

# 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 14, 2026

## IDSR Reports

## Ongoing Events

## Field Reports

*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;*

- *Suspected Hepatitis A Outbreak Investigation Report, Ward No. 3, Takhtbhai, District Mardan*
- *Knowledge hub on Acute Watery Diarrhea: What you need to know*

*By transforming complex health data into actionable intelligence, the Public Health Bulletin continues to be an indispensable tool in our collective journey toward a healthier Pakistan.*

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*Sincerely,  
The Chief Editor*



- During Week 14, the most frequently reported cases were of Acute Diarrhea (Non-Cholera), followed by Malaria, ILI, ALRI <5 years, TB, Dog Bite, B. Diarrhea, VH (B, C & D), Typhoid SARI, and AVH (A & E).
- Twenty-one cases of AFP were reported from KP, six from Sindh, one from GB, and one from AJK.
- Six suspected cases of HIV/ AIDS were reported from Sindh and three from KP.
- Seventy suspected cases of Brucellosis were reported from Sindh, while eight suspected cases were reported from KP
- Among VPDs, there is an increase in the number of cases of Mumps, Chicken pox, and NT this week.
- Among Respiratory diseases, there is an increase in the number of cases of ILI and SARI this week.
- Among Water/food-borne diseases, there is an increase in the number of cases of AVH (A & E) this week.
- Among Vector-borne diseases, there is a decrease in the number of cases of Malaria this week.
- Among STDs, there is a decline in the number of cases of HIV/AIDs this week.
- Among Zoonotic/Other diseases, there is a decrease in the cases of dog bite, while an increase in the number of cases of Brucellosis 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 80%
- Sindh is the top reporting region with a compliance rate of 98%, followed by GB and AJK 89%, and KP 80%.
- The lowest compliance rate was observed in ICT 71% and Balochistan, 46%.

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	2,234	1,779	80
Azad Jammu Kashmir	469	418	89
Islamabad Capital Territory	38	27	71
Balochistan	1,308	599	46
Gilgit Baltistan	417	370	89
Sindh	2,111	2,072	98
National	6,577	5,213	80

## Public Health Actions

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

### Acute Watery Diarrhea (AWD) – Suspected Cholera

- **Strengthen Surveillance and Immediate Notification:** Ensure prompt reporting of suspected AWD/cholera cases through IDSR particularly in high-risk and underserved areas.
- **Enhance Laboratory Confirmation:** Strengthen laboratory capacity for stool sample collection, transport, and confirmation of *Vibrio cholerae* through culture or rapid diagnostic tests to guide timely response.
- **Ensure Rapid Case Management:** Ensure availability of Oral Rehydration Salts (ORS), IV fluids, zinc, and appropriate antibiotics for severe cases.
- **Implement Water, Sanitation, and Hygiene (WASH) Interventions:** Coordinate with WASH partners to ensure access to safe drinking water, chlorination of water sources, improved sanitation, and promotion of handwashing with soap.
- **Strengthen Outbreak Preparedness and Response:** Activate rapid response teams for field investigation, mapping of cases, and implementation of control measures, including safe burial practices where needed.
- **Promote Community Awareness and Risk Communication:** Disseminate clear public health messages on safe water use, food hygiene, early use of ORS at home, and immediate care-seeking for watery diarrhea.

### Acute Viral Hepatitis (A & E)

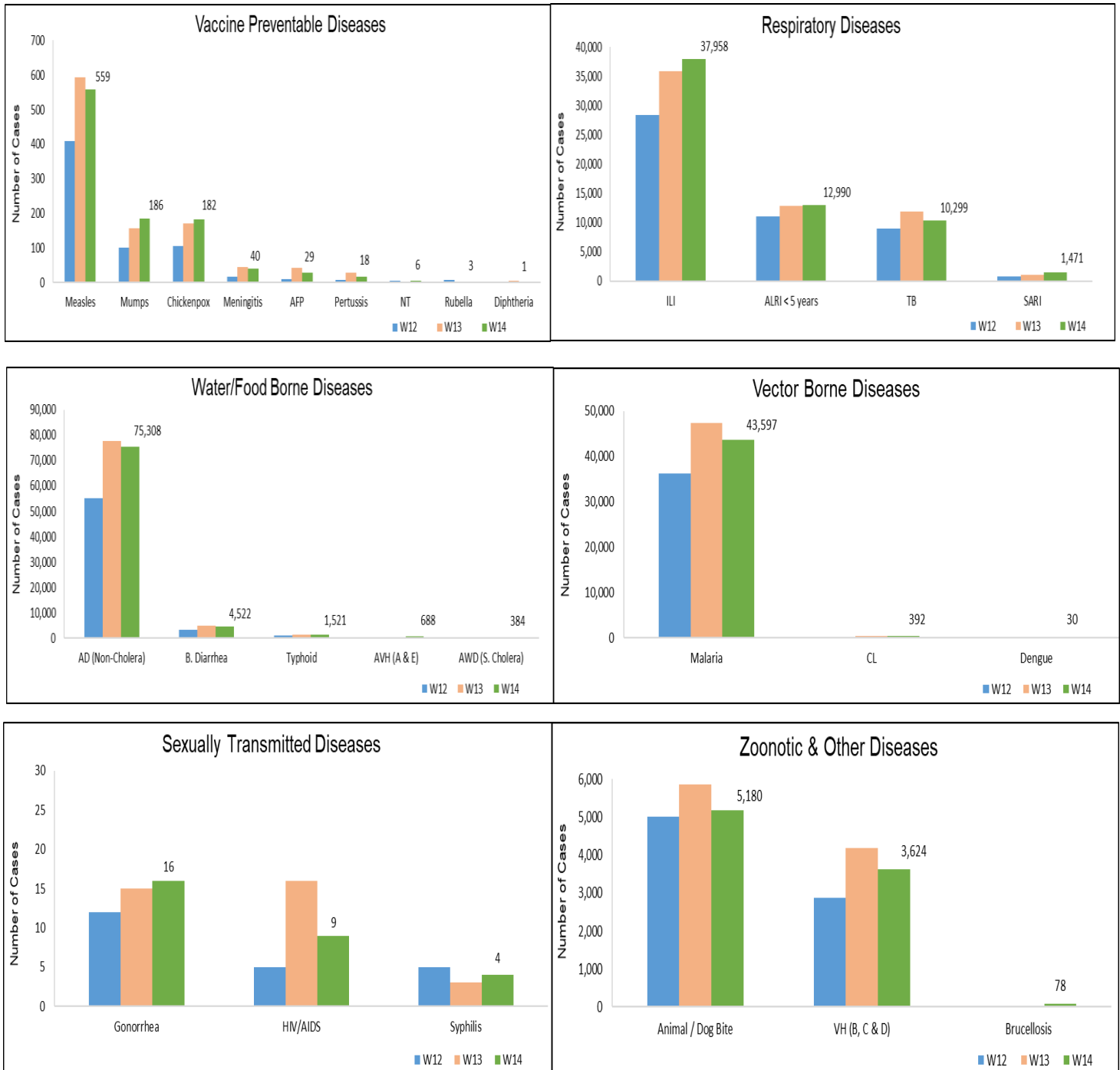
- **Enhance Case Detection and Reporting:** Strengthen AHV (A & E) surveillance in the IDSR system by training health personnel to recognize symptoms and ensure timely reporting, especially during seasonal peaks or in outbreak-prone areas.
- **Strengthen Laboratory Confirmation:** Improve diagnostic capacity by ensuring availability of rapid and confirmatory tests (e.g., IgM for HAV/HEV) at regional laboratories to facilitate timely outbreak response.
- **Improve WASH Infrastructure:** Coordinate with municipal and rural development authorities to upgrade water supply systems, prevent sewage contamination, and promote latrine use to interrupt fecal-oral transmission.
- **Engage in Risk Communication:** Design and disseminate targeted messages through community channels to raise awareness about safe drinking water, personal hygiene, food safety, and the risks of consuming contaminated water or raw produce.



**Table 1: Province/Area wise distribution of most frequently reported suspected cases during Week 14, Pakistan.**

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	1,835	5,799	629	424	25,906	NR	40,715	75,308
Malaria	0	2,065	0	0	2,378	NR	39,154	43,597
ILI	2,016	6,267	359	1,166	3,209	NR	24,941	37,958
ALRI < 5 years	1,268	1,041	719	1	845	NR	9,116	12,990
TB	78	17	100	21	257	NR	9,826	10,299
Animal / Dog Bite	110	167	7	1	1,217	NR	3,678	5,180
B. Diarrhea	52	844	48	3	661	NR	2,914	4,522
VH (B, C & D)	31	42	0	0	101	NR	3,450	3,624
Typhoid	12	274	76	2	369	NR	788	1,521
SARI	166	470	132	0	413	NR	290	1,471
AVH (A & E)	24	0	1	0	106	NR	557	688
Measles	13	12	15	1	442	NR	76	559
CL	1	30	1	0	358	NR	2	392
AWD (S. Cholera)	20	107	3	0	6	NR	248	384
Mumps	6	46	2	1	89	NR	42	186
Chickenpox/ Varicella	8	20	4	5	92	NR	53	182
Brucellosis	0	0	0	0	8	NR	70	78
Meningitis	2	1	3	0	18	NR	16	40
Dengue	0	7	0	0	1	NR	22	30
AFP	1	0	1	0	21	NR	6	29
Pertussis	0	11	2	0	4	NR	1	18
Gonorrhea	0	12	0	0	0	NR	4	16
HIV/AIDS	0	0	0	0	3	NR	6	9
NT	0	0	0	0	6	NR	0	6
Syphilis	0	0	0	0	0	NR	4	4
Rubella (CRS)	0	0	0	0	3	NR	0	3
Diphtheria (Probable)	0	1	0	0	0	NR	0	1

**Figure 1: Most frequently reported suspected cases during Week 14, Pakistan.**

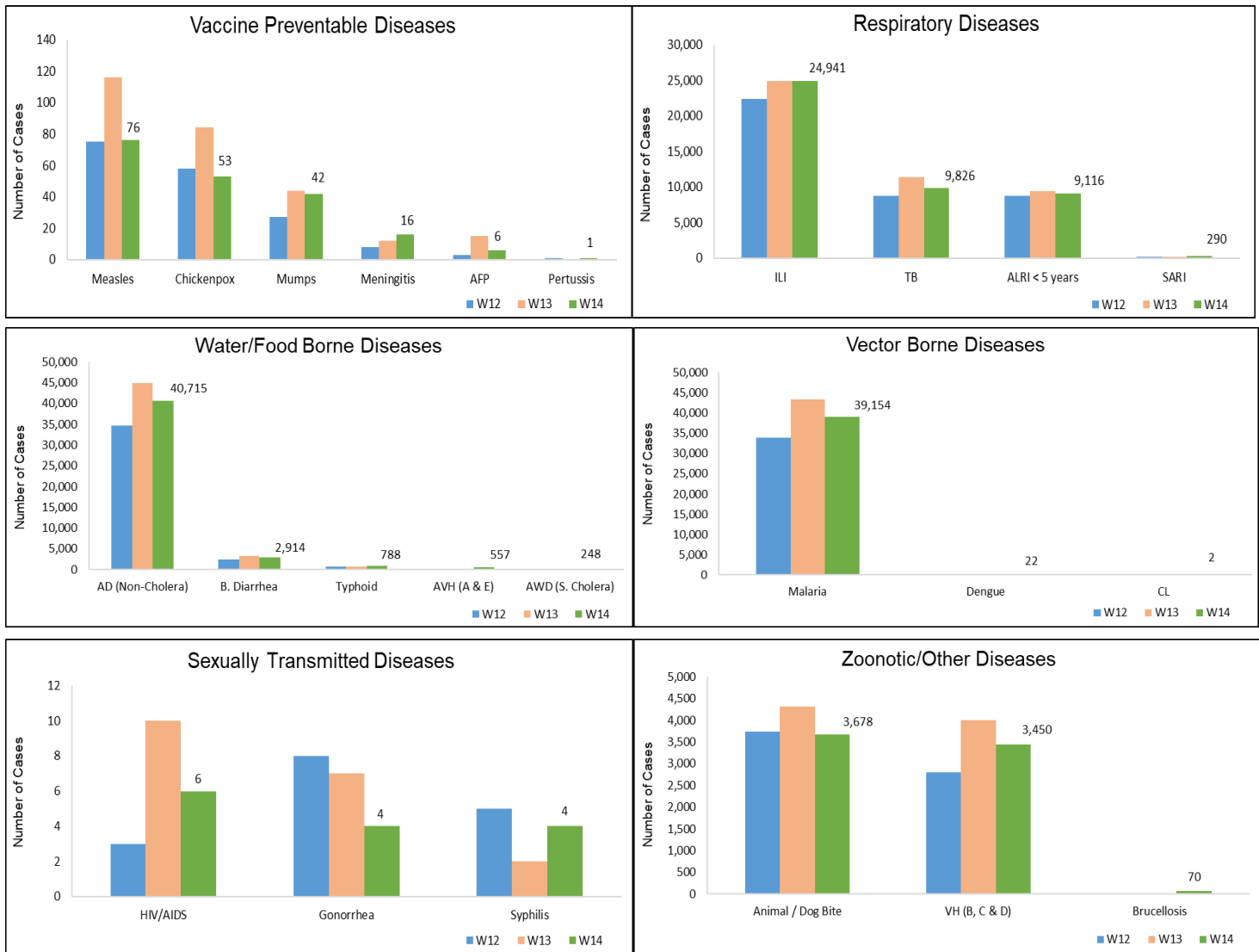


- AD (non – cholera) cases were maximum followed by Malaria, ILI, TB, ALRI<5 Years, Dog Bite, VH (B, C, D), B. Diarrhea, Typhoid and AVH (A & E).
- Malaria cases are mostly from Khairpur, Sanghar and Larkana whereas ILI cases are from Khairpur, Mirpurkhas and Badin.
- Six cases of AFP reported from Sindh. They are suspected cases and need field verification.
- Seventy suspected cases of Brucellosis were reported from Sindh, which require field verification
- There is a decline in number of cases of Measles, Mumps, Chicken pox, AFP, Malaria, AD (Non-Cholera), TB, ALRI <5years, HIV/AIDs, Dog Bite and VH (B, C & D) while an increase in the number of cases of Meningitis, Pertussis, Typhoid, AVH (A & E), SARI and Brucellosis this

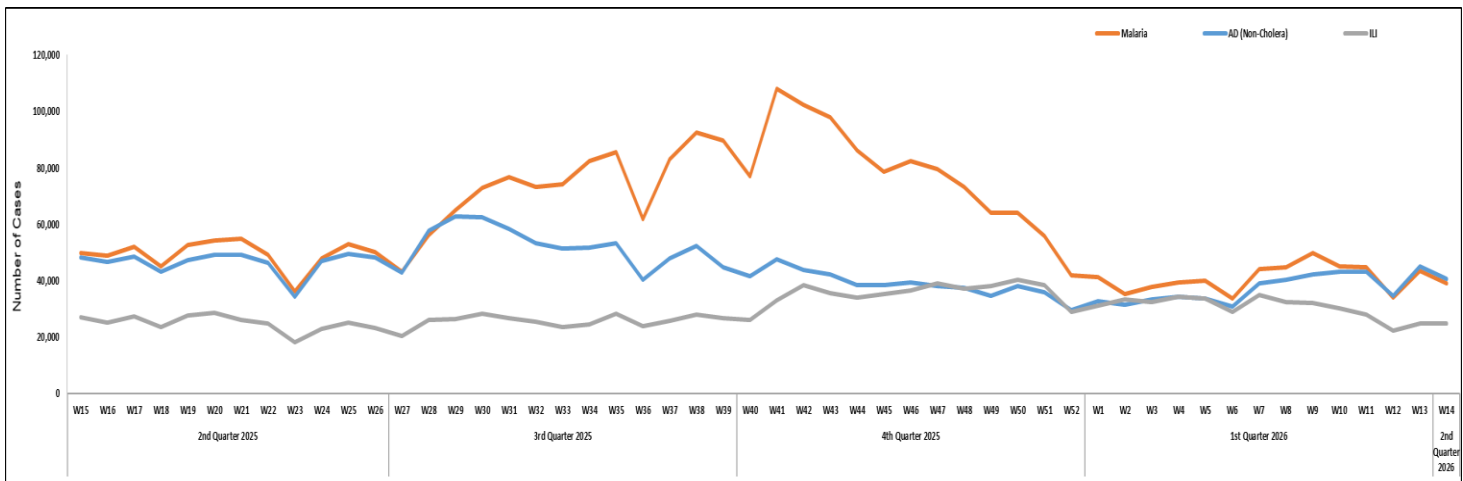
**Table 2: District wise distribution of most frequently reported suspected cases during Week 14, Sindh.**

Districts	AD (Non-Cholera)	Malaria	ILI	TB	ALRI < 5 years	Animal / Dog Bite	VH (B, C & D)	B. Diarrhea	Typhoid	AVH (A & E)
Badin	2,207	1,797	2,471	658	314	92	139	213	58	0
Dadu	1,535	2,723	853	492	1,084	300	57	260	92	34
Ghotki	900	1,651	19	392	410	222	436	83	1	0
Hyderabad	2,227	580	1,435	324	127	69	80	46	4	11
Jacobabad	663	1,054	739	213	337	231	44	84	13	0
Jamshoro	1,726	1,603	121	431	402	103	122	65	39	0
Kamber	1,360	2,434	0	565	211	258	78	101	13	1
Karachi Central	1,020	15	1,476	294	146	126	12	0	63	329
Karachi East	322	21	11	18	18	3	1	4	0	9
Karachi Keamari	618	16	319	18	34	29	0	8	8	0
Karachi Korangi	313	47	16	69	2	12	1	9	1	0
Karachi Malir	967	31	1,462	71	194	38	1	23	4	0
Karachi South	81	8	0	0	0	0	0	0	0	0
Karachi West	816	376	1,290	69	215	69	15	12	20	0
Kashmore	305	1,383	176	101	64	114	6	16	0	0
Khairpur	2,780	3,135	5,057	839	1,140	290	197	287	212	6
Larkana	1,392	2,993	0	552	238	75	19	224	17	0
Matiali	1,530	1,887	23	592	291	136	356	80	2	5
Mirpurkhas	2,840	1,563	3,101	688	566	145	48	357	12	63
Naushero Feroze	1,329	1,382	907	242	241	237	79	177	41	5
Sanghar	1,980	3,095	87	902	374	238	1,051	50	20	2
Shaheed Benazirabad	1,560	1,759	0	274	166	166	69	68	69	0
Shikarpur	912	1,294	3	201	228	227	89	132	3	0
Sujawal	2,348	904	0	176	296	83	45	92	3	6
Sukkur	1,145	1,022	1,895	326	244	124	59	133	8	0
Tando Allahyar	1,805	1,119	1,184	340	125	53	82	76	4	5
Tando Muhammad Khan	1,167	627	100	423	168	126	130	94	0	0
Tharparkar	2,061	1,693	1,147	340	725	0	77	116	59	17
Thatta	1,236	1,007	1,049	23	522	112	130	24	3	63
Umerkot	1,570	1,935	0	193	234	0	27	80	19	1
<b>Total</b>	<b>40,715</b>	<b>39,154</b>	<b>24,941</b>	<b>9,826</b>	<b>9,116</b>	<b>3,678</b>	<b>3,450</b>	<b>2,914</b>	<b>788</b>	<b>557</b>

**Figure 2: Most frequently reported suspected cases during Week 14, Sindh.**



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

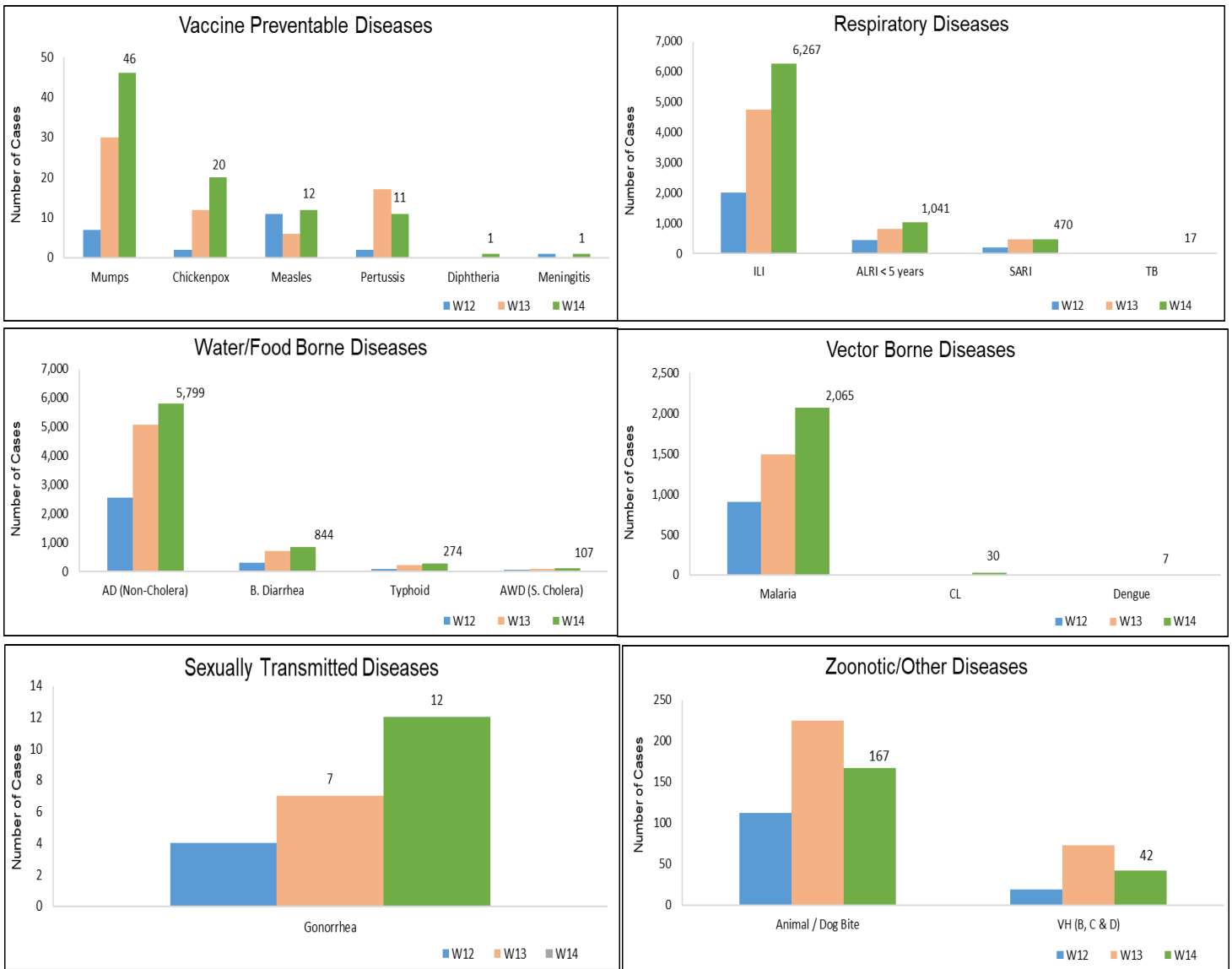


- ILI, AD (Non-Cholera), Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, Dog Bite, AWD (S. Cholera) and Mumps cases were the most frequently reported diseases from Balochistan province.
- ILI cases are mostly reported from Gwadar, Kech (Turbat) and Quetta while AD (Non-Cholera) cases are mostly reported from Gwadar, Kech (Turbat) and Sibi.
- Measles, Mumps, Chickenpox, Diphtheria, Meningitis, ILI, ALRI< 5years, AD (Non-Cholera), B. Diarrhea, AWD (S – Cholera), Typhoid, Malaria, and CL cases showed an increase in the number of cases. At the same time, a decline has been observed in the number of cases of Pertussis, Dog Bite and VH (B, C & D).

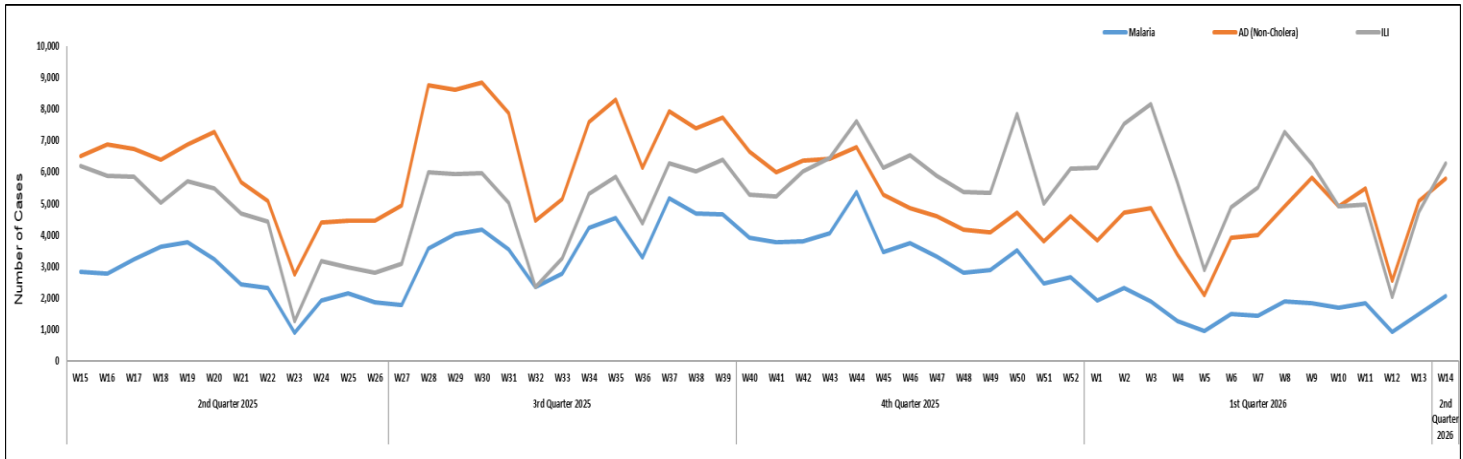
**Table 3: District wise distribution of most frequently reported suspected cases during Week 14, Balochistan.**

Districts	ILI	AD (Non-Cholera)	Malaria	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	Animal / Dog Bite	AWD (S. Cholera)	Mumps
Awaran	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Barkhan	73	66	34	26	3	0	28	11	1	0
Chagai	313	171	22	0	55	0	9	0	0	0
Chaman	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dera Bugti	0	5	5	3	0	0	0	0	0	0
Duki	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Gwadar	1,229	752	78	48	180	0	42	5	1	4
Harnai	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hub	65	208	49	15	13	0	1	3	1	1
Jaffarabad	40	135	135	4	8	0	2	18	0	1
Jhal Magsi	21	49	21	29	0	0	0	0	0	0
Kachhi (Bolan)	261	243	331	70	29	12	0	24	12	0
Kalat	0	0	0	0	0	0	0	0	0	0
Kech (Turbat)	1,044	569	480	6	78	NR	14	NR	NR	6
Kharan	398	207	13	2	71	41	4	0	0	0
Khuzdar	155	171	61	11	56	15	28	6	1	0
Killa Abdullah	165	175	2	20	40	100	11	15	25	3
Killa Saifullah	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Kohlu	64	27	18	NR	21	4	9	NR	NR	NR
Lasbella	73	496	228	159	41	3	11	10	0	1
Loralai	398	216	21	65	41	81	21	4	0	1
Mastung	225	219	16	66	45	46	16	7	1	0
MusaKhel	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Naseerabad	10	301	158	33	14	20	30	23	1	5
Nushki	6	84	1	3	33	6	0	0	0	0
Panjgur	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Pishin	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Quetta	758	462	4	107	26	40	5	0	4	8
Sherani	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sibi	541	566	266	85	31	50	36	3	32	16
Sohbat pur	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Surab	7	2	0	0	0	0	0	0	0	0
Usta Muhammad	206	531	98	220	55	15	7	33	0	0
Washuk	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zhob	48	69	1	37	4	35	NR	1	9	NR
Ziarat	167	75	23	21	0	2	0	4	19	0
<b>Total</b>	<b>6,267</b>	<b>5,799</b>	<b>2,065</b>	<b>1,041</b>	<b>844</b>	<b>470</b>	<b>274</b>	<b>167</b>	<b>107</b>	<b>46</b>

**Figure 4: Most frequently reported suspected cases during Week 14, Balochistan.**



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



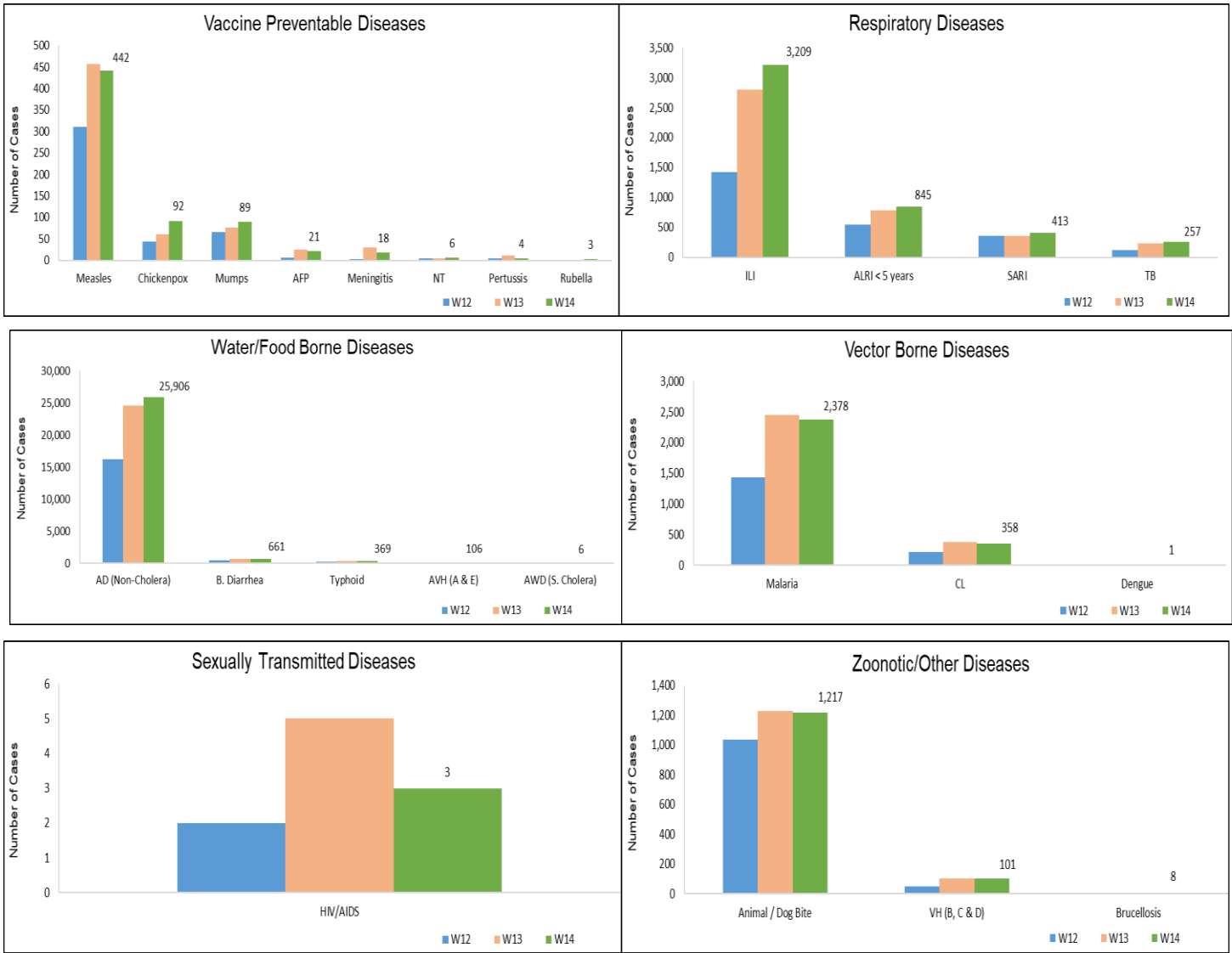
- Cases of AD (Non-Cholera) were maximum followed by ILI, Malaria, Dog bite, ALRI<5 Years, B. Diarrhea, Measles, SARI, Typhoid and CL.
- Chicken pox, NT, Mumps, Rubella, ILI, ALRI <5years, SARI, TB and AD (Non – Cholera) cases showed an increase in number while Measles, AFP, Meningitis, Pertussis, Malaria and HIVAIDs showed a decline in number this week.
- Twenty-one cases of AFP reported from KP. All are suspected cases and need field verification.
- Three cases of HIV/AIDs reported from KP. A field investigation is required.
- Eight suspected cases of Brucellosis were reported from KP, which require field verification.

**Table 4: District wise distribution of most frequently reported suspected cases during Week 14, KP.**

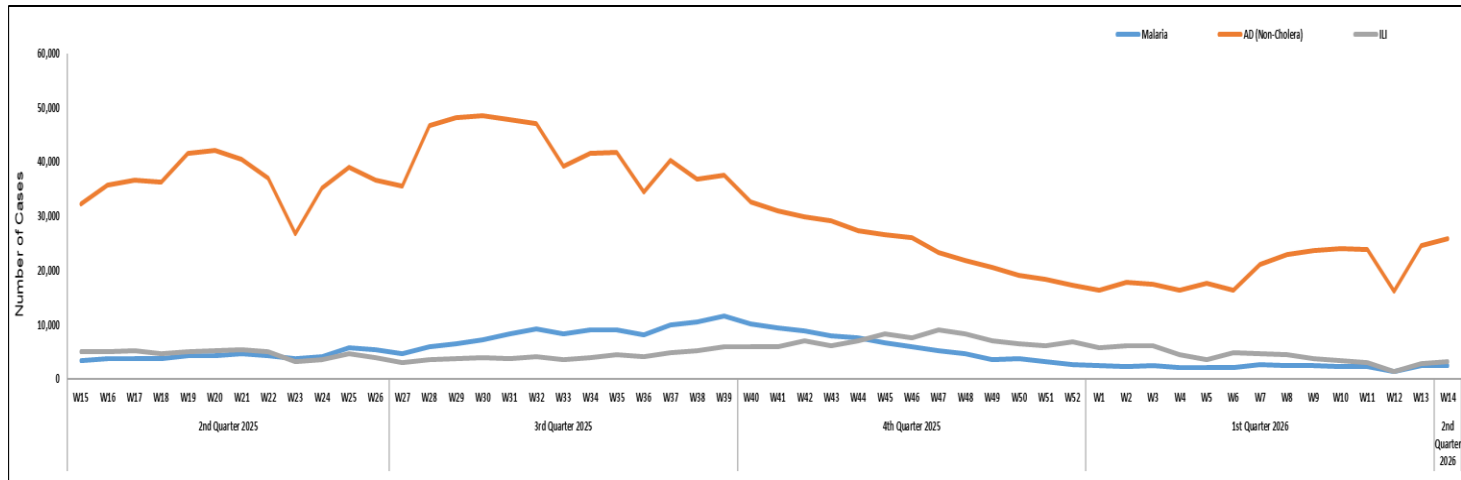
Districts	AD (Non-Cholera)	ILI	Malaria	Animal / Dog Bite	ALRI < 5 years	B. Diarrhea	Measles	SARI	Typhoid	CL
Abbottabad	771	251	0	69	62	4	16	5	11	0
Bajaur	620	0	88	91	22	37	3	32	3	23
Bannu	740	3	781	1	2	4	74	0	77	6
Battagram	206	380	13	12	0	1	1	0	0	0
Buner	241	0	57	0	0	0	0	0	4	0
Charsadda	1,606	358	255	34	153	74	64	1	44	0
Chitral Lower	334	19	3	12	13	17	2	7	2	10
Chitral Upper	124	21	1	9	2	4	1	5	17	1
D.I. Khan	2,051	0	99	15	20	27	60	0	1	1
Dir Lower	1,211	0	32	51	7	64	25	0	14	0
Dir Upper	1,086	31	8	21	74	19	9	2	9	0
Hangu	328	6	67	15	1	65	6	0	2	21
Haripur	1,323	507	0	97	78	0	3	5	15	0
Karak	425	47	50	28	34	8	32	0	5	103
Khyber	332	12	79	49	13	57	0	4	17	81
Kohat	472	0	21	36	2	16	1	0	10	6
Kohistan Lower	87	0	0	0	0	4	0	0	2	0
Kohistan Upper	326	0	2	0	2	12	2	3	0	0
Kolai Palas	67	9	0	0	4	0	0	21	2	0
L & C Kurram	10	2	0	0	2	3	0	0	0	0
Lakki Marwat	568	6	118	97	0	4	6	0	9	0
Malakand	480	80	19	0	16	0	3	8	0	4
Mansehra	357	63	0	5	0	0	0	0	3	0
Mardan	1,317	31	34	11	95	37	4	1	0	0
Mohmand	100	72	43	15	0	4	5	84	2	62
North Waziristan	25	12	24	2	10	10	6	17	3	2
Nowshera	1,592	20	109	52	15	17	6	9	13	19
Orakzai	95	3	3	2	0	7	0	0	0	0
Peshawar	4,006	211	8	13	45	51	62	0	25	0
Shangla	888	0	267	61	14	10	3	0	3	0
South Waziristan (Lower)	57	61	15	12	19	11	4	43	3	14
SWU	34	1	11	0	2	0	0	11	1	0
Swabi	1,542	663	68	250	34	10	38	118	35	0
Swat	1,850	175	15	139	64	38	5	0	25	0
Tank	343	19	55	0	3	4	1	0	0	0
Tor Ghar	93	0	25	10	12	13	0	0	6	5
Upper Kurram	199	146	8	8	25	29	0	37	6	0
<b>Total</b>	<b>25,906</b>	<b>3,209</b>	<b>2,378</b>	<b>1,217</b>	<b>845</b>	<b>661</b>	<b>442</b>	<b>413</b>	<b>369</b>	<b>358</b>



**Figure 6: Most frequently reported suspected cases during Week 14, KP.**



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

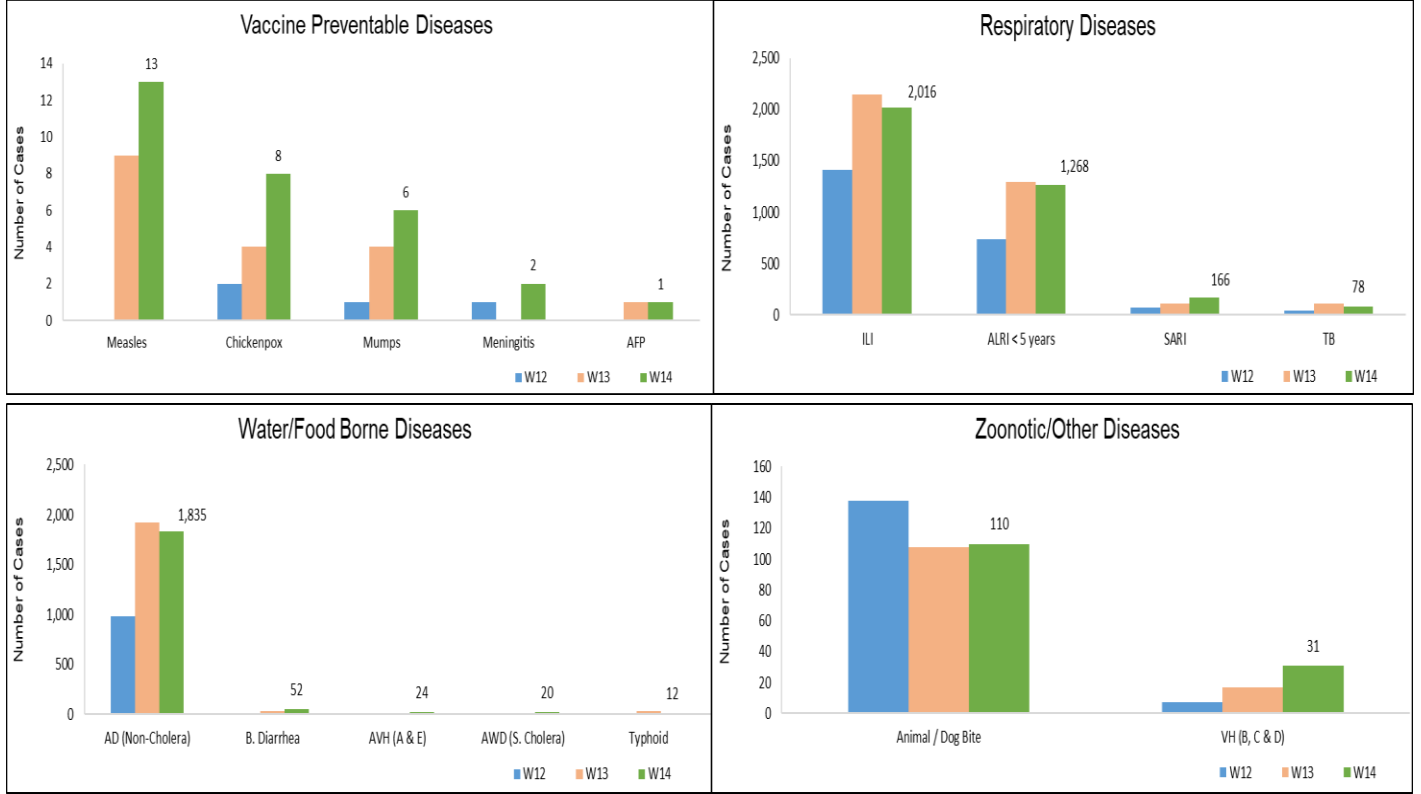


**ICT:** The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera) and TB. ILI, AD (Non-Cholera) and TB cases showed an increase in cases this week.

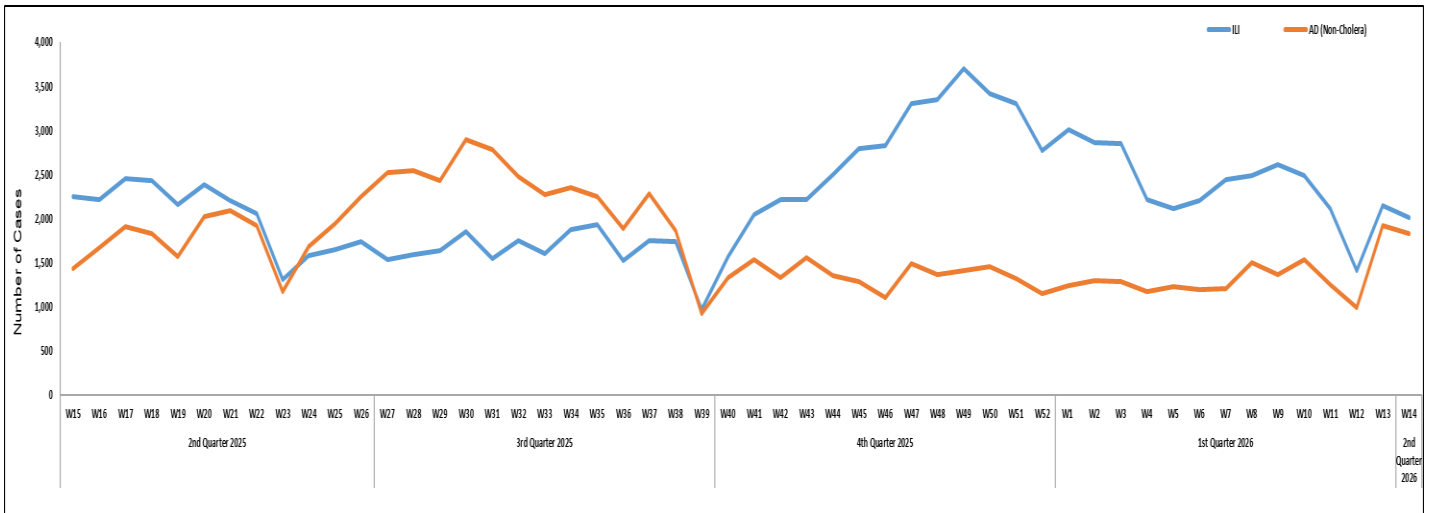
**AJK:** ILI cases were maximum followed by AD (Non-Cholera), ALRI < 5years, SARI and Dog Bite cases. An increase in number of suspected cases was observed for Mumps, Measles, Meningitis, Chicken pox, SARI, B.Diarrhea, AWD (S. Cholera), AVH(A&E), Dog bite, and VH (B, C &D). In contrast, a decline in cases was observed for ILI, ALRI < 5 years, TB, and AD (non-cholera) this week.

**GB:** ALRI <5 Years cases were the most frequently reported disease, followed by AD (Non-Cholera), ILI, SARI, and TB cases. An increase in cases is observed for AD (Non-cholera), Typhoid, ILI, ALRI < 5 years, SARI, TB, Measles, and Dog bite.

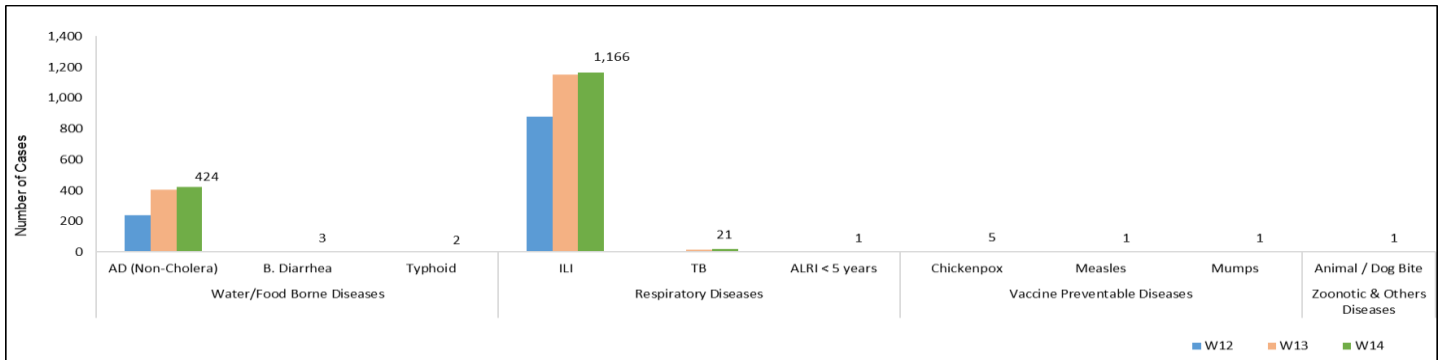
**Figure 8: Most frequently reported suspected cases during Week 14, AJK.**



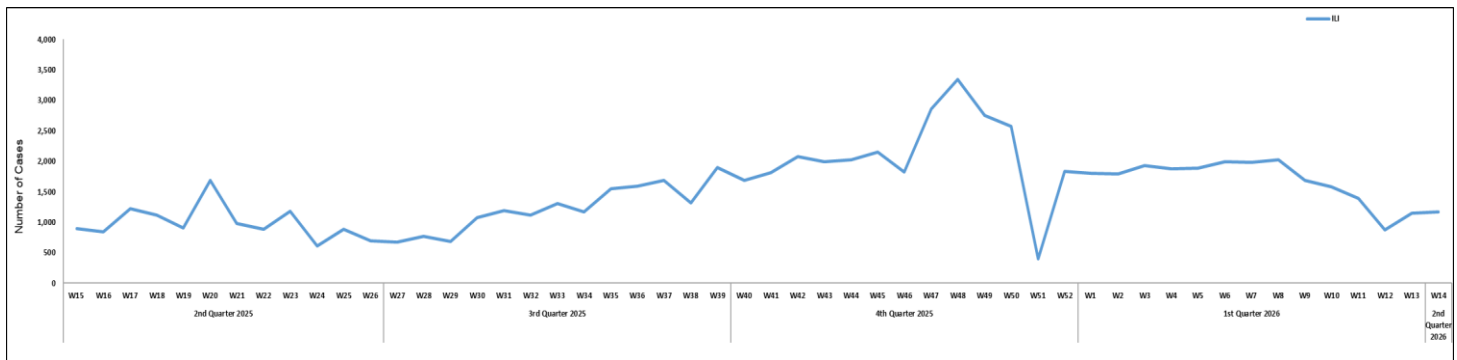
**Figure 9: Week wise reported suspected cases of ILI and AD (Non-Cholera), AJK.**



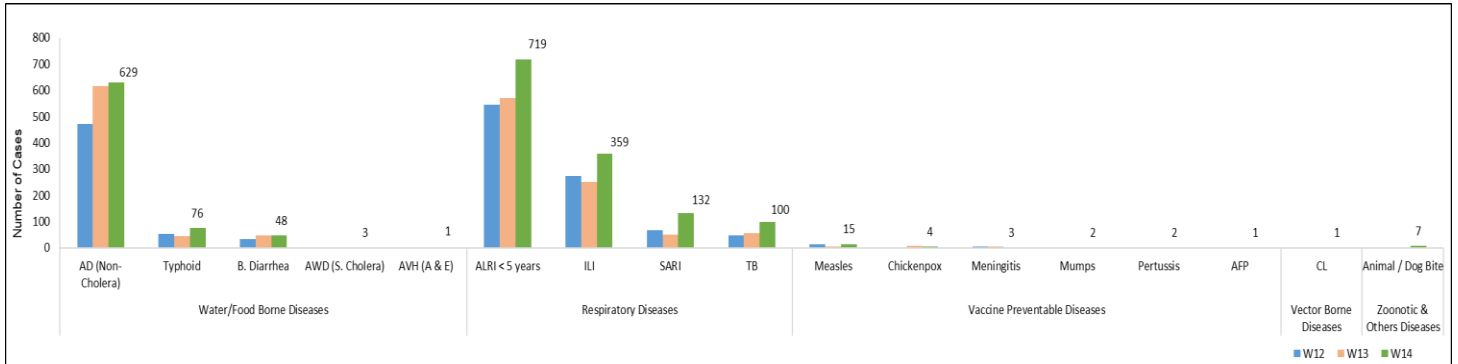
**Figure 10: Most frequently reported suspected cases during Week 14, ICT.**



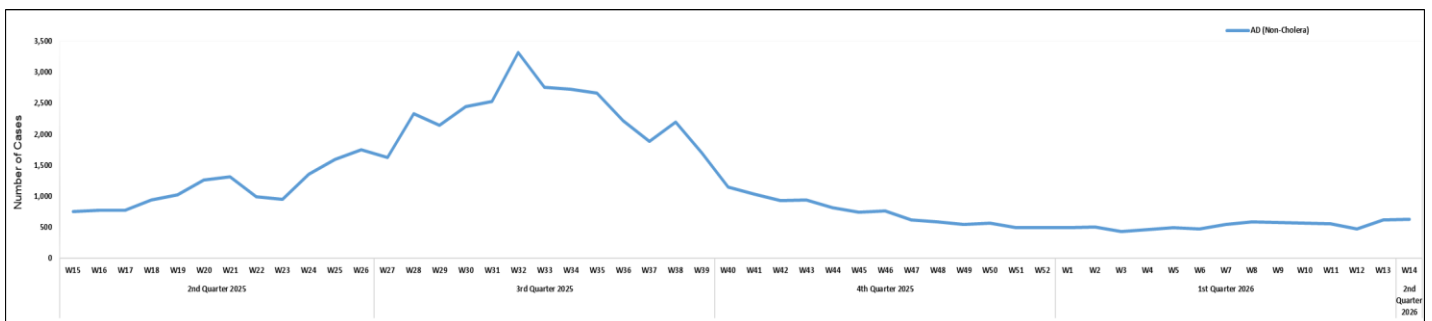
**Figure 11: Week wise reported suspected cases of ILI, ICT.**



**Figure 12: Most frequently reported suspected cases during Week 14, GB.**



**Figure 13: Week wise reported suspected cases of AD (Non-Cholera), GB.**

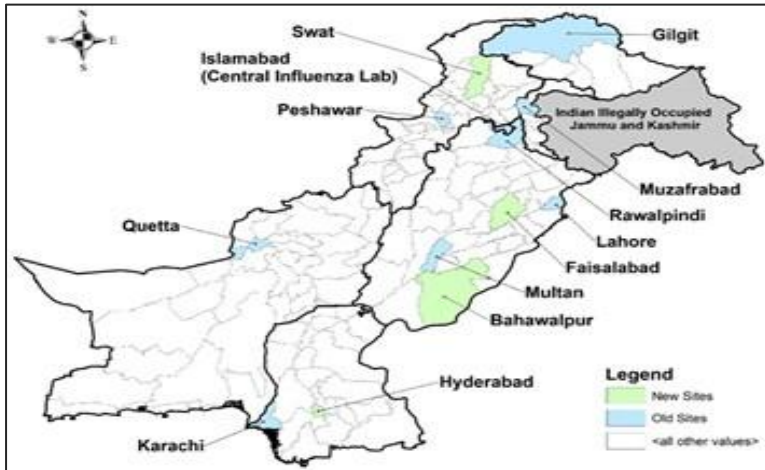


**Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epi Week 14, Pakistan.**

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
<b>AWD (S. Cholera)</b>	57	3	-	-	-	-	-	-	-	-	-	-	-	-
<b>Stool culture &amp; Sensitivity</b>	235	3	-	-	-	-	-	-	-	-	-	-	3	0
<b>Malaria</b>	5,950	229	1,305	78	5	0	-	-	191	1	-	-	-	-
<b>CCHF</b>	-	-	2	0	-	-	-	-	-	-	-	-	-	-
<b>Dengue</b>	1,260	36	381	31	3	0	-	-	-	-	-	-	10	0
<b>VH (B)</b>	14,829	325	928	54	37	3	-	-	1,041	4	-	-	598	2
<b>VH (C)</b>	15,350	1,323	1,013	53	35	2	-	-	1,127	4	-	-	597	14
<b>VH (D)</b>	71	14	-	-	-	-	-	-	-	-	-	-	-	-
<b>VH (A)</b>	50	11	-	-	6	0	-	-	-	-	-	-	-	-
<b>VH (E)</b>	81	26	-	-	1	0	-	-	-	-	-	-	-	-
<b>Covid-19</b>	1	0	1	0	-	-	-	-	-	-	-	-	-	-
<b>TB</b>	818	89	181	25	3	0	-	-	55	0	-	-	48	0
<b>HIV/ AIDS</b>	5,131	32	513	0	13	0	-	-	242	1	-	-	493	0
<b>Syphilis</b>	1,567	5	184	1	-	-	-	-	176	0	-	-	-	-
<b>Typhoid</b>	651	11	103	15	-	-	-	-	147	3	-	-	-	-
<b>Diphtheria</b>	5	2	-	-	-	-	-	-	-	-	-	-	-	-
<b>ILI</b>	-	-	1	0	-	-	-	-	-	-	-	-	-	-
<b>Pneumonia (ALRI)</b>	125	16	1	0	-	-	-	-	-	-	-	-	-	-
<b>Meningitis</b>	5	0	-	-	-	-	-	-	-	-	-	-	-	-
<b>Measles</b>	425	169	41	21	441	188	28	16	9	3	406	93	23	9
<b>Rubella (CRS)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Leishmaniosis (cutaneous)</b>	1	0	90	41	-	-	-	-	2	0	-	-	-	-
<b>Mpox</b>	12	7	-	-	-	-	-	-	-	-	-	-	-	-
<b>Leishmaniosis (Visceral)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>SARI</b>	14	11	-	-	-	-	-	-	-	-	-	-	-	-
<b>Covid-19</b>	<b>ILI</b>	2	0	-	-	-	-	-	-	-	-	13	0	-
	<b>SARI</b>	17	0	-	-	7	0	7	0	-	-	42	0	4
<b>Influenza A</b>	<b>ILI</b>	2	0	-	-	-	-	-	-	-	-	13	0	-
	<b>SARI</b>	17	0	-	-	7	0	7	0	-	-	42	0	4
<b>Influenza B</b>	<b>ILI</b>	2	0	-	-	-	-	-	-	-	-	13	0	-
	<b>SARI</b>	17	1	-	-	7	0	7	0	-	-	42	0	4
<b>RSV</b>	<b>ILI</b>	2	0	-	-	-	-	-	-	-	-	13	0	-
	<b>SARI</b>	17	0	-	-	7	0	7	0	-	-	42	0	4

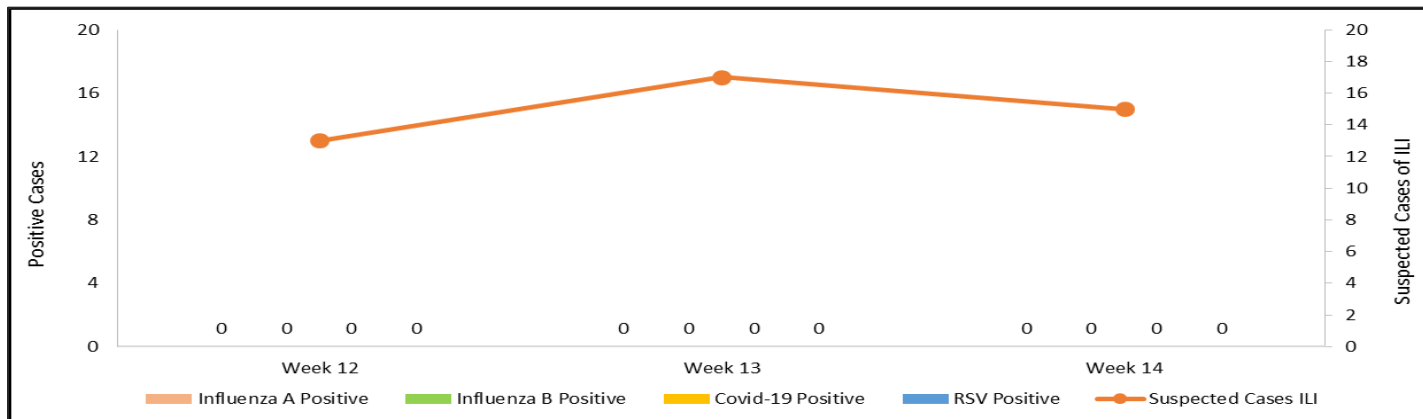


**Figure 14: District wise Influenza sentinel sites, Pakistan.**

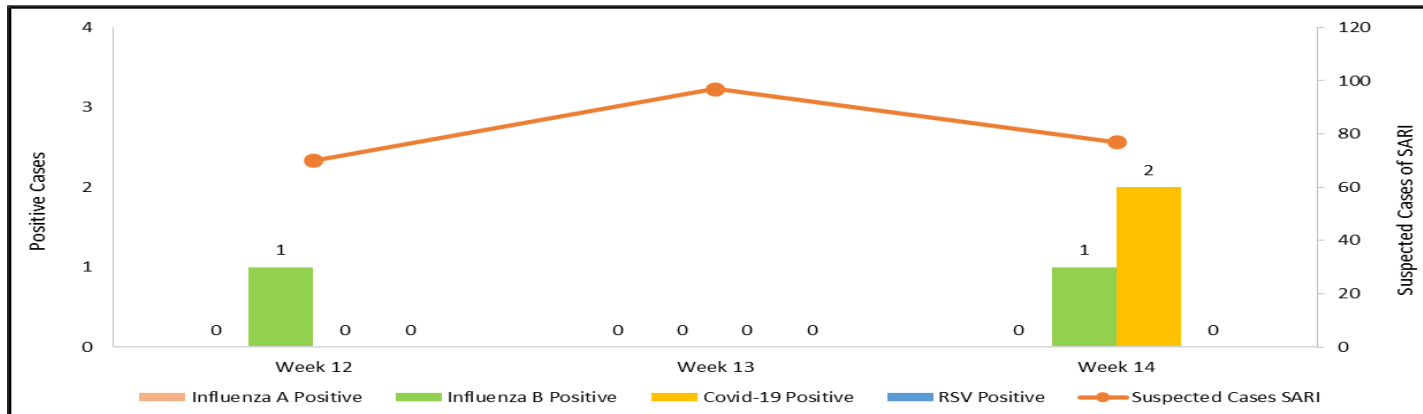


- The National Influenza Centre (NIC) comprises twelve Laboratory-Based sentinel surveillance sites strategically located at major tertiary care hospitals across Pakistan providing comprehensive geographical coverage. These sites collect samples from individuals with Influenza-Like Illness (ILI) and Severe Acute Respiratory Infections (SARI), which are then analyzed for high-impact Respiratory pathogens with epidemic and pandemic potential, including Influenza, SARS-CoV-2, and Respiratory Syncytial Virus.
- During week 14, There is a decrease trend in SARI and ILI cases

**Figure 15: Distribution of suspected samples of ILI and positive cases of Influenza A, Influenza B, COVID-19 and RSV, Week 14, Pakistan.**



**Figure 16: Distribution of suspected samples of SARI and positive cases of Influenza A, Influenza B, COVID-19 and RSV, Week 14, Pakistan.**



# IDSR Reports Compliance

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

**Table 6: Compliance of IDSR reporting districts Week 14, Pakistan.**

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	111	102	92%
	Bannu	238	133	56%
	Battagram	59	38	64%
	Buner	34	18	53%
	Bajaur	44	42	95%
	Charsadda	59	57	97%
	Chitral Upper	34	30	88%
	Chitral Lower	35	34	97%
	D.I. Khan	115	115	100%
	Dir Lower	74	59	80%
	Dir Upper	37	36	97%
	Hangu	22	19	86%
	Haripur	72	72	100%
	Karak	36	36	100%
	Khyber	53	24	45%
	Kohat	61	61	100%
	Kohistan Lower	12	11	92%
	Kohistan Upper	20	17	85%
	Kolai Palas	10	10	100%
	Lakki Marwat	70	69	99%
	Lower & Central Kurram	42	13	31%
	Upper Kurram	41	34	83%
	Malakand	42	29	69%
	Mansehra	133	131	98%
	Mardan	80	71	89%
	Nowshera	56	55	98%
	North Waziristan	13	7	54%
	Peshawar	156	135	87%
	Shangla	37	35	95%
	Swabi	66	63	95%
	Swat	77	73	95%
	South Waziristan (Upper)	93	38	41%
	South Waziristan (Lower)	42	29	69%
Tank	34	33	97%	
Torghar	14	13	93%	
Mohmand	68	29	43%	
Orakzai	69	8	12%	
Azad Jammu Kashmir	Mirpur	39	39	100%
	Bhimber	92	62	67%
	Kotli	60	60	100%
	Muzaffarabad	45	45	100%
	Poonch	46	46	100%
	Haveli	39	39	100%



	Bagh	54	33	61%
	Neelum	39	39	100%
	Jhelum Velly	29	28	97%
	Sudhnooti	27	27	100%
Islamabad Capital Territory	ICT	24	23	96%
	CDA	15	4	27%
Balochistan	Gwadar	26	25	96%
	Kech	44	36	82%
	Khuzdar	74	16	22%
	Killa Abdullah	26	25	96%
	Lasbella	55	55	100%
	Pishin	69	0	0%
	Quetta	55	24	44%
	Sibi	36	34	94%
	Zhob	39	14	36%
	Jaffarabad	16	16	100%
	Naserabad	32	32	100%
	Kharan	30	30	100%
	Sherani	15	0	0%
	Kohlu	75	7	9%
	Chagi	36	21	58%
	Kalat	41	40	98%
	Harnai	17	0	0%
	Kachhi (Bolan)	35	17	49%
	Jhal Magsi	28	13	46%
	Sohbat pur	25	0	0%
	Surab	32	1	3%
	Mastung	46	46	100%
	Loralai	33	25	76%
	Killa Saifullah	28	0	0%
	Ziarat	29	15	52%
	Duki	31	0	0%
	Nushki	32	29	91%
	Dera Bugti	45	2	4%
	Washuk	46	0	0%
	Panjgur	38	0	0%
	Awaran	23	0	0%
	Chaman	24	0	0%
	Barkhan	20	18	90%
Hub	33	24	73%	
Musakhel	41	0	0%	
Usta Muhammad	34	34	100%	
Gilgit Baltistan	Hunza	32	32	100%
	Nagar	25	20	80%
	Ghizer	38	38	100%
	Gilgit	44	44	100%
	Diامر	62	53	85%
	Astore	55	55	100%
	Shigar	27	22	81%



	Skardu	53	52	98%
	Ganche	29	29	100%
	Kharmang	46	25	54%
Sindh	Hyderabad	72	72	100%
	Ghotki	64	64	100%
	Umerkot	62	62	100%
	Naushahro Feroze	107	102	95%
	Tharparkar	276	270	98%
	Shikarpur	60	58	97%
	Thatta	52	49	94%
	Larkana	67	67	100%
	Kamber Shadadkot	71	71	100%
	Karachi-East	21	16	76%
	Karachi-West	20	20	100%
	Karachi-Malir	35	28	80%
	Karachi-Kemari	22	21	95%
	Karachi-Central	12	11	92%
	Karachi-Korangi	18	18	100%
	Karachi-South	6	4	67%
	Sujawal	55	55	100%
	Mirpur Khas	106	106	100%
	Badin	124	123	99%
	Sukkur	64	63	98%
	Dadu	90	89	99%
	Sanghar	100	100	100%
	Jacobabad	44	44	100%
	Khairpur	170	167	98%
	Kashmore	59	59	100%
	Matiari	42	42	100%
	Jamshoro	75	74	99%
	Tando Allahyar	54	54	100%
Tando Muhammad Khan	41	41	100%	
Shaheed Benazirabad	122	122	100%	



**Table 7: Compliance of IDSR reporting Tertiary care hospitals Week 14, Pakistan.**

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%
Sindh	Karachi-South	3	2	67%
	Sukkur	1	1	100%
	Shaheed Benazirabad	1	1	100%
	Karachi-East	1	1	100%
	Karachi-Central	1	1	100%
KP	Peshawar	3	0	0%
	Swabi	1	0	0%
	Nowshera	1	1	100%
	Mardan	1	0	0%
	Abbottabad	1	0	0%
	Swat	1	0	0%



## Notes from the field:

### Suspected Hepatitis A Outbreak Investigation Report, Ward No. 3, Takhtbhai, District Mardan

#### Introduction

Hepatitis A is an acute viral infection transmitted primarily through the fecal–oral route, often associated with contaminated food and water. Globally, it remains a significant public health concern, particularly in low- and middle-income countries where sanitation and water quality are suboptimal. According to the World Health Organization, millions of infections occur annually, with periodic outbreaks linked to unsafe water supplies. In the South Asian region, endemic transmission persists due to inadequate sanitation infrastructure and population density. In Pakistan, sporadic outbreaks and clusters are frequently reported, particularly in peri-urban and rural settings. Ward No. 3, Takhtbhai, District Mardan, experienced a sudden increase in suspected cases, prompting an outbreak investigation.

#### Objectives

- To determine the magnitude of the outbreak
- To identify potential risk factors contributing to disease transmission
- To propose evidence-based recommendations for outbreak control and prevention

#### Methods

A descriptive cross-sectional study design was used. The study population included residents of Ward No. 3, Takhtbhai, with a total population of 31,257 individuals (17,654 males and 13,603 females). The investigation was conducted over two days following notification of increased suspected cases. A suspected case was defined as “any individual residing in the area presenting with symptoms suggestive of acute hepatitis, including fever, jaundice, nausea, or abdominal discomfort during the outbreak period”. Data were collected using structured field survey tools through door-to-door visits and community engagement sessions.

Active case finding was conducted across the community, along with environmental assessment of water supply and sanitation systems. Water samples were collected from the main communal water tank for laboratory testing. Data were analyzed descriptively, focusing on distribution by person, place, and exposure.

#### Results

A total of 200 suspected cases of Hepatitis A were identified in Ward No. 3, Takhtbhai. The median age of affected individuals was 28 years (age range-5–58 years). Females constituted 58% (n=116) of cases. The outbreak was geographically confined to the ward, with clustering observed among households relying on a shared water tank.

The overall attack rate was 0.64%. The gender-specific attack rate among females was 0.85%, compared to 0.48% among males, indicating a higher burden of disease in females.

Clinically, cases presented with symptoms consistent with acute hepatitis, including fever (100%), jaundice (70%), nausea (40%), and generalized weakness (60%). Environmental assessment revealed poor water supply infrastructure, with dependence on a single communal water tank and inadequate sanitation practices identified as key risk factors. Water samples were collected from the suspected source; however, laboratory confirmation results were not available at the time of reporting.

#### Discussion

The epidemiological pattern suggests a common-source outbreak, most likely linked to contaminated water. The concentration of cases in a defined geographic area and dependence on a shared water source strongly supports this inference. Similar outbreaks in comparable settings have demonstrated a clear association between unsafe water and Hepatitis A transmission.

The higher proportion of female cases (58%) may reflect differential exposure patterns, possibly related to domestic water use roles. The median age of 28 years indicates that infection is not



limited to children, suggesting shifting epidemiology in areas with partial immunity.

Rapid response measures, including chlorination of the water tank and community awareness sessions, were appropriate and aligned with standard outbreak control practices. However, lack of laboratory confirmation and incomplete stratified data limits detailed epidemiological interpretation.

### Conclusion

The Hepatitis A outbreak in Ward No. 3, Takhtbhai was most likely associated with contaminated water and poor sanitation conditions. Prompt public health response contributed to early risk identification and initial containment efforts.

### Recommendations

- Strengthen surveillance systems for early detection and response to future outbreaks.
- Ensure continuous provision of safe drinking water through regular chlorination and monitoring of water sources.
- Improve sanitation infrastructure, including proper waste disposal systems.
- Establish routine water quality surveillance mechanisms at the community level.
- Conduct sustained health education campaigns focusing on personal hygiene and safe water practices.
- Promote regular handwashing with soap, particularly before meals and after defecation.

### References

1. World Health Organization. Hepatitis A. Geneva: WHO; 2023.
2. Jacobsen KH, Wiersma ST. Hepatitis A virus seroprevalence by age and world region. *Vaccine*. 2010;28(41):6653–6657.
3. Franco E, Meleleo C, Serino L, Sorbara D, Zaratti L. Hepatitis A: epidemiology and prevention in developing countries. *World J Hepatol*. 2012;4(3):68–73.
4. Centers for Disease Control and Prevention. Hepatitis A outbreaks and prevention strategies. Atlanta: CDC; 2022.

## Knowledge Hub

### Acute Watery Diarrhea: What you need to know

Acute Watery Diarrhea (AWD) is a clinical term for diarrhea characterized by frequent, loose, or liquid stools without blood. It is a major public health concern, especially in areas with poor sanitation, because it can lead to severe and life-threatening dehydration.

#### What Causes Acute Watery Diarrhea?

AWD is most often caused by an infection from a virus, bacteria, or parasite. The most common causes include:

- **Bacteria:**
  - *Vibrio cholerae* (the cause of cholera): This is the most infamous cause of AWD, leading to profuse, "rice-water" stools that can cause severe dehydration in a matter of hours.
  - *Escherichia coli* (E. coli), particularly enterotoxigenic E. coli (ETEC).
  - *Campylobacter*
  - *Salmonella*
- **Viruses:**
  - Rotavirus
  - Norovirus
  - Adenovirus
- **Parasites:**
  - *Cryptosporidium*
  - *Giardia*

#### How It Spreads

AWD is spread primarily through the fecal-oral route. This means that a person gets sick by ingesting water or food that is contaminated with the feces of an infected person.

Transmission can occur through:

- **Contaminated Water:** Drinking unsafe water or using it for food preparation.
- **Contaminated Food:** Eating food that was washed with contaminated water, or food prepared by an infected person who didn't wash their hands.
- **Person-to-Person Contact:** Direct contact with an infected person, particularly in a household or group setting.



## Signs & Symptoms

The main symptom of AWD is the frequent passage of large volumes of watery stools. This is a crucial distinction from other forms of diarrhea, such as dysentery, which is characterized by bloody stools.

Symptoms can include:

- Frequent, watery, non-bloody diarrhea.
- Nausea and vomiting.
- Abdominal cramps.
- Fever (in some cases).

The most dangerous symptom is **dehydration**, which can be very rapid and severe. Signs of dehydration include:

- Extreme thirst.
- Sunken eyes.
- Dry mouth and tongue.
- Reduced urination.
- Lack of tears (in children).
- Lethargy or irritability.

## Complications

The most common and serious complication of AWD is **severe dehydration**. Losing large amounts of water and electrolytes (such as sodium and potassium) can lead to:

- **Hypovolemic shock:** A dangerous drop in blood volume and pressure.
- **Kidney failure.**
- **Electrolyte imbalance**, which can disrupt heart and nerve function.

## Prevention

Prevention of AWD focuses on good hygiene and ensuring access to safe food and water.

- **Safe Water:** Drink and use only boiled, bottled, or chemically treated water.
- **Hand Hygiene:** Wash hands with soap and water frequently, especially after using the toilet and before preparing or eating food.
- **Food Safety:** Eat food that is well-cooked and served hot. Avoid raw or uncooked foods from unhygienic sources.
- **Sanitation:** Proper disposal of human waste is essential to prevent the

contamination of water sources and the environment.

- **Vaccination:** The rotavirus vaccine is a key tool in preventing a common cause of AWD in children. An oral cholera vaccine is also available for travelers and people living in high-risk areas.

## Diagnosis and Treatment

- **Diagnosis:** AWD is primarily diagnosed based on symptoms and a physical exam to assess for dehydration. Lab tests on stool samples can identify the specific cause.
- **Treatment:** The most important treatment for AWD is **rehydration**.
  - **Oral Rehydration Solution (ORS):** This is the cornerstone of treatment. ORS is a simple mixture of salts, sugar, and water that helps the body absorb fluids and electrolytes to replace what has been lost. It can be made with pre-packaged sachets or a simple recipe.
  - **Zinc Supplementation:** For children, zinc supplements are recommended as they can reduce the duration and severity of diarrhea.

Immediate medical attention is crucial if a person with AWD shows signs of severe dehydration, especially in infants and young children.

## More Information

For additional authoritative information on Acute Watery Diarrhea, please visit:

- **World Health Organization (WHO):** <https://www.who.int/news-room/fact-sheets/detail/diarrhoeal-disease>
- **Centers for Disease Control and Prevention (CDC):** <https://www.cdc.gov/cholera/index.html>
- **Public Health Agency of Canada (PHAC):** <https://www.canada.ca/en/public-health/services/diseases/diarrhea.html>
- **UK Health Security Agency (UKHSA) / National Health Service (NHS):** <https://www.nhs.uk/conditions/diarrhoea-and-vomiting/>



# Acute Diarrhea

Food is contaminated with bacteria.  
In hot weather, food turns bad easily.

Consume contaminated  
food or water

## Symptoms



## Prevention



Eat well-cooked food







Always wash your hands  
before eating



Use clean water  
in cooking



Consult your doctor  
if any doubts

	<a href="https://phb.nih.org.pk/">https://phb.nih.org.pk/</a>		<a href="https://twitter.com/NIH_Pakistan">https://twitter.com/NIH_Pakistan</a>
	<a href="mailto:idsr-pak@nih.org.pk">idsr-pak@nih.org.pk</a>		<a href="https://www.facebook.com/NIH.PK/">https://www.facebook.com/NIH.PK/</a>