

# **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**

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## Overview

### Public Health Bulletin - Pakistan, Week 05, 2024

This week's bulletin reveals critical trends and insights relevant to public health in Pakistan:

## IDSR Reports

The latest edition of the public health bulletin for Pakistan reveals concerning trends and valuable insights regarding the nation's health landscape. This week the most common illnesses reported were acute diarrhea (non-cholera), respiratory infections (ILI and ALRI), malaria, and tuberculosis. Additionally, there were several suspected cases of serious diseases like CCHF, HIV/AIDS, and Brucellosis, requiring further investigation to confirm, as all reported cases currently lack confirmed diagnoses.

## Ongoing Events

This edition of the bulletin further emphasizes the pivotal role of the Public Health Bulletin (PHB) Pakistan as a sentinel for the nation's health. It features a surveillance summary for Neonatal Tetanus Diseases in Rawalpindi District, along with an update on the ongoing IDSR/DHIS-2 Cascade Trainings Empower Healthcare Professionals in Rahim Yar Khan, Pakistan. Additionally, the Health and nutrition supervisor from Rawalpindi, Punjab shares the insides from Successful Medical & Screening Camp. Recognizing the importance of individual empowerment in disease control, the editor concludes with an insightful update Crimean-Congo hemorrhagic fever infection.

## Field Reports

Sincerely,

The Chief Editor



- During week 5, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by ILLI, Malaria, ALRI <5 years, TB, B. Diarrhea, VH (B, C & D), Typhoid, SARI and dog bite.
- Twelve cases of AFP reported from KP and six from Sindh. All are suspected cases and need field verification.
- Five cases of CCHF reported from Punjab. All are suspected cases and need field investigation to confirm the cases.
- Six suspected cases of HIV/ AIDS reported from Sindh. Field investigation required to verify the cases.
- Six cases of Brucellosis reported from KP. Field investigation is required to confirm the cases.

## IDSR compliance attributes

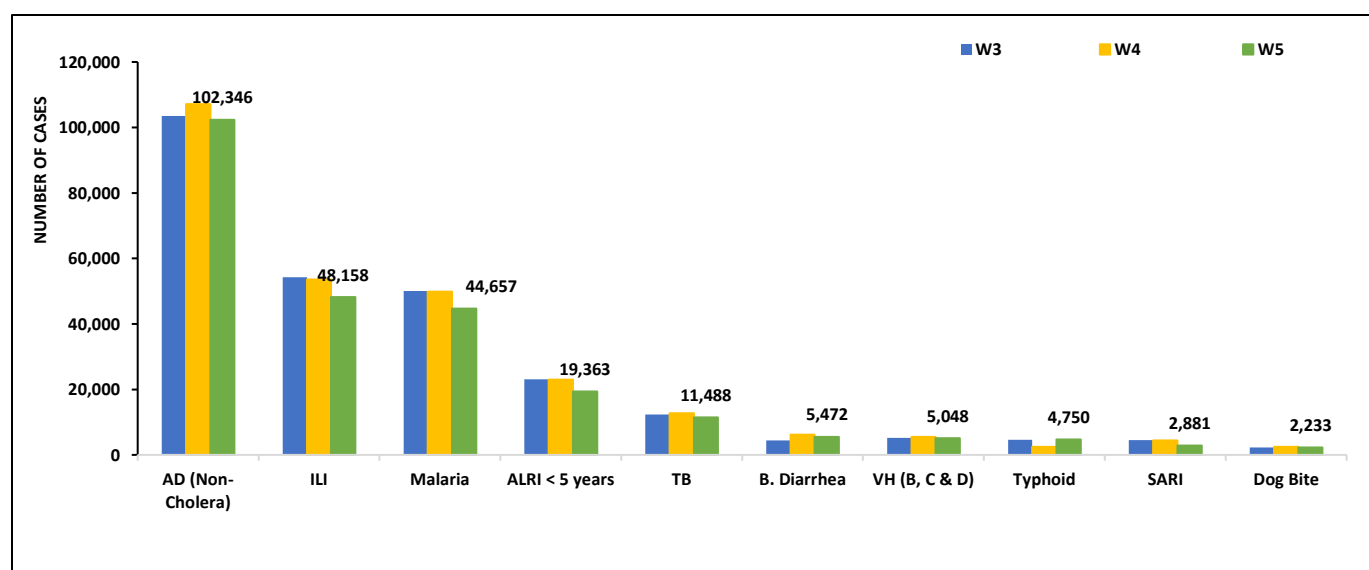
- The national compliance rate for IDSR reporting in 149 implemented districts is 74%
- Gilgit Baltistan and AJK are the top reporting regions with a compliance rate of 100% and 98%, followed by Sindh 91%
- The lowest compliance rate was observed in KPK.

Region	Expected Reports	Received Reports	Compliance (%)
<i>Khyber Pakhtunkhwa</i>	2750	1480	54
<i>Azad Jammu Kashmir</i>	382	375	98
<i>Islamabad Capital Territory</i>	70	52	74
<i>Balochistan</i>	1220	890	73
<i>Gilgit Baltistan</i>	374	373	100
<i>Sindh</i>	2088	1901	91
<i>National</i>	6884	5071	74

**Table 1: Province/Area wise distribution of most frequently reported suspected cases during week 05, Pakistan.**

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	1,006	4,607	309	173	9,803	56,998	29,450	102,346
ILI	2,641	8,917	632	1,266	5,622	124	28,956	48,158
Malaria	18	3,585	0	0	2,545	2,449	36,060	44,657
ALRI < 5 years	1,859	1,985	843	12	2,217	NR	12,447	19,363
TB	49	68	49	7	303	NR	11,012	11,488
B.Diarrhea	40	1,081	25	2	414	1,394	2,516	5,472
VH (B, C & D)	14	90	4	0	60	NR	4,880	5,048
Typhoid	25	444	25	1	336	2,803	1,116	4,750
SARI	503	633	322	0	929	NR	494	2,881
Dog Bite	31	59	0	0	136	NR	2,007	2,233
Measles	2	38	13	0	373	NR	76	502
AVH(A&E)	12	47	1	0	158	NR	274	492
Mumps	10	57	11	2	58	NR	253	391
CL	0	134	0	0	177	22	3	336
AWD (S. Cholera)	33	100	42	0	42	NR	63	280
Pertussis	0	75	7	0	55	NR	9	146
Chickenpox/ Varicella	1	8	3	2	35	18	52	119
Dengue	0	3	0	0	2	NR	99	104
Gonorrhea	0	36	1	0	19	NR	13	69
AFP	2	0	2	0	12	NR	6	22
Meningitis	0	1	0	0	7	NR	10	18
Syphilis	0	0	0	0	0	NR	13	13
Diphtheria (Probable)	0	10	0	0	2	NR	0	12
NT	0	0	0	0	10	NR	0	10
VL	0	0	0	0	9	NR	0	9
Brucellosis	0	0	0	0	6	NR	0	6
HIV/AIDS	0	0	0	0	0	NR	6	6
CCHF	0	0	0	0	0	5	0	5
Rubella (CRS)	0	1	0	0	1	NR	0	2

**Figure 1: Most frequently reported suspected cases during week 05, Pakistan.**

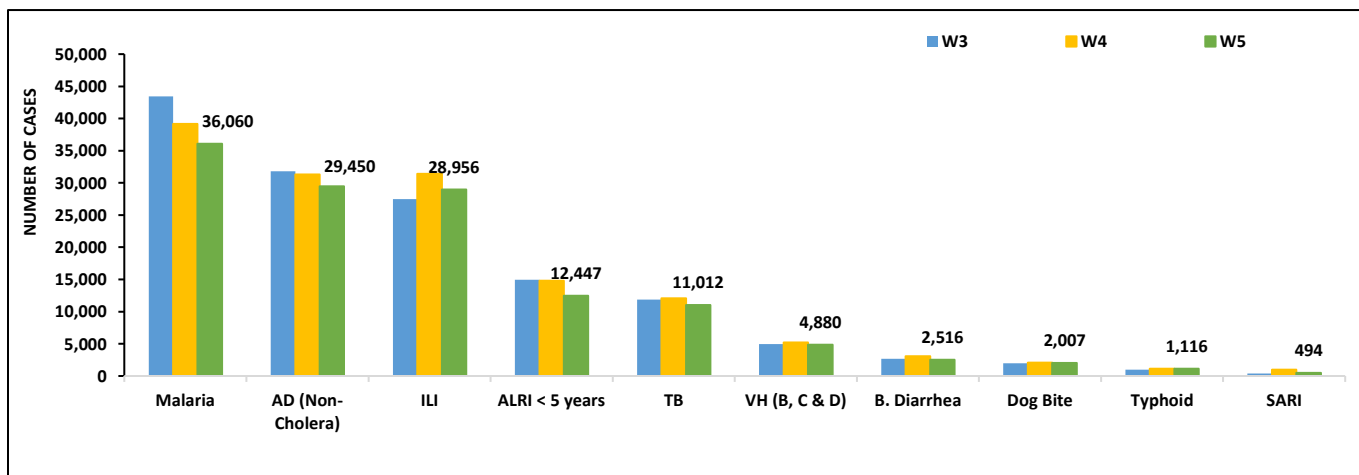


- Malaria cases were maximum followed by AD (Non-Cholera), ILI, ALRI<5 Years, TB, VH (B, C, D), B. Diarrhea, dog bite, Typhoid and SARI.
- Malaria cases are from Larkana, Khairpur and Kamber whereas AD cases are mostly from Dadu, Khairpur and Badin.
- Six cases of HIV/AIDS reported from Sindh. All are suspected cases and need field verification.
- There is a decreasing trend for Malaria, AD (Non-Cholera), ILI, ALRI<5 Years and TB cases this week.

**Table 2: District wise distribution of most frequently reported suspected cases during week 05, Sindh**

Districts	Malaria	AD (Non-Cholera)	ILI	ALRI < 5 years	TB	VH (B, C & D)	B. Diarrhea	Dog Bite	Typhoid	SARI
Badin	1,918	1,906	488	670	804	224	135	44	29	0
Dadu	2,334	2,190	240	741	375	5	372	95	116	12
Ghotki	242	389	0	547	168	200	57	235	0	0
Hyderabad	207	1,162	2,400	200	211	105	64	40	27	3
Jacobabad	1,406	611	430	605	182	171	91	123	18	0
Jamshoro	1,750	995	12	312	352	101	60	13	74	0
Kamber	2,912	1,147	0	418	687	213	116	62	29	0
Karachi Central	53	1,073	2,521	233	688	457	18	0	86	15
Karachi East	103	593	452	45	12	0	15	8	0	2
Karachi Keamari	5	244	120	39	0	0	3	0	1	0
Karachi Korangi	60	284	104	3	3	0	6	0	3	0
Karachi Malir	55	746	2,625	240	46	10	59	17	22	0
Karachi South	38	87	0	0	0	0	0	0	0	0
Karachi West	250	1,387	3,088	397	462	330	99	364	115	119
Kashmore	1,545	404	974	330	339	356	51	214	25	0
Khairpur	3,728	2,055	3,412	1,155	770	312	308	122	158	178
Larkana	3,858	1,144	5	730	605	140	165	0	37	0
Matari	843	961	23	640	572	445	60	25	19	0
Mirpurkhas	2,311	1,602	4,204	846	736	217	87	68	9	0
Naushero Feroze	757	532	974	150	279	74	41	126	41	0
Sanghar	2,235	1,281	8	449	1053	640	43	111	22	15
Shaheed Benazirabad	1,307	1,480	0	461	264	89	62	86	162	2
Shikarpur	1,417	789	2	185	12	88	91	105	0	3
Sujawal	385	486	0	69	27	15	30	30	30	0
Sukkur	1,078	1,073	2,269	400	500	222	226	39	9	0
Tando Allahyar	1,060	645	612	328	408	116	78	4	14	1
Tando Muhammad Khan	720	570	2	208	589	49	45	0	3	0
Tharparkar	1,800	1,772	2,562	1,312	519	38	90	0	46	140
Thatta	1,050	1,094	1,427	382	22	156	15	76	12	4
Umerkot	633	748	2	352	327	107	29	0	9	0
<b>Total</b>	<b>36,060</b>	<b>29,450</b>	<b>28,956</b>	<b>12,447</b>	<b>11,012</b>	<b>4,880</b>	<b>2,516</b>	<b>2,007</b>	<b>1,116</b>	<b>494</b>

**Figure 2: Most frequently reported suspected cases during week 05 Sindh**

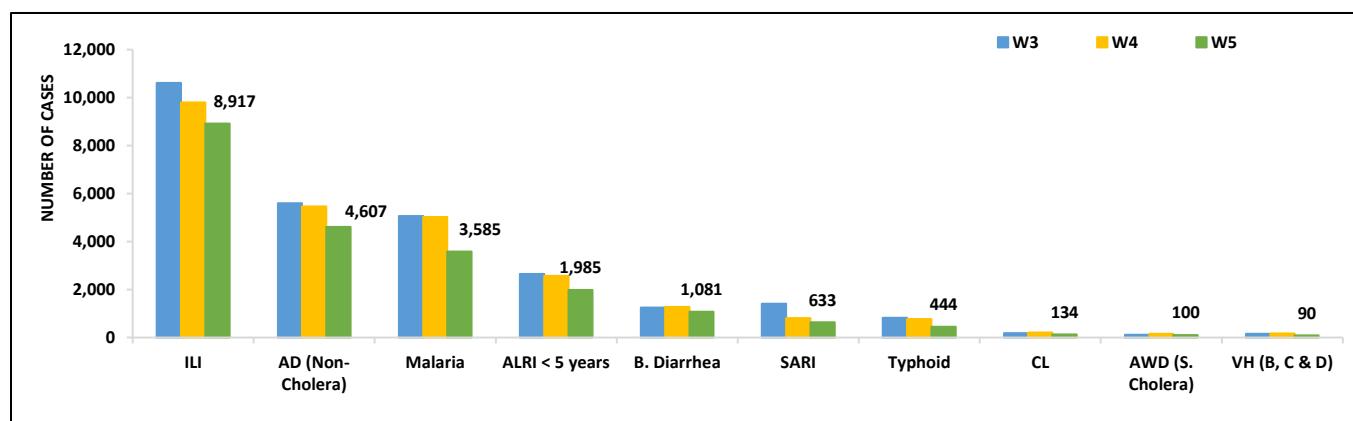


- ILI, AD (Non-Cholera), Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, CL, AWD (S. Cholera) and VH (B, C & D) were the most frequently reported diseases from Balochistan province.
- ILI, AD (Non-Cholera), Malaria, ALRI <5 years, B. Diarrhea, SARI and Typhoid cases showed a decreasing trend this week.
- ILI cases are mostly reported from Sibi, Quetta and Kech (Turbat) while AD (Non-Cholera) cases are mostly reported from Gwadar, Jhal Magsi and Kech (Turbat).

**Table 3: District wise distribution of most frequently reported suspected cases during week 05, Balochistan**

Districts	ILI	AD Non-Cholera)	Malaria	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	CL	AWD (S.Cholera)	VH(B,C&D)
Awaran	73	26	39	6	7	0	6	2	1	1
Barkhan	134	90	28	103	3	0	17	0	0	0
Chagai	344	147	29	0	55	0	22	0	9	1
Chaman	396	152	8	19	46	27	25	10	1	1
Dera Bugti	78	63	84	82	42	0	10	0	0	0
Duki	20	39	9	26	11	14	4	2	0	1
Gwadar	596	359	94	1	14	0	9	5	0	0
Harnai	16	64	56	156	62	0	2	0	9	0
Hub	165	214	116	39	45	20	2	6	0	25
Jaffarabad	390	356	781	22	33	10	0	7	0	0
Jhal Magsi	40	108	97	18	35	52	18	3	4	0
Kachhi (Bolan)	11	32	15	19	18	3	18	1	0	0
Kalat	1,031	305	148	13	44	1	NR	NR	NR	NR
Kech (Turbat)	411	118	17	0	64	4	5	0	3	0
Kharan	90	68	40	6	27	4	5	1	0	1
Khuzdar	3	71	85	151	49	32	12	15	0	0
Killa Saifullah	614	195	88	71	70	57	24	0	7	2
Kohlu	172	274	340	119	15	16	6	22	0	2
Lasbella	408	119	21	48	20	83	13	0	0	0
Loralai	179	150	73	77	23	41	14	3	4	10
Mastung	99	73	74	39	18	26	13	2	16	0
Naseerabad	1	232	326	45	18	2	53	9	0	19
Nushki	39	128	7	0	47	13	0	0	0	0
Panjgur	156	80	48	58	20	2	2	0	21	0
Pishin	205	15	3	24	22	0	5	3	0	0
Quetta	1,078	219	13	53	54	9	14	19	0	1
Sherani	14	5	1	1	3	0	5	1	0	0
Sibi	1,243	161	171	71	18	61	32	17	22	1
Sohbat pur	25	197	336	151	62	63	49	6	0	5
Surab	117	69	39	42	6	9	45	0	0	0
Usta Muhammad	219	257	310	262	36	12	0	0	0	20
Washuk	176	56	28	2	50	28	3	0	0	0
Zhob	282	83	45	252	28	43	10	0	2	0
Ziarat	92	82	16	9	16	1	1	0	1	0
<b>Total</b>	<b>8,917</b>	<b>4,607</b>	<b>3,585</b>	<b>1,985</b>	<b>1,081</b>	<b>633</b>	<b>444</b>	<b>134</b>	<b>100</b>	<b>90</b>

**Figure 3: Most frequently reported suspected cases during week 05, Balochistan**

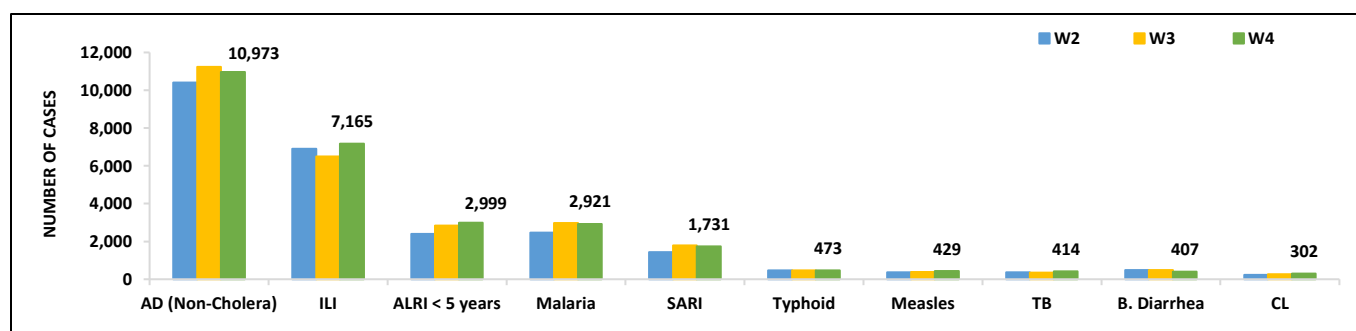


- Cases of AD (Non-Cholera) were maximum followed by ILI, ALRI<5 Years, Malaria, SARI, Typhoid, Measles, TB, B. Diarrhea and CL cases.
- AD (Non-Cholera) cases showed a decreasing trend while ILI and ALRI<5 years cases showed an increasing trend this week.
- Twenty cases of AFP reported from KP this week. All are suspected cases and need field verification.
- Eight cases of Brucellosis reported from KP this week. Field investigation is required to confirm the cases.

**Table 4: District wise distribution of most frequently reported suspected cases during week 05, KP**

Districts	AD (Non-Cholera)	ILI	Malaria	ALRI <5 Years	SARI	B. Diarrhea	Measles	Typhoid	TB	CL
Abbottabad	267	83	3	15	12	1	0	5	24	0
Bajaur	36	25	14	7	10	5	0	0	0	0
Bannu	636	10	969	12	3	6	43	54	32	0
Battagram	56	174	0	0	0	0	0	0	0	1
Buner	139	0	107	0	0	0	0	6	0	0
Charsadda	648	870	255	274	110	24	2	16	3	1
Chitral Lower	100	86	9	53	30	6	0	8	4	5
Chitral Upper	60	7	0	19	3	3	0	8	2	0
D.I. Khan	543	0	130	65	38	8	69	0	38	1
Dir Lower	514	8	389	249	0	47	32	25	23	1
Dir Upper	163	127	3	2	3	1	3	25	21	0
Hangu	87	238	199	2	13	9	0	0	1	5
Haripur	659	358	6	197	33	10	0	32	17	0
Karak	149	108	35	40	0	0	37	9	10	27
Khyber	28	96	14	16	0	19	3	5	11	4
Kohat	41	52	8	1	4	0	0	0	0	0
Kohistan Lower	92	0	0	4	0	7	4	0	0	0
Kohistan Upper	142	35	0	15	0	7	66	2	0	0
Kolai Palas	54	0	0	7	15	2	1	0	0	0
L & C Kurram	14	94	0	0	0	3	0	1	0	0
Lakki Marwat	212	42	67	100	0	2	6	7	5	3
Malakand	304	120	15	48	28	37	28	1	3	15
Mansehra	158	372	0	57	57	1	2	0	4	0
Mardan	292	42	8	594	3	10	0	0	10	0
Mohmand	74	33	80	14	25	16	0	6	1	48
Nowshera	685	106	40	2	21	15	14	1	4	19
Orakzai	7	19	6	1	0	1	0	0	3	0
Peshawar	1,540	623	23	97	116	102	26	38	27	18
SD DI Khan	0	0	5	0	0	0	0	0	0	0
SD Peshawar	0	0	0	0	0	0	0	0	0	0
SD Tank	1	0	1	0	0	1	0	1	0	0
Shangla	97	0	46	17	7	2	0	5	4	0
SWA	45	293	22	71	62	5	2	18	0	9
Swabi	582	798	8	161	74	10	12	14	45	0
Swat	944	207	3	45	2	9	5	4	4	0
Tank	220	167	73	16	0	0	2	38	4	17
Tor Ghar	31	0	7	3	33	15	0	6	1	3
Upper Kurram	183	429	0	11	227	30	11	1	2	0
<b>Total</b>	<b>9,803</b>	<b>5,622</b>	<b>2,545</b>	<b>2,217</b>	<b>929</b>	<b>414</b>	<b>373</b>	<b>336</b>	<b>303</b>	<b>177</b>

**Figure 4: Most frequently reported suspected cases during week 05, KP**



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

**AJK:** ILI cases were maximum followed by ALRI <5 years, AD (Non-Cholera), SARI, B. Diarrhea, TB, Malaria, AVH (A&E), Typhoid and Mumps cases. Cases of ILI and AD (Non-Cholera) showed an decreasing trend in cases this week.

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

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

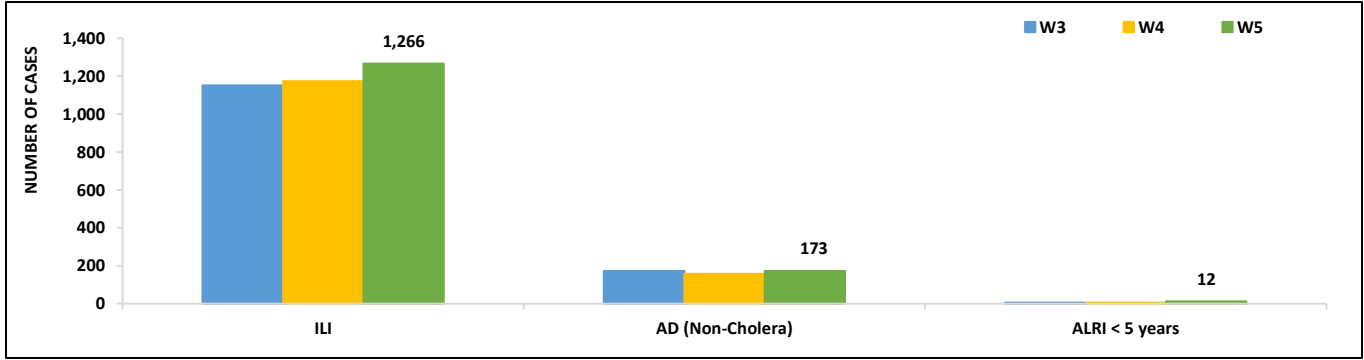


Figure 6: Week wise reported suspected cases of ILI, ICT

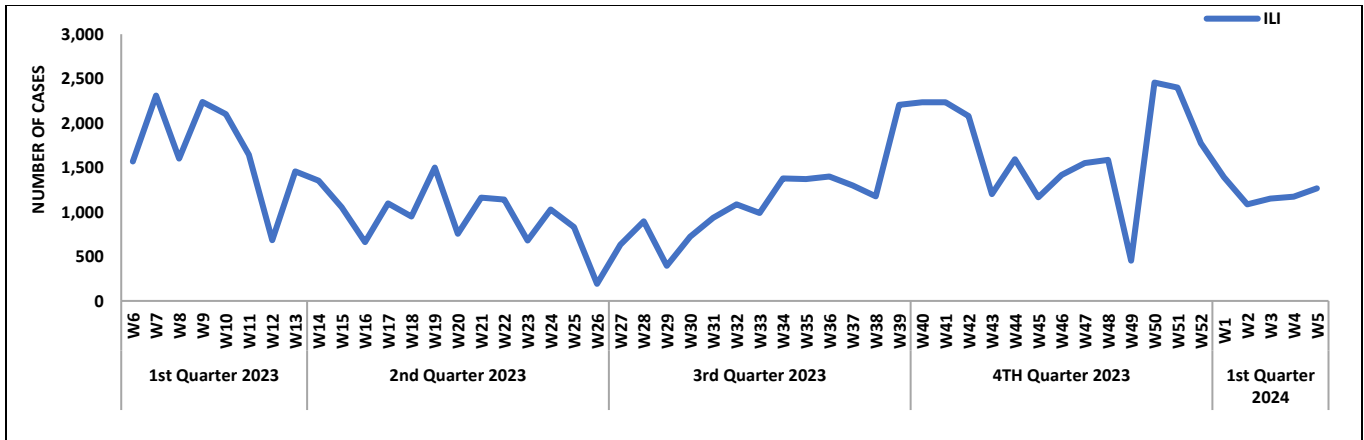


Figure 7: Most frequently reported suspected cases during week 05, AJK

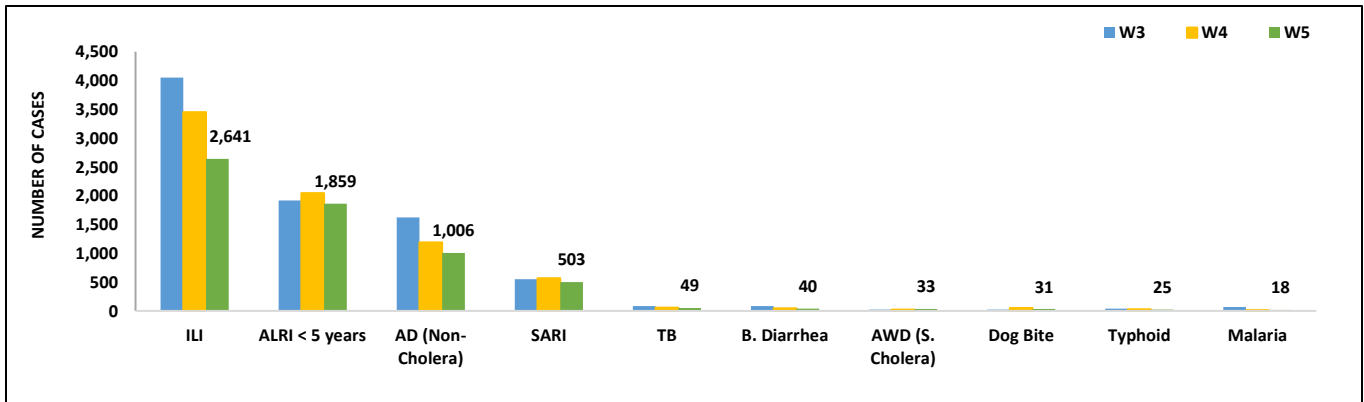




Figure 8: Week wise reported suspected cases of ILI and ALRI<5 years AJK

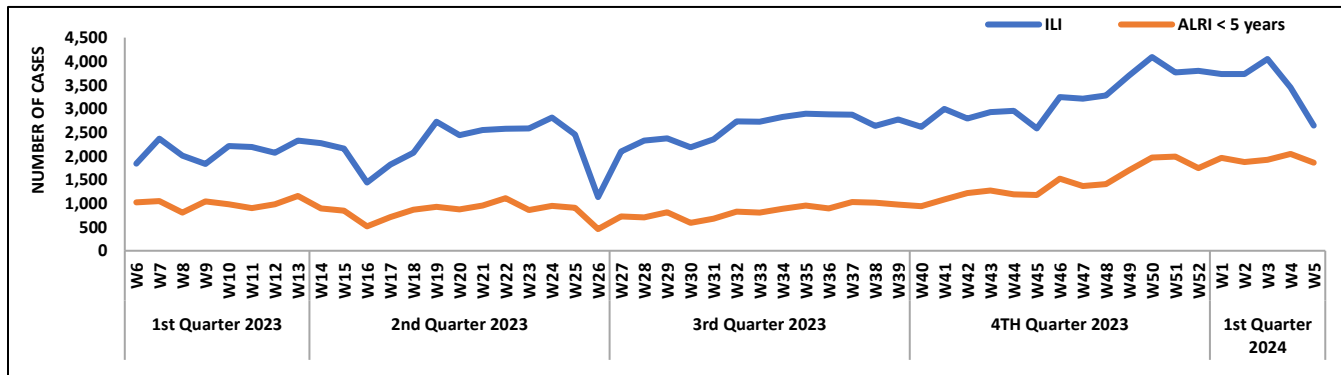


Figure 9: Most frequent cases reported during Wk 04, GB

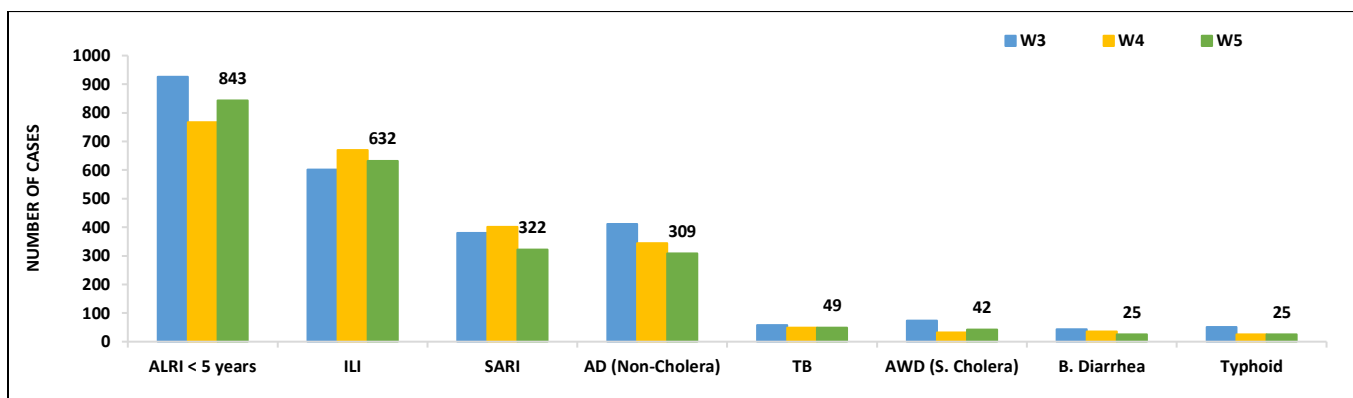
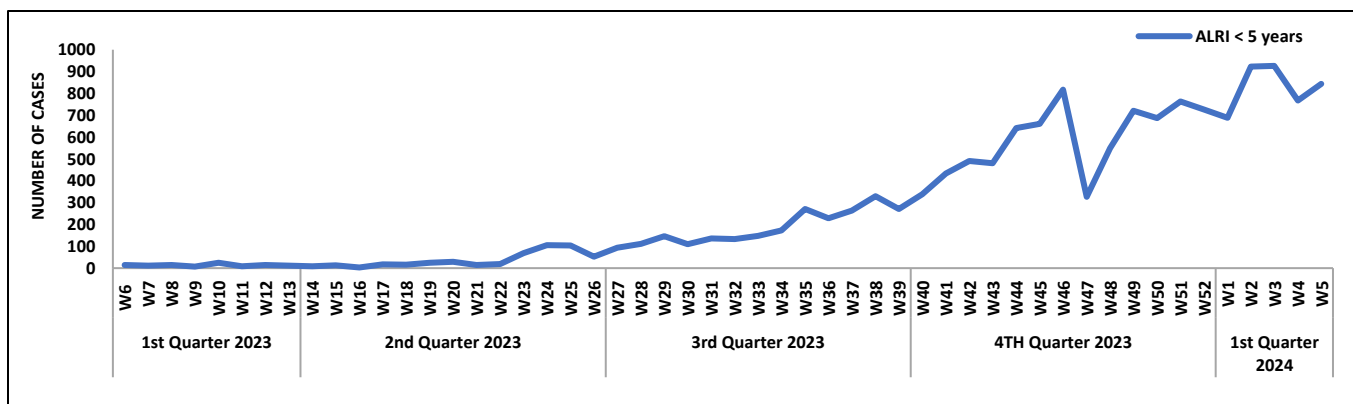
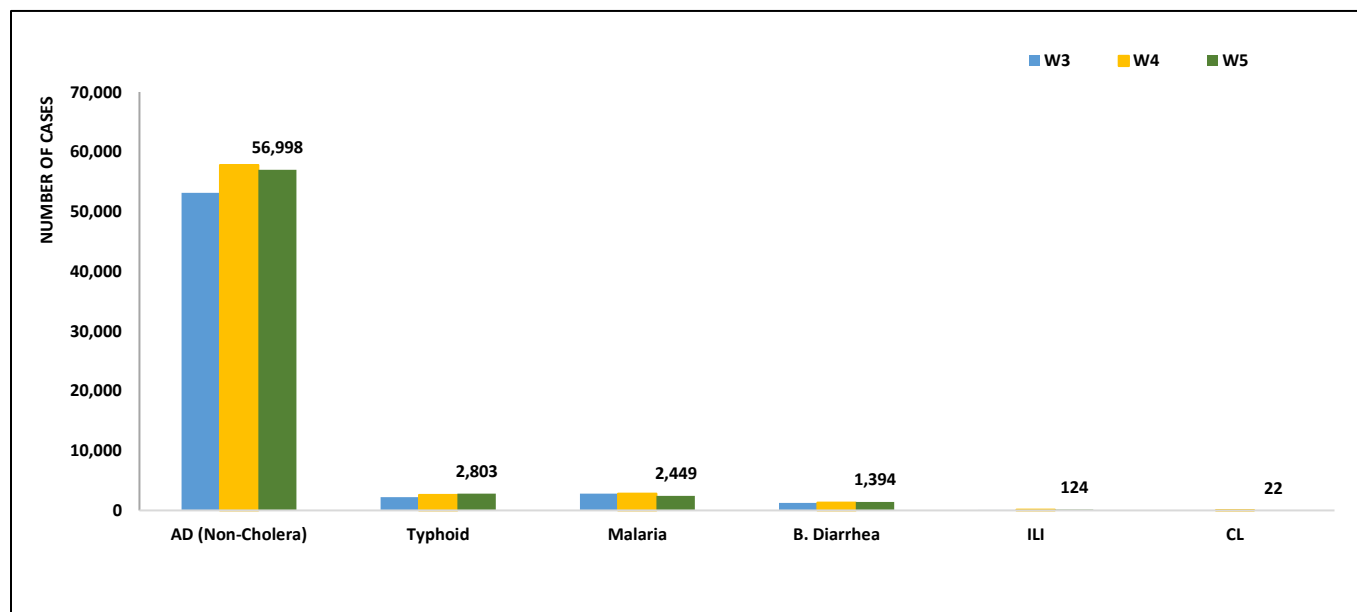


Figure 10: Week wise reported suspected cases of ALRI, GB



- Cases of AD (Non-Cholera) were the most frequently reported followed by Malaria, Typhoid, B. Diarrhea, ILI and Chickenpox.

**Figure 11: District wise distribution of most frequently reported suspected cases during week 05, Punjab**



**Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 05**

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)	59	0	-	-	-	-	0	0	-	-
AD (Non-Cholera)	59	0	-	-	-	-	0	0	-	-
Malaria	2,483	121	-	-	-	-	0	0	-	-
CCHF	-	-	22	0	-	-	-	-	-	-
Dengue	25	2	0	0	-	-	1	0	-	-
VH (B&C)	2,186	381	209	128	-	-	74	4	364	1
Typhoid	409	11	-	-	-	-	2	0	-	-
Covid-19	-	-	118	2	9	0	183	4	-	-
HIV	62	0	-	-	-	-	9	0	-	-
Pertussis	-	-	-	-	-	-	1	0	-	-
Diphtheria	-	-	-	-	-	-	6	0	-	-
Influenza A	-	-	-	-	20	3	-	-	-	-
TB	120	10	-	-	-	-	-	-	-	-
Syphilis	148	16	-	-	-	-	-	-	-	-



# 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 05, 2024**

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	110	99	90%
	Bannu	234	111	47%
	Battagram	63	18	29%
	Buner	34	25	74%
	Bajaur	44	12	27%
	Charsadda	59	55	93%
	Chitral Upper	34	28	82%
	Chitral Lower	35	34	97%
	D.I. Khan	94	92	98%
	Dir Lower	74	70	95%
	Dir Upper	52	35	67%
	Hangu	22	20	91%
	Haripur	71	59	83%
	Karak	35	32	91%
	Khyber	64	12	19%
	Kohat	61	61	100%
	Kohistan Lower	11	10	91%
	Kohistan Upper	20	20	100%
	Kolai Palas	10	10	100%
	Lakki Marwat	70	70	100%
	Lower & Central Kurram	40	3	8%
	Upper Kurram	42	9	21%
	Malakand	48	35	73%
	Mansehra	136	53	39%
	Mardan	80	56	70%
	Nowshera	55	48	87%
	North Waziristan	380	1	0%
	Peshawar	153	120	78%
	Shangla	65	14	22%
	Swabi	63	62	98%
	Swat	76	69	91%
	South Waziristan	134	51	38%
	Tank	34	33	97%
	Torghar	14	14	100%
Mohmand	86	18	21%	
SD DI Khan	19	1	5%	
SD Peshawar	5	2	40%	
SD Tank	58	1	2%	
Orakzai	68	16	24%	
	Mirpur	37	37	100%
	Bhimber	20	20	100%
	Kotli	60	60	100%
	Muzaffarabad	45	44	98%
	Poonch	46	46	100%



<b>Azad Jammu Kashmir</b>	Haveli	39	34	87%
	Bagh	40	40	100%
	Neelum	39	39	100%
	Jhelum Vellay	29	29	100%
	Sudhnooti	27	26	96%
<b>Islamabad Capital Territory</b>	ICT	35	26	74%
	CDA	35	26	74%
<b>Balochistan</b>	Gwadar	25	25	100%
	Kech	40	28	70%
	Khuzdar	20	18	90%
	Killa Abdullah	20	0	0%
	Lasbella	55	55	100%
	Pishin	62	6	10%
	Quetta	43	16	37%
	Sibi	36	34	94%
	Zhob	39	30	77%
	Jaffarabad	16	0	0%
	Naserabad	32	31	97%
	Kharan	30	30	100%
	Sherani	15	3	20%
	Kohlu	75	72	96%
	Chagi	35	29	83%
	Kalat	41	40	98%
	Harnai	17	16	94%
	Kachhi (Bolan)	35	34	97%
	Jhal Magsi	26	26	100%
	Sohbat pur	25	25	100%
	Surab	32	32	100%
	Mastung	45	45	100%
	Loralai	33	28	85%
	Killa Saifullah	28	26	93%
	Ziarat	29	13	45%
	Duki	31	12	39%
	Nushki	32	30	94%
	Dera Bugti	45	20	44%
	Washuk	46	13	28%
	Panjgur	38	14	37%
	Awaran	23	7	30%
	Chaman	24	23	96%
	Barkhan	20	20	100%
Hub	33	32	97%	
Musakhel	41	22	54%	
Usta Muhammad	34	34	100%	
<b>Gilgit Baltistan</b>	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	26	96%
	Skardu	52	52	100%
	Ganche	29	29	100%
	Kharmang	18	18	100%
Sindh	Hyderabad	73	66	90%
	Ghotki	64	64	100%
	Umerkot	43	27	63%
	Naushahro Feroze	107	62	58%
	Tharparkar	282	223	79%
	Shikarpur	60	60	100%
	Thatta	53	51	96%
	Larkana	67	67	100%
	Kamber Shadadkot	71	71	100%
	Karachi-East	23	21	91%
	Karachi-West	20	20	100%
	Karachi-Malir	37	16	43%
	Karachi-Kemari	18	6	33%
	Karachi-Central	11	10	91%
	Karachi-Korangi	18	14	78%
	Karachi-South	4	4	100%
	Sujawal	54	54	100%
	Mirpur Khas	106	105	99%
	Badin	123	116	94%
	Sukkur	64	64	100%
	Dadu	90	90	100%
	Sanghar	100	100	100%
	Jacobabad	44	43	98%
	Khairpur	169	166	98%
	Kashmore	59	55	93%
	Matiari	42	40	95%
	Jamshoro	68	68	100%
	Tando Allahyar	54	54	100%
	Tando Muhammad Khan	40	40	100%
	Shaheed Benazirabad	124	124	100%

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### The Public Health Bulletin: A Guardian of Pakistan's Health

The Public Health Bulletin (PHB) stands as a vigilant sentinel, meticulously monitoring and reporting on the ever-evolving health landscape of Pakistan. Issued by the National Institute of Health's Field Epidemiology & Disease Surveillance Division (FE&DSD), the PHB serves as a crucial communication channel, disseminating authoritative and timely information regarding priority diseases across the nation's diverse provinces and regions.

#### Empowering Informed Action:

More than just a passive reporter, the PHB empowers health authorities with a comprehensive snapshot of disease prevalence at both provincial and district levels. This granular view, meticulously compiled from data sources like Integrated Disease Surveillance and Response (IDSR) reporting, evidence-based surveillance, and outbreak investigations, forms the bedrock for informed decision-making. Armed with this knowledge, health officials can effectively implement targeted public health interventions, mitigating the impact of disease outbreaks and safeguarding public health.

#### Building Capacity, Strengthening Response:

The PHB's impact extends beyond mere information dissemination. It actively fosters the development of a robust public health workforce by providing a platform for health professionals to hone their skills. Through opportunities to contribute reports on disease alerts, outbreaks, and key public health interventions, the PHB empowers healthcare personnel to become active participants in safeguarding public health.

#### Scope and Impact:

The PHB's scope goes beyond mere disease reporting. It paints a vivid picture of the burden of IDSR priority diseases across geographical areas where IDSR is operational. By meticulously tracking seasonal trends, reporting on outbreaks, and offering actionable recommendations for public health interventions, the PHB equips relevant stakeholders

with the knowledge and tools necessary to effectively combat public health threats.

This real-time surveillance system fosters a proactive approach to public health. By facilitating timely and effective responses to public health alerts, the PHB empowers local, district, provincial, and national authorities to formulate data-driven policies and programs that prioritize the health and well-being of the Pakistani population.

### Surveillance Summary.

#### Epidemiological Investigation of Neonatal Tetanus in Rawalpindi, 2023

**Dr. Waqar Ahmed**  
**Public Health Advisor**  
**Safetynet**

**Dr. Ehsan Ghani**  
**DHO, (PS), DHA**  
**Rawalpindi**

#### Introduction:

The specter of neonatal tetanus, a potentially fatal ailment caused by *Clostridium tetani*, has recently loomed large over public health in Rawalpindi. This report delves deep into the findings of a comprehensive investigation undertaken to shed light on the root causes and contributing factors that fueled this alarming outbreak.

#### Methodology:

A retrospective analysis was conducted, rigorously evaluating 21 confirmed cases of neonatal tetanus diagnosed throughout the year 2023. Data collected from district line list encompassed a comprehensive spectrum of information, including the demographic characteristics of the affected infants, mortality rates, the type of healthcare professional attending the deliveries, the location of the deliveries, the instrument utilized for umbilical cord severance, and the maternal vaccination status against tetanus, as well as details regarding case response immunization efforts.

#### Results:

The investigation confirmed a total of 21 neonatal tetanus cases with a mean age of diagnosis at 7 days (SD ± 2.26 days). A significant gender disparity was observed, with 72% (n=15) of cases



being male and 28% (n=6) female. The outbreak exhibited an alarmingly high mortality rate, with 67% (n=14) of affected infants succumbing to the illness.

Further analysis revealed a strong association between the outbreak and deliveries attended by traditional birth attendants (dais) (72% of cases, n=15). Additionally, 67% (n=14) of deliveries occurred at home, suggesting potential challenges in maintaining hygienic practices. The use of blades for umbilical cord cutting in 57% (n=12) of cases raises concerns regarding sterilization procedures. Perhaps the most significant finding was the woefully inadequate maternal tetanus vaccination coverage, with only 15% (n=3) of mothers having received the necessary immunizations.

In response to the outbreak, a targeted immunization campaign vaccinated 1521 women aged 15-49 years against tetanus across 630 households.

### Discussion:

The confluence of several factors likely contributed to the emergence and spread of this neonatal tetanus outbreak in Rawalpindi. The low maternal tetanus vaccination coverage, evident in 85% of mothers remaining unvaccinated, created a vulnerable population susceptible to the infection. Unsanitary practices during childbirth, including the use of unsterilized blades for umbilical cord cutting and inadequate hand hygiene, further exacerbated the risk of transmission. Additionally, deliveries attended by untrained traditional birth attendants, who may lack knowledge or adherence to safe delivery protocols, likely played a role in perpetuating the outbreak.

### Prevention Measures:

In light of the concerning findings, implementing robust prevention measures is imperative to prevent future outbreaks and safeguard the lives of newborns. These measures should encompass:

- **Enhanced Maternal Tetanus Vaccination Coverage:** Prioritizing and expanding access to tetanus vaccination programs for all pregnant women can significantly reduce the risk of neonatal tetanus transmission.
- **Promoting Safe Delivery Practices:** Educational campaigns and community outreach programs should emphasize the importance of sterile

instruments, proper hand hygiene, and cord care practices during childbirth.

- **Training Traditional Birth Attendants:** Equipping traditional birth attendants with the necessary knowledge and skills regarding safe delivery protocols can significantly improve birth outcomes and reduce the risk of infections.

### Conclusion:

This comprehensive investigation has shed light on the critical factors contributing to the recent neonatal tetanus outbreak in Rawalpindi. By implementing the outlined prevention measures, we can collectively work towards strengthening public health infrastructure and safeguarding the well-being of newborns in the community. This proactive approach will not only mitigate the risk of future outbreaks but also contribute to a healthier future for generations to come.

### A note from Field Activities.

IDSR/DHIS-2 Cascade Trainings Empower Healthcare Professionals in Rahim Yar Khan, Pakistan, Feb 2024

**Dr. Saleh Ahmed**  
**Fellow FELTP, DSC**  
**Rahim Yar Khan, Punjab**



A comprehensive training program aimed at strengthening the district health system in Rahim Yar Khan, Pakistan, is underway with the support of the UK Health Security Agency (UK HSA). The initiative, titled "IDSR/DHIS-2 Cascade Trainings," focuses on equipping healthcare professionals with the knowledge and skills necessary to effectively respond to public health threats and emergencies.

### Equipping the Workforce:

The program, implemented by the Primary and secondary healthcare department under the supervision of director health services (CDC & EP) and facilitated by esteemed professionals including Dr. Saleh Ahmed (FELTP Graduate), District Health Management Team, and DHIS Focal Person, features a cascade training model. This approach ensures the efficient dissemination of knowledge across various levels of the healthcare system, maximizing the program's impact.



Nine batches, each comprising 30 participants, will undergo intensive training across critical topics. These include:

- **International Health Regulations (IHR) and the Global Health Security Agenda (GHSA):** Participants will gain a thorough understanding of international frameworks and best practices for preventing, detecting, and responding to public health emergencies.
- **Multisectoral Outbreak Investigation and Response (MOIR):** The training will equip healthcare professionals with essential skills for effectively investigating and containing outbreaks, fostering a collaborative approach across different sectors.

### Expected Outcomes:

This comprehensive training program is expected to yield significant benefits for the healthcare system in Rahim Yar Khan:

- **Enhanced Capacity:** Healthcare professionals will be better equipped to identify, report, and respond to public health threats promptly and efficiently.
- **Improved Collaboration:** The cascade training model will foster stronger collaboration and communication between different levels and sectors of the healthcare system, leading to a more coordinated response to emergencies.
- **Strengthened Surveillance:** Participants will gain valuable skills in data collection, analysis, and reporting, contributing to a more robust public health surveillance system.

### Investing in the Future:

The IDSR/DHIS-2 Cascade Trainings represent a significant investment in the future of public health in Rahim Yar Khan. By empowering healthcare professionals with the necessary knowledge and skills, the program strives to build a more resilient and responsive healthcare system, safeguarding the health and well-being of the community.

### Further Collaboration:

This initiative serves as a testament to the ongoing commitment of the Primary and secondary healthcare department, the UK HSA, and other stakeholders to strengthening public health systems in Pakistan. Continued collaboration and support are crucial to ensure the program's long-term success and its lasting impact on the health of the people of Rahim Yar Khan.

### Letter to the Editor:

#### Successful Medical & Screening Camp in Muhammadi Colony Rawalpindi: A Beacon of Hope for Community Health

**Fehmeeda Malik**  
Health and Nutrition Supervisor  
Rawalpindi



I am writing to express my sincere appreciation for the recent medical and screening camp organized by the District Health Authority Rawalpindi (DHA Rawalpindi) in Muhammadi Colony, Shakrial. This initiative served as a beacon of hope for



a community often facing limited access to healthcare, providing much-needed medical services and raising awareness about critical health issues.





The camp's success stemmed from its comprehensive approach. A diverse team of specialists, ranging from pediatricians and gynecologists to nutritionists and epidemiologists, catered to the diverse needs of the community. The impressive number of 287 patients treated is a testament to the camp's reach and impact, addressing seasonal illnesses like ARIs, allergic coughs, and fever, alongside addressing chronic issues like joint pain and nutritional deficiencies. Additionally, crucial screenings for hepatitis and tuberculosis provided invaluable preventive care.

Furthermore, the camp went beyond mere diagnosis and treatment. The provision of free medication and food supplements to address nutritional deficiencies demonstrated a commitment to holistic healthcare, recognizing the link between proper nutrition and overall well-being.

The presence of distinguished guests like the CEO of DHA Rawalpindi, Dr. Ejaz Ahmed Ghillo, and other respected officials from the health department and local community leaders added further significance to the initiative. Their participation highlighted the importance placed on ensuring the well-being of the community and their dedication to supporting such public health efforts.

This camp serves as a commendable example of how to bridge healthcare gaps and ensure equitable access to vital services. The comprehensive approach, diverse team of specialists, and provision of free medication and screenings set a benchmark for future community health efforts. I urge the DHA Rawalpindi to continue these valuable initiatives and encourage other organizations to follow their lead in prioritizing the health and well-being of all communities.

## Knowledge Hub

### Crimean-Congo Hemorrhagic Fever (CCHF): What You Need to Know

#### What is CCHF?

Crimean-Congo hemorrhagic fever (CCHF) is a viral illness that can be fatal. It is caused by a virus called Crimean-Congo hemorrhagic fever virus (CCHFV), which is spread to humans through contact with the blood or tissues of infected animals, such as livestock (e.g., sheep, goats, cattle), ticks, or humans.

#### Symptoms of CCHF

The symptoms of CCHF typically appear 2 to 14 days after infection. They can include fever, headache,

muscle pain, backache, fatigue, sore throat, and gastrointestinal symptoms such as nausea, vomiting, and diarrhea. In some cases, patients may also experience bleeding from the eyes, nose, gums, or other orifices.

#### Treatment for CCHF

There is no specific treatment for CCHF. Treatment is supportive and may include measures such as providing fluids, oxygen, and medications to manage symptoms.

#### Prevention of CCHF

The best way to prevent CCHF is to avoid contact with infected animals and ticks. This can be done by:

- Avoiding contact with livestock, especially during birthing and slaughtering.
- Wearing protective clothing when working with livestock or in areas where ticks are common.
- Using insect repellent when outdoors in areas where ticks are common.
- Checking for ticks after being outdoors and removing any ticks that are found.
- Getting vaccinated against CCHF.

Here are some important messages to raise public awareness about CCHF:

- CCHF is a viral illness that can be spread to humans through contact with the blood or tissues of infected animals, such as livestock (e.g., sheep, goats, cattle), ticks, or humans.
- The symptoms of CCHF typically appear 2 to 14 days after infection and can include fever, headache, muscle pain, backache, fatigue, sore throat, and gastrointestinal symptoms such as nausea, vomiting, and diarrhea. In some cases, patients may also experience bleeding from the eyes, nose, gums, or other orifices.
- There is no specific treatment for CCHF. Treatment is supportive and may include measures such as providing fluids, oxygen, and medications to manage symptoms.
- The best way to prevent CCHF is to avoid contact with infected animals and ticks. This can be done by wearing protective clothing, using insect repellent, checking for ticks after being outdoors, and getting vaccinated against CCHF.





# One Health



# One World

One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems.

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