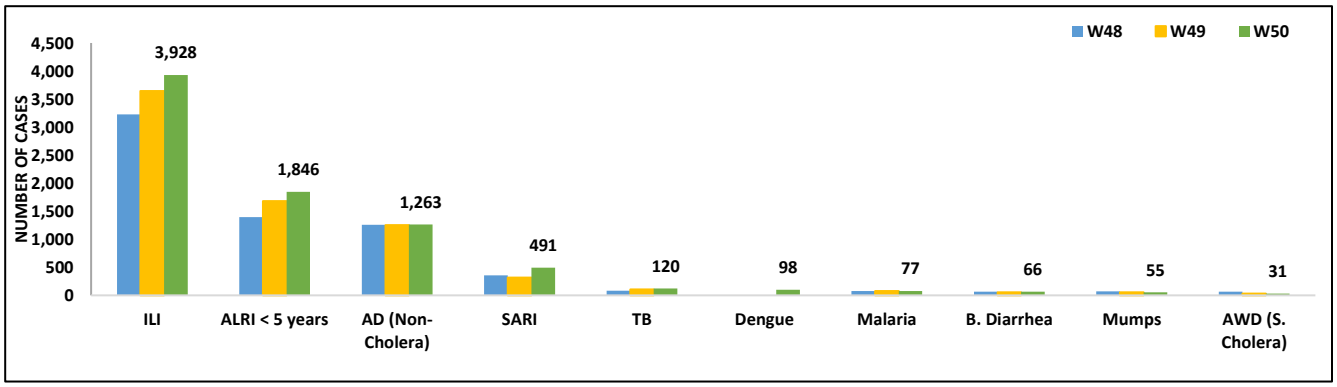


Figure 8: Week wise reported suspected cases of ILI and ALRI<5 years AJK

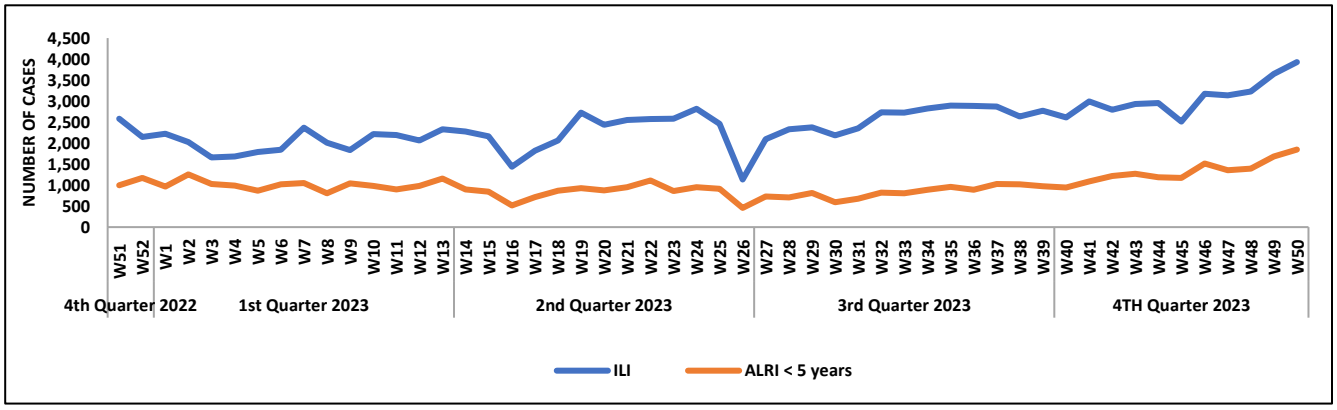


Figure 9: Most frequent cases reported during WK 50, GB

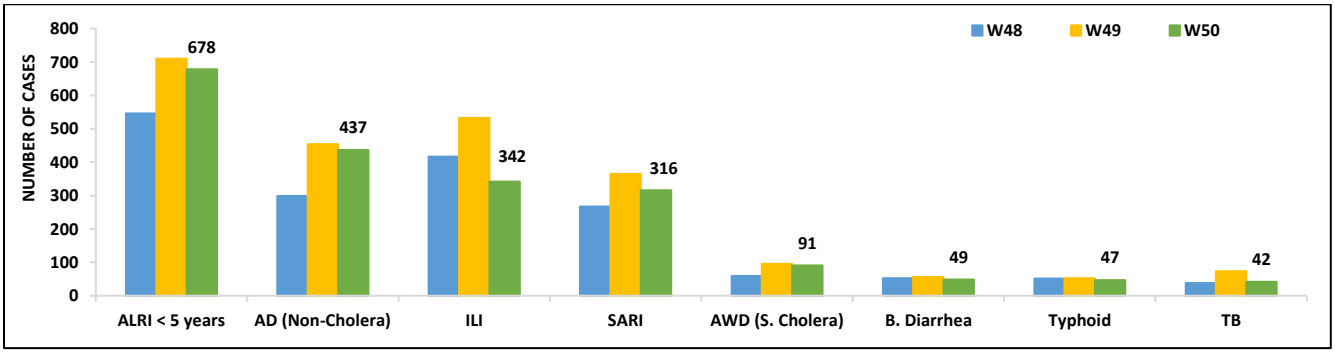
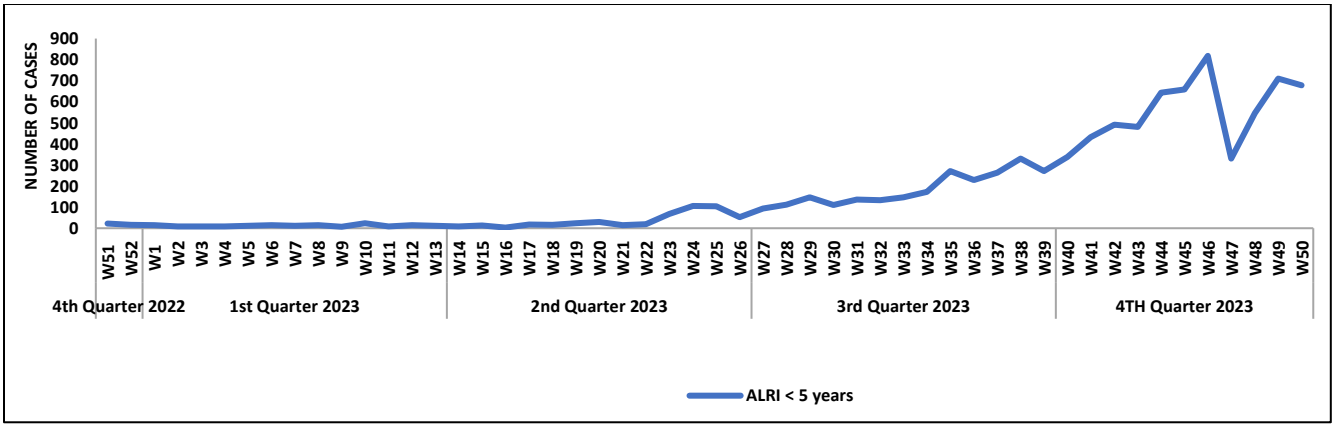


Figure 10: Week wise reported suspected cases of ALRI, GB



Punjab

- Cases of AD (Non-Cholera) were maximum followed by Malaria, Typhoid, and B. Diarrhea. Trends for AD cases remained same this week.

Figure 11: District wise distribution of most frequently reported suspected cases during week 50, Punjab

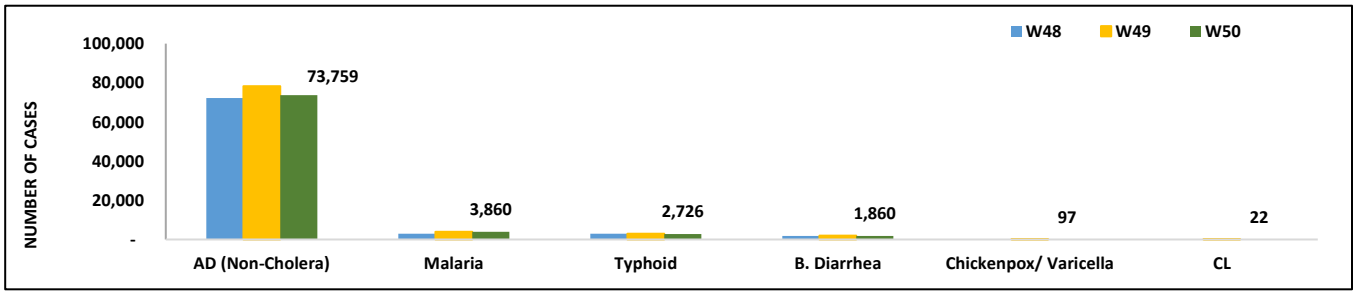


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 50

Diseases	Status	Sindh	Balochistan	Punjab	KPK	ISL	Gilgit
Acute Watery Diarrhea (S. Cholera)	Suspected	88	-	-	-	-	0
	Confirmed	0	-	-	-	-	0
Acute Diarrhea(non-cholera)	Suspected	88	-	-	-	-	0
	Confirmed	0	-	-	-	-	0
Malaria	Suspected	5686	-	-	-	-	0
	Confirmed	171	-	-	-	-	0
CCHF	Suspected	0	13	-	-	-	0
	Confirmed	0	0	-	-	-	0
Dengue	Suspected	23	-	-	-	-	0
	Confirmed	0	-	-	-	-	0
MPOX	Suspected	0	-	-	-	-	0
	Confirmed	0	-	-	-	-	0
Acute Viral Hepatitis(B&C)	Suspected	1988	23	-	-	-	37
	Confirmed	51	11	-	-	-	0
Acute Viral Hepatitis(E)	Suspected	0	-	-	-	-	0
	Confirmed	0	-	-	-	-	0
Typhoid	Suspected	556	-	-	-	-	14
	Confirmed	2	-	-	-	-	2
Covid 19	Suspected	0	78	-	-	-	0
	Confirmed	0	2	-	-	-	0
TB	Suspected	597	-	-	-	-	0
	Confirmed	1	-	-	-	-	0
HIV	Suspected	74	-	-	-	-	0
	Confirmed	0	-	-	-	-	0
Meningitis	Suspected	2	-	-	-	-	0
	Confirmed	0	-	-	-	-	0
Syphilis	Suspected	358	-	-	-	-	0
	Confirmed	1	-	-	-	-	0

IDSR Reports Compliance

- Out OF 125 IDSR implemented districts, compliance is low from ICT & KPK. Green color showing >50% compliance while red color is <50% compliance

Table 6: IDSR reporting districts Week 50

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	111	45%
	Battagram	63	20	32%
	Buner	34	27	79%
	Bajaur	44	23	52%
	Charsadda	59	56	95%
	Chitral Upper	34	28	82%
	Chitral Lower	35	33	94%
	D.I. Khan	94	93	99%
	Dir Lower	74	72	97%
	Dir Upper	52	42	81%
	Hangu	22	22	100%
	Haripur	71	62	87%
	Karak	32	32	100%
	Khyber	64	14	22%
	Kohat	61	60	98%
	Kohistan Lower	11	11	100%
	Kohistan Upper	20	20	100%
	Kolai Palas	10	10	100%
	Lakki Marwat	70	70	100%
	Lower & Central Kurram	40	6	15%
	Upper Kurram	42	11	26%
	Malakand	48	37	77%
	Mansehra	136	76	56%
	Mardan	80	76	95%
	Nowshera	54	53	98%
	North Waziristan	380	0	0%
	Peshawar	153	120	78%
	Shangla	65	17	26%
	Swabi	62	60	97%
	Swat	76	64	84%
	South Waziristan	133	48	36%
	Tank	34	30	88%
	Torghar	14	14	100%
	Mohmand	86	34	40%
	SD DI Khan	19	1	5%
	SD Peshawar	5	2	40%
	SD Tank	58	1	2%
	Mirpur	37	37	100%
	Bhimber	20	20	100%
	Kotli	60	60	100%
	Muzaffarabad	45	44	98%
	Poonch	46	46	100%

Azad Jammu Kashmir	Haveli	39	0	0%
	Bagh	40	38	95%
	Neelum	39	36	92%
	Jhelum Vellay	29	27	93%
	Sudhnooti	27	27	100%
Islamabad Capital Territory	ICT	35	20	57%
	CDA	35	20	57%
Balochistan	Gwadar	25	23	92%
	Kech	39	18	46%
	Khuzdar	20	19	95%
	Killa Abdullah	20	0	0%
	Lasbella	55	55	100%
	Pishin	62	5	8%
	Quetta	43	20	47%
	Sibi	36	36	100%
	Zhob	39	34	87%
	Jaffarabad	16	16	100%
	Naserabad	32	32	100%
	Kharan	30	29	97%
	Sherani	15	13	87%
	Kohlu	75	71	95%
	Chagi	35	31	89%
	Kalat	41	40	98%
	Harnai	17	17	100%
	Kachhi (Bolan)	35	30	86%
	Jhal Magsi	26	26	100%
	Sohbat pur	25	25	100%
	Surab	32	21	66%
	Mastung	45	44	98%
	Loralai	33	26	79%
	Killa Saifullah	28	27	96%
	Ziarat	29	21	72%
	Duki	31	28	90%
	Nushki	32	30	94%
	Dera Bugti	45	20	44%
	Washuk	46	20	43%
	Panjgur	38	24	63%
	Awaran	23	0	0%
	Chaman	24	23	96%
	Barkhan	20	20	100%
	Hub	33	33	100%
	Usta Muhammad	34	34	100%
Gilgit Baltistan	Hunza	32	30	94%
	Nagar	20	19	95%
	Ghizer	40	34	85%
	Gilgit	40	40	100%
	Diamer	78	40	51%
	Astore	54	54	100%

	Shigar	27	26	96%
	Skardu	52	39	75%
	Ganche	29	29	100%
	Kharmang	18	7	39%
Sindh	Hyderabad	73	31	42%
	Ghotki	64	64	100%
	Umerkot	43	32	74%
	Naushahro Feroze	107	63	59%
	Tharparkar	282	263	93%
	Shikarpur	60	60	100%
	Thatta	53	52	98%
	Larkana	67	67	100%
	Kamber Shadadkot	71	71	100%
	Karachi-East	23	21	91%
	Karachi-West	20	20	100%
	Karachi-Malir	37	12	32%
	Karachi-Kemari	18	9	50%
	Karachi-Central	11	9	82%
	Karachi-Korangi	18	14	78%
	Karachi-South	4	4	100%
	Sujawal	54	53	98%
	Mirpur Khas	106	105	99%
	Badin	127	115	91%
	Sukkur	64	62	97%
	Dadu	90	90	100%
	Sanghar	100	99	99%
	Jacobabad	44	43	98%
	Khairpur	169	165	98%
	Kashmore	59	57	97%
	Matiari	42	41	98%
	Jamshoro	68	68	100%
	Tando Allahyar	54	52	96%
	Tando Muhammad Khan	40	40	100%
	Shaheed Benazirabad	124	124	100%

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A Note from Field Activities.

Epidemiological Investigation of a Laboratory-Confirmed Diphtheria Case in Rawalpindi, Union Council No. 38 (November 2023)

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Introduction:

An urgent notification on November 24, 2023, raised the alarm for a suspected diphtheria case in Rawalpindi. A 72-month-old male child, presented with concerning symptoms, prompting immediate adherence to established investigation protocols. These protocols encompassed comprehensive contact tracing, crucial chemoprophylaxis advice, and prompt laboratory testing to confirm the diagnosis.

Methods:

To understand the context of this case, a multi-pronged investigation was launched. This included a thorough assessment of the family's socioeconomic background, particularly their living conditions and the father's occupation. Child's vaccination history, along with that of his siblings, was meticulously examined, including travel history and recent relocations. The definitive diagnosis was established through a molecular PCR assay confirming the presence of Corynebacterium diphtheriae, the causative agent.

Results:

The investigation yielded significant findings. Child's vaccination history was ambiguous and potentially incomplete, suggesting susceptibility to diphtheria. However, meticulous active surveillance and a targeted mop-up vaccination campaign in the surrounding 160 houses did not detect any additional cases. This mop-up activity, focusing on children under 5 years old, resulted in the administration of 27 DTP booster doses and one pentavalent vaccine, demonstrating the proactive response to potential transmission risks. Active surveillance further revealed concerning factors, including poor sanitation conditions near the patient's residence and a lack of awareness about diphtheria at nearby healthcare facilities.

Child's school was also visited. The principal confirmed his admission on November 1st but absentee from November 17th to 24th due to illness, leading to hospitalization. No other similar cases were reported at the school. Other schools were visited in

the same area for active surveillance of similar cases, but no other case was identified

Within Union Council (UC) 38 of Rawalpindi, the targeted population for DTP booster vaccination in 2022 comprised 649 children. Notably, the vaccination campaign exceeded its target, achieving coverage for 807 children, translating to a commendable 24% surplus. Although this preliminary data suggests positive DTP booster coverage in UC 38, it is crucial to acknowledge the limitations for comprehensive analysis. To gain a deeper understanding, further context and details are required, including seroprevalence surveys, which would provide valuable insights into vaccine-induced immunity among the target population.

Discussion:

The proximity of Rawalpindi to other provinces and the seasonal influx of migrants create a heightened vulnerability to vaccine-preventable diseases like diphtheria. This case highlights the challenges associated with incomplete vaccination, particularly among relocated families, emphasizing the need for robust tracking mechanisms and targeted interventions. The upcoming routine vaccination campaign in Rawalpindi presents a crucial opportunity to improve overall immunization coverage and effectively prevent future outbreaks.

Way Forward:

To build upon the commendable response to this case, several avenues for improvement are evident. Enhanced collaboration with neighboring provinces is essential to facilitate immunization data sharing and strengthen coordinated disease prevention efforts. Continued active surveillance for diphtheria cases in Rawalpindi, especially during the winter months with increased migration, remains crucial. Strengthening awareness and capacity building among healthcare providers will enable prompt identification and effective management of potential cases. Prioritizing routine immunization campaigns and addressing incomplete vaccination, particularly among relocated families, will be instrumental in building long-term immunity and safeguarding vulnerable populations.

Conclusion:

The prompt investigation and management of this diphtheria case, along with planned vaccination campaigns, demonstrate Rawalpindi's commitment to proactive disease control. However, continued vigilance, interprovincial collaboration, and sustained investments in immunization programs remain key to preventing future outbreaks and protecting the health of everyone in the region.

A Note from Field Activities.

Gujranwala's Dengue Fight: A Third-Party Perspective

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CD&EPC,
Punjab

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Punjab

As dengue cases surged in Gujranwala, a team from the Provincial Health Department conducted a third-party validation (TPV) on November 23rd, 2023, to assess the district's response. Here's a glimpse into their findings and recommendations.

Hotspot Hunting:

While last year's hotspots saw minimal activity, new UCs emerged with significant caseloads, suggesting a dynamic spread of the virus. Aroop Town, particularly UCs 7 & 8, emerged as the epicenter, prompting the team's visit. In Gulshan Iqbal Park, a major hotspot, tree holes were filled to prevent water stagnation, breeding grounds for dengue mosquitoes. Bird houses received similar attention, with housekeepers educated on larval detection and eradication.

Indoor & Outdoor Surveillance:

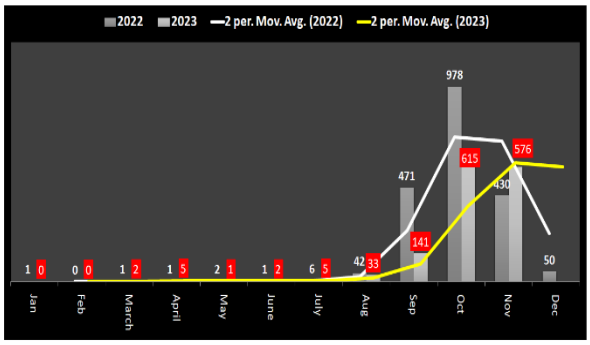
While inspecting residences, the team observed door markings and encountered indoor surveillance teams. In UC 7, positive houses were identified, samples confirmed the presence of Aedes larvae, and case response measures were verified.

Similarly, in UC 8, confirmed cases were followed up on, with rooftop water sources checked for dryness and larval absence.

Hospital Visit & Data Analysis:

The DHQ Teaching Hospital's dengue counter maintained proper patient registers and O forms. The dengue ward housed 16 confirmed cases, with 6 requiring close monitoring. Data revealed 468 confirmed cases in 2023, with 20 in November alone.

Gujranwala
Monthly Cases Comparison 2022 & 2023



Meeting with District Administration:

The TPV team briefed the Deputy Commissioner on their observations and analysis. Key takeaways highlighted a shift in hotspots from last year, with new UCs reporting cases. While a slight decline in weekly cases was noted, vulnerable UCs were identified for targeted interventions.

Recommendations for Improvement:

The team emphasized the need for:

- **Inter-sectoral Collaboration**: Establish a coordinated action plan within one week with line departments (WASA, PHA, GWMC) for improved solid waste management, vegetation removal, and stagnant water control. Utilize DERC and TERC for real-time data sharing and response.
- **Community Engagement**: Launch immediate and ongoing community mobilization campaigns using local influencers, media outreach, and targeted household programs to address refusal rates and lack of housekeeping practices.
- **Monitoring and Evaluation**: Implement a robust system for regular monitoring and evaluation of all control activities, including performance indicators, reporting requirements, and feedback mechanisms.
- **TPV Gaps**: Ensure nominated line departments fulfill their TPV responsibilities by defining roles, conducting regular reviews, and providing capacity building.
- **Data Correction**: Collaboratively rectify technical issues causing inaccurate reporting of probable dengue cases on the PITB Dengue Dashboard and implement standardized protocols for data entry and validation.
- **Serotype Identification**: Prioritize serotype testing in confirmed cases and facilitate data analysis and reporting by collaborating with tertiary care hospitals, DHA Gujranwala, and Punjab Public Health Reference Lab.
- **Training Enhancement**: Develop and implement comprehensive dengue-related training programs for healthcare personnel at all levels, covering case identification, management, surveillance, and community mobilization.

Conclusion:

Gujranwala's dengue battle demands swift and coordinated action. The TPV report provides valuable insights and actionable recommendations. By addressing the gaps identified and implementing the proposed measures, the district can effectively curb dengue transmission and safeguard public health.

Knowledge Hub

The Covid-19: Fading Foe or Seasonal Intruder?

The ever-shifting landscape of COVID-19 throws a complex question our way: will this virus, once a dominant force, settle into a predictable pattern, resembling the seasonal rhythms of influenza or RSV, or will it continue to surprise us with unpredictable surges? While the crystal ball remains cloudy, current trends offer glimpses of a potentially less disruptive future, but caution remains paramount.

Reasons for Optimism:

- **Widespread Immunity**: Vaccination and prior infections have significantly bolstered population immunity, leading to milder illness and reduced pressure on healthcare systems. This widespread protection acts as a buffer against severe disease and large-scale outbreaks.
- **Seasonality:** Like influenza and RSV, COVID-19 seems to exhibit seasonality, with cases rising during colder months when indoor gatherings increase. This predictable pattern allows for more accurate forecasting and preparation, enabling proactive measures like targeted vaccination campaigns and public health advisories.
- **Science and Technology**: Advancements in diagnostics, treatment, and research empower us to track variants, develop targeted interventions, and potentially predict future outbreaks. This proactive approach allows us to stay ahead of the curve and mitigate the virus's impact.

Reasons for Caution:

- **The Mutation Factor**: The virus's ability to evolve and mutate remains a significant threat. New variants like JN.1 demonstrate its potential to bypass existing immunity, leading to unexpected surges. This underscores the need for continued vigilance and adaptation.
- **Equity and Access**: Unequal access to vaccines and healthcare across the globe can create pockets of vulnerability, allowing the virus to persist and potentially mutate. Addressing these disparities is crucial for achieving global control.
- **Long-Term Effects**: The long-term consequences of COVID-19, such as Long COVID, remain unclear. We must continue research efforts to understand and address these potential complications.

The Crossroads of Hope and Vigilance:

We stand at a crossroads where the future of COVID-19 remains uncertain. While the current trajectory suggests a potential future where the virus becomes less disruptive, akin to a seasonal illness, the possibility of unexpected twists and turns cannot be ignored.

Moving Forward with Adaptability:

Navigating this uncertainty requires a cautious yet hopeful outlook. We must:

- **Remain Adaptable**: Our strategies and interventions need to be flexible, adjusting to the virus's evolution and changing circumstances.
- **Invest in Research**: Continued research efforts are crucial to understanding the virus, developing new vaccines and treatments, and predicting future outbreaks.
- **Prioritize Global Equity**: Addressing vaccine and healthcare disparities globally is essential for achieving long-term control and preventing further mutations.
- **Keep Individual Responsibility**: Individual actions like mask-wearing, hand hygiene, and responsible behavior remain critical in mitigating transmission and protecting vulnerable populations.

By adopting this balanced approach, we can navigate the evolving nature of COVID-19 and build a future where it occupies a less prominent space in our lives. We must walk the tightrope between hope and vigilance, embracing both the possibilities and challenges that lie ahead.

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