

# **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 16, 2026

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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 week's highlights include;*

- CCHF Outbreak Investigation Report, District Karak, March 2026*
- Knowledge hub on Understanding Mumps: A Public Health Priority*

*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 16, 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), Typhoid, and SARI.
- Thirty-one cases of AFP were reported from KP, six from Sindh, three from AJK, two from Balochistan, and one from GB.
- Eight suspected cases of HIV/ AIDS were reported from KP and six from Sindh.
- Four suspected cases of Brucellosis were reported from KP.
- Among VPDs, there is an increase in the number of cases of Mumps and Pertussis this week.
- Among Respiratory diseases, there is an increase in the number of cases of TB this week.
- Among Water/food-borne diseases, there is an increase in the number of cases of AD (Non-Cholera) this week.
- Among Vector-borne diseases, there is a slight increase 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 decline in the number of cases of dog bite and VH (B, C & D) this week.

## IDSR compliance attributes

- The national compliance rate for IDSR reporting in 158 implemented districts is 79%
- Sindh is the top reporting region with a compliance rate of 98%, followed by GB 89%, ICT 79%, and KP 78%.
- The lowest compliance rate was observed in AJK 77% and Balochistan, 47%.

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	2,234	1,748	78
Azad Jammu Kashmir	469	361	77
Islamabad Capital Territory	38	30	79
Balochistan	1,308	611	47
Gilgit Baltistan	417	371	89
Sindh	2,111	2,074	98
National	6,577	5,195	79

## Public Health Actions

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

### Typhoid

- **Enhance Case Detection and Reporting:** Strengthen typhoid surveillance within the Integrated Disease Surveillance and Response (IDSR) system by training healthcare providers on standard case definitions, timely notification, and outbreak detection, particularly in high-burden and underserved areas.
- **Improve Laboratory Diagnosis:** Expand laboratory diagnostic capacity for typhoid by supporting culture and sensitivity testing for MDR and XDR detection at district and provincial levels to confirm cases and guide antimicrobial stewardship.
- **Promote Water, Sanitation, and Hygiene (WASH):** Collaborate with relevant sectors to ensure access to safe drinking water, improve sanitation infrastructure, and promote hygiene practices, especially handwashing with soap.
- **Implement Vaccination Strategies:** Support the scale-up of Typhoid Conjugate Vaccine (TCV) through routine immunization and targeted campaigns in high-risk populations.
- **Raise Community Awareness:** Develop culturally appropriate health education campaigns to inform communities about transmission routes, preventive behaviors (e.g., safe food handling and hygiene), and the importance of early care-seeking.

### Acute Viral Hepatitis (A & E)

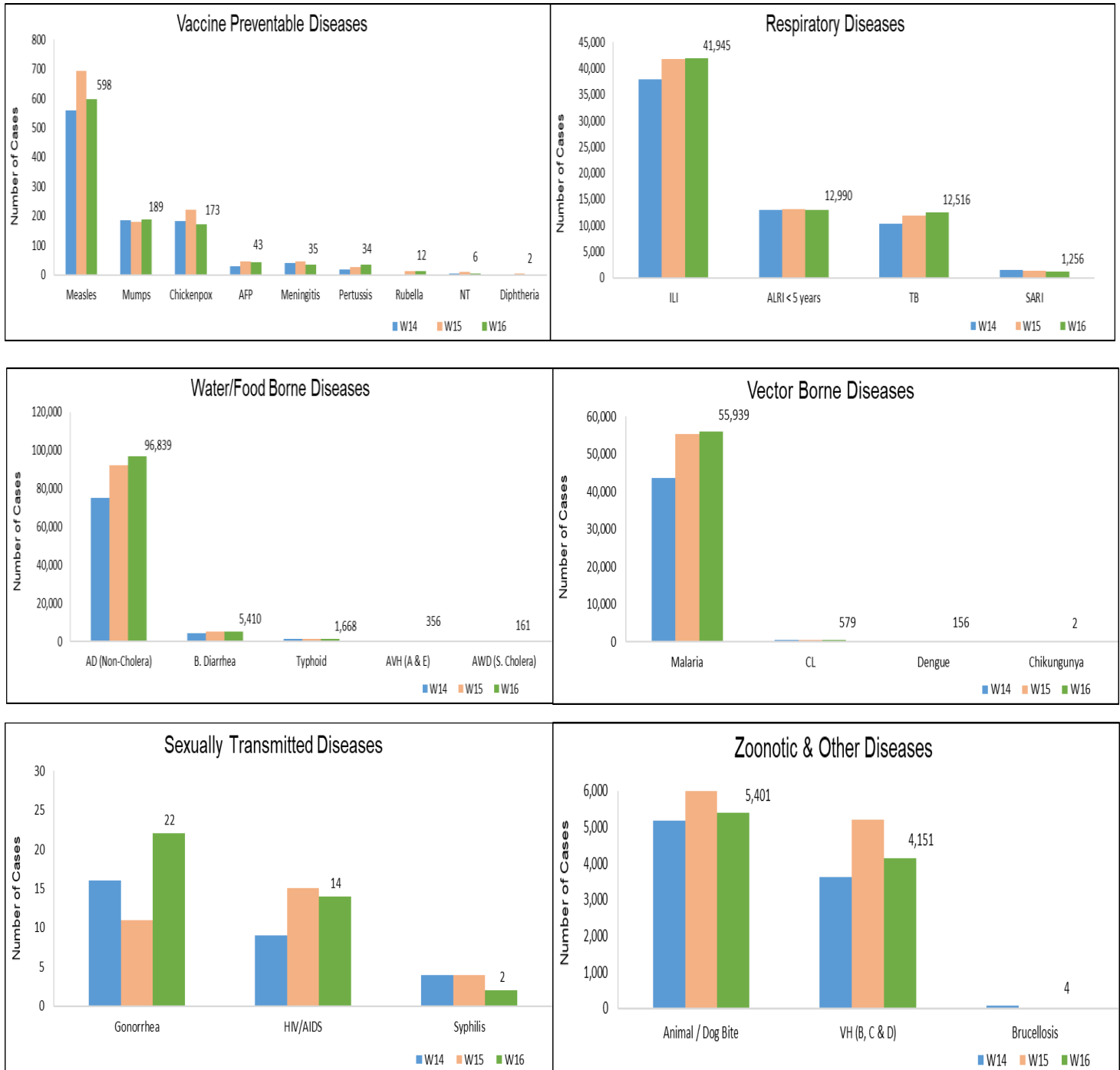
- **Enhance Case Detection and Reporting:** Strengthen AHV (A & E) surveillance in the IDSR system by training health personnel to recognize symptoms and ensure timely reporting, especially during seasonal peaks or in outbreak-prone areas.
- **Strengthen Laboratory Confirmation:** Improve diagnostic 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 16, Pakistan.**

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	1,795	6,443	786	588	33,817	NR	53,410	96,839
Malaria	1	2,029	0	0	3,171	NR	50,738	55,939
ILI	1,891	6,122	309	1,556	3,384	NR	28,683	41,945
ALRI < 5 years	1,182	1,050	796	7	729	NR	9,226	12,990
TB	76	12	95	15	251	NR	12,067	12,516
B. Diarrhea	45	802	40	3	896	NR	3,624	5,410
Animal / Dog Bite	126	157	1	0	1,250	NR	3,867	5,401
VH (B, C & D)	19	48	4	0	126	NR	3,954	4,151
Typhoid	19	239	82	3	471	NR	854	1,668
SARI	140	373	80	0	506	NR	157	1,256
Measles	5	11	8	2	467	NR	105	598
CL	0	17	0	0	558	NR	4	579
AVH (A & E)	19	4	0	0	128	NR	205	356
Mumps	7	40	2	2	89	NR	49	189
Chickenpox/ Varicella	6	18	3	1	63	NR	82	173
AWD (S. Cholera)	12	140	6	0	0	NR	3	161
Dengue	0	22	0	0	30	NR	104	156
AFP	3	2	1	0	31	NR	6	43
Meningitis	7	0	6	0	12	NR	10	35
Pertussis	0	30	0	0	4	NR	0	34
Gonorrhea	0	14	0	0	3	NR	5	22
HIV/AIDS	0	0	0	0	8	NR	6	14
Rubella (CRS)	0	12	0	0	0	NR	0	12
NT	0	0	0	0	6	NR	0	6
Brucellosis	0	0	0	0	4	NR	0	4
Chikungunya	0	0	0	0	0	NR	2	2
Diphtheria (Probable)	0	0	0	0	2	NR	0	2
Syphilis	0	0	0	0	0	NR	2	2

**Figure 1: Most frequently reported suspected cases during Week 16, Pakistan.**

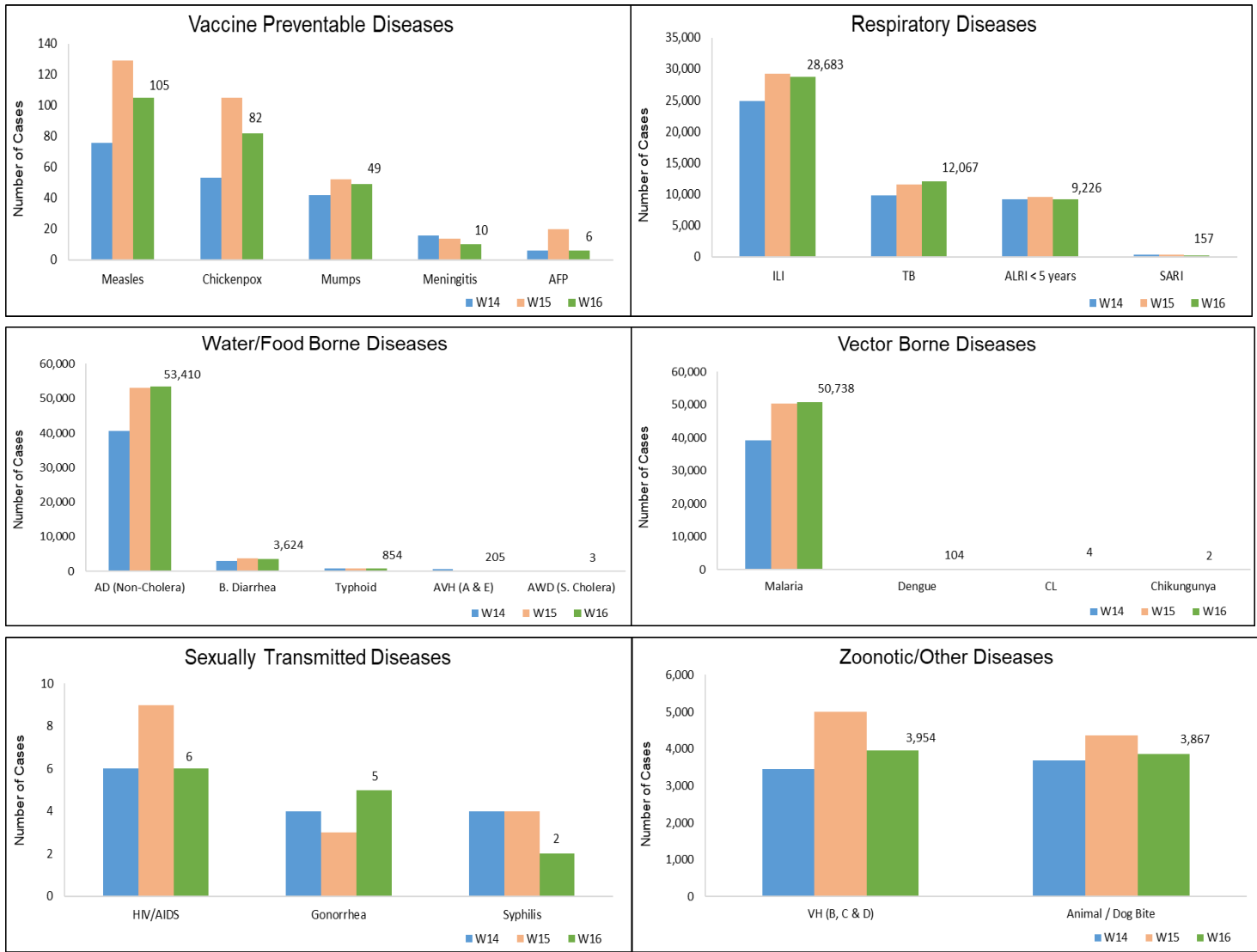


- AD (non-cholera) cases were maximum followed by Malaria, ILI, TB, ALRI<5 Years, VH (B, C, D), Dog Bite, B. Diarrhea, Typhoid and AVH (A & E).
- Malaria cases are mostly from Khairpur, Sanghar and Larkana whereas ILI cases are from Khairpur, Mirpurkhas and Karachi Central.
- Six cases of AFP reported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

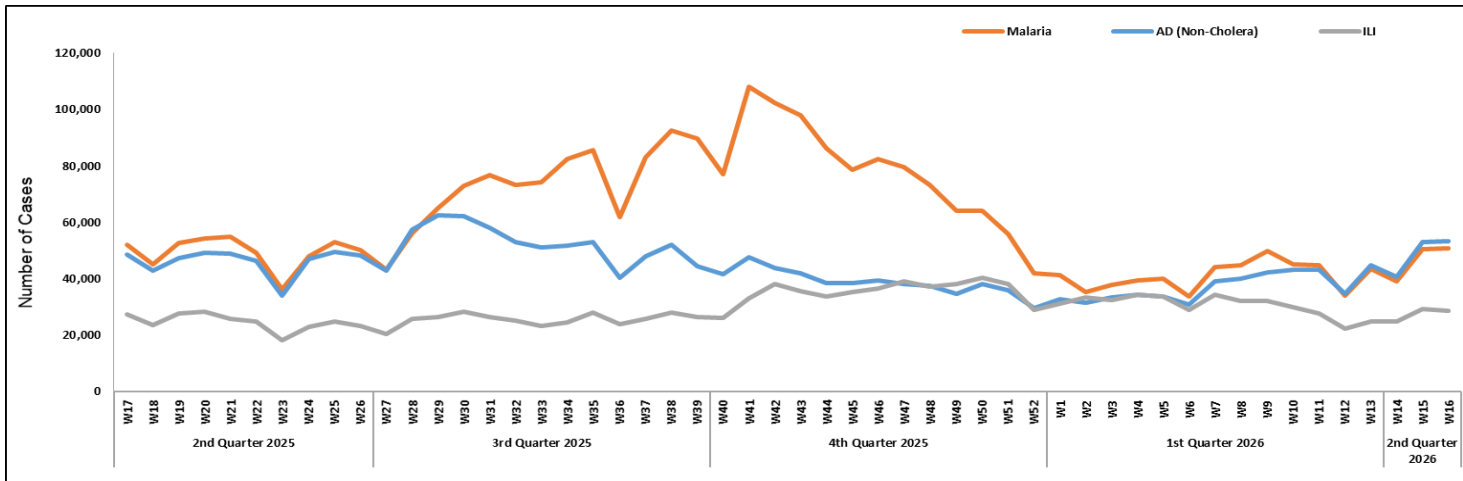
**Table 2: District wise distribution of most frequently reported suspected cases during Week 16, Sindh.**

Districts	AD (Non-Cholera)	Malaria	ILI	TB	ALRI < 5 years	VH (B, C & D)	Animal / Dog Bite	B. Diarrhea	Typhoid	AVH (A & E)
Badin	4,145	2,833	2,743	811	351	208	102	344	65	0
Dadu	2,073	2,804	757	552	1,018	66	249	362	98	27
Ghotki	1,174	2,555	23	472	394	576	247	119	0	0
Hyderabad	2,820	743	1,293	321	154	125	84	57	9	2
Jacobabad	700	1,941	743	254	306	80	280	95	26	0
Jamshoro	2,332	2,224	113	553	390	125	89	113	42	1
Kamber	1,687	3,031	0	777	250	99	279	142	22	0
Karachi Central	1,897	11	2,968	254	170	17	135	0	91	10
Karachi East	488	40	14	24	20	4	3	13	0	0
Karachi Keamari	784	10	445	19	34	0	4	11	2	0
Karachi Korangi	362	69	9	53	1	1	10	6	7	1
Karachi Malir	1,359	52	1,769	134	194	9	46	54	10	9
Karachi South	105	19	0	0	0	0	0	0	0	0
Karachi West	1,060	346	1,322	93	252	17	74	18	23	0
Kashmore	333	1,642	394	135	91	13	146	27	2	0
Khairpur	3,394	4,131	6,586	1,246	1,136	207	333	380	191	34
Larkana	1,860	3,611	0	718	303	32	114	327	2	0
Matiari	2,241	2,416	45	795	201	326	79	87	0	15
Mirpurkhas	4,035	1,636	3,430	669	431	41	159	180	11	3
Naushero Feroze	1,399	1,640	1,062	324	462	99	250	196	40	0
Sanghar	2,372	3,730	95	1,035	377	878	196	74	19	2
Shaheed Benazirabad	2,042	2,056	0	337	246	111	181	110	103	0
Shikarpur	1,360	1,830	4	245	237	68	244	181	1	0
Sujawal	2,443	1,029	0	153	187	59	93	68	15	0
Sukkur	1,333	1,299	1,796	354	361	107	153	129	5	0
Tando Allahyar	2,451	1,643	943	425	134	283	74	127	5	4
Tando Muhammad Khan	1,622	848	70	542	200	110	121	149	0	0
Tharparkar	2,026	2,010	816	394	581	44	1	111	27	27
Thatta	1,578	1,684	1,243	51	481	198	121	44	12	68
Umerkot	1,935	2,855	0	327	264	51	0	100	26	2
<b>Total</b>	<b>53,410</b>	<b>50,738</b>	<b>28,683</b>	<b>12,067</b>	<b>9,226</b>	<b>3,954</b>	<b>3,867</b>	<b>3,624</b>	<b>854</b>	<b>205</b>

**Figure 2: Most frequently reported suspected cases during Week 16, Sindh.**



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

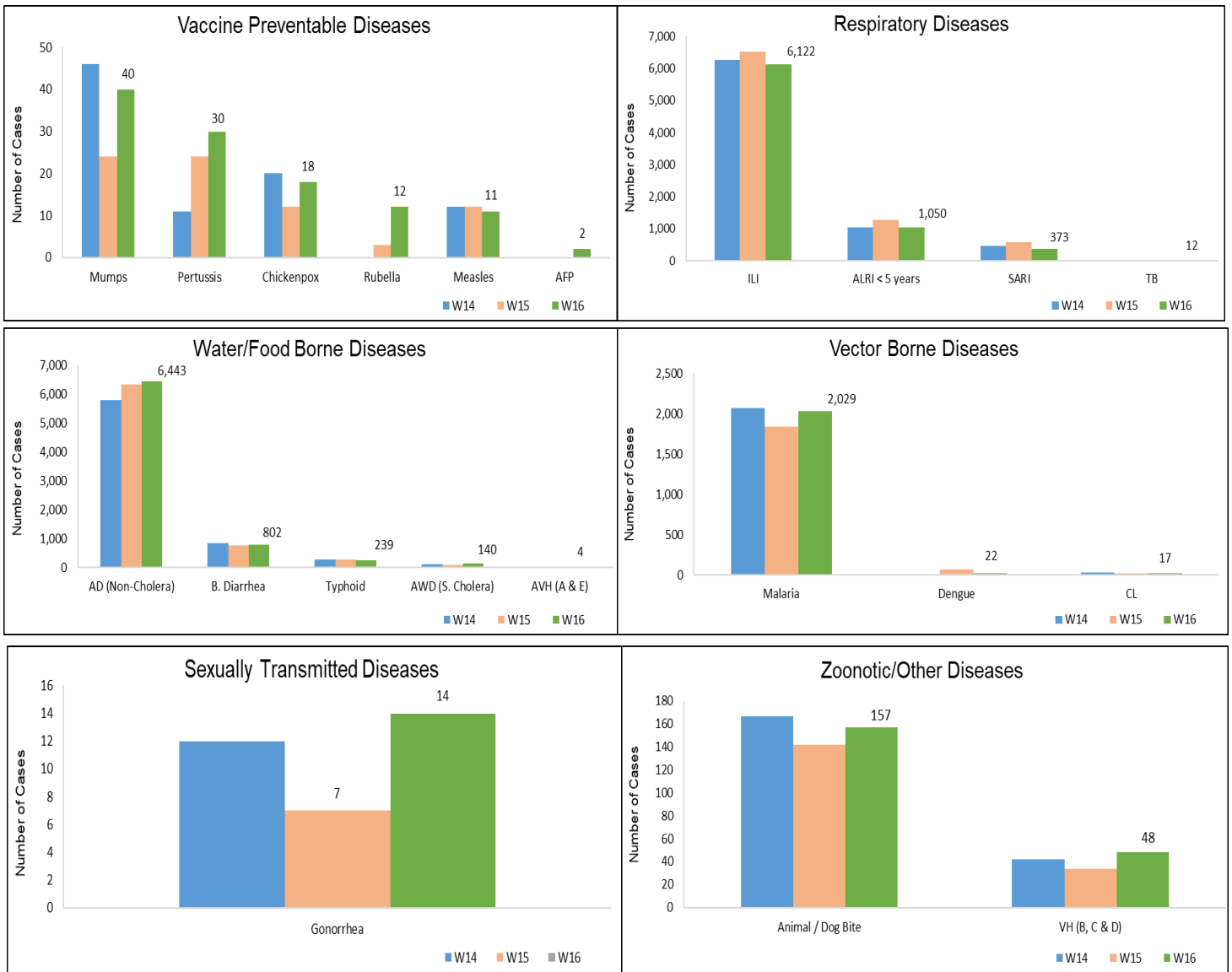


- AD (Non-Cholera), ILI, Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, Dog Bite, AWD (S. Cholera) and VH (B, C&D) cases were the most frequently reported diseases from Balochistan province.
- ILI cases are mostly reported from Gwadar, Quetta and Kech (Turbat) while AD (Non-Cholera) cases are mostly reported from Gwadar, Usta Muhammad and Sibi.
- Two cases of AFP reported from Balochistan. Field investigation is required to confirm the cases.
- Mumps, Pertussis, Chicken pox, Rubella, AFP, AD (non-Cholera), B.Diarrhea, AWD (S. Cholera), Malaria, Dog bite, and VH (B, C &D) showed an increase in the number of cases. At the same time, a decline has been observed in the number of cases of Measles, ILI, ALRI <5 years, SARI, and Dengue this week.

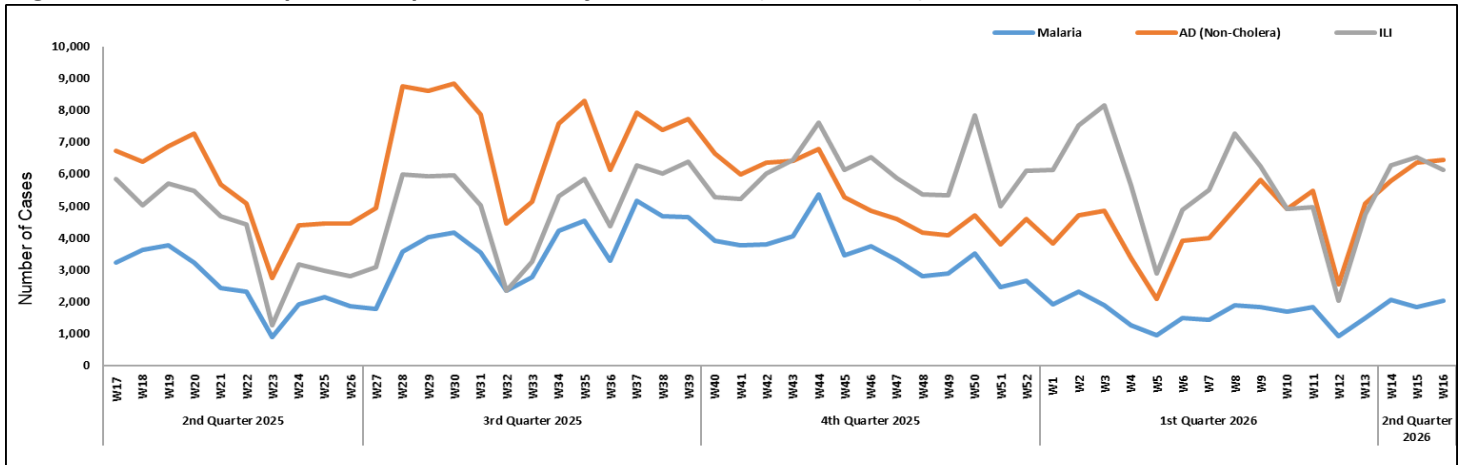
**Table 3: District wise distribution of most frequently reported suspected cases during Week 16, Balochistan.**

Districts	AD (Non-Cholera)	ILI	Malaria	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	Animal / Dog Bite	AWD (S. Cholera)	VH (B, C & D)
Awaran	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Barkhan	11	17	14	0	0	0	14	0	1	0
Chagai	193	292	32	0	58	0	9	0	0	3
Chaman	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dera Bugti	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Duki	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Gwadar	767	1,215	60	34	100	0	40	7	1	1
Harnai	138	171	55	19	52	0	0	0	2	0
Hub	207	62	71	2	8	0	0	1	0	1
Jaffarabad	173	42	173	5	11	0	0	18	0	0
Jhal Magsi	72	77	69	2	0	0	0	0	0	0
Kachhi (Bolan)	257	317	339	67	27	9	NR	12	17	4
Kalat	22	0	5	10	3	0	9	0	0	0
Kech (Turbat)	315	491	177	1	57	NR	NR	NR	NR	NR
Kharan	250	482	11	2	98	19	7	0	0	0
Khuzdar	101	49	18	7	21	9	12	1	0	0
Killa Abdullah	237	180	4	20	44	77	10	10	38	0
Killa Saifullah	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Kohlu	21	53	12	6	5	8	8	1	NR	NR
Lasbella	558	97	337	180	42	3	8	21	0	17
Loralai	247	433	33	63	29	42	9	0	0	0
Mastung	301	294	27	108	64	40	12	8	0	4
MusaKhel	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Naseerabad	324	13	180	29	13	20	54	38	0	9
Nushki	120	2	0	9	39	5	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	447	839	5	124	2	45	0	1	20	0
Sherani	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sibi	613	482	275	77	48	52	28	0	50	0
Sohbat pur	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Surab	6	20	0	0	0	0	0	0	0	0
Usta Muhammad	766	202	92	169	71	5	3	19	0	9
Washuk	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zhob	62	24	1	35	4	31	NR	2	9	NR
Ziarat	235	268	39	81	6	8	16	18	2	0
<b>Total</b>	<b>6,443</b>	<b>6,122</b>	<b>2,029</b>	<b>1,050</b>	<b>802</b>	<b>373</b>	<b>239</b>	<b>157</b>	<b>140</b>	<b>48</b>

**Figure 4: Most frequently reported suspected cases during Week 16, Balochistan.**



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



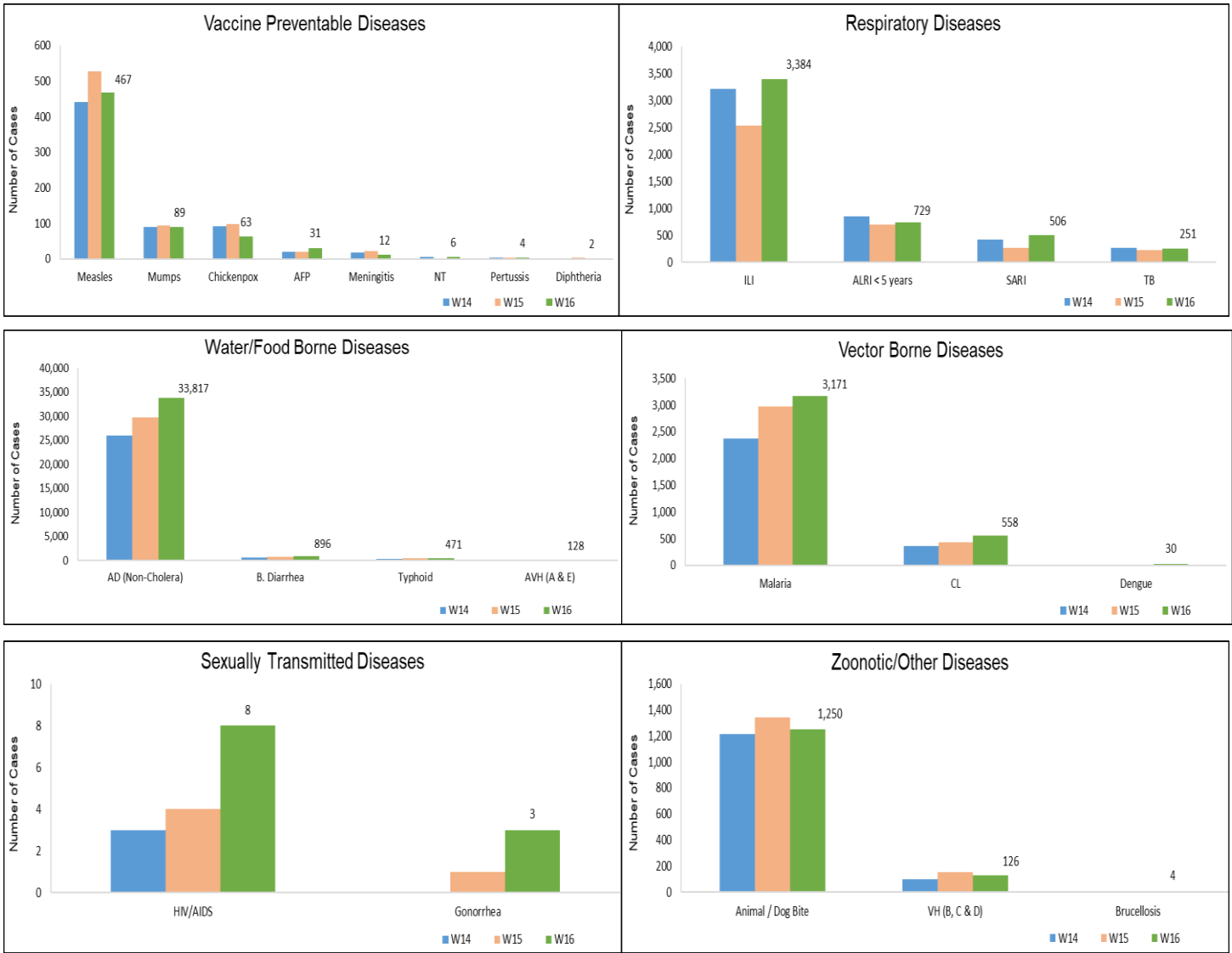
- Cases of AD (Non-Cholera) were maximum followed by ILI, Malaria, Dog bite, B. Diarrhea, ALRI<5years, CL, SARI, Typhoid and Measles.
- AFP, NT, ILI, ALRI<5years, SARI, TB, AD (non-cholera), B.Diarrhea, Malaria, CL, Dengue and HIV/AIDS cases showed an increase in number while Measles, Mumps, Chickenpox, Meningitis, Dog bite and VH (B, C& D) showed a decline in number this week.
- Thirty-one cases of AFP reported from KP. All are suspected cases and need field verification.
- Eight cases of HIV/AIDS reported from KP. A field investigation is required.
- Four suspected cases of Brucellosis were reported from KP, which requires field verification.

**Table 4: District wise distribution of most frequently reported suspected cases during Week 16, KP.**

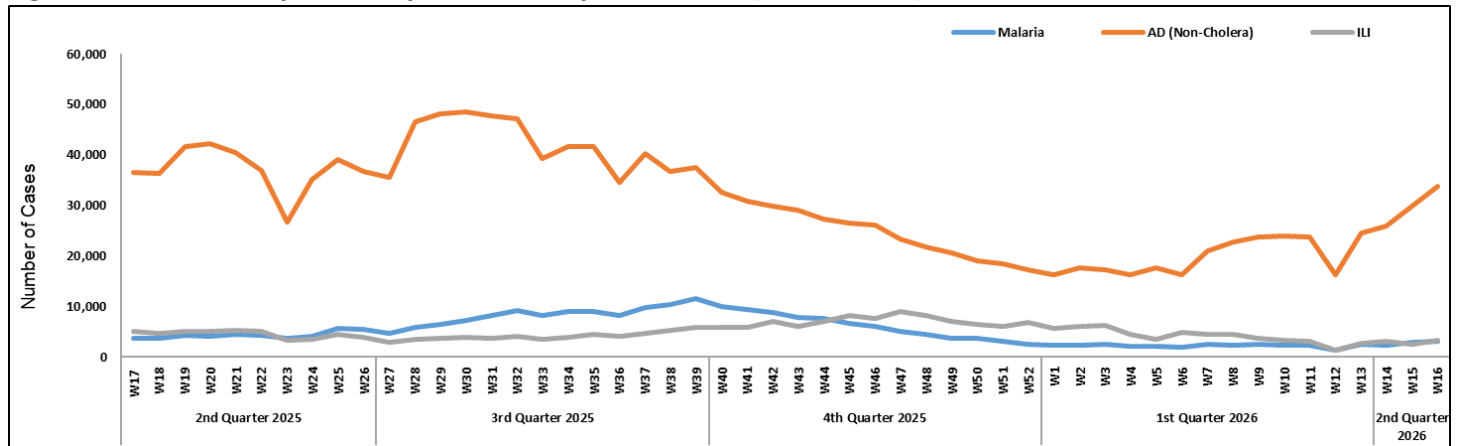
Districts	AD (Non-Cholera)	ILI	Malaria	Animal / Dog Bite	B. Diarrhea	ALRI < 5 years	CL	SARI	Typhoid	Measles
Abbottabad	865	280	2	62	6	36	1	13	1	3
Bajaur	644	5	134	100	32	14	25	99	1	7
Bannu	858	3	823	0	13	9	8	0	81	88
Battagram	241	496	51	12	9	12	0	3	5	0
Buner	251	0	76	0	0	0	0	0	5	0
Charsadda	1,720	353	158	35	90	103	1	0	77	16
Chitral Lower	475	17	5	8	23	5	10	20	6	1
Chitral Upper	121	16	1	4	2	1	0	5	9	1
D.I. Khan	2,534	0	187	26	38	24	1	0	3	84
Dir Lower	1,807	0	42	64	71	7	4	0	21	19
Dir Upper	1,342	37	7	12	34	52	0	0	12	8
Hangu	381	0	73	25	63	2	21	0	1	2
Haripur	1,945	365	0	99	0	21	0	5	10	1
Karak	421	44	82	33	16	40	154	0	5	31
Khyber	668	23	178	44	125	81	101	5	52	0
Kohat	779	2	35	42	20	0	80	0	0	3
Kohistan Lower	59	0	0	0	3	0	0	0	1	0
Kohistan Upper	285	0	1	0	24	2	0	0	0	1
Kolai Palas	67	5	0	0	1	0	0	4	1	0
L & C Kurram	27	6	0	0	1	0	0	0	2	0
Lakki Marwat	649	13	187	89	10	1	0	0	11	3
Malakand	683	131	19	0	0	11	2	10	0	8
Mansehra	766	105	0	0	0	0	0	0	28	0
Mardan	1,678	12	58	17	57	61	0	2	37	43
Mohmand	119	103	91	3	2	0	84	107	0	3
North Waziristan	97	3	96	3	11	21	10	5	12	8
Nowshera	2,781	29	167	62	23	20	27	26	11	44
Orakzai	121	6	15	9	6	0	0	0	0	0
Peshawar	5,613	350	33	13	93	32	2	0	23	52
Shangla	1,062	0	382	160	4	17	0	0	14	4
South Waziristan (Lower)	82	164	52	18	32	7	21	121	7	2
SWU	31	3	9	3	0	4	0	11	1	0
Swabi	1,646	577	69	79	18	47	0	21	26	25
Swat	2,303	88	15	179	34	70	0	0	0	6
Tank	414	21	98	0	4	3	0	0	1	3
Tor Ghar	67	0	18	14	10	17	6	0	2	0
Upper Kurram	215	127	7	35	21	9	0	49	5	1
<b>Total</b>	<b>33,817</b>	<b>3,384</b>	<b>3,171</b>	<b>1,250</b>	<b>896</b>	<b>729</b>	<b>558</b>	<b>506</b>	<b>471</b>	<b>467</b>



**Figure 6: Most frequently reported suspected cases during Week 16, KP.**



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

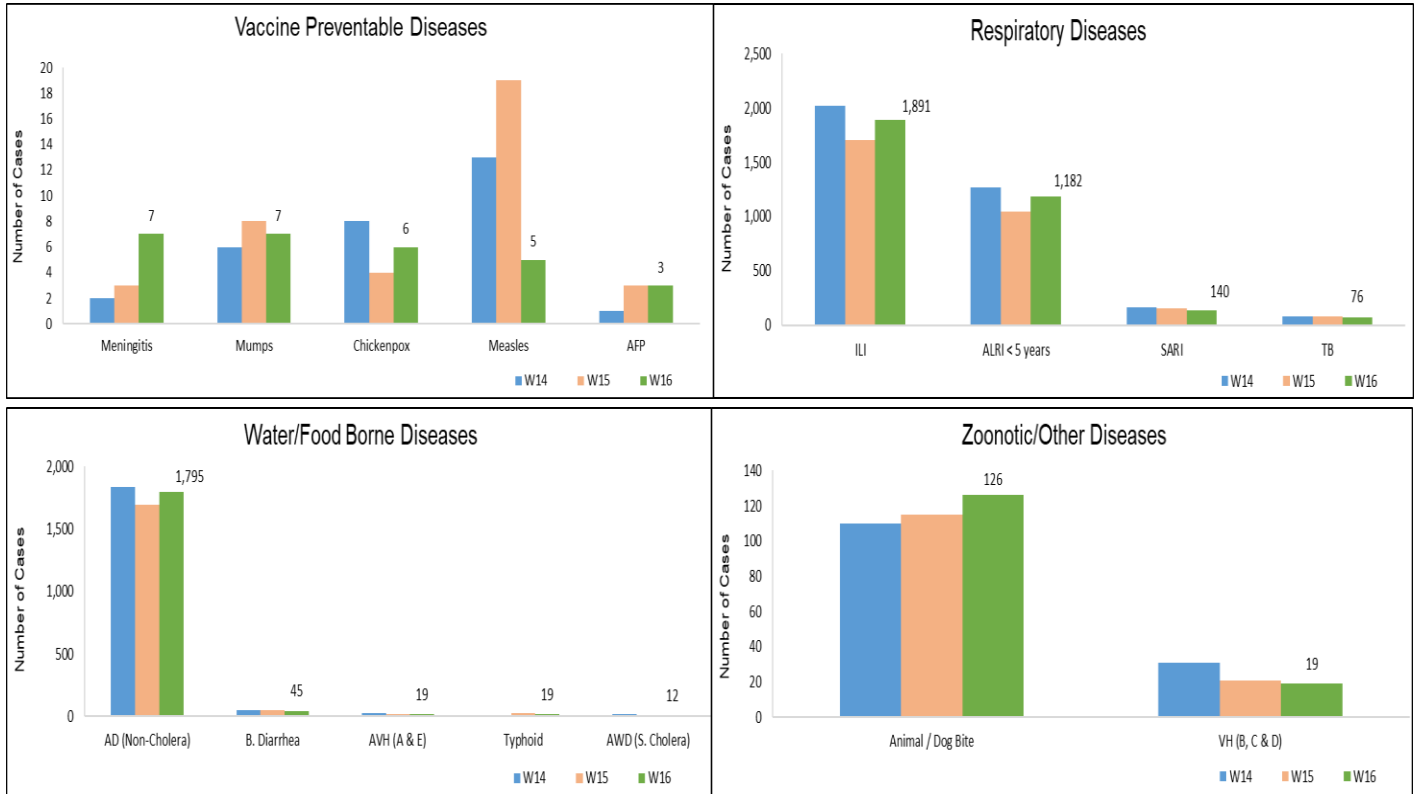


**ICT:** The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera), TB and ALRI<5years. An increase in number was observed in AD (Non-Cholera) cases and ILI this week.

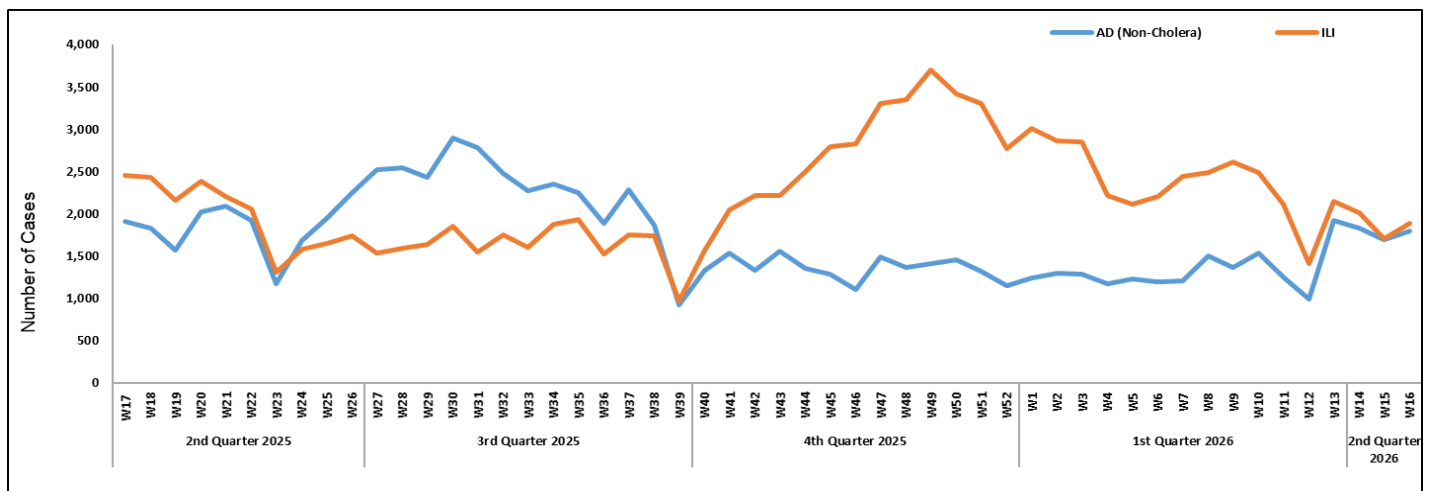
**AJK:** ILI cases were maximum followed by AD (Non-Cholera), ALRI<5years, SARI, Dog Bite, TB and B. Diarrhea cases. An increase in the number of suspected cases was observed for Meningitis, Chicken pox, ILI, ALRI< 5 years, AD (Non-Cholera), and Dog Bite, while a decline in cases was observed for Measles,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

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

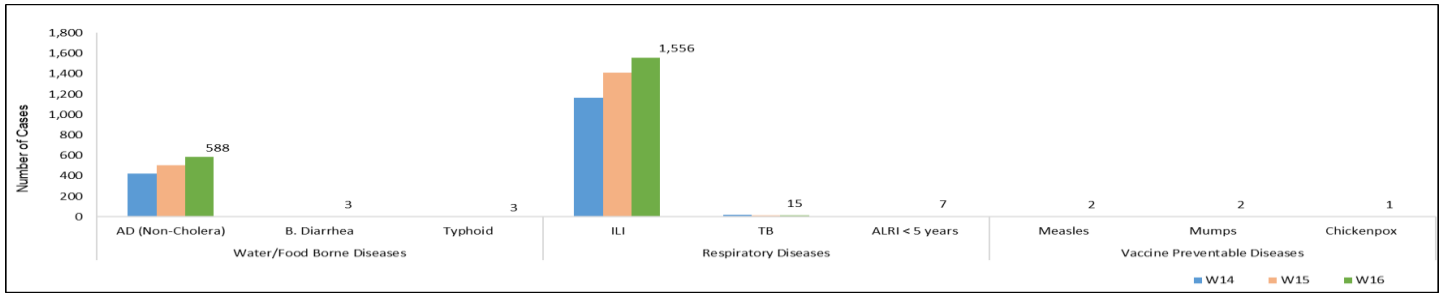
**Figure 8: Most frequently reported suspected cases during Week 16, AJK.**



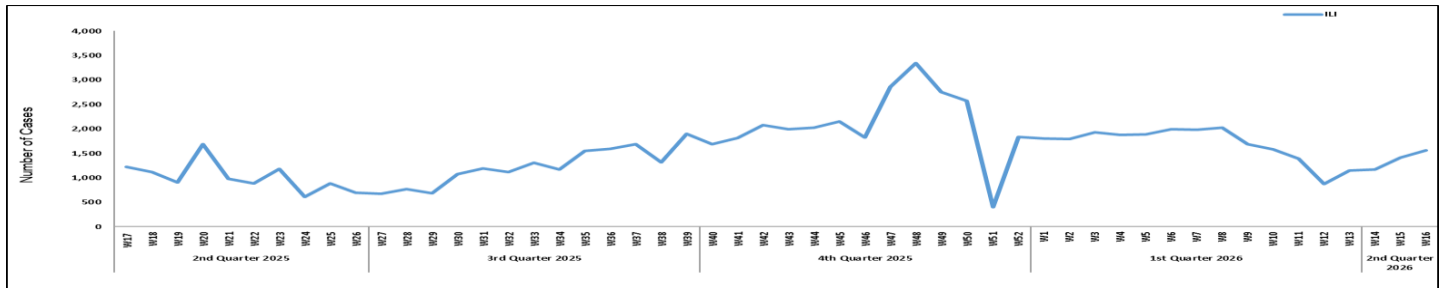
**Figure 9: Week wise reported suspected cases of ILI and AD (Non-Cholera), AJK**



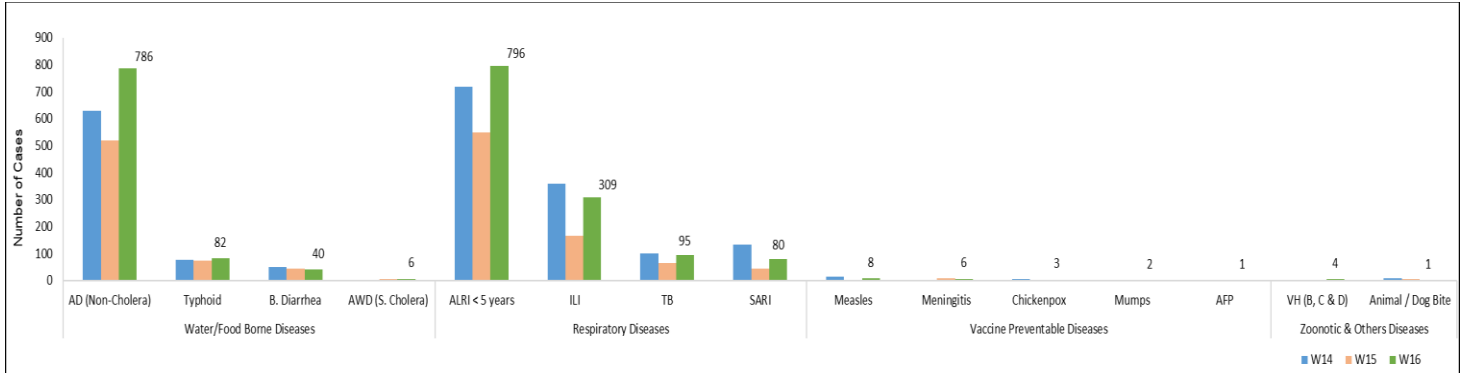
**Figure 10: Most frequently reported suspected cases during Week 16, ICT.**



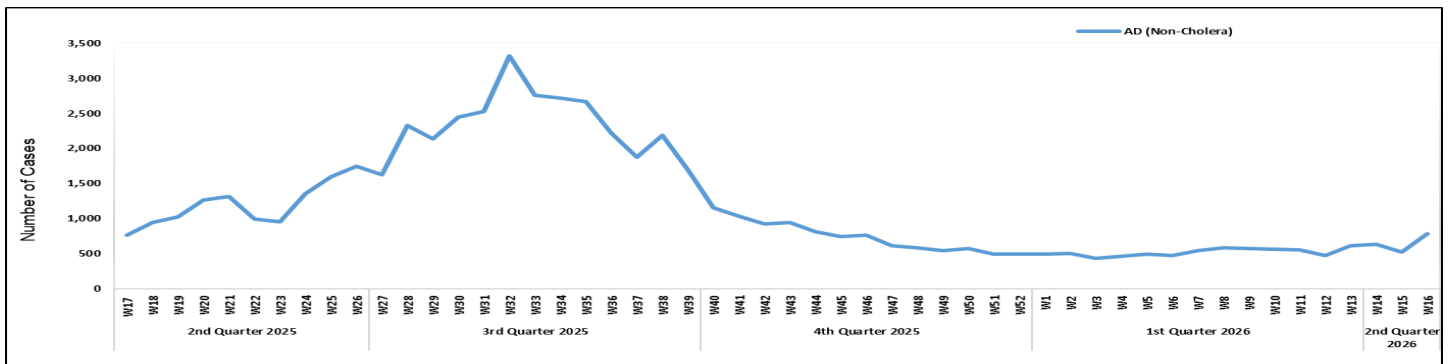
**Figure 11: Week wise reported suspected cases of ILI, ICT.**



**Figure 12: Most frequently reported suspected cases during Week 16, 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 16, 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
AWD (S. Cholera)	55	0	-	-	-	-	-	-	-	-	-	-	-	-
Stool culture & Sensitivity	330	0	-	-	-	-	-	-	-	-	-	-	-	-
Malaria	6,651	298	1,798	104	12	0	-	-	189	0	-	-	31	0
CCHF	-	-	1	1	-	-	-	-	-	-	-	-	-	-
Dengue	1,698	56	781	96	3	0	-	-	-	-	-	-	9	0
VH (B)	17,028	407	1,120	79	42	3	-	-	1,037	10	-	-	870	6
VH (C)	17,416	1,752	1,109	87	43	4	-	-	1,110	3	-	-	870	10
VH (D)	121	12	63	11	-	-	-	-	-	-	-	-	-	-
VH (A)	134	37	-	-	17	4	-	-	-	-	-	-	-	-
VH (E)	86	25	-	-	1	0	-	-	-	-	-	-	-	-
Covid-19	-	-	2	0	-	-	-	-	-	-	-	-	6	0
TB	727	95	147	31	1	0	-	-	149	3	-	-	35	6
HIV/ AIDS	5,148	38	927	4	20	0	-	-	292	0	-	-	777	2
Syphilis	1,110	32	180	1	-	-	-	-	179	2	-	-	-	-
Typhoid	789	6	97	10	-	-	-	-	192	1	-	-	-	-
Diphtheria	4	1	-	-	-	-	-	-	-	-	-	-	-	-
ILI	6	1	2	0	-	-	-	-	-	-	-	-	-	-
Pneumonia (ALRI)	114	13	1	1	-	-	-	-	-	-	-	-	-	-
Meningitis	14	0	-	-	-	-	-	-	-	-	-	-	-	-
Measles	485	212	50	25	432	192	20	12	10	4	377	91	21	11
Leishmaniosis (cutaneous)	1	0	82	32	-	-	-	-	-	-	-	-	-	-
Chikungunya	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickenpox	1	1	-	-	-	-	-	-	-	-	-	-	-	-
Mpox	143	9	1	0	-	-	-	-	-	-	-	-	-	-
SARI	33	12	-	-	-	-	-	-	-	-	-	-	-	-
Covid-19	ILI	-	-	-	-	-	4	0	-	-	12	0	-	-
	SARI	-	-	-	-	34	0	38	0	-	26	0	4	0
Influenza A	ILI	-	-	-	-	-	4	0	-	-	12	0	-	-
	SARI	-	-	-	-	34	1	38	0	-	26	0	4	0
Influenza B	ILI	-	-	-	-	-	4	0	-	-	12	0	-	-
	SARI	-	-	-	-	34	0	38	0	-	26	0	4	0
RSV	ILI	-	-	-	-	-	4	0	-	-	12	0	-	-
	SARI	-	-	-	-	34	0	38	0	-	26	0	4	0



# Integrated Respiratory Viruses Sentinel Surveillance, National Influenza Centre

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.

Figure 14: District wise Influenza sentinel sites, Pakistan.

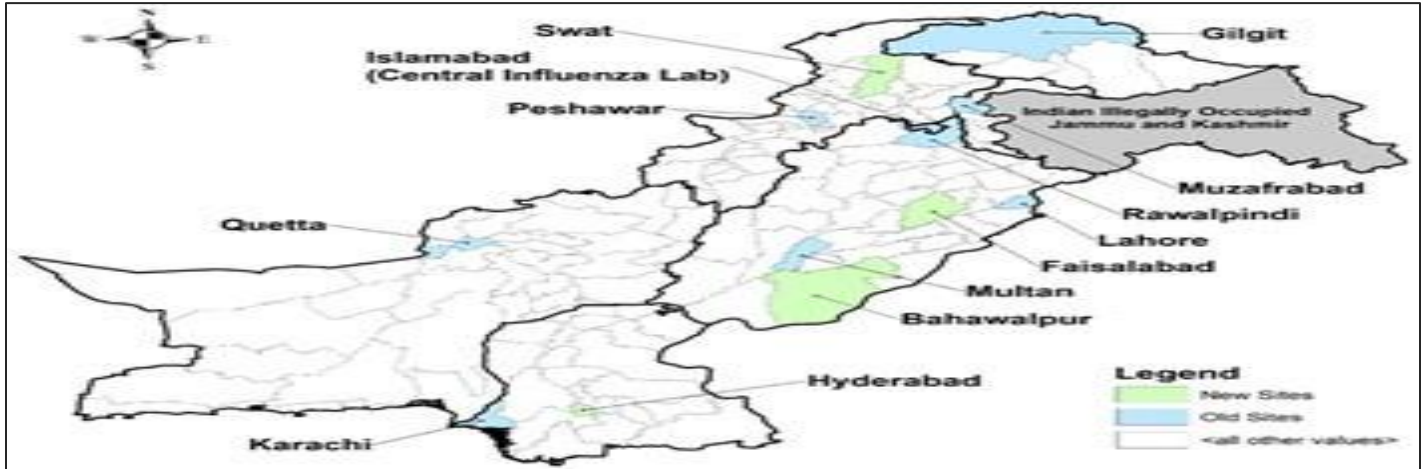


Figure 15: Distribution of suspected samples of ILI and positive cases of Influenza A, Influenza B, COVID-19 and RSV, Week 16, Pakistan.

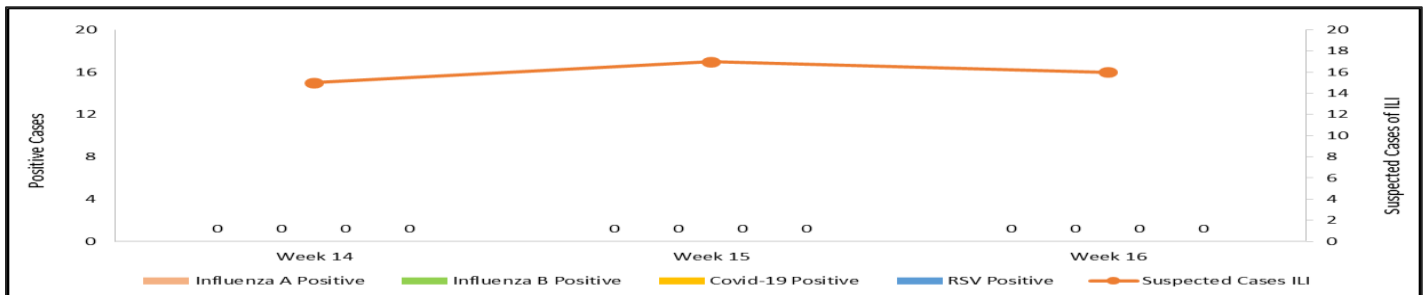
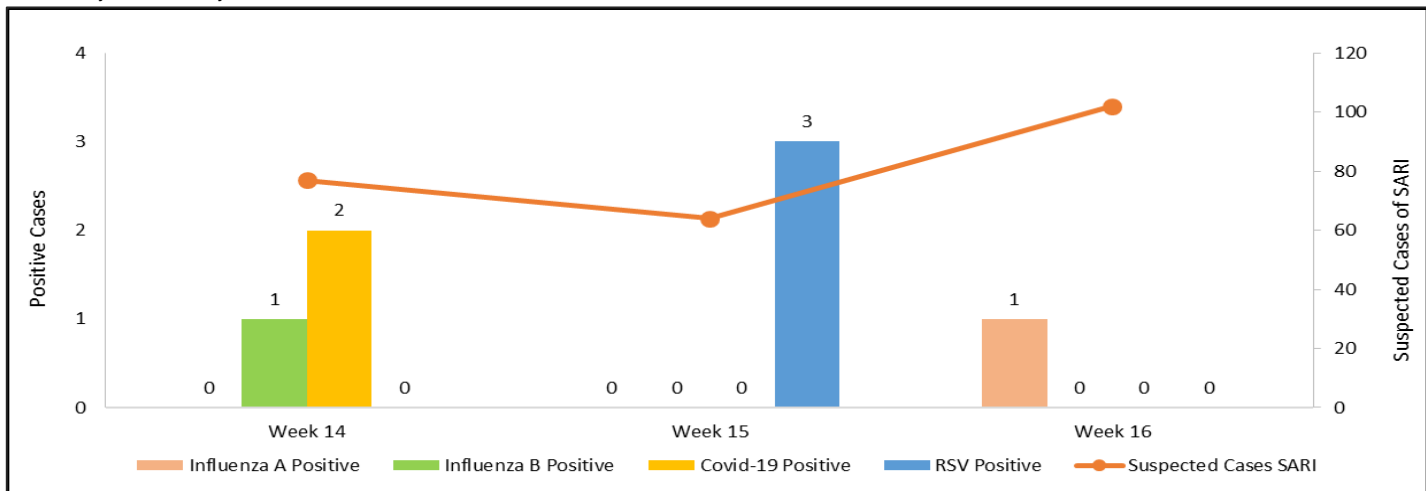


Figure 16: Distribution of suspected samples of SARI and positive cases of Influenza A, Influenza B, COVID-19 and RSV, Week 16, Pakistan.



# IDSR Reports Compliance

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

**Table 6: Compliance of IDSR reporting districts Week 16, Pakistan.**

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	111	106	95%
	Bannu	238	131	55%
	Battagram	59	44	75%
	Buner	34	20	59%
	Bajaur	44	43	98%
	Charsadda	61	60	98%
	Chitral Upper	34	30	88%
	Chitral Lower	35	35	100%
	D.I. Khan	115	114	99%
	Dir Lower	74	57	77%
	Dir Upper	37	33	89%
	Hangu	22	18	82%
	Haripur	72	72	100%
	Karak	36	36	100%
	Khyber	53	41	77%
	Kohat	61	61	100%
	Kohistan Lower	12	11	92%
	Kohistan Upper	20	17	85%
	Kolai Palas	10	9	90%
	Lakki Marwat	70	69	99%
	Lower & Central Kurram	42	12	29%
	Upper Kurram	41	37	90%
	Malakand	42	29	69%
	Mansehra	133	67	50%
	Mardan	80	73	91%
	Nowshera	57	57	100%
	North Waziristan	13	9	69%
	Peshawar	156	135	87%
	Shangla	37	35	95%
	Swabi	66	64	97%
	Swat	77	76	99%
	South Waziristan (Upper)	93	37	40%
	South Waziristan (Lower)	42	29	69%
	Tank	34	33	97%
Torghar	14	13	93%	
Mohmand	68	27	40%	
Orakzai	69	8	12%	
Azad Jammu Kashmir	Mirpur	39	33	85%
	Bhimber	92	11	12%
	Kotli	60	60	100%
	Muzaffarabad	45	45	100%
	Poonch	46	46	100%
	Haveli	39	39	100%
	Bagh	54	32	59%



	Neelum	39	39	100%
	Jhelum Velley	29	29	100%
	Sudhnooti	27	27	100%
<b>Islamabad Capital Territory</b>	ICT	24	24	100%
	CDA	15	6	40%
<b>Balochistan</b>	Gwadar	26	23	88%
	Kech	44	19	43%
	Khuzdar	74	12	16%
	Killa Abdullah	26	26	100%
	Lasbella	55	54	98%
	Pishin	69	0	0%
	Quetta	55	26	47%
	Sibi	36	35	97%
	Zhob	39	10	26%
	Jaffarabad	16	15	94%
	Naserabad	32	32	100%
	Kharan	30	30	100%
	Sherani	15	0	0%
	Kohlu	75	6	8%
	Chagi	36	21	58%
	Kalat	41	40	98%
	Harnai	17	16	94%
	Kachhi (Bolan)	35	19	54%
	Jhal Magsi	28	27	96%
	Sohbat pur	25	0	0%
	Surab	32	3	9%
	Mastung	46	46	100%
	Loralai	33	29	88%
	Killa Saifullah	28	0	0%
	Ziarat	29	22	76%
	Duki	31	0	0%
	Nushki	32	28	88%
	Dera Bugti	45	0	0%
	Washuk	46	0	0%
	Panjgur	38	0	0%
	Awaran	23	0	0%
	Chaman	24	0	0%
	Barkhan	20	8	40%
	Hub	33	30	91%
Musakhel	41	0	0%	
Usta Muhammad	34	34	100%	
<b>Gilgit Baltistan</b>	Hunza	32	32	100%
	Nagar	25	20	80%
	Ghizer	38	38	100%
	Gilgit	44	44	100%
	Diامر	62	60	97%
	Astore	55	55	100%
	Shigar	27	20	74%
	Skardu	53	52	98%
Ganche	29	25	86%	



	Kharmang	46	25	54%
Sindh	Hyderabad	72	72	100%
	Ghotki	64	64	100%
	Umerkot	62	62	100%
	Naushahro Feroze	107	102	95%
	Tharparkar	276	271	98%
	Shikarpur	60	59	98%
	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	27	77%
	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	90	100%
	Sanghar	100	100	100%
	Jacobabad	44	44	100%
	Khairpur	170	168	99%
	Kashmore	59	59	100%
	Matiali	42	42	100%
	Jamshoro	75	73	97%
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 16, 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	1	100%
	Abbottabad	1	1	100%
	Swat	1	0	0%



## Notes from the field:

### Outbreak Investigation Report of Crimean-Congo Hemorrhagic Fever (CCHF) District Karak, Khyber Pakhtunkhwa, Pakistan, March 2026

Public Health Coordinator  
District Entomologist  
IDSRS Focal Person

#### Introduction

Crimean-Congo Hemorrhagic Fever (CCHF) is a severe viral zoonotic disease caused by a Nairovirus belonging to the family *Bunyaviridae*.<sup>[1]</sup> The disease is mainly transmitted through bites of infected *Hyalomma* ticks or through direct contact with blood and tissues of infected animals and humans.<sup>[2]</sup> CCHF has a wide geographic distribution and is endemic in Africa, Asia, the Middle East, and Eastern Europe, with reported case fatality rates ranging from 10% to 40%.<sup>[1]</sup> The World Health Organization has identified CCHF as a priority disease because of its epidemic potential and public health significance.<sup>[3]</sup> Pakistan is considered an endemic country for CCHF, with sporadic outbreaks frequently reported from Balochistan and Khyber Pakhtunkhwa provinces.<sup>[4]</sup> High-risk groups include butchers, livestock handlers, farmers, and healthcare workers due to occupational exposure to infected animals and ticks.<sup>[5]</sup> On 05 March 2026, a suspected case of CCHF was reported from District Karak, prompting an outbreak investigation.

#### Objectives

1. To determine the magnitude of the outbreak
2. To determine possible risk factors
3. To recommend appropriate control and preventive measures

#### Methods

A descriptive outbreak investigation was conducted in District Karak following the report of a suspected CCHF case on 05 March 2026. The study population included the confirmed patient, household members, close contacts, and residents of the affected locality. The investigation was conducted in the Tappi Algadi area of District Karak, Khyber Pakhtunkhwa, Pakistan, from 05 to 06 March 2026.

A suspected case was defined as “any person presenting with acute onset of high-grade fever, body aches, headache, rash, nausea, vomiting, or hemorrhagic manifestations with history of tick exposure, livestock handling, or travel to endemic areas during the investigation period”. A confirmed case was defined as “a suspected case with laboratory confirmation for CCHF virus”.

Data were collected using a structured case investigation form through patient interviews, household assessment, and review of hospital medical records. Active case finding was conducted in surrounding households to identify any secondary cases. Surveillance activities were initiated in the affected locality. Laboratory samples were collected and sent to the Public Health Reference Laboratory (PHRL), KMU Peshawar, for confirmation of CCHF infection.

Descriptive analysis was performed to summarize demographic characteristics, clinical manifestations, possible risk factors, and laboratory findings. Frequencies and proportions were calculated where applicable.

#### Results

One confirmed case of Crimean-Congo Hemorrhagic Fever was identified during the



investigation period. The patient was a 26-year-old male resident of Tappi Algadi, District Karak. The affected individual was a butcher and animal merchant by occupation.

The patient had a history of travel to Dera Ghazi Khan on 24 February 2026, where he stayed for two days before returning to Karak. Symptoms developed on 27 February 2026 and included high-grade fever, body aches, headache, generalized rash, nausea, vomiting, severe weakness, and dehydration. Physical examination revealed rashes over the whole body and marked weakness.

Initial laboratory investigations showed Dengue NS1 positivity, while Dengue IgG and IgM were negative. Hematological findings demonstrated leukopenia and thrombocytopenia with a total leukocyte count of 3,000/mm<sup>3</sup> and platelet count of 81,000/mm<sup>3</sup>. Repeat complete blood count revealed worsening thrombocytopenia with platelet count decreasing to 40,000/mm<sup>3</sup>. Due to persistent symptoms and declining platelet levels, a blood sample for CCHF was collected on 05 March 2026 and tested positive at PHRL KMU Peshawar on 06 March 2026. At Hayatabad Medical Complex (HMC), Peshawar, platelet count further dropped to 10,000/mm<sup>3</sup>, requiring blood transfusion, after which the patient showed clinical improvement.

The major risk factors identified were occupational exposure as a butcher and animal merchant, possible contact with livestock, and recent travel history to an endemic area. No secondary cases were identified during active surveillance in the surrounding community.

Public health response activities included household investigation, indoor residual spraying in five houses, distribution of bed nets, community awareness sessions regarding prevention of CCHF and Dengue, and coordination with the District Livestock Department for tick control measures in animals. Family members were advised to provide contact samples; however, they refused testing. Continued surveillance and vector control activities remained in progress.

## Discussion

This investigation confirmed a case of Crimean-Congo Hemorrhagic Fever in District Karak, highlighting the continued public health threat posed by zoonotic and vector-borne diseases in Pakistan. The affected patient belonged to a high-risk occupational group, which is consistent with previous studies showing increased exposure among butchers, livestock handlers, and animal traders. [4,5] The patient's recent travel history and occupational exposure to animals may have contributed to infection.

The clinical presentation of fever, rash, thrombocytopenia, and hemorrhagic manifestations observed in this investigation is consistent with the classical presentation of CCHF described in previous literature.[2,6] Initial positivity for Dengue NS1 complicated the diagnosis and delayed suspicion of CCHF, a challenge frequently encountered in endemic countries where multiple viral hemorrhagic fevers coexist.[7] Severe thrombocytopenia requiring transfusion has also been reported in previous CCHF outbreaks.[6]

Rapid public health response measures, including active surveillance, vector control activities, indoor residual spraying, and coordination with livestock authorities, likely helped prevent secondary transmission in the community. Similar integrated One Health approaches have been recommended globally to effectively control zoonotic outbreaks.[3] The absence of secondary cases indicates that containment measures were timely and effective. However, the refusal of family contacts to provide samples limited the ability to complete risk assessment and surveillance activities.

Improved awareness among healthcare workers regarding differential diagnosis of hemorrhagic fevers, particularly in high-risk occupational groups, is essential for early diagnosis, isolation, and management. [1,4] Strengthening collaboration between human and animal health sectors remains crucial for preventing future outbreaks in endemic regions.



## Conclusion

A confirmed case of Crimean-Congo Hemorrhagic Fever was identified in District Karak in March 2026 involving a young male butcher and animal merchant with a history of travel and livestock exposure. Prompt laboratory confirmation, clinical management, surveillance, and vector control measures helped contain the outbreak and prevent secondary transmission. The investigation emphasizes the importance of early recognition of CCHF among high-risk populations and the need for integrated One Health approaches for disease prevention and control.

## Recommendations

1. **Strengthen IDSR surveillance** for early detection and reporting of CCHF cases in endemic districts.
2. **Enhance awareness and training of healthcare workers** regarding identification and management of viral hemorrhagic fevers.
3. **Encourage contact tracing** and compliance with sample collection for better outbreak monitoring.
4. **Ensure availability of personal protective equipment (PPE)** in healthcare facilities and slaughterhouses.
5. **Improve laboratory diagnostic capacity** for rapid confirmation of suspected CCHF cases.
6. **Conduct regular tick control** measures in livestock through collaboration with livestock departments.
7. **Promote health education** among butchers, livestock handlers, and animal traders regarding personal protective measures.
8. **Continue integrated One Health coordination** between public health and veterinary sectors to prevent future outbreaks.

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## Knowledge Hub

### Mumps: What You Need to Know

Mumps is a contagious disease caused by a virus. It is best known for causing painful swelling of the salivary glands (parotid glands) located near the ears. While often a mild childhood illness, mumps can lead to serious complications.

### What is Mumps?

Mumps is caused by the mumps virus, which belongs to the paramyxovirus family. It is a vaccine-preventable disease. The widespread use of the MMR (Measles, Mumps, Rubella) vaccine has made mumps rare in many countries.



However, outbreaks can still occur, especially in groups with low vaccination rates.

## How Mumps Spreads

Mumps spreads through respiratory droplets from an infected person's nose or throat. It can spread when an infected person coughs, sneezes, or talks, as well as by sharing drinks, food, or eating utensils. It can also spread if an infected person is in close contact with others for a long period of time

## Signs & Symptoms

Symptoms usually appear 16 to 18 days after exposure to the virus, but can range from 12 to 25 days. About one-third of people infected with mumps have very mild or no symptoms at all.

Common symptoms include:

Swollen, tender salivary glands (parotitis) under the ears on one or both sides of the face. This makes the cheeks and jaw look puffy.

Fever

Headache

Muscle aches

Tiredness

Loss of appetite

Pain while chewing or swallowing

## Complications

Most people recover fully from mumps, but complications can occur, especially in adults. Complications are rare but include:

**Orchitis:** Inflammation and swelling of one or both testicles in males who have reached puberty. This is the most common serious complication in males and can, in rare cases, lead to reduced fertility.

**Meningitis:** Inflammation of the lining of the brain and spinal cord.

**Encephalitis:** Inflammation of the brain (very rare).

**Oophoritis/Mastitis:** Inflammation of the ovaries or breasts in females who have reached puberty.

**Hearing loss:** Temporary or, rarely, permanent hearing loss in one or both ears.

## Prevention

The best way to prevent mumps is through vaccination with the MMR vaccine.

**Two doses are recommended:** the first dose at 12–15 months of age and the second dose at 4–6 years of age.

## Diagnosis and Treatment

**Diagnosis:** Mumps is diagnosed by a healthcare provider based on symptoms and confirmed with a blood test or by testing a swab from the inside of the cheek.

**Treatment:** There is no specific treatment to cure mumps once you have it. Treatment focuses on managing symptoms:

**Rest:** Get plenty of rest.

**Pain Relief:** Use over-the-counter pain relievers (like acetaminophen or ibuprofen) for fever and aches.

**Isolation:** Stay home from work, school, or public places for at least five days after the swelling begins to avoid spreading the virus.

**More : mumps, please visit:**

**Centers for Disease Control and Prevention (CDC):**

<https://www.cdc.gov/mumps/index.html>

**World Health Organization (WHO):**  
<https://www.who.int/news-room/factsheets/detail/mumps>

**Public Health Agency of Canada (PHAC) Public Health Agency of Canada (PHAC):**  
<https://www.canada.ca/en/publichealth/services/diseases/mumps.html>

**UK Health Security Agency (UKHSA) / National Health Service (NHS) - UK):**  
<https://www.nhs.uk/conditions/mumps/>



# PROTECT YOURSELF AGAINST MUMPS



**MMR VACCINATION IS THE BEST WAY TO PREVENT MUMPS!**  
THERE IS NO TREATMENT FOR MUMPS IF YOU GET IT

## KEEP FROM SPREADING MUMPS



Don't share things that have saliva on them



Cover your coughs and sneezes



Stay home when you are sick



Wash your hands often with soap and water



Clean and disinfect surfaces

## SIGNS AND SYMPTOMS OF MUMPS



Mumps is best known for the puffy cheeks and swollen jaw that it causes.



Fever



Headache



Loss of appetite



Muscle aches



Tiredness

## VACCINATION ALSO HELPS PREVENT MUMPS COMPLICATIONS



Complications can include swelling of the:

- testicles
- ovaries
- breasts
- pancreas
- brain
- spinal cord tissue

**IF YOU HAVE SYMPTOMS, STAY HOME AND AWAY FROM OTHERS. CONTACT YOUR DOCTOR OR HEALTH SERVICES AT YOUR INSTITUTION.**



	<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>