

# 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

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### Public Health Bulletin - Pakistan, Week 13, 2025

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## IDSR Reports

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## Ongoing Events

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## Field Reports

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*The Public Health Bulletin (PHB) provides timely, reliable, and actionable health information to the public and professionals. It disseminates key IDSR data, outbreak reports, and seasonal trends, along with actionable public health recommendations. Its content is carefully curated for relevance to Pakistan's priorities, excluding misinformation. The PHB also proactively addresses health misinformation on social media and aims to be a trusted resource for informed public health decision-making.*

*This Weeks Highlights include;*

- *Operationalizing One Health in Khyber Pakhtunkhwa*
- *Diphtheria Outbreak Investigation in Muhammad Hassan Pindrani Goth, Usta Muhammad – November 2024*
- *Knowledge hub on Understanding CCHF*

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*Stay informed. Stay prepared. Stay healthy.*

*Sincerely,  
The Chief Editor*

**Note: All reported cases in this report are suspected cases**

- During Week 13, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, ILI, ALRI <5 years, TB, B. Diarrhea, dog bite, VH (B, C & D), SARI and Typhoid.
- Nine cases of AFP reported from KP and seven from Sindh.
- Three suspected cases of HIV/ AIDS reported from Balochistan, two from KP and one from Sindh.
- Three suspected cases of Brucellosis reported from KP and one from Sindh.
- Among VPDs, there is an increase in number of cases of Rubella and NT this week.
- Among Respiratory, Water/Food-borne, Vector-borne, sexually transmitted, zoonotic and other diseases, most diseases showed a decline in number of cases this week.
- Field investigation is required for verification of the alerts and for prevention and control of the outbreaks.

## IDSR compliance attributes

- The national compliance rate for IDSR reporting in 158 implemented districts is 70%
- Sindh is the top reporting regions with a compliance rate of 93%, followed by GB 92%, ISB 78% and AJK 73%.
- The lowest compliance rate was observed in KP 63% and Balochistan 39 %.

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	2315	1456	63
Azad Jammu Kashmir	404	296	73
Islamabad Capital Territory	36	28	78
Balochistan	1308	504	39
Gilgit Baltistan	405	373	92
Sindh	2095	1943	93
National	6563	4600	70



## Public Health Actions

Federal, Provincial, Regional Health Departments and relevant programs may consider following public health actions to prevent and control diseases.

### Mumps

- **Enhance Case Detection and Reporting:** Strengthen surveillance for mumps through the Integrated Disease Surveillance and Response (IDSR) platform by training healthcare workers on case definitions, timely notification, and outbreak investigation. Focus on detecting clusters in schools, universities, and densely populated areas.
- **Improve Laboratory Diagnosis:** Expand access to mumps diagnostic services including IgM serologic testing and RT-PCR for confirmation, particularly in outbreak settings. Strengthen quality assurance mechanisms and provide refresher trainings for laboratory staff.
- **Promote Vaccination in Priority Populations:** Advocate for inclusion of the MR (measles, rubella) vaccine in routine immunization schedules where not already present. Prioritize mop-up campaigns in schools, universities, and among health worker.
- **Raise Community Awareness:** Conduct targeted awareness campaigns focusing on mumps transmission, symptoms, complications (e.g., orchitis, meningitis), and the importance of vaccination. Engage parents, educators, and youth to reduce misconceptions and increase vaccine uptake.
- **Strengthen multi sectoral Coordination:** Collaborate with education departments to implement school-based immunization programs and enforce exclusion policies for infected individuals during outbreaks to limit transmission

### Chickenpox/Varicella

- **Enhance Case Detection and Reporting:** Strengthen case-based surveillance for chickenpox through IDSR by training healthcare workers to identify typical rash patterns and report cases promptly. Emphasize monitoring in schools, daycare centers, and displaced populations.
- **Improve Laboratory Diagnosis:** Facilitate access to varicella-zoster virus (VZV) diagnostic tools such as PCR and direct fluorescent antibody (DFA) testing in reference laboratories. Ensure quality control and training for laboratory personnel on sample collection and handling.
- **Promote Vaccination in High-Risk Groups:** Encourage varicella vaccination for susceptible individuals, especially healthcare workers, teachers, and immune-compromised persons. Implement catch-up vaccination for adolescents and adults without a history of disease or vaccination.
- **Raise Community Awareness:** Develop culturally appropriate health education materials to inform the public about chickenpox symptoms, transmission, prevention through vaccination, and home isolation practices to prevent spread.
- **Ensure Inter-sectoral Coordination:** Work with the education and social welfare sectors to implement school and community-level outbreak control measures, such as isolation guidelines, hygiene promotion, and temporary school exclusions for affected children.

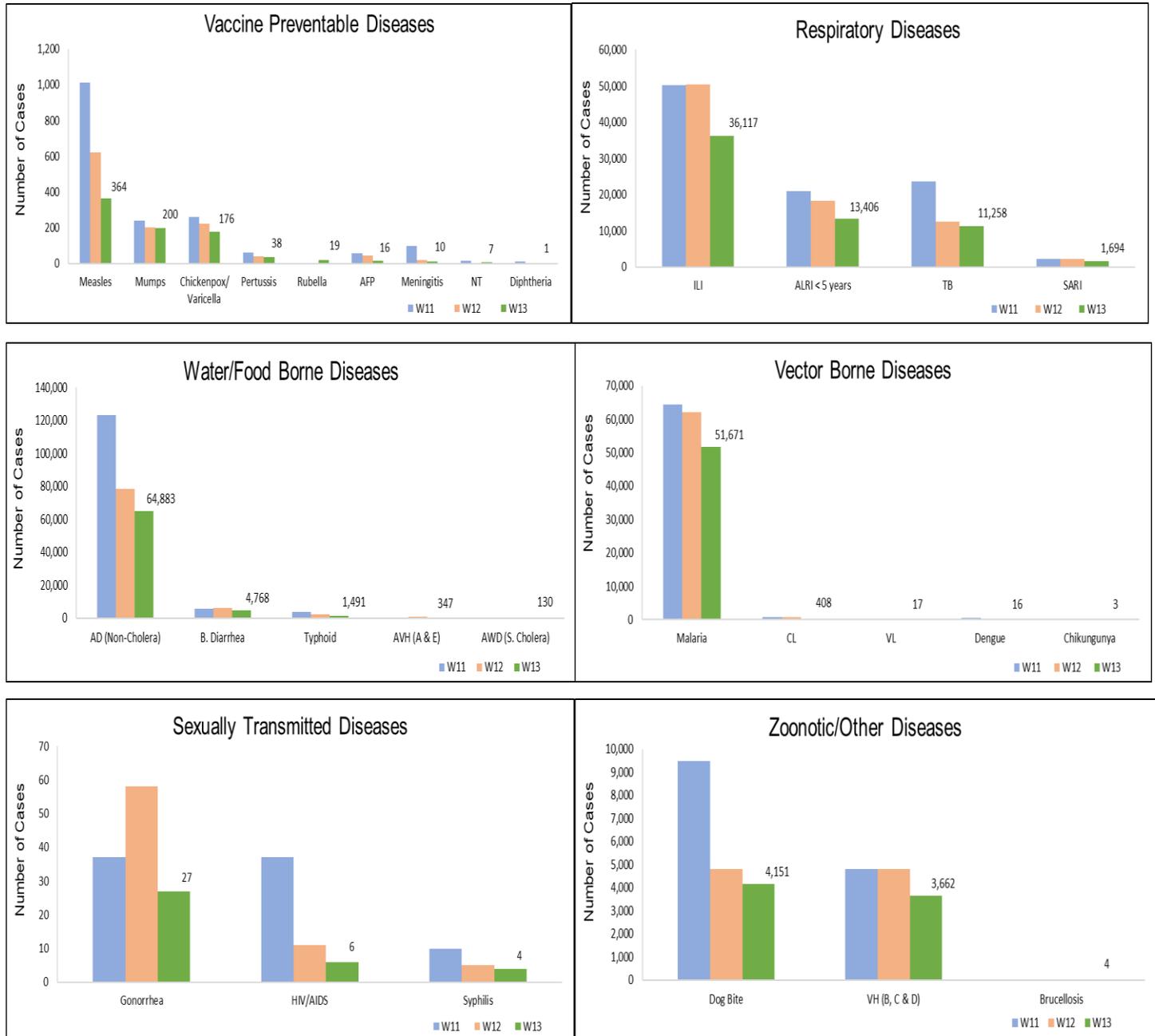


**Table 1: Province/Area wise distribution of most frequently reported suspected cases during Week 13, Pakistan.**

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab*	Sindh	Total
AD (non-cholera)	1,285	6,490	544	248	21,362	NR	48,464	78,393
Malaria	0	3,813	0	0	2,914	NR	55,323	62,050
ILI	2,118	7,920	351	780	6,098	NR	33,230	50,497
ALRI < 5 years	1,045	2,326	936	17	2,133	NR	11,814	18,271
TB	37	47	51	11	443	NR	12,017	12,606
B. Diarrhea	41	1,457	60	2	947	NR	3,626	6,133
VH (B, C & D)	9	54	6	1	102	NR	4,646	4,818
Dog Bite	84	143	6	0	888	NR	3,684	4,805
Typhoid	8	618	54	0	551	NR	1,066	2,297
SARI	163	887	203	2	820	NR	182	2,257
CL	0	76	0	0	799	NR	2	877
AVH (A & E)	12	16	1	0	285	NR	467	781
Measles	16	14	15	0	449	NR	128	622
AWD (S. Cholera)	28	144	11	0	49	NR	16	248
Chickenpox/ Varicella	3	7	6	1	53	NR	155	225
Mumps	4	28	3	0	106	NR	60	201
Gonorrhoea	0	32	0	0	9	NR	17	58
AFP	2	0	1	0	37	NR	5	45
Pertussis	0	5	4	0	20	NR	12	41
Meningitis	1	0	1	0	6	NR	12	20
Leprosy	0	0	0	0	16	NR	1	17
HIV/AIDS	0	0	0	0	4	NR	7	11
Dengue	0	0	0	0	0	NR	6	6
Brucellosis	0	0	0	0	6	NR	0	6
Syphilis	0	0	0	0	0	NR	5	5
Diphtheria (Probable)	0	0	0	0	4	NR	0	4
Chikungunya	0	0	0	0	0	NR	4	4
VL	0	0	0	0	0	NR	3	3

★ Data delayed due to non-reporting by Health Facilities.

**Figure 1: Most frequently reported suspected cases during Week 13, Pakistan.**

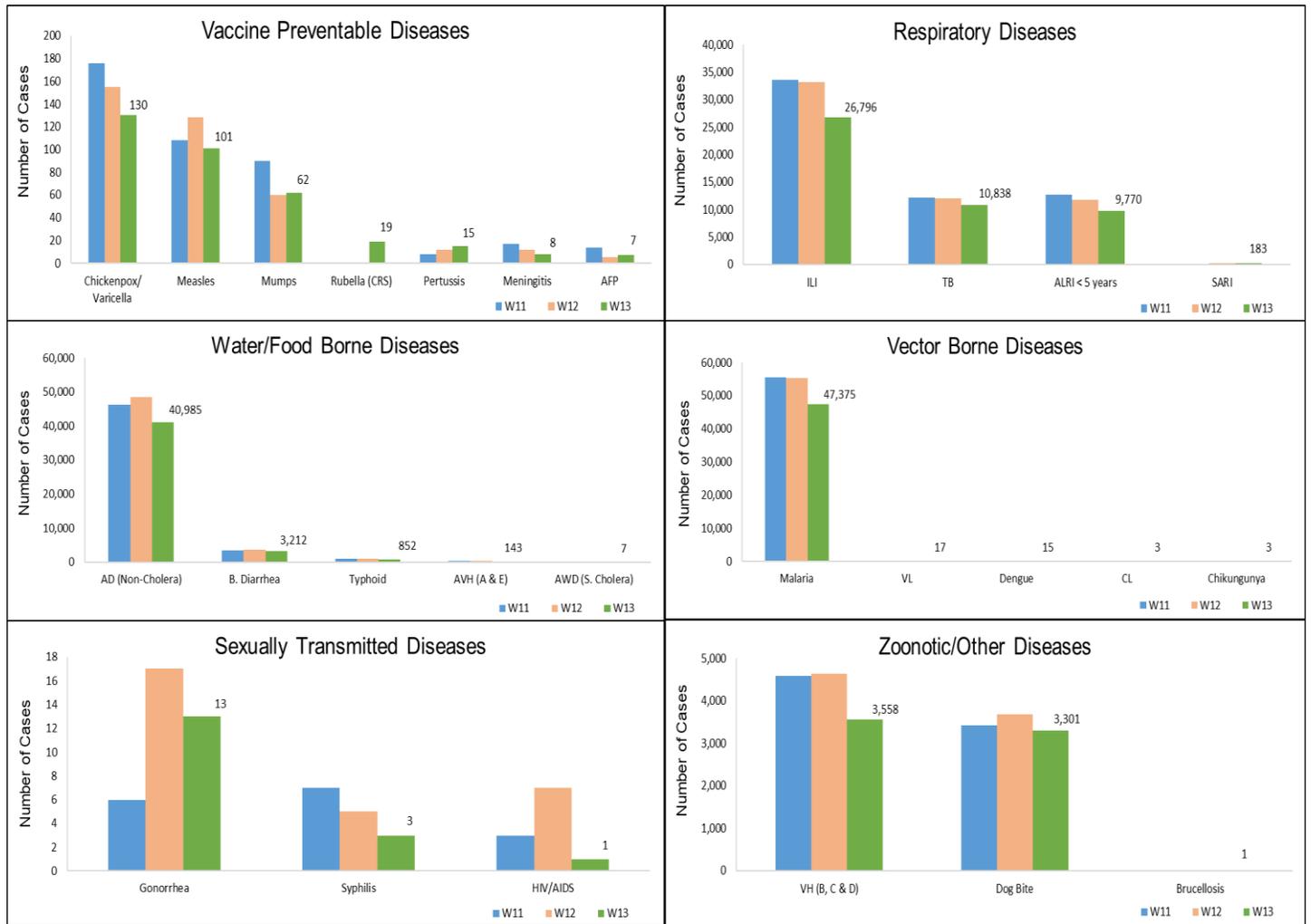


- Malaria cases were maximum followed by AD (Non-Cholera), ILI, TB, ALRI<5 Years, VH (B, C, D), dog bite, B. Diarrhea, Typhoid and SARI.
- Malaria cases are mostly from Larkana, Khairpur and Dadu whereas AD (Non-Cholera) cases are from Khairpur, Mirpurkhas and Dadu.
- Seven cases of AFP reported from Sindh. All are suspected cases and need field verification.
- One suspected case of HIV/ AIDS reported from Sindh. Field investigation required to verify the case.
- There is a decline in number of cases of Malaria, AD (Non-Cholera), ILI, TB, ALRI<5 Years, VH (B, C, D), dog bite, B. Diarrhea and Typhoid while an increase in number of cases of Mumps, Rubella (CRS), Pertussis and AFP this week.

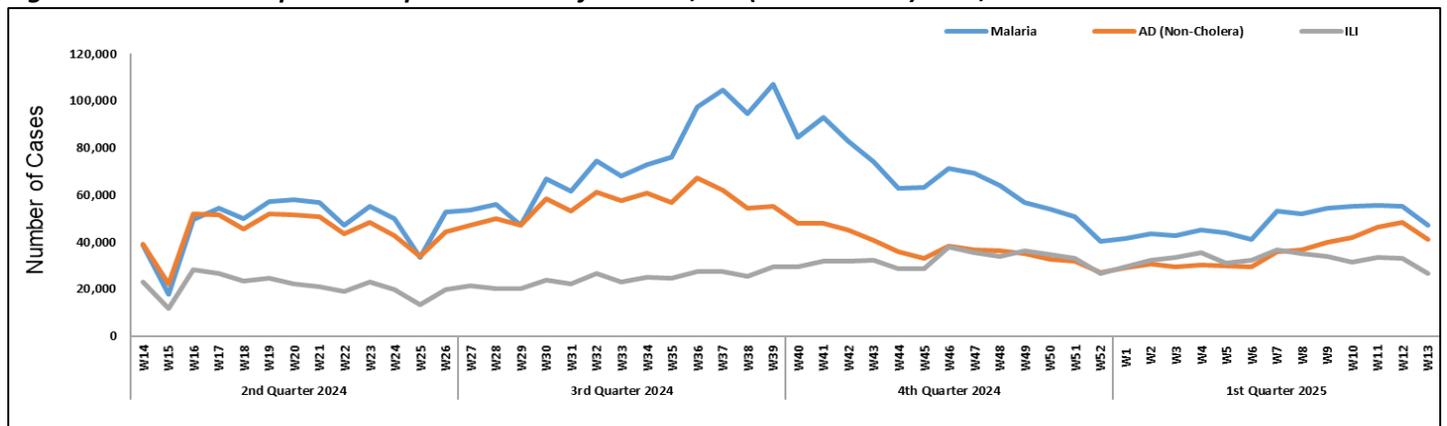
**Table 2: District wise distribution of most frequently reported suspected cases during Week 13, Sindh**

Districts	Malaria	AD (Non-Cholera)	ILI	ALRI < 5 years	TB	VH (B, C & D)	B. Diarrhea	Dog Bite	Typhoid	AVH (A & E)
Badin	1,953	2,683	4,081	688	403	162	110	264	80	0
Dadu	3,654	2,709	392	484	953	75	627	395	122	6
Ghotki	889	734	118	226	467	38	203	60	5	0
Hyderabad	625	2,022	1,427	198	124	58	64	36	11	5
Jacobabad	564	622	710	142	381	170	244	88	27	0
Jamshoro	1,904	1,799	109	574	238	235	88	149	30	1
Kamber	3,618	1,603	0	810	330	139	268	111	25	0
Karachi Central	2	386	623	10	19	3	0	2	41	0
Karachi East	19	356	283	27	20	7	22	8	2	1
Karachi Keamari	4	348	334	4	31	0	0	5	1	0
Karachi Korangi	53	308	4	12	0	0	0	5	2	0
Karachi Malir	133	772	1,566	79	127	5	44	17	6	1
Karachi South	4	70	3	0	0	0	0	0	0	0
Karachi West	347	862	1,233	76	182	36	99	21	23	4
Kashmore	2,097	446	598	227	171	19	122	34	0	0
Khairpur	4,194	3,106	6,920	975	1,147	188	181	366	132	120
Larkana	4,791	1,632	63	840	453	59	31	278	4	0
Matiali	2,392	1,871	3	598	247	209	73	59	14	0
Mirpurkhas	1,966	2,791	2,274	779	520	157	138	113	29	0
Naushero Feroze	1,561	1,178	932	363	338	44	214	179	71	3
Sanghar	2,752	1,870	71	1,015	467	931	234	58	35	0
Shaheed Benazirabad	1,761	1,700	4	311	233	60	143	75	108	0
Shikarpur	2,379	1,245	5	212	243	381	168	170	4	4
Sujawal	1,046	1,639	6	188	266	51	70	169	16	9
Sukkur	1,998	1,333	2,082	458	625	78	88	109	8	0
Tando Allahyar	1,787	1,543	1,324	484	222	297	53	134	7	0
Tando Muhammad Khan	930	1,018	17	242	86	0	16	59	2	0
Tharparkar	2,449	2,464	1,614	446	798	88	1	146	18	25
Thatta	197	310	0	13	241	3	0	33	0	0
Umerkot	1,306	1,565	0	357	438	65	0	69	29	4
<b>Total</b>	<b>47,375</b>	<b>40,985</b>	<b>26,796</b>	<b>10,838</b>	<b>9,770</b>	<b>3,558</b>	<b>3,301</b>	<b>3,212</b>	<b>852</b>	<b>183</b>

**Figure 2: Most frequently reported suspected cases during Week 13 Sindh**



**Figure 3: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Sindh**

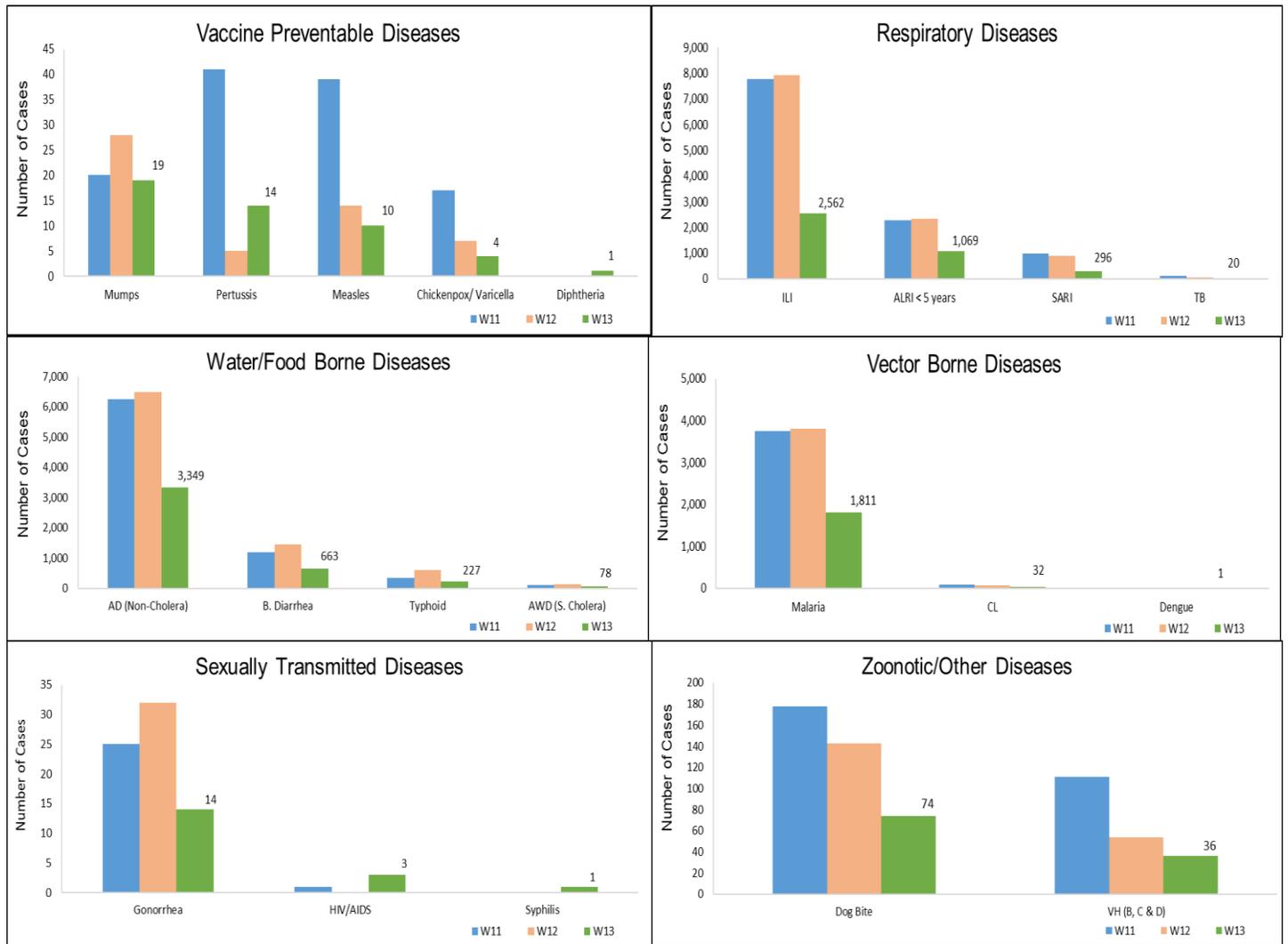


- AD (Non-Cholera), ILI, Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, AWD (S. Cholera), dog bite and VH (B, C & D) cases were the most frequently reported diseases from Balochistan province.
- AD (Non-Cholera) cases are mostly reported from Usta Muhammad, Lesbella and Quetta while ILI cases are mostly reported from Quetta, Washuk and Loralai.
- Three cases of HIV/AIDs reported from Balochistan. Field investigation is required to confirm the cases.
- AD (Non-Cholera), ILI, Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, AWD (S. Cholera), dog bite and VH (B, C & D) showed a decline in cases while Pertussis and HIV/AIDs showed an increase in number this week.

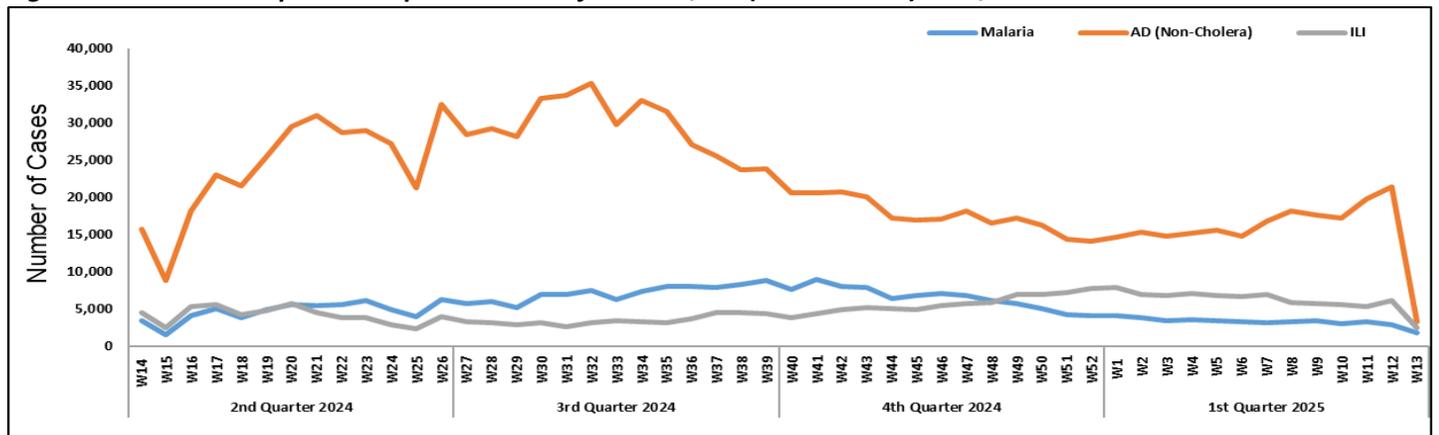
**Table 3: District wise distribution of most frequently reported suspected cases during Week 13, Balochistan**

Districts	ILI	AD (Non-Cholera)	Malaria	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	Dog Bite	TB	AWD (S. Cholera)
Barkhan	5	11	3	1	0	0	7	2	0	0
Chagai	117	203	42	0	48	0	13	1	0	0
Gwadar	5	7	3	2	1	0	3	2	1	0
Harnai	72	5	51	188	71	0	0	3	3	0
Hub	95	28	41	15	2	0	3	0	1	0
Jaffarabad	263	157	239	8	70	13	18	0	0	0
Jhal Magsi	155	130	381	34	0	2	1	0	0	0
Kalat	7	1	5	6	2	0	8	0	0	0
Khuzdar	48	57	9	0	17	0	3	0	0	0
Killa Abdullah	78	94	2	17	26	56	19	52	9	0
Killa Saifullah	134	0	138	144	47	17	8	0	0	0
Kohlu	31	82	16	9	26	13	5	1	NR	NR
Lasbella	451	40	264	89	51	1	12	0	20	0
Loralai	101	233	18	25	18	79	9	3	0	0
Mastung	93	156	39	95	31	30	7	0	8	0
Naseerabad	295	38	120	18	8	10	54	1	6	4
Panjgur	52	64	27	41	8	0	6	1	0	0
Quetta	307	554	8	95	31	41	8	0	0	1
Sohbat pur	184	39	159	90	41	16	16	3	3	8
Surab	51	183	18	0	0	0	0	0	0	0
Usta Muhammad	658	172	137	185	94	4	10	0	23	23
Washuk	147	308	91	7	71	14	17	9	0	0
<b>Total</b>	<b>3,349</b>	<b>2,562</b>	<b>1,811</b>	<b>1,069</b>	<b>663</b>	<b>296</b>	<b>227</b>	<b>78</b>	<b>74</b>	<b>36</b>

**Figure 4: Most frequently reported suspected cases during Week 13, Balochistan**



**Figure 5: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Balochistan**



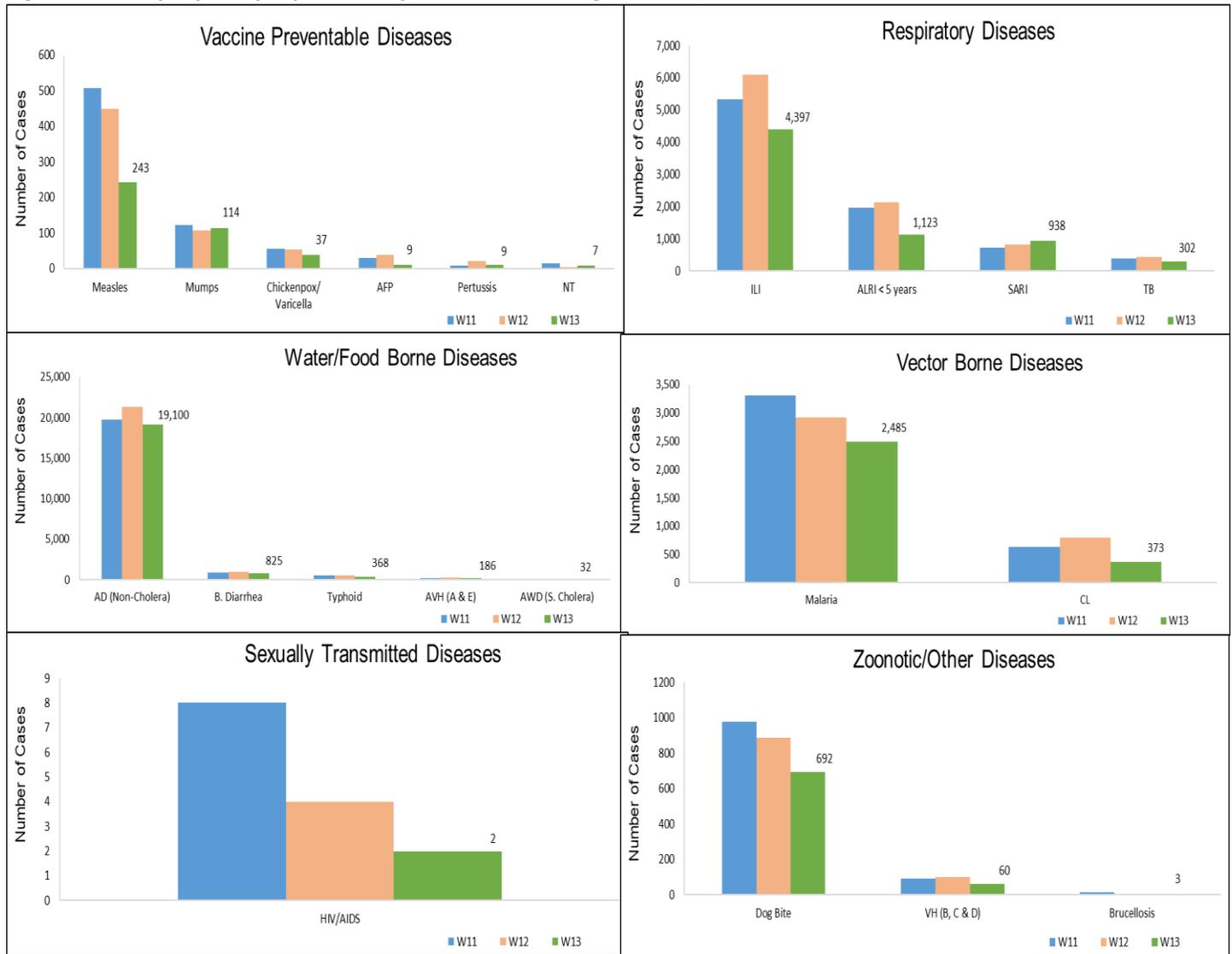
- Cases of AD (Non-Cholera) were maximum followed by ILI, Malaria, ALRI<5 Years, SARI, B. Diarrhea, dog bite, CL, Typhoid and TB cases.
- ILI, Malaria, ALRI<5 Years, B. Diarrhea, dog bite, CL, Typhoid and TB cases showed a decline in number while SARI, Mumps and NT showed an increase in number this week.
- Three cases of AFP reported from KP. All are suspected cases and need field verification.
- Two cases of HIV/AIDs reported from KP. Field investigation is required.
- Three suspected cases of Brucellosis reported from KP. They require field verification.

**Table 4: District wise distribution of most frequently reported suspected cases during Week 13, KP**

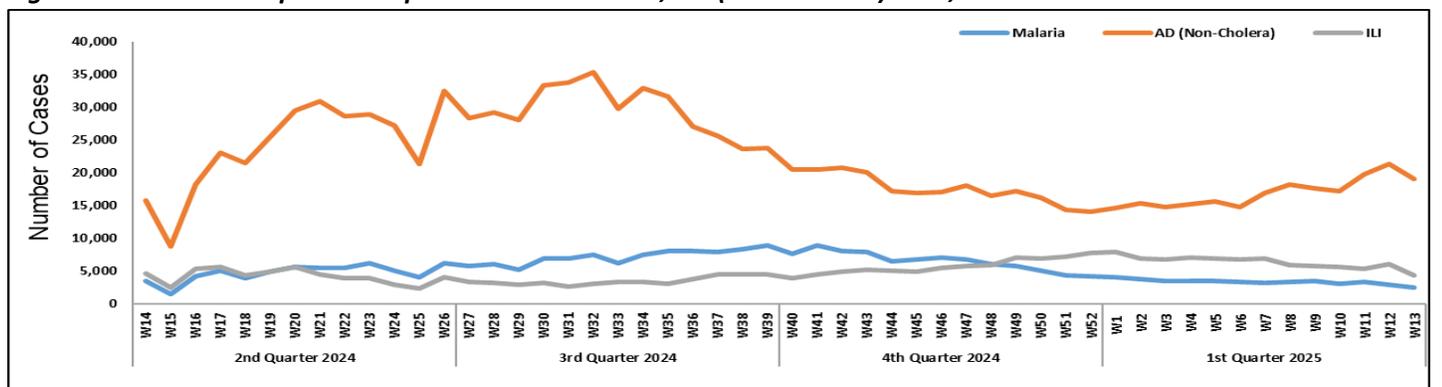
Districts	AD (Non-Cholera)	ILI	Malaria	ALRI < 5 years	Dog Bite	B. Diarrhea	SARI	CL	Typ hoid	Measles
Abbottabad	509	98	0	16	0	1	23	0	28	16
Bajaur	328	83	90	20	85	39	72	19	8	5
Bannu	605	2	1,074	16	0	31	4	0	64	21
Battagram	112	339	9	NR	NR	4	7	7	NR	32
Buner	143	0	186	0	0	0	0	0	2	0
Charsadda	1,760	1,477	313	343	6	82	1	1	9	7
Chitral Lower	381	56	4	7	5	20	16	7	1	2
Chitral Upper	56	6	2	8	3	3	1	0	5	0
D.I. Khan	1,505	0	112	31	0	188	22	2	0	41
Dir Lower	985	0	80	7	0	67	66	1	35	1
Dir Upper	558	37	3	19	6	0	0	10	2	21
Hangu	5	NR	NR	NR	NR	NR	NR	NR	NR	NR
Haripur	530	4	0	30	0	0	14	0	0	0
Karak	317	38	40	34	16	20	65	243	8	22
Khyber	273	54	12	10	2	46	25	17	8	7
Kohat	513	0	23	0	0	22	21	8	2	0
Kohistan Lower	61	0	0	0	0	6	2	0	0	0
Kohistan Upper	271	1	15	6	10	23	1	0	3	19
Kolai Palas	55	11	0	1	0	5	0	0	3	0
L & C Kurram	7	0	0	0	0	6	0	0	0	0
Lakki Marwat	892	6	112	7	0	22	40	0	5	6
Mansehra	539	326	1	0	94	2	0	0	5	0
Mardan	348	156	4	247	45	4	53	9	3	1
Mohmand	61	150	103	0	132	2	21	40	3	0
North Waziristan	32	0	37	0	0	30	1	2	5	2
Nowshera	1,545	17	27	34	30	5	48	5	11	10
Orakzai	88	23	4	0	0	4	2	0	0	0
Peshawar	3,375	341	18	35	29	64	8	0	30	3
SD Tank	22	0	13	0	0	5	0	0	0	0
Shangla	57	0	62	5	0	0	12	0	11	2
South Waziristan (Lower)	12	9	6	0	0	1	0	0	4	0
SWU	8	39	2	4	11	0	0	0	0	0
Swabi	977	597	36	73	56	20	80	0	47	61
Swat	1,312	147	12	126	45	42	27	0	38	11
Tank	702	149	60	28	0	3	7	0	24	6
Tor Ghar	56	2	18	8	92	34	37	2	0	2
Upper Kurram	98	229	7	8	271	24	16	0	4	4
<b>Total</b>	<b>19,100</b>	<b>4,397</b>	<b>2,485</b>	<b>1,123</b>	<b>938</b>	<b>825</b>	<b>692</b>	<b>373</b>	<b>368</b>	<b>302</b>



**Figure 6: Most frequently reported suspected cases during Week 13, KP**



**Figure 7: Week wise reported suspected cases Malaria, AD (Non-Cholera) & ILI, KP**

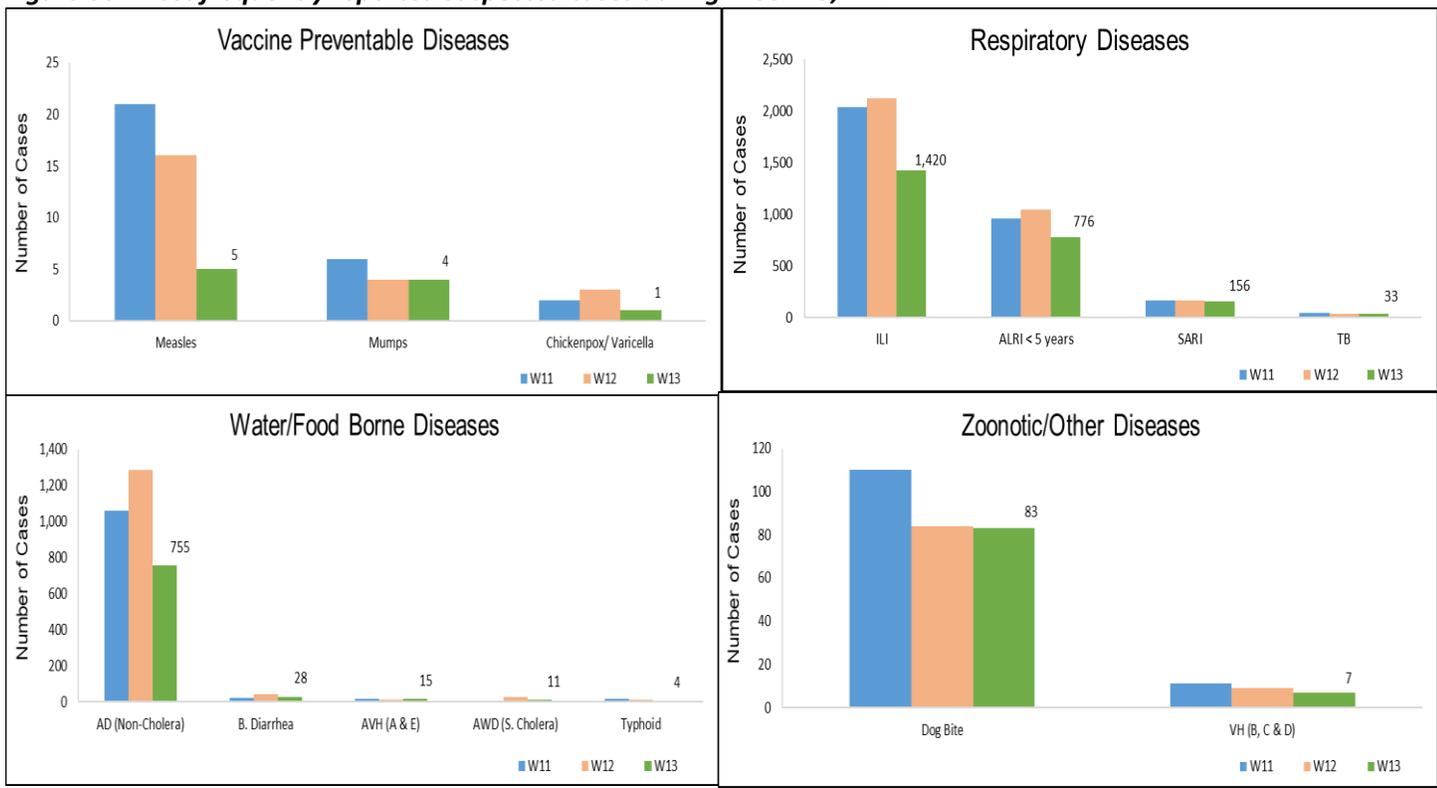


**ICT:** The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera) and ALRI <5 years. ILI, AD (Non-Cholera) and ALRI <5 years cases showed a decline in number this week.

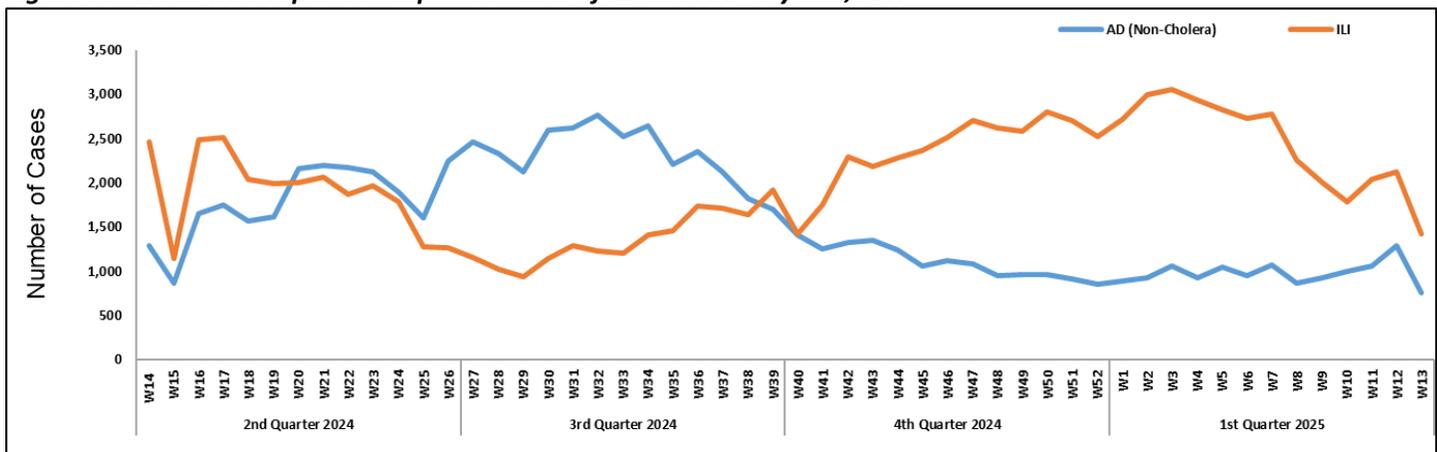
**AJK:** ILI cases were maximum followed by ALRI <5 years, AD (Non-Cholera), SARI, dog bite, TB, B. Diarrhea, AVH (A & E), AWD (S. Cholera) and VH (B, C & D) cases. A decline in cases observed for ILI, ALRI <5 years, AD (Non-Cholera), SARI, dog bite, TB, B. Diarrhea, AWD (S. Cholera) and VH (B, C & D) this week.

**GB:** ALRI <5 Years cases were the most frequently reported diseases followed by AD (Non-Cholera), ILI, SARI, TB, B. Diarrhea, Typhoid and Measles cases. A decline in cases observed for by ALRI <5 Years, AD (Non-Cholera), ILI, SARI, B. Diarrhea, Typhoid and Measles this week.

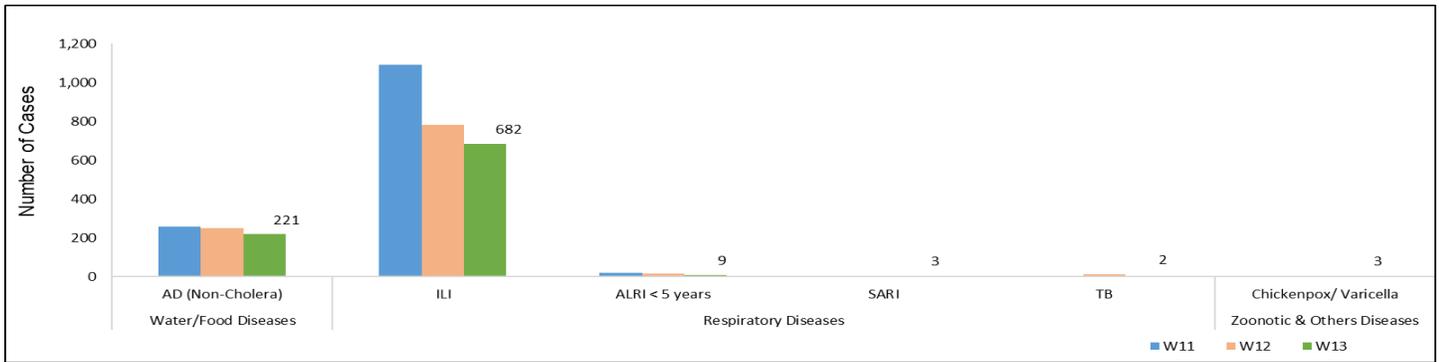
**Figure 08: Most frequently reported suspected cases during Week 13, AJK**



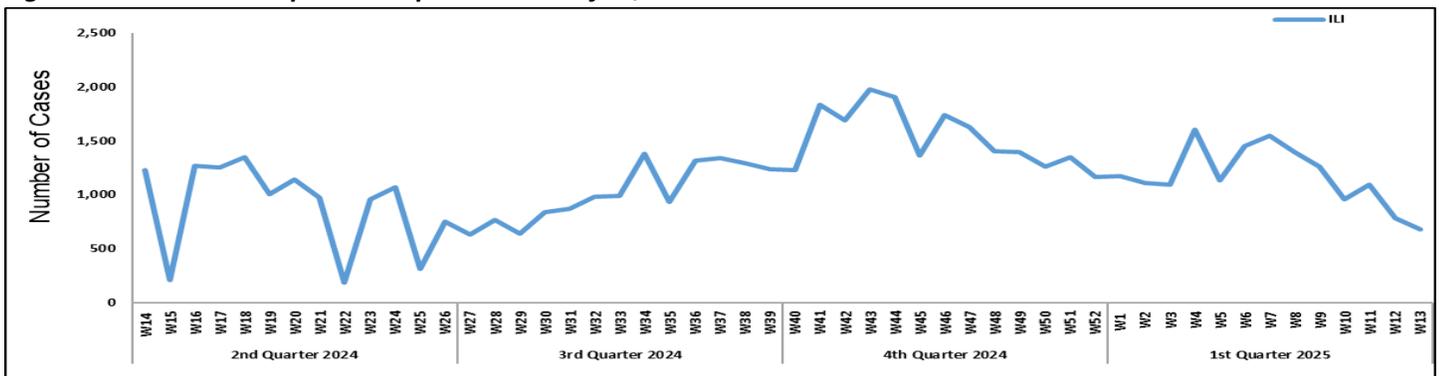
**Figure 09: Week wise reported suspected cases of ILI and ARI <5 years, AJK**



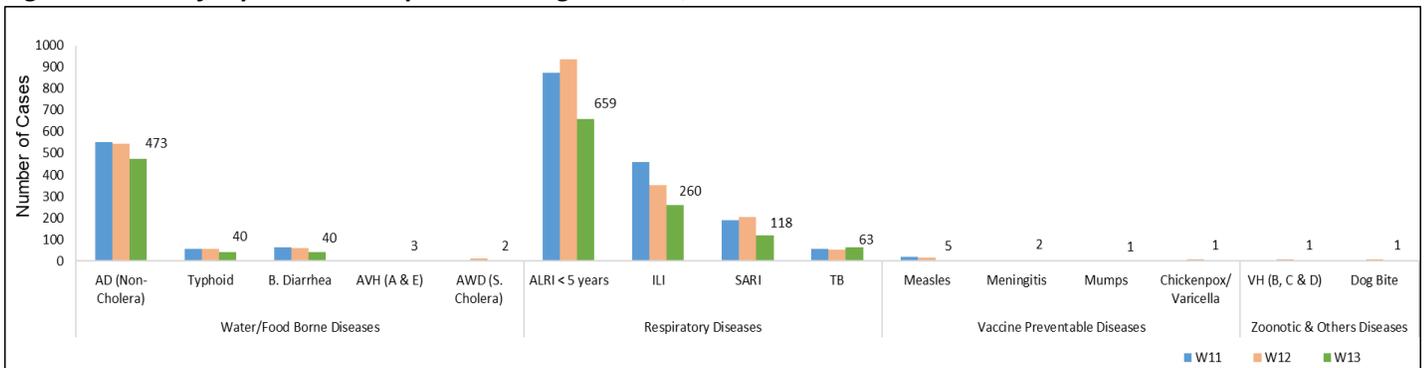
**Figure 10: Most frequently reported suspected cases during Week 13, ICT**



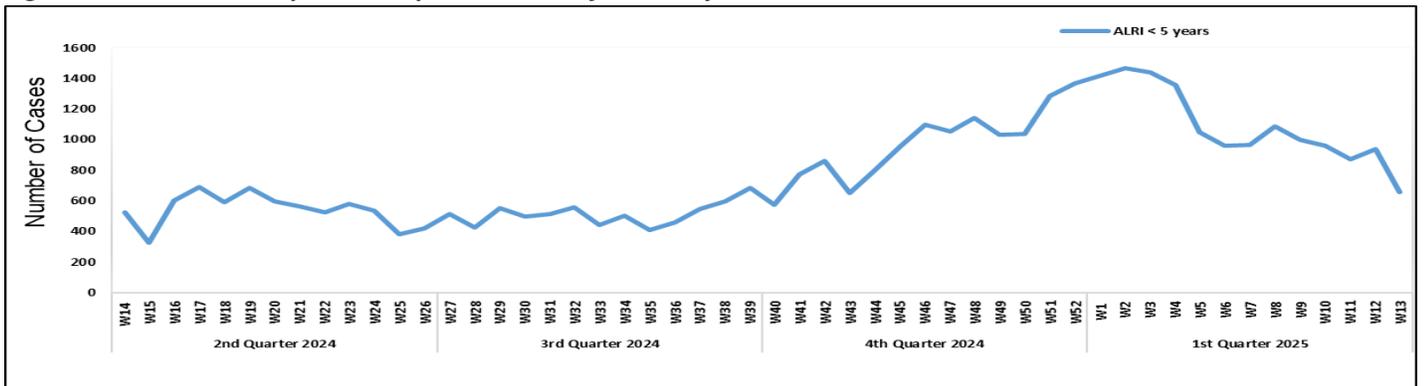
**Figure 11: Week wise reported suspected cases of ILI, ICT**



**Figure 12: Most frequent cases reported during Week 13, GB**



**Figure 13: Week wise reported suspected cases of ALRI <5 years, GB**



**Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 13**

Diseases	Sindh		Balochistan		KPK		ISL		GB		Punjab		AJK		
	Total Test	Total Pos	Total Test	Total Pos	Total Test	Total Pos	Total Test	Total Pos	Total Test	Total Pos	Total Test	Total Pos	Total Test	Total Pos	
AWD (S. Cholera)	22	1	-	-	0	0	-	-	-	-	-	-	-	-	
AD (non-cholera)	104	0	-	-	0	0	-	-	-	-	-	-	-	-	
Malaria	5,212	317	-	-	130	7	-	-	-	-	-	-	-	-	
CCHF	1	0	-	-	0	0	-	-	-	-	-	-	-	-	
Dengue	807	26	-	-	1	0	-	-	-	-	-	-	-	-	
VH (B)	5,820	137	-	-	80	1	-	-	-	-	-	-	-	-	
VH (C)	6,030	609	-	-	80	1	-	-	-	-	-	-	-	-	
VH (D)	67	27	-	-	-	-	-	-	-	-	-	-	-	-	
VH (A)	19	1	-	-	-	-	-	-	-	-	-	-	-	-	
VH (E)	5	1	-	-	-	-	-	-	-	-	-	-	-	-	
Covid-19	53	0	-	-	-	-	-	-	-	-	-	-	-	-	
Chikungunya	0	0	-	-	-	-	-	-	-	-	-	-	-	-	
TB	496	43	-	-	-	-	-	-	-	-	-	-	-	-	
HIV/ AIDS	1,804	4	-	-	80	0	-	-	-	-	-	-	-	-	
Syphilis	837	8	-	-	10	0	-	-	-	-	-	-	-	-	
B. Diarrhea	16	0	-	-	-	-	-	-	-	-	-	-	-	-	
Typhoid	975	16	-	-	-	-	-	-	-	-	-	-	-	-	
Diphtheria	9	4	-	-	-	-	-	-	-	-	-	-	-	-	
ILI	26	6	-	-	-	-	-	-	-	-	-	-	-	-	
M-POX	1	0	-	-	-	-	-	-	-	-	-	-	-	-	
Pneumonia (ALRI)	4	2	-	-	-	-	-	-	-	-	-	-	-	-	
Measles	377	157	98	50	416	206	16	10	13	10	492	131	24	8	
Rubella	377	8	98	0	416	5	16	1	13	0	492	14	24	0	
Covid-19	Out of SARI	11	-	-	-	-	-	49	0	16	0	53	1	-	-
	Out of ILI	4	-	-	-	-	-	18	0	10	0	22	0	-	-
Influenza A	Out of SARI	11	-	-	-	-	-	49	2	16	0	53	1	-	-
	Out of ILI	4	-	-	-	-	-	18	0	10	0	22	0	-	-
Influenza B	Out of SARI	11	-	-	-	-	-	49	0	16	0	53	0	-	-
	Out of ILI	4	-	-	-	-	-	18	0	10	0	22	0	-	-
RSV	Out of SARI	11	-	-	-	-	-	49	5	16	0	53	0	-	-
	Out of ILI	4	-	-	-	-	-	18	0	10	0	22	0	-	-



# IDSR Reports Compliance

- Out of 158 IDSR implemented districts, compliance is low from KP and Balochistan. Green color highlights >50% compliance while red color highlights <50% compliance

**Table 6: IDSR reporting districts Week 13, 2024**

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	111	93	84%
	Bannu	238	108	45%
	Battagram	59	24	41%
	Buner	34	20	59%
	Bajaur	44	37	84%
	Charsadda	59	56	95%
	Chitral Upper	34	29	85%
	Chitral Lower	35	35	100%
	D.I. Khan	113	113	100%
	Dir Lower	74	63	85%
	Dir Upper	37	30	81%
	Hangu	22	1	5%
	Haripur	72	71	99%
	Karak	36	36	100%
	Khyber	53	27	51%
	Kohat	61	61	100%
	Kohistan Lower	11	9	82%
	Kohistan Upper	20	15	75%
	Kolai Palas	10	7	70%
	Lakki Marwat	70	69	99%
	Lower & Central Kurram	42	3	7%
	Upper Kurram	41	26	63%
	Malakand	42	0	0%
	Mansehra	133	91	68%
	Mardan	80	25	31%
	Nowshera	55	48	87%
	North Waziristan	13	4	31%
	Peshawar	155	116	75%
	Shangla	37	5	14%
	Swabi	64	57	89%
	Swat	77	71	92%
	South Waziristan (Upper)	93	7	8%
	South Waziristan (Lower)	42	15	36%
	Tank	34	29	85%
	Torghar	14	14	100%
Mohmand	68	22	32%	
SD Peshawar	5	0	0%	
SD Tank	58	9	16%	
Balochistan	Orakzai	69	10	14%
	Mirpur	37	37	100%
	Bhimber	42	4	10%



<b>Azad Jammu Kashmir</b>	Kotli	60	60	100%
	Muzaffarabad	45	43	96%
	Poonch	46	14	30%
	Haveli	39	39	100%
	Bagh	40	34	85%
	Neelum	39	36	92%
	Jhelum Velley	29	29	100%
<b>Islamabad Capital Territory</b>	Sudhnooti	27	0	0%
	ICT	21	20	95%
<b>Balochistan</b>	CDA	15	8	53%
	Gwadar	26	1	4%
	Kech	44	0	0%
	Khuzdar	74	7	9%
	Killa Abdullah	26	21	81%
	Lasbella	55	55	100%
	Pishin	69	0	0%
	Quetta	55	24	44%
	Sibi	36	0	0%
	Zhob	39	0	0%
	Jaffarabad	16	16	100%
	Naserabad	32	32	100%
	Kharan	30	0	0%
	Sherani	15	0	0%
	Kohlu	75	9	12%
	Chagi	36	21	58%
	Kalat	41	40	98%
	Harnai	17	17	100%
	Kachhi (Bolan)	35	0	0%
	Jhal Magsi	28	28	100%
	Sohbat pur	25	25	100%
	Surab	32	28	88%
	Mastung	45	45	100%
	Loralai	33	19	58%
	Killa Saifullah	28	22	79%
	Ziarat	29	0	0%
	Duki	31	0	0%
	Nushki	32	0	0%
	Dera Bugti	45	0	0%
	Washuk	46	31	67%
	Panjgur	38	4	11%
	Awaran	23	0	0%
Chaman	24	0	0%	
Barkhan	20	8	40%	
Hub	33	17	52%	
Musakhel	41	0	0%	
<b>Gilgit Baltistan</b>	Usta Muhammad	34	34	100%
	Hunza	32	32	100%
	Nagar	25	20	80%
	Ghizer	38	38	100%



	Gilgit	40	40	100%
	Diamer	62	61	98%
	Astore	54	54	100%
	Shigar	27	25	93%
	Skardu	52	52	100%
	Ganche	29	29	100%
Sindh	Kharmang	46	22	48%
	Hyderabad	73	62	85%
	Ghotki	64	64	100%
	Umerkot	43	43	100%
	Naushahro Feroze	107	96	90%
	Tharparkar	276	233	84%
	Shikarpur	61	60	98%
	Thatta	52	24	46%
	Larkana	67	54	81%
	Kamber Shadadkot	71	71	100%
	Karachi-East	24	19	79%
	Karachi-West	20	20	100%
	Karachi-Malir	37	28	76%
	Karachi-Kemari	18	16	89%
	Karachi-Central	12	7	58%
	Karachi-Korangi	18	18	100%
	Karachi-South	6	4	67%
	Sujawal	55	53	96%
	Mirpur Khas	106	101	95%
	Badin	124	124	100%
	Sukkur	64	63	98%
	Dadu	90	90	100%
	Sanghar	100	100	100%
	Jacobabad	44	39	89%
	Khairpur	170	166	98%
	Kashmore	59	59	100%
	Matiari	42	41	98%
	Jamshoro	75	74	99%
	Tando Allahyar	54	53	98%
	Tando Muhammad Khan	41	41	100%
Shaheed Benazirabad	122	120	98%	



**Table 7: IDSR reporting Tertiary care hospital Week 13, 2024**

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
AJK	Mirpur	2	2	100%
	Bhimber	1	1	100%
	Kotli	1	1	100%
	Muzaffarabad	2	2	100%
	Poonch	2	2	100%
	Haveli	1	1	100%
	Bagh	1	1	100%
	Neelum	1	1	100%
	Jhelum Vellay	1	1	100%
	Sudhnooti	1	1	100%



# Public Health Events and Surveillance Reports, PHB-Pakistan

## Operationalizing One Health in Khyber Pakhtunkhwa

As part of Pakistan's continued efforts to institutionalize the One Health approach at both federal and provincial levels, the National Institutes of Health (NIH), in collaboration with the U.S. Centers for Disease Control and Prevention (CDC-US), organized a two-day technical workshop titled "Operationalizing Provincial One Health Hubs". The workshop was held from April 16–17, 2025, in Khyber Pakhtunkhwa (KP).



The primary objective of the workshop was to initiate the establishment of a well-defined, inclusive, and functional governance framework that supports the operationalization of One Health in KP. The event brought together a wide array of stakeholders, representing relevant provincial institutions and international development partners. Among the notable organizations present were the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO), the UK Health Security Agency (UKHSA), and the Fleming Fund — all of whom are key contributors to Pakistan's One Health ecosystem.

Over the course of the two days, participants engaged in a series of plenary discussions and interactive group activities. These sessions focused on identifying existing gaps in multisectoral coordination, understanding the current landscape of One Health activities in KP, and defining roles and responsibilities of various departments under a unified framework. A significant portion of the workshop was dedicated to collaborative discussions aimed at designing a functional governance structure that ensures timely information sharing, joint outbreak response, and integrated surveillance and reporting mechanisms.



The workshop culminated in the development of a draft governance structure for the KP One Health Hub. This event marked a critical milestone in Pakistan's journey toward the operationalization of the One Health approach.

## Notes from Field

**Diphtheria Outbreak Investigation in Muhammad Hassan Pindrani Goth, Usta Muhammad – November 2024**

### Introduction

Diphtheria is an acute, contagious, and potentially fatal bacterial infection caused by *Corynebacterium diphtheriae*. It primarily affects



the mucous membranes of the respiratory tract and is characterized by fever, sore throat, and the formation of a pseudomembrane. Despite the availability of effective vaccines, diphtheria remains a public health concern in many low- and middle-income countries due to gaps in immunization coverage. According to the World Health Organization, over 10,000 cases were reported globally in 2022, with the majority from South-East Asia and Africa. In Pakistan, periodic outbreaks occur due to inconsistent vaccine uptake and poor surveillance, especially in underserved areas. The province of Balochistan has reported clusters in recent years, including spillovers from neighboring districts. On November 20, 2024, a suspected case from Muhammad Hassan Pindrani Goth, Usta Muhammad, prompted an outbreak investigation by the Department of Health.

### Objectives

1. To confirm the presence of diphtheria cases and determine the magnitude of the outbreak in Muhammad Hassan Pindrani Goth.
2. To identify risk factors associated with disease transmission.
3. To recommend appropriate public health measures for containment and prevention.

### Methods

A descriptive study was conducted to confirm the presence and extent of diphtheria cases in Muhammad Hassan Pindrani Goth, District Usta Muhammad, Balochistan. particularly children. Suspected cases was defined as “any individual residing in or visiting Muhammad Hassan Pindrani Goth, from 10th to 26th Nov, and presenting with sore throat, fever, pseudo membrane formation over tonsils, throat or nose, and/or difficulty swallowing” and confirmed cases were defined as “suspected case with laboratory confirmation of *Corynebacterium diphtheriae* through throat swab culture or PCR testing”. The team

employed active surveillance and house-to-house visits in the affected area. Active case finding was prioritized through school screening and household surveys. A structured questionnaire was used to collect data from suspected cases and their families through interpersonal interviews. Laboratory samples was collected from the index case for confirmation. Data was compiled and analyzed descriptively by time, place, and person to determine attack rates and assess risk factors.

### Results

A total of seven cases of diphtheria were identified during the investigation, all originating from the same neighborhood in Muhammad Hassan Pindrani Goth. The affected individuals were aged between 5 and 14 years, with a mean age of 8.4 years. Males accounted for 57% (n=4) of the cases. The overall attack rate among children in the village was 7%. Age-specific attack rates showed the highest burden in children aged 5–9 years, with an attack rate of 10%, while the 10–14 years group had an attack rate of 2.5%.

All patients presented with sore throat (100%), five reported fever (71%), and one had a swollen neck (14%). All cases reported direct contact with the index case, and 100% belonged to the same neighborhood and attended the same school. In terms of immunization status, 29% of the cases had received partial vaccinations, while the remaining were unvaccinated. Laboratory testing of index case confirmed the presence of *Corynebacterium diphtheriae*, supporting the clinical and epidemiological findings. These results underscored the importance of vaccination coverage and early detection in preventing further spread.

### Discussion

This investigation confirms a diphtheria outbreak affecting children aged 5–14 years in a remote village of Usta Muhammad. The outbreak had a clear epidemiological link to a single index case, and all subsequent cases shared a common



exposure setting i.e. school and neighborhood. Males were slightly more affected and the highest burden was in children aged 5–9 years.

The main contributing factors were poor immunization coverage and close-contact environments. The clinical presentation was consistent with diphtheria, and laboratory confirmation supported the suspected diagnosis. Attack rates, especially in the younger age group, highlight the vulnerability due to incomplete or absent vaccinations.

Similar outbreaks in Pakistan and other low-resource settings have shown that lack of herd immunity and delayed outbreak response can lead to rapid disease spread (Ref: WHO WER 2022; ECDC Diphtheria Surveillance Reports 2023). Timely vaccination and awareness efforts, as initiated during this response, are crucial to containment.

## Conclusion

The diphtheria outbreak in Muhammad Hassan Pindrani Goth was characterized by rapid transmission among unvaccinated and partially vaccinated children in a close-contact school setting. Seven cases were identified with a high attack rate in children aged 5–9 years. The outbreak was effectively contained through immediate vaccination of contacts, temporary school closure, and community sensitization.

## Recommendations

1. **Strengthen Surveillance:** Strengthen surveillance through IDSR system and train health care provider on standard case definition and case detections.
2. **Enhance Routine Immunization:** Ensure full coverage of DPT (diphtheria, pertussis, tetanus) vaccines through strengthened routine immunization.
3. **Training of Health Workers:** Build capacity in early recognition and response to vaccine-preventable diseases.
4. **Vaccination Drives:** Conduct regular mop-up campaigns in high-risk areas.

5. **Strengthen Community Engagement:** Promote vaccine acceptance through local influencers and healthcare providers.
6. **Outbreak Preparedness:** Maintain a buffer stock of antitoxins and essential vaccines at district level.

## References

1. World Health Organization. Diphtheria vaccine: WHO position paper – August 2022. Weekly Epidemiological Record. 2022;97(32):373–392.
2. European Centre for Disease Prevention and Control (ECDC). Diphtheria Annual Epidemiological Report for 2023. Stockholm: ECDC; 2024.
3. Pakistan Ministry of National Health Services. Expanded Program on Immunization – Annual Report 2023. Islamabad; 2024.

## Knowledge Hub

### Understanding CCHF

#### Overview

Crimean-Congo Hemorrhagic Fever (CCHF) is a **zoonotic viral disease** caused by the **CCHF virus**, a member of the *Nairovirus* genus in the *Bunyaviridae* family. It causes **severe viral hemorrhagic fever** outbreaks, with case fatality rates ranging from **10% to 40%**. The virus is transmitted to humans through tick bites, contact with infected animal blood/tissues, or person-to-person via body fluids.

#### Global Burden

Globally, CCHF is endemic in over 30 countries, particularly in Africa, Eastern Europe, the Balkans, the Middle East, Central Asia, and parts of South Asia. Its burden is underreported due to limited surveillance systems in endemic areas. The World Health Organization has identified CCHF as a priority disease due to its potential for large-scale outbreaks, lack of effective treatment, and high mortality rate. Outbreaks tend to follow seasonal patterns, often increasing during warmer months when tick activity is heightened, and in conjunction with increased livestock movement.

#### CCHF in Pakistan



In Pakistan, CCHF is a recognized public health threat, particularly in Balochistan, Khyber Pakhtunkhwa, and parts of Sindh. The disease tends to spike around the time of Eid-ul-Adha, a period associated with extensive animal sacrifice and informal slaughtering. Inadequate slaughterhouse regulation, poor personal protective practices, and unrestricted animal movement across provincial and national borders exacerbate the situation. Rural communities involved in animal husbandry and meat processing are especially vulnerable, and healthcare workers in tertiary hospitals frequently encounter sporadic or outbreak-related cases.

### Transmission

The virus is primarily transmitted through tick bites or contact with the blood and tissues of infected animals. Human infection may also occur during the slaughtering of animals or through crushing ticks with bare hands. Secondary transmission among humans typically results from exposure to the blood, secretions, or excreta of infected persons, which can occur in healthcare or household settings without proper infection control measures in place.

### Clinical Presentation

The clinical course of CCHF can be divided into three stages. The pre-hemorrhagic phase is characterized by the sudden onset of high fever, headache, muscle pain, dizziness, neck pain, and fatigue. As the disease progresses to the hemorrhagic phase, patients may present with petechiae, ecchymosis, bleeding from the gums, hematemesis, and melena. In some cases, patients develop a swollen, tender liver and jaundice. In survivors, the recovery phase begins by the second week, during which symptoms gradually subside. The incubation period ranges from one to three days following a tick bite and five to six days following exposure to infected blood.

### Diagnosis

- **Laboratory tests:**
  - RT-PCR (early phase detection)
  - ELISA (IgM and IgG antibodies)
  - Virus isolation (BSL-4 facilities only)
  - CBC shows thrombocytopenia, leukopenia, elevated liver enzymes

### Treatment and Management

- **Supportive care is the mainstay:** fluid management, transfusions, antipyretics
- **Antiviral:** Ribavirin may be used empirically but lacks conclusive evidence
- **Infection Prevention and Control (IPC)** is critical in healthcare settings

### Prevention and Control

#### In Communities:

- Avoid tick-infested areas and wear protective clothing
- Use tick repellents on skin and clothing
- Tick control in livestock (acaricides)
- Educate farmers and butchers on safe practices

#### In Healthcare Settings:

- Use standard and contact precautions for all patients
- PPE for handling suspected/confirmed cases
- Prompt isolation and notification of cases

### Surveillance and Outbreak Response

Effective surveillance systems are essential for early detection and response. During outbreaks, public health authorities should prioritize active case finding, contact tracing, and community sensitization. Contacts of confirmed cases should be monitored for a minimum of 14 days for any signs of illness. Vector control measures should be undertaken in affected areas, and movement of livestock should be restricted to prevent further spread.

### Conclusion

In conclusion, Crimean-Congo Hemorrhagic Fever poses a significant threat to public health



in endemic regions such as Pakistan. Its high fatality rate, zoonotic nature, and potential for nosocomial transmission make it a priority for outbreak preparedness and response. Strengthening surveillance, improving diagnostic capacity, enhancing infection prevention in healthcare settings, and increasing community awareness are key strategies to mitigate the impact of this deadly disease.

## References

1. **World Health Organization.** Crimean-Congo hemorrhagic fever: Fact sheet. Geneva: WHO; 2022 [cited 2025 May 15]. Available from: <https://www.who.int/news-room/fact-sheets/detail/crimean-congo-haemorrhagic-fever>
2. **Centers for Disease Control and Prevention.** Viral hemorrhagic fevers (VHFs): Crimean-Congo hemorrhagic fever. Atlanta: CDC; 2022 [cited 2025 May 15]. Available from: <https://www.cdc.gov/vhf/crimean-congo/>
3. **Bente DA, Forrester NL, Watts DM, McAuley AJ, Whitehouse CA, Bray M.** Crimean-Congo hemorrhagic fever: history, epidemiology, pathogenesis, clinical syndrome and genetic diversity. *Antiviral Res.* 2013 Mar;100(1):159–89. doi: 10.1016/j.antiviral.2013.07.006.
4. **National Institute of Health, Pakistan.** Crimean-Congo hemorrhagic fever (CCHF) guidelines. Islamabad: NIH; 2022 [cited 2025 May 15]. Available from: <https://www.nih.org.pk>





# کانگو بخار کیا ہے



Crimean Congo Hemorrhagic Fever (CCHF) جسے مخمفر اگانگو بخار کہا جاتا ہے ایک خطرناک قسم کے وائرس (nairovirus) سے پھیلتا ہے۔ یہ وائرس زیادہ تر بھیڑ، کبری، گائے تیل، دنبہ اور اونٹ کی کھال میں چپکی ہوئی چیچڑیوں (Ticks) میں پایا جاتا ہے۔ جب یہ چیچڑی کسی مویشی یا انسان کو کاٹ لے تو پھر یہ وائرس متحرک ہو جاتا ہے۔ اس کے علاوہ یہ وائرس متاثرہ جانور کے خون کے ذریعے بھی پھیل سکتا ہے۔ مثلاً اگر قصاب جانور زخم کرتے ہوئے احتیاط نہیں کرتا اور اس کے ہاتھ پر کٹ لگا جاتا ہے تو اس طرح متاثرہ جانور کے خون سے مخصوص وائرس اس کے جسم میں داخل ہو جائے گا۔ یہ وائرس صرف انسانوں میں بیماری پھیلاتا ہے جبکہ جانوروں میں اس مرض کی کوئی علامت رونما نہیں ہوتی۔ عام طور پر یہ مرض ان علاقوں میں پایا جاتا ہے جہاں بڑی تعداد میں مویشی پالے جاتے ہیں۔ یہ وائرس مریض کے خون، تھوک اور فضلات میں پایا جاتا ہے۔ کانگو بخار سے متاثر ہونے کا خطرہ زیادہ تر ان لوگوں کو ہے جو مویشیوں کے زیادہ قریب رہتے ہیں جیسے مویشیوں کے بیوپاری، زرعی کارکن، قصاب اور جانوروں کے معالج و غیرہ۔ عید الاضحیٰ کے موقع پر کانگو بخار کے پھیلنے کا خطرہ زیادہ ہو جاتا ہے کیونکہ عید پر ملک کے تمام صوبوں سے جانوروں کی نقل و حرکت غیر معمولی طور پر بڑھنے کے ساتھ ساتھ عام لوگوں کا جانوروں سے رابطہ / قربت بھی بڑھ جاتی ہے۔

## علامات

اجانک تیز بخار، کمر، پٹوں، گردن میں درد اور کھچاؤ۔ متلی، تپ، گلے کی سوزش۔ جسم پر سرخ رنگ کے دھبے۔  
سوزھوں، ناک اور اندرونی اعضاء سے خون کا اخراج۔ مندرجہ بالا علامات کی صورت میں فوراً ڈاکٹر سے رجوع کریں۔  
اب تک کانگو بخار کی کوئی ویکسین ایجاد نہیں ہوئی لہذا احتیاطی تدابیر اپنانا اس بیماری سے بچا جا سکتا ہے۔

## عوام الناس کے لیے ہدایات

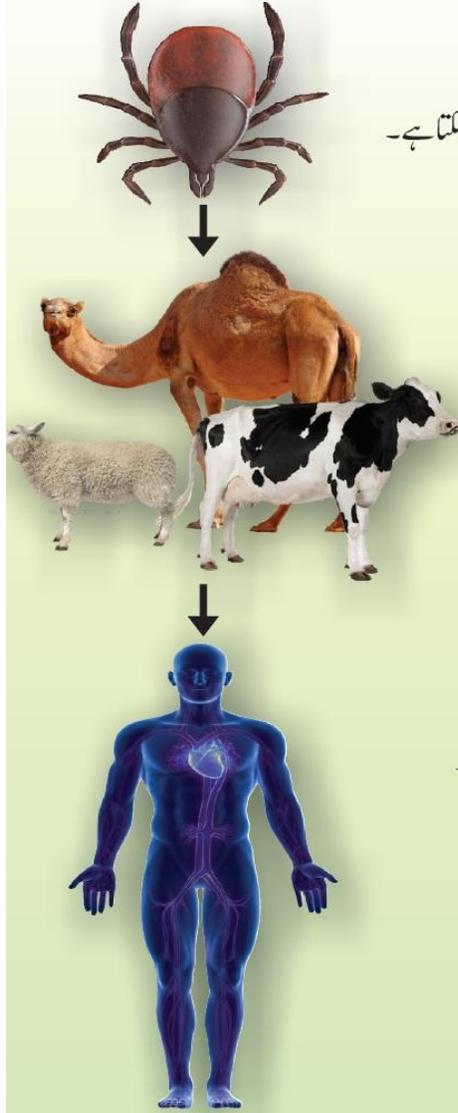
- مویشی منڈی جاتے وقت پتلے رنگ کا پوری آستین والا لباس پہنیں تاکہ ان پر چیچڑی موجودگی کو دیکھا جاسکے۔
- مویشی منڈی سے واپس آکر نہیں اور کپڑے تبدیل کر لیں۔
- بچوں کو مویشی منڈی لے جانے سے گریز کریں۔
- قربانی کا جانور خریدنے سے پہلے اچھی طرح یقین کر لیں کہ اس کے جسم پر چیچڑیاں نہ ہوں۔
- جانور کو چپک کرتے وقت دستانے استعمال کریں یا چیچڑی بھگاؤ لوش (Repellent) لگائیں۔
- اپنے پالتو جانوروں کو چیچڑیوں سے محفوظ رکھنے کیلئے حکمہ لائیو سٹاک کے مشورے سے چیچڑیاں ادویات کا استعمال کریں۔
- جانوروں کو زخم کرتے اور گوشت بناتے وقت دستانوں کا استعمال کریں اور جانوروں کے خون سے خود کو آلودہ ہونے سے بچائیں۔
- ذبح شدہ جانور کا خون مکمل طور پر بہہ جانے دیں۔
- جانور ذبح کرنے کے بعد خون اور آلائشوں کو احتیاط سے تلف کریں۔
- قربانی کا گوشت دھوتے ہوئے دستانوں کا استعمال کریں۔
- گوشت کو اچھی طرح پکا کر کھائیں۔
- بیماری کی صورت میں ڈاکٹر سے رجوع کریں۔

## طبی عملے کے لیے ہدایات

- کانگو کے مریض کا علاج کرتے وقت ڈاکٹر اور دیگر سٹاف ذاتی حفاظتی اقدامات مثلاً دستانوں، ماسک اور گاؤن کا استعمال یقینی بنائیں۔
- علاج کے دوران مریض کو الگ کمرے (Isolation Room) میں رکھیں۔
- انجیکشن لگاتے وقت مناسب احتیاطی تدابیر اپنائیں اور سرخ / سوئی صحیح طریقے سے تلف کریں۔
- مریض کی موت واقع ہونے کی صورت میں احتیاطی تدابیر کو ملحوظ خاطر رکھ کر تدفین کی جائے۔
- متاثرہ مریض کی زیر استعمال چیزیں مثلاً برتن، کپڑے وغیرہ ضائع کر دیں یا جلادیں۔

## حکمہ لائیو سٹاک کیلئے ہدایات

- مویشی منڈیوں میں چیچڑیاں سپرے کو یقینی بنایا جائے۔
- جانوروں کو چپک کرتے وقت دستانے استعمال کریں یا (DEET) لوشن لگائیں۔
- مویشیوں اور ان کے بازوؤں کو چیچڑیوں سے محفوظ رکھنے کیلئے صفائی کا خیال رکھیں۔



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