

Integrated Disease Surveillance & Response (IDSR) Report

Center of Disease Control
National Institutes of Health, Islamabad

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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Public Health Bulletin - Pakistan, Week 34, 2026

Overview

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The **Integrated Disease Surveillance & Response (IDSR) Weekly Public Health Bulletin** is your trusted source for the latest disease trends, outbreak updates, and essential public health information in Pakistan. Published weekly, the bulletin provides **timely, reliable, and evidence-based** information for public health professionals, policymakers, healthcare workers, and the public. It presents key surveillance findings, outbreak investigations, seasonal disease trends, and practical public health recommendations to support informed decision-making and strengthen disease prevention efforts.

The bulletin is developed using verified surveillance data and expert review to ensure its content remains accurate, relevant, and aligned with Pakistan's public health priorities. It also addresses emerging health misinformation by providing factual, science-based information that communities can trust.

This Week's Highlights:

- **Pakistan Launches National Wastewater Environmental Surveillance Strategy and Genomics Dashboard to Strengthen Early Warning Systems**
- **Knowledge Hub – Pertussis (Whooping cough)**

Together, we can strengthen disease surveillance, promote informed action, and build a healthier Pakistan.

By transforming surveillance data into actionable public health intelligence, the IDSR Weekly Public Health Bulletin continues to support evidence-based decision-making and protect communities across Pakistan.

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Stay informed. Stay prepared. Stay healthy.

Note: All reported cases in this report are suspected cases

- During Week 34, the most frequently reported cases were of Acute Diarrhea (Non-Cholera), followed by Malaria, ILI, TB, ALRI <5 years, B. Diarrhea, Animal/Dog Bite, VH (B, C & D), Typhoid, SARI, AVH (A & E) and CL.
- Twenty cases of AFP were reported from KP, eighteen from Sindh, and two from GB.
- Thirteen suspected cases of HIV/ AIDS reported from Sindh, twelve from Balochistan, six from KP, and 1 from GB.
- Two suspected cases of Brucellosis were reported from KP.
- Among VPDs, there is an increase in the number of cases of AFP and Mumps this week.
- Among Respiratory diseases, there is an increase in the number of cases of ILI, ALRI < 5 years, TB, and SARI this week.
- Among Water/food-borne diseases, there is a decrease in the number of cases of AD (Non-cholera), B.Diarrhea and Typhoid this week.
- Among Vector-borne diseases, there is a decrease in the number of cases of Malaria this week.
- Among STDs, there is an increase in the number of cases of HIV/AIDs this week.
- Among Zoonotic/Other diseases, there is an increase in the number of cases of Animal / Dog Bite and VH (B, C & D) 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 75%
- Sindh is the top reporting region with a compliance rate of 97%, followed by GB 93%, ICT 83%, and KP 81%.
- The lowest compliance rate was observed in Balochistan 51% and AJK 0%.

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	2,277	1,847	81
Azad Jammu Kashmir	476	0	0
Islamabad Capital Territory	36	30	83
Balochistan	1,305	665	51
Gilgit Baltistan	405	376	93
Sindh	2,115	2,056	97
National	6,614	4,974	75

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

MEASLES

- **Surveillance:** Ensure early detection, immediate notification, and investigation of suspected cases and clusters.
- **Case Finding:** Conduct active case finding and contact tracing in affected communities and healthcare facilities.
- **Laboratory Testing:** Ensure timely specimen collection and laboratory confirmation.
- **Immunization:** Identify immunity gaps and strengthen routine and outbreak-response vaccination where indicated.
- **Infection Control:** Isolate suspected cases and implement appropriate airborne precautions in healthcare settings.
- **Case Management:** Ensure appropriate clinical management, vitamin A supplementation, and timely referral of complicated cases.
- **Risk Communication:** Promote vaccination, early recognition of symptoms, and timely healthcare seeking.

MUMPS

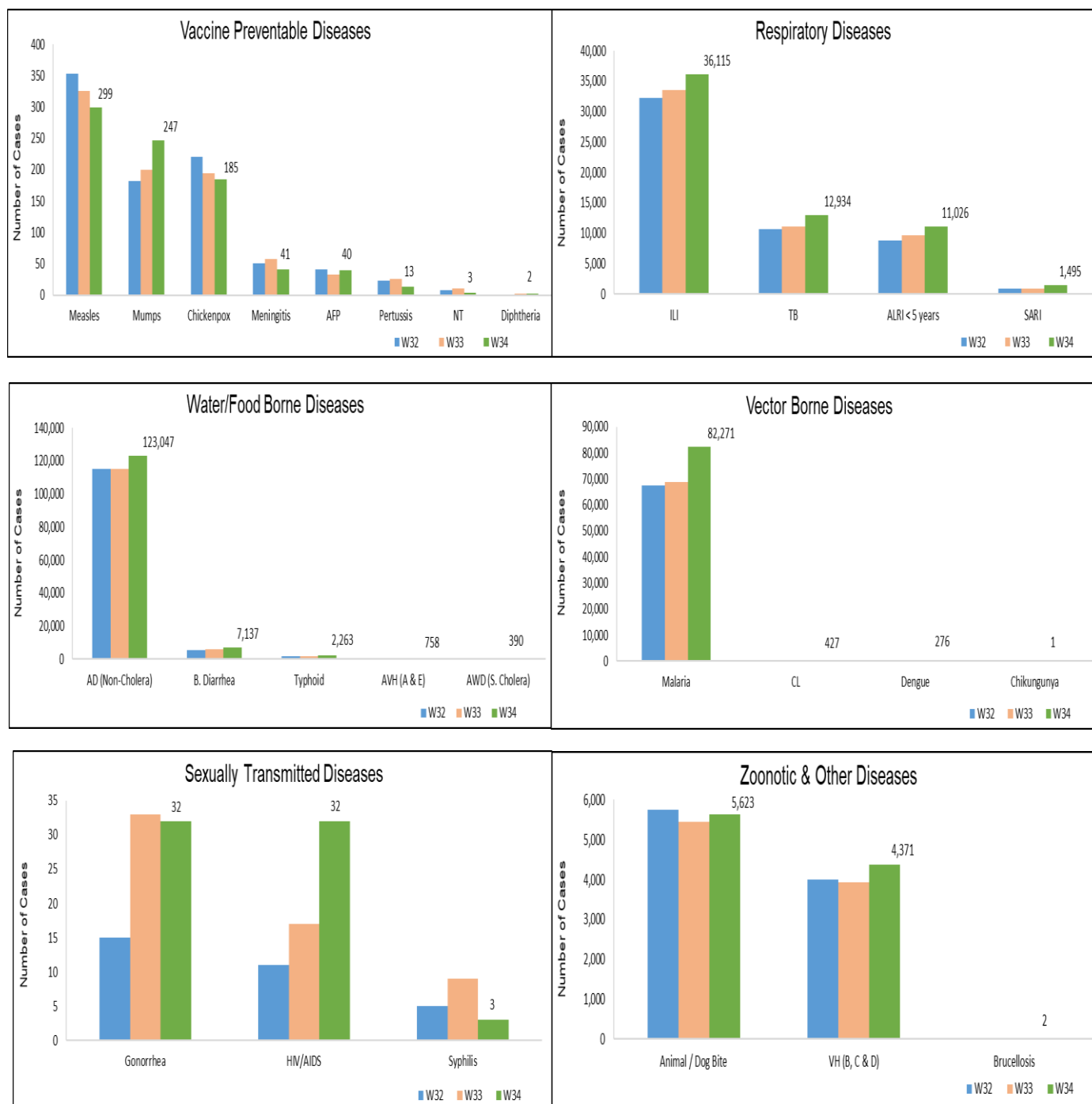
- **Surveillance:** Ensure early detection, notification, and investigation of suspected cases and clusters.
- **Case Finding:** Conduct active case finding and epidemiological investigation, particularly in schools and congregate settings.
- **Laboratory Testing:** Ensure appropriate specimen collection and laboratory confirmation where indicated.
- **Immunization:** Review vaccination status and strengthen mumps-containing vaccine coverage according to national recommendations.
- **Infection Control:** Advise cases to isolate for five days after onset of parotitis and implement appropriate droplet precautions.
- **Clinical Management:** Monitor for complications, including orchitis, meningitis, encephalitis, and pancreatitis, with timely referral when required.
- **Risk Communication:** Raise awareness about symptoms, transmission, respiratory hygiene, vaccination, and timely healthcare seeking.



Table 1: Province/Area wise distribution of most frequently reported suspected cases during Week 34, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	NR	6,774	2,388	580	50,638	NR	62,667	123,047
Malaria	NR	1,987	0	2	7,919	NR	72,363	82,271
ILI	NR	4,089	380	1,579	3,149	NR	26,918	36,115
TB	NR	15	141	15	291	NR	12,472	12,934
ALRI < 5 years	NR	1,501	541	0	685	NR	8,299	11,026
B. Diarrhea	NR	1,182	93	5	1,446	NR	4,411	7,137
Animal / Dog Bite	NR	97	45	2	1,438	NR	4,041	5,623
VH (B, C & D)	NR	49	31	0	127	NR	4,164	4,371
Typhoid	NR	355	89	3	604	NR	1,212	2,263
SARI	NR	497	103	0	396	NR	499	1,495
AVH (A & E)	NR	7	1	0	308	NR	442	758
CL	NR	41	0	0	380	NR	6	427
AWD (S. Cholera)	NR	345	41	0	4	NR	0	390
Measles	NR	3	15	0	244	NR	37	299
Dengue	NR	0	0	0	137	NR	139	276
Mumps	NR	41	7	0	152	NR	47	247
Chickenpox/ Varicella	NR	12	10	1	159	NR	3	185
Meningitis	NR	0	3	0	17	NR	21	41
AFP	NR	0	2	0	20	NR	18	40
Gonorrhea	NR	5	0	0	4	NR	23	32
HIV/AIDS	NR	12	1	0	6	NR	13	32
Pertussis	NR	1	0	0	11	NR	1	13
NT	NR	0	0	0	3	NR	0	3
Syphilis	NR	0	0	0	0	NR	3	3
Brucellosis	NR	0	0	0	2	NR	0	2
Diphtheria (Probable)	NR	0	2	0	0	NR	0	2
Chikungunya	NR	0	0	0	0	NR	1	1

Figure 1: Most frequently reported suspected cases during Week 34, Pakistan.



- Malaria cases were maximum followed by AD (non-cholera), ILI, TB, ALRI<5 Years, B. Diarrhea, VH (B, C & D, Animal / Dog Bite, Typhoid and SARI.
- Malaria cases are mostly from Badin, Mirpurkhas and Ghotki whereas ILI cases are from Khairpur, Mirpurkhas and Sukkur.
- Eighteen cases of AFP and thirteen cases of HIV/AIDs were reported from Sindh. They are suspected cases and need field verification.
- There is a decline in number of cases of Measles, Meningitis, Chickenpox, Pertussis while an increase in the number of cases of Mumps, AFP, Diphtheria, ILI, TB, ALRI<5years, SARI, AD (non-cholera), B. Diarrhea, Typhoid, Malaria, HIV/AIDs, Dog Bite, and VH (B, C & D) this week.

Table 2: District wise distribution of most frequently reported suspected cases during Week 34, Sindh.

Districts	Malaria	AD (Non-Cholera)	ILI	TB	ALRI < 5 years	B. Diarrhea	VH (B, C & D)	Animal / Dog Bite	Typhoid	SARI
Badin	6,303	5,713	2,294	967	598	468	157	161	94	0
Dadu	2,962	3,150	771	697	1,327	513	221	279	319	311
Ghotki	5,172	2,497	3	620	638	195	784	294	2	0
Hyderabad	1,260	3,292	1,506	415	189	117	128	109	8	0
Jacobabad	1,567	942	525	293	252	142	39	252	35	23
Jamshoro	2,528	2,861	33	708	278	171	139	142	54	0
Kamber	2,899	2,243	7	801	239	143	32	259	10	0
Karachi Central	4	1,998	1,414	19	5	1	24	116	108	0
Karachi East	212	426	32	41	26	7	45	11	4	0
Karachi Keamari	39	702	610	15	17	3	0	12	4	0
Karachi Korangi	73	436	6	19	3	7	1	6	9	0
Karachi Malir	92	1,192	2,367	139	145	27	11	33	11	0
Karachi South	19	157	28	0	0	0	0	0	0	0
Karachi West	353	901	1,351	96	263	37	13	83	17	6
Kashmore	1,698	532	444	84	53	69	6	80	10	0
Khairpur	4,111	3,644	5,992	993	709	396	257	297	197	155
Larkana	3,620	2,374	121	857	265	340	34	98	2	0
Matari	3,759	2,388	8	699	196	98	215	106	2	0
Mirpurkhas	5,489	4,576	2,659	797	363	233	77	163	17	0
Naushero Feroze	1,452	1,228	829	267	291	115	44	317	81	0
Sanghar	3,573	1,796	71	943	275	51	595	261	11	0
Shaheed Benazirabad	2,962	1,924	0	312	143	97	176	216	119	0
Shikarpur	2,377	1,468	2	217	165	200	326	216	6	2
Sujawal	1,414	2,522	0	86	129	42	69	77	6	0
Sukkur	2,331	1,783	2,401	423	171	202	354	157	18	0
Tando Allahyar	4,067	1,938	1,217	416	137	118	85	102	5	0
Tando Muhammad Khan	2,148	1,983	0	543	139	191	72	84	2	0
Tharparkar	2,474	3,371	814	580	673	193	28	0	11	0
Thatta	2,408	2,086	1,413	81	299	117	174	110	25	2
Umerkot	4,997	2,544	0	344	311	118	58	0	25	0
Total	72,363	62,667	26,918	12,472	8,299	4,411	4,164	4,041	1,212	499

Figure 2: Most frequently reported suspected cases during Week 34, Sindh.

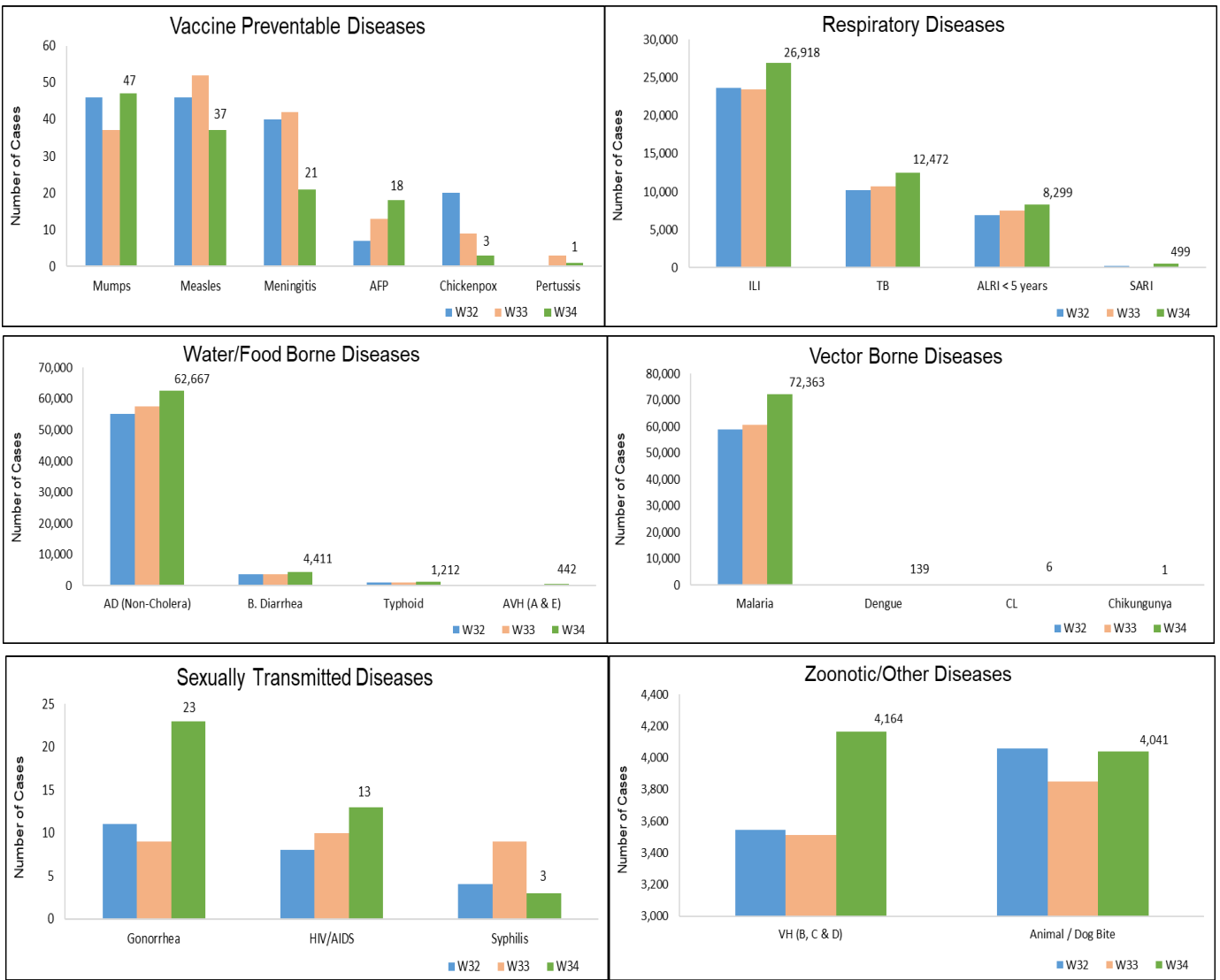
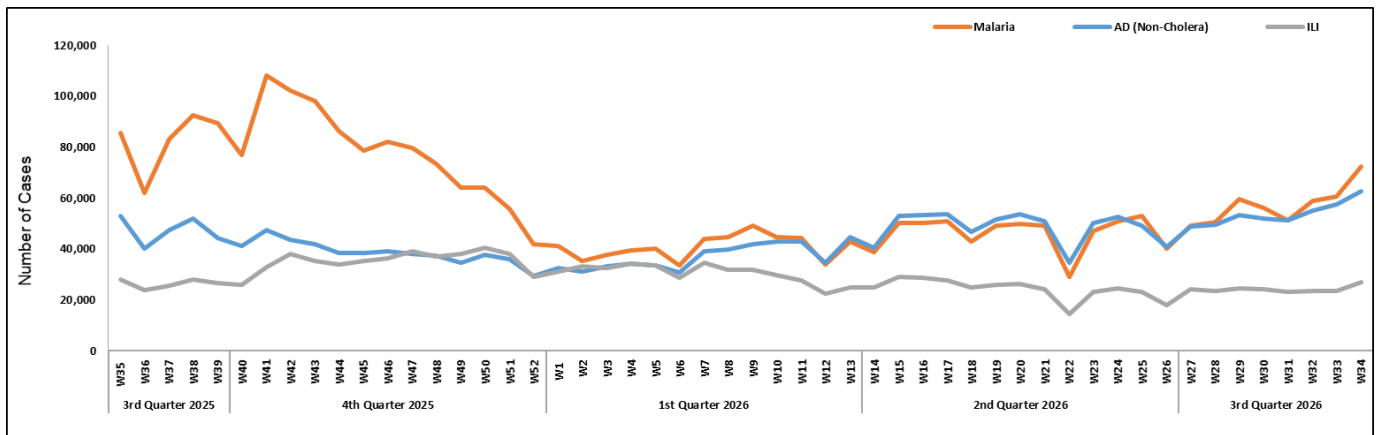


Figure 3: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Sindh.



- AD (Non-Cholera), ILI, Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, AWD (S. Cholera), Animal / Dog Bite, and VH (B, C&D) cases were the most frequently reported diseases from Balochistan province.
- Twelve cases of HIV/AIDs reported from KP. Field investigation is required.
- ILI cases are mostly reported from Kech (Turbat), Kharan and Pishin while AD (Non-Cholera) cases are mostly reported from Lasbella, Pishin and Loralai.
- Mumps, Chickenpox, ALRI<5years, SARI, AD(Non-cholera), B.Diarrhea, Typhoid, AWD (S. Cholera), Malaria, CL, HIV/AIDs and Animal/Dogbite showed an increase in the number of cases. A decline has been observed in Measles, Pertussis, and ILI this week.

Table 3: District wise distribution of most frequently reported suspected cases during Week 34, Balochistan.

Districts	AD (Non-Cholera)	ILI	Malaria	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	AWD (S. Cholera)	Animal / Dog Bite	VH (B, C & D)
Awaran	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Barkhan	61	39	95	12	10	0	33	6	24	0
Chagai	215	284	39	0	43	0	7	0	0	3
Chaman	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dera Bugti	22	0	25	1	10	3	8	0	0	0
Duki	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Gwadar	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Harnai	183	3	45	126	61	0	0	0	0	0
Hub	116	32	18	11	2	1	0	0	0	0
Jaffarabad	139	0	95	0	26	0	0	0	4	0
Jhal Magsi	46	0	4	14	0	0	1	0	0	0
Kachhi (Bolan)	130	102	73	25	7	71	NR	10	6	NR
Kalat	12	0	12	5	2	1	4	0	0	0
Kech (Turbat)	398	879	495	25	52	NR	1	NR	NR	2
Kharan	225	548	4	2	80	20	6	0	0	0
Khuzdar	86	36	35	2	12	2	10	0	0	0
Killa Abdullah	285	166	7	2	61	65	10	36	3	4
Killa Saifullah	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Kohlu	43	83	7	NR	NR	NR	2	NR	NR	NR
Lasbella	563	85	212	289	32	0	48	0	7	21
Loralai	460	453	66	34	80	59	27	7	4	0
Mastung	173	183	65	73	32	52	17	163	10	9
MusaKhel	197	38	243	20	32	0	23	12	0	0
Naseerabad	347	0	111	10	9	27	74	0	29	3
Nushki	179	0	0	2	88	8	0	9	0	0
Panjgur	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Pishin	545	459	28	88	167	48	23	33	5	0
Quetta	228	170	9	154	30	4	6	4	0	0
Sherani	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Sibi	420	114	128	104	39	76	22	20	1	0
Sohbat pur	269	6	40	176	89	9	12	0	1	1
Surab	21	59	0	0	0	0	0	0	0	0
Usta Muhammad	1,007	133	40	224	124	0	5	0	2	6
Washuk	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Zhob	61	10	29	25	8	46	NR	23	NR	NR
Ziarat	343	207	62	77	86	5	16	22	1	0
Total	6,774	4,089	1,987	1,501	1,182	497	355	345	97	49

Figure 4: Most frequently reported suspected cases during Week 34, Balochistan.

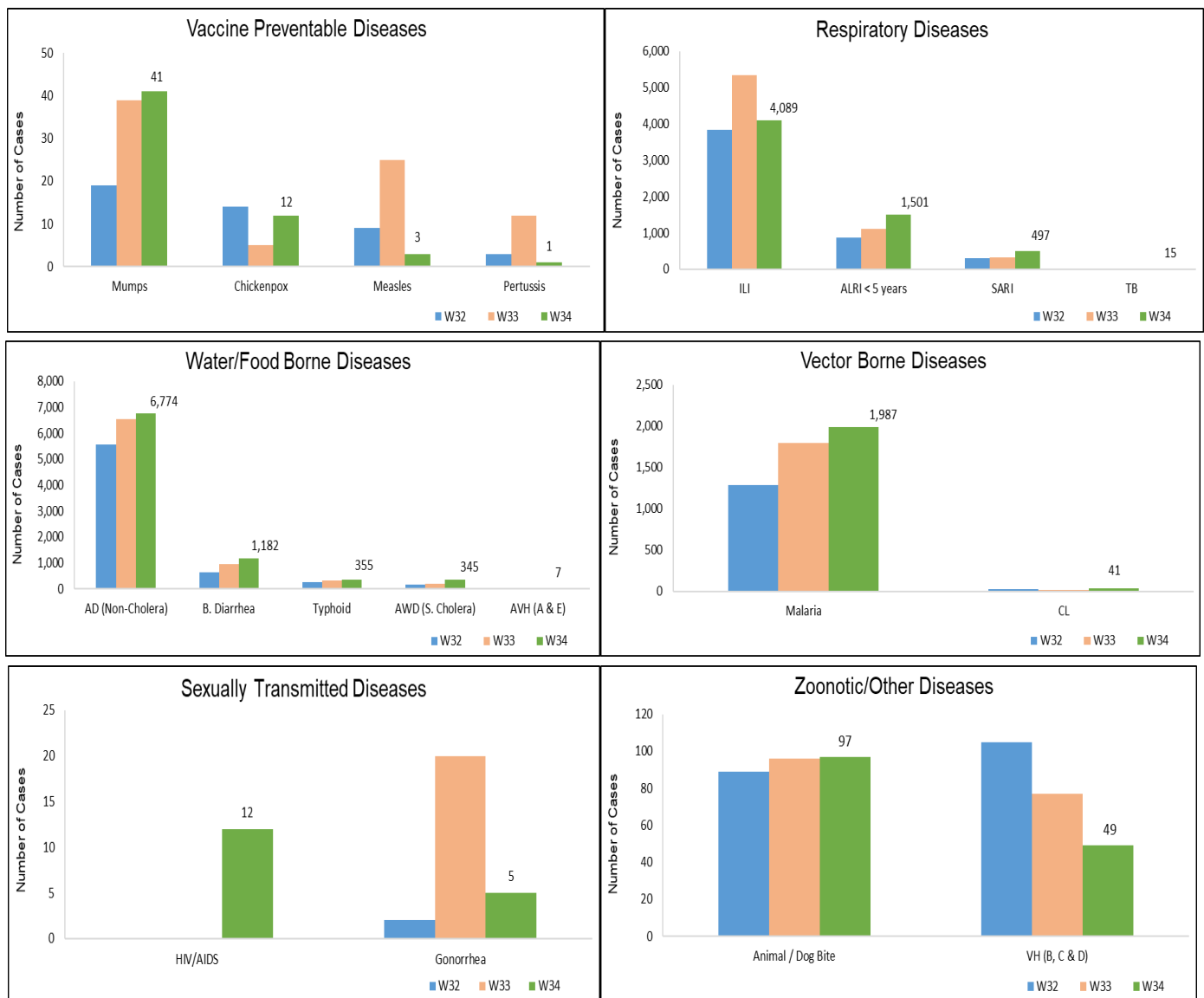
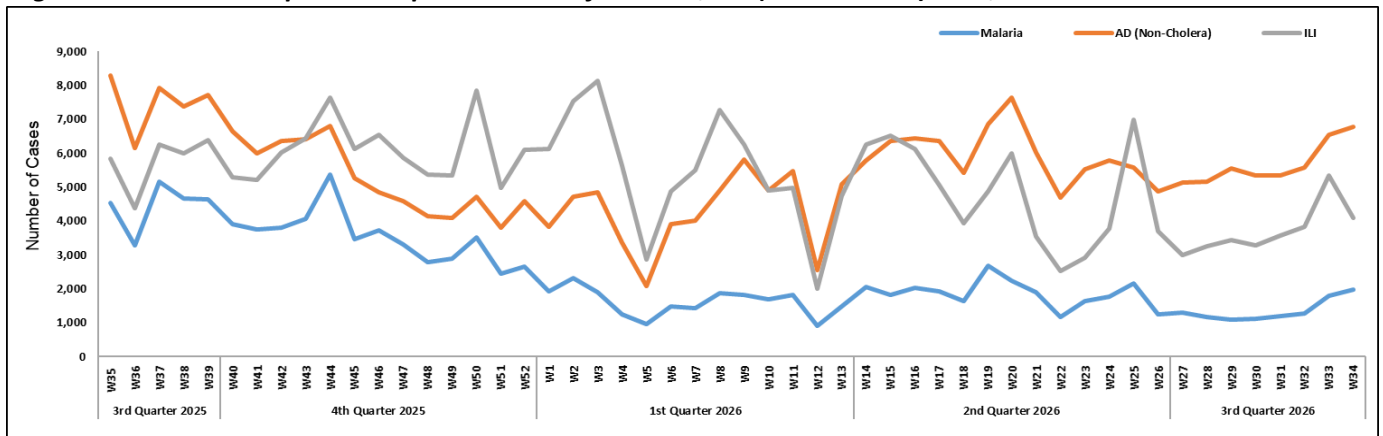


Figure 5: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Balochistan.



- Cases of AD (Non-Cholera) were maximum followed by Malaria, ILI, B. Diarrhea, Animal / Dog Bite, ALRI<5 Years, Typhoid, SARI, CL and AVH (A & E)
- Measles, Mumps, Meningitis, Pertussis, ALRI<5 years, TB, AD(non- cholera), B.Diarrhea, Malaria, CL, Dengue cases showed an increase in number while Chickenpox, NT, ILI, Typhoid, HIV/AIDs ,Dog Bite and VH(B,C & D) showed a decline in number this week.
- Twenty cases of AFP were reported from KP. All are suspected cases and need field verification.
- Six cases of HIV/AIDs reported from KP. Field investigation is required.
- Two 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 34, KP.

Districts	AD (Non-Cholera)	Malaria	ILI	B. Diarrhea	Animal / Dog Bite	ALRI < 5 years	Typhoid	SARI	CL	AVH (A & E)
Abbottabad	1,408	6	171	14	66	34	15	0	0	5
Bajaur	803	280	0	43	66	9	0	4	15	14
Bannu	772	735	6	22	1	5	51	0	3	0
Battagram	815	67	575	0	8	2	7	3	0	2
Buner	632	217	0	0	28	0	0	0	0	0
Charsadda	1,892	367	281	65	4	102	67	0	0	10
Chitral Lower	1,058	20	6	42	2	8	11	13	8	1
Chitral Upper	355	5	0	16	4	6	13	5	1	2
D.I. Khan	2,354	1,174	0	50	42	10	3	0	2	1
Dir Lower	2,654	156	0	111	72	8	56	0	12	11
Dir Upper	2,953	22	41	29	23	33	10	0	0	6
Hangu	368	87	0	14	0	0	6	0	7	0
Haripur	1,658	0	143	0	67	45	0	25	0	0
Karak	977	460	28	91	53	70	37	0	103	19
Khyber	1,035	680	13	144	57	47	15	6	91	24
Kohat	1,105	314	0	49	47	0	26	0	44	0
Kohistan Lower	334	1	0	20	0	0	4	0	0	0
Kohistan Upper	689	13	5	48	0	3	0	0	0	0
Kolai Palas	113	1	5	1	0	8	0	8	0	0
L & C Kurram	59	13	1	0	0	0	0	1	0	0
Lakki Marwat	829	405	0	6	79	5	23	0	0	0
Malakand	2,048	28	151	141	55	0	0	25	0	28
Mansehra	1,375	4	579	25	0	54	11	0	0	0
Mardan	1,981	461	41	69	70	38	50	0	2	2
Mohmand	100	184	92	2	7	0	7	99	29	0
North Waziristan	59	109	0	2	2	2	11	10	0	3
Nowshera	3,144	757	14	28	52	5	15	7	23	31
Orakzai	102	15	5	1	1	0	0	0	0	0
Peshawar	6,599	61	140	130	18	28	42	0	0	9
Shangla	2,664	469	0	6	187	14	15	0	0	2
South Waziristan (Lower)	229	191	119	88	16	4	26	72	31	16
SWU	0	3	0	0	0	0	0	0	0	0
Swabi	2,760	175	515	10	99	42	7	93	0	13
Swat	5,725	70	103	134	283	84	62	0	0	109
Tank	415	240	21	4	0	6	1	0	0	0
Tor Ghar	223	109	0	22	15	0	4	0	9	0
Upper Kurram	351	20	94	19	14	13	9	25	0	0
Total	50,638	7,919	3,149	1,446	1,438	685	604	396	380	308

Figure 6: Most frequently reported suspected cases during Week 34, KP.

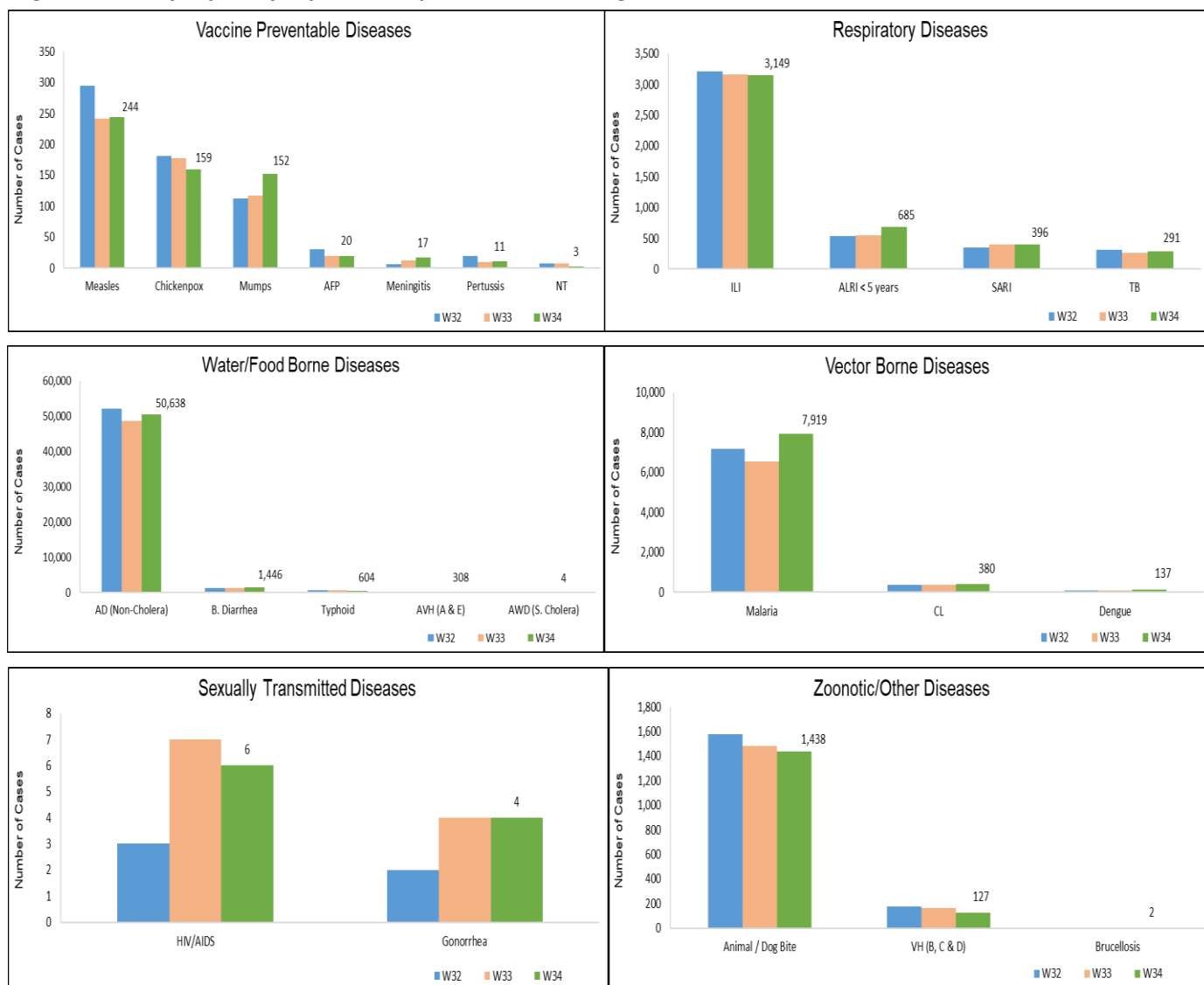
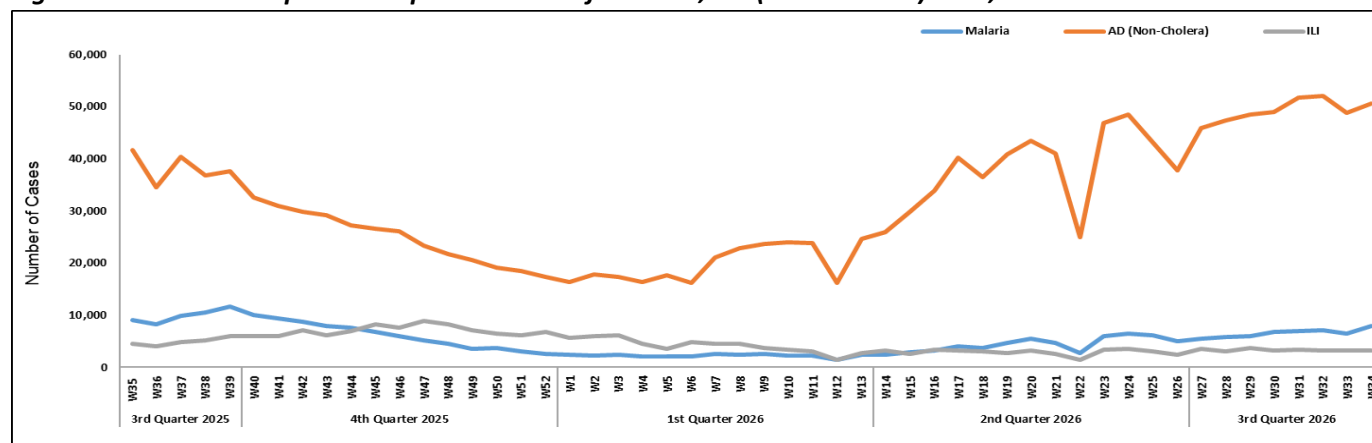


Figure 7: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, KP.



ICT: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera).
AD (non- cholera), ILI and TB cases showed a decline in number this week.

AJK: No reporting from AJK due to political issues.

GB: AD (non-cholera) cases were maximum, followed by ALRI <5 Years and ILI. An increase in cases is observed for AD (non-cholera), Typhoid, AWD (S. Cholera), ALRI< 5 years, ILI, TB, SARI, Measles, Chickenpox, and Dog bite. In contrast, a decline is observed in the number of cases of B. Diarrhea and VH (B, C & D) this week.

NOTE: Due to the political conditions AJK data for Week 34 is not shared.
Figure 8: Most frequently reported suspected cases during Week 22, AJK.

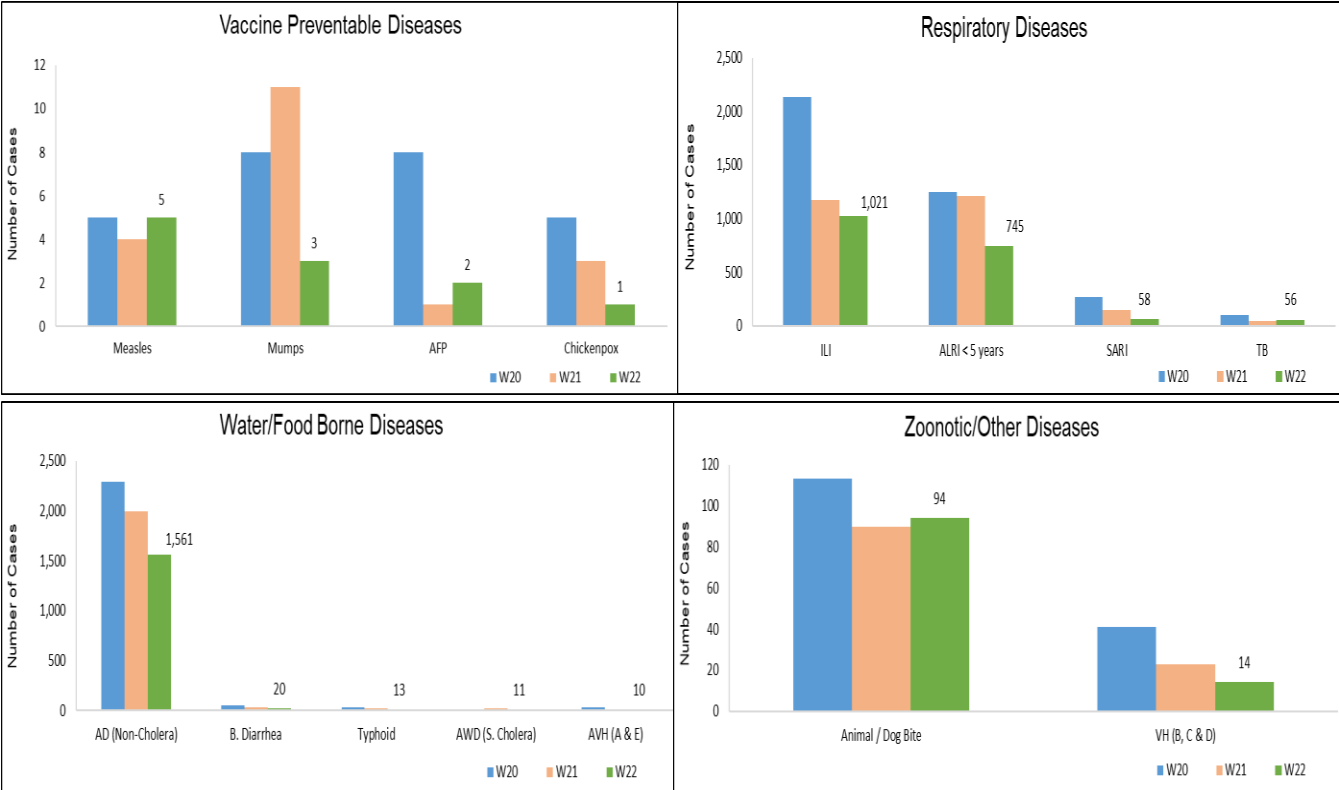


Figure 9: Week wise reported suspected cases of ILI and AD (Non-Cholera), AJK.

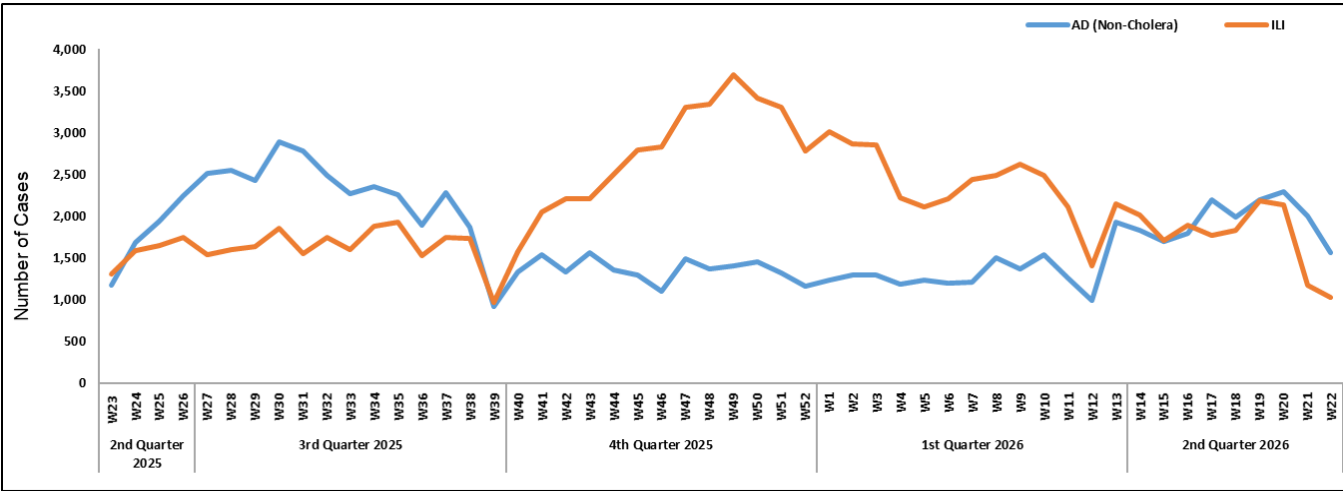


Figure 10: Most frequently reported suspected cases during Week 34, ICT.

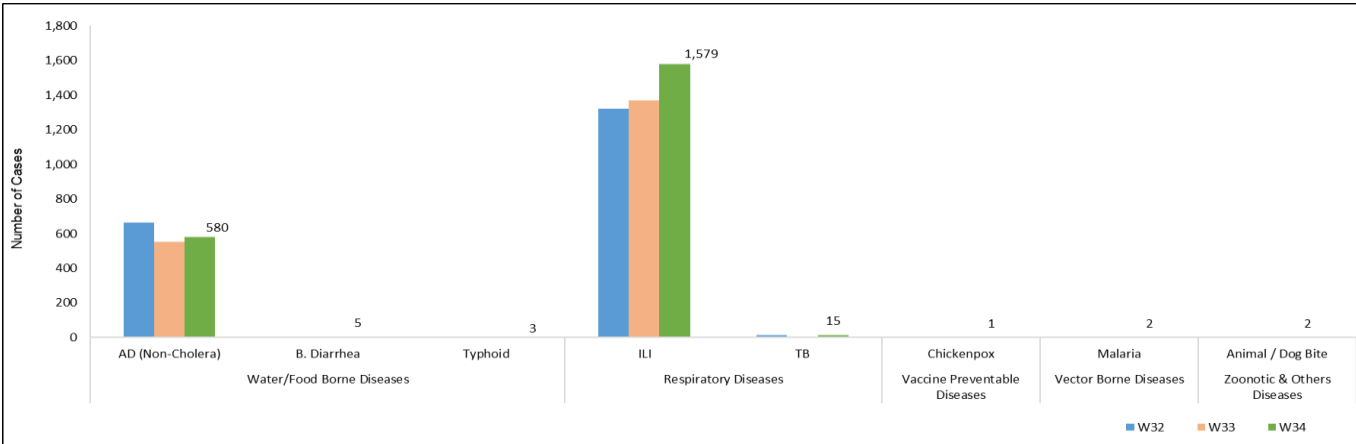


Figure 11: Week wise reported suspected cases of ILI, ICT.

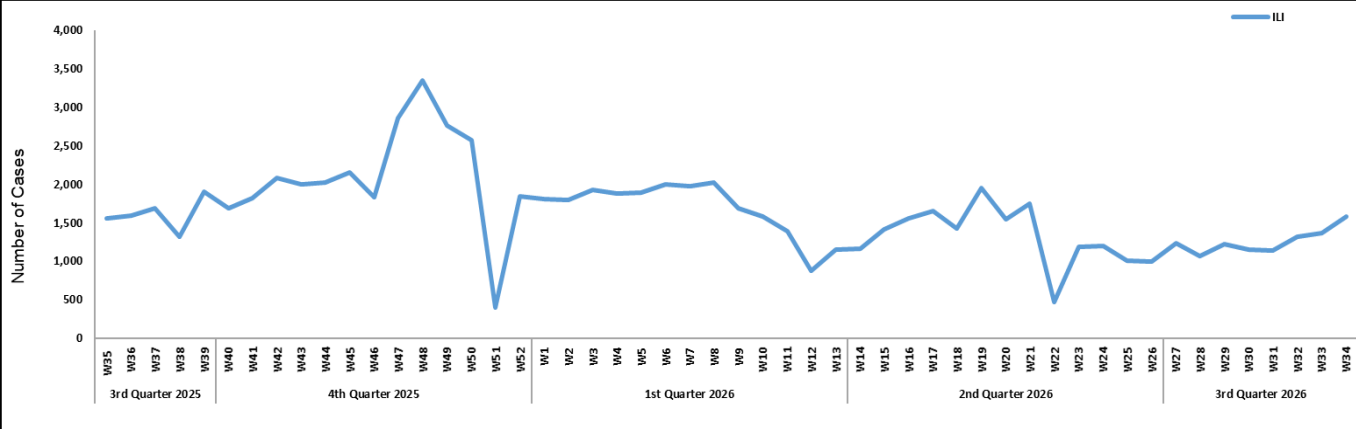


Figure 12: Most frequently reported suspected cases during Week 34, GB.

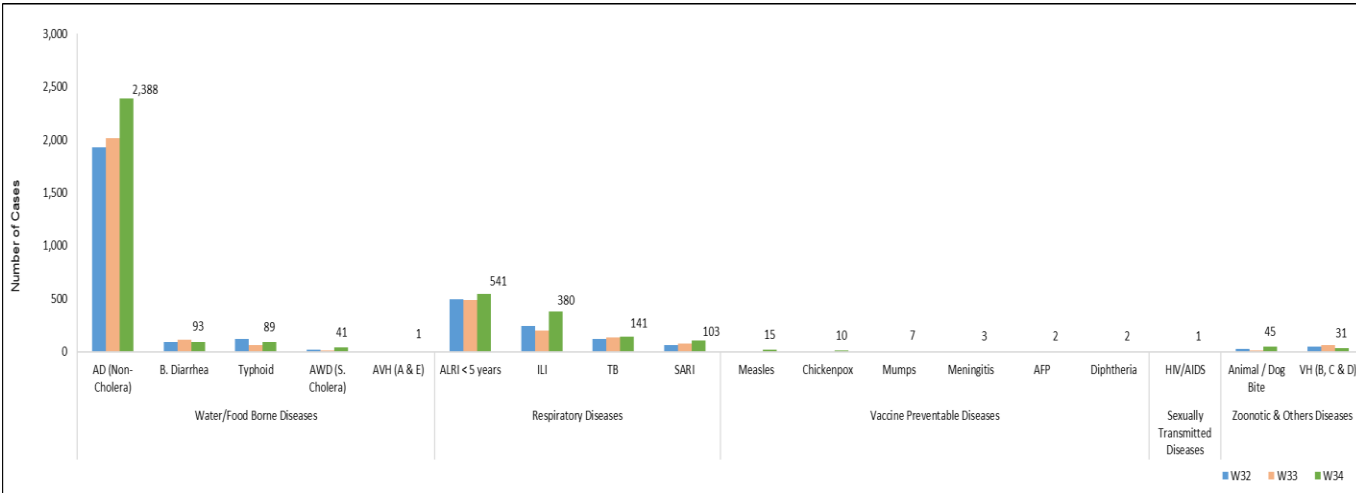
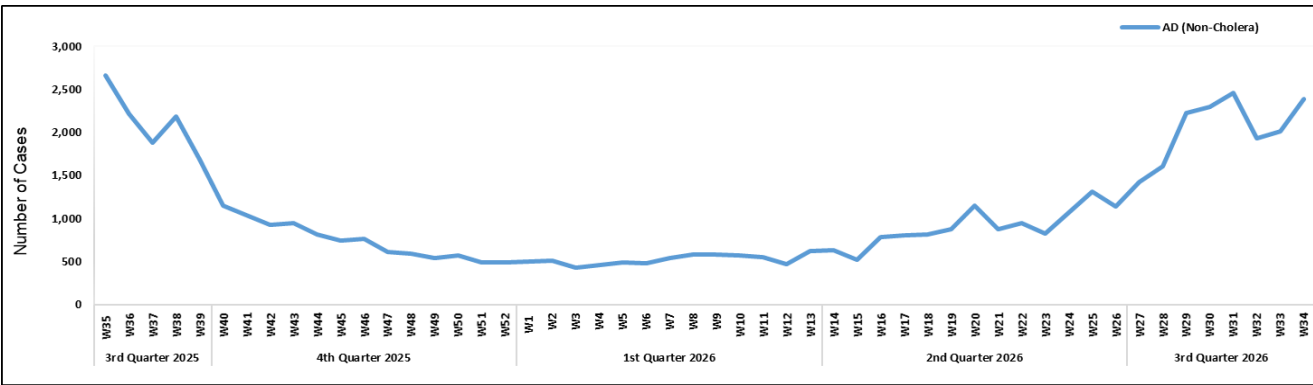


Figure 13: Week wise reported suspected cases of AD (Non-Cholera), GB.



Public Health Laboratories

Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epi Week 34, 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)	10	0	-	-	-	-	-	-	-	-	-	-	-	-
Stool culture & Sensitivity	179	2	-	-	-	-	-	-	-	-	-	-	-	-
Malaria	8,168	620	1,156	53	-	-	-	-	290	0	-	-	-	-
CCHF	-	-	12	2	-	-	-	-	-	-	-	-	-	-
Dengue	1,596	75	13	1	-	-	-	-	-	-	-	-	-	-
VH (B)	12,473	264	834	150	-	-	-	-	1,997	16	-	-	-	-
VH (C)	12,771	957	750	64	-	-	-	-	2,014	4	-	-	-	-
VH (D)	186	27	51	8	-	-	-	-	-	-	-	-	-	-
VH (A)	308	81	-	-	-	-	-	-	-	-	-	-	-	-
VH (E)	118	14	-	-	-	-	-	-	-	-	-	-	-	-
Covid-19	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TB	714	67	85	9	-	-	-	-	220	3	-	-	-	-
HIV/ AIDS	5,586	15	485	0	-	-	-	-	344	1	-	-	-	-
Syphilis	1,041	22	49	0	-	-	-	-	277	1	-	-	-	-
Typhoid	176	4	96	22	-	-	-	-	222	10	-	-	-	-
Diphtheria	6	2	-	-	-	-	-	-	-	-	-	-	-	-
ILI	24	0	-	-	-	-	-	-	-	-	-	-	-	-
Pneumonia (ALRI)	131	13	-	-	-	-	-	-	-	-	-	-	-	-
Meningitis	12	0	-	-	-	-	-	-	-	-	-	-	-	-
Measles	65	34	26	12	203	72	2	2	5	3	362	39	20	5
Rubella (CRS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leishmaniosis (cutaneous)	9	1	15	2	-	-	-	-	2	0	-	-	-	-
Chikungunya	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chickenpox	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gonorrhea	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brucellosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mpox	4	3	-	-	-	-	-	-	-	-	-	-	-	-
Leishmaniosis (Visceral)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SARI	18	9	-	-	-	-	-	-	-	-	-	-	-	-
Covid-19	ILI	3	0	-	-	2	0	-	-	-	14	0	-	-
	SARI	6	0	-	-	6	0	8	0	-	41	1	-	-
Influenza A	ILI	3	0	-	-	2	0	-	-	-	14	0	-	-
	SARI	6	0	-	-	6	0	8	0	-	41	0	-	-
Influenza B	ILI	3	0	-	-	2	0	-	-	-	14	0	-	-
	SARI	6	0	-	-	6	0	8	0	-	41	0	-	-
RSV	ILI	3	0	-	-	2	0	-	-	-	14	0	-	-
	SARI	6	0	-	-	6	0	8	0	-	41	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.

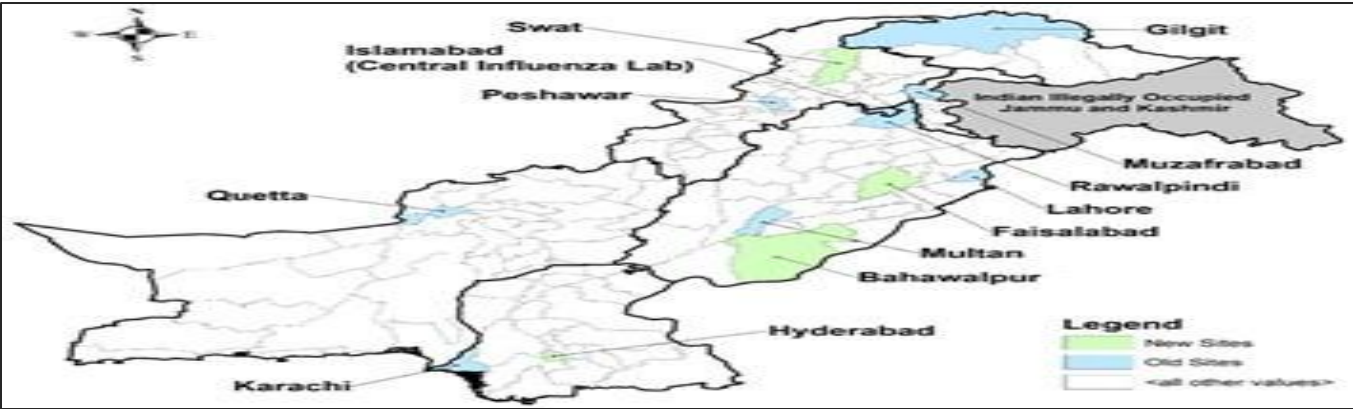


Figure 15: Distribution of suspected samples of ILI and positive cases of Influenza A, Influenza B, COVID-19 and RSV, Week 34, Pakistan.

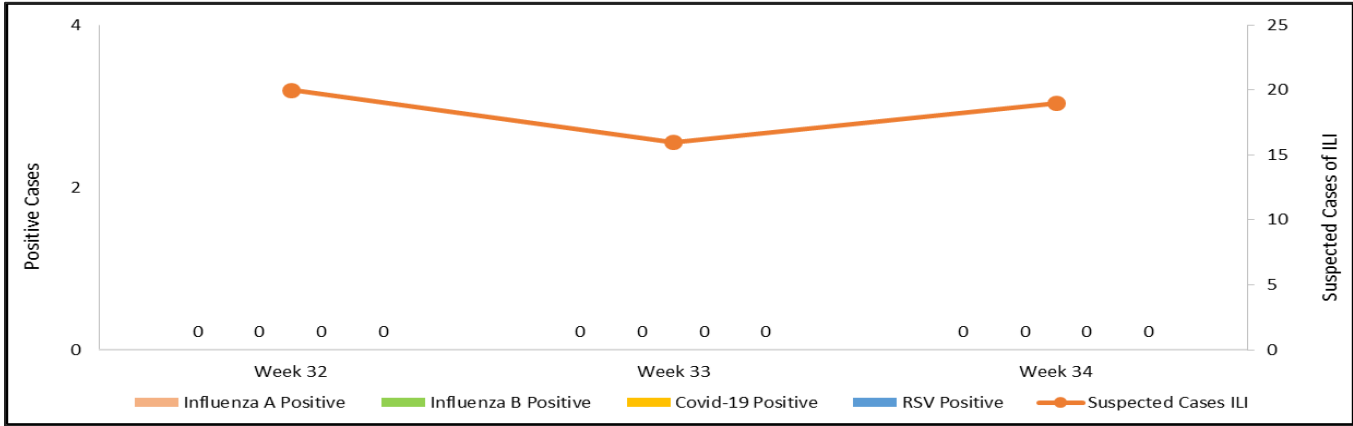
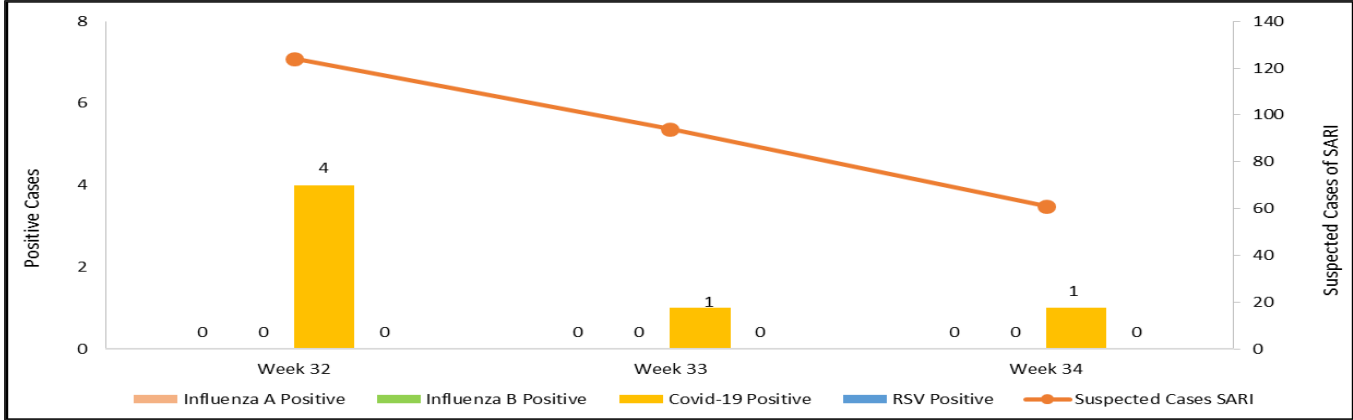


Figure 16: Distribution of suspected samples of SARI and positive cases of Influenza A, Influenza B, COVID-19 and RSV, Week 34, Pakistan.



IDSR Reports Compliance

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

Table 6: Compliance of IDSR reporting districts Week 34, Pakistan.

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	111	100	90%
	Bannu	228	116	51%
	Battagram	59	44	75%
	Buner	34	33	97%
	Bajaur	43	42	98%
	Charsadda	61	60	98%
	Chitral Upper	31	31	100%
	Chitral Lower	37	36	97%
	D.I. Khan	115	115	100%
	Dir Lower	63	63	100%
	Dir Upper	56	49	88%
	Hangu	22	15	68%
	Haripur	72	72	100%
	Karak	36	36	100%
	Khyber	53	41	77%
	Kohat	61	61	100%
	Kohistan Lower	13	13	100%
	Kohistan Upper	22	15	68%
	Kolai Palas	10	10	100%
	Lakki Marwat	70	69	99%
	Lower & Central Kurram	34	13	38%
	Upper Kurram	38	35	92%
	Malakand	42	42	100%
	Mansehra	133	130	98%
	Mardan	82	75	91%
	Nowshera	57	57	100%
	North Waziristan	10	7	70%
	Peshawar	157	130	83%
	Shangla	37	37	100%
	Swabi	65	62	95%
	Swat	75	73	97%
	South Waziristan (Upper)	93	77	83%
	South Waziristan (Lower)	29	29	100%
	Tank	34	33	97%
	Torghar	13	13	100%
	Mohmand	68	18	26%
	Orakzai	69	5	7%
Azad Jammu Kashmir	Mirpur	41	0	0%
	Bhimber	85	0	0%
	Kotli	60	0	0%
	Muzaffarabad	45	0	0%
	Poonch	46	0	0%
	Haveli	39	0	0%

	Bagh	54	0	0%
	Neelum	39	0	0%
	Jhelum Velley	29	0	0%
	Sudhnooti	27	0	0%
Islamabad Capital Territory	ICT	24	24	100%
	CDA	12	6	50%
Balochistan	Gwadar	26	0	0%
	Kech	45	29	64%
	Khuzdar	74	10	14%
	Killa Abdullah	26	26	100%
	Lasbella	55	55	100%
	Pishin	65	20	31%
	Quetta	56	12	21%
	Sibi	36	28	78%
	Zhob	39	13	33%
	Jaffarabad	16	13	81%
	Naseerabad	32	32	100%
	Kharan	30	30	100%
	Sherani	15	0	0%
	Kohlu	75	6	8%
	Chagai	36	22	61%
	Kalat	41	40	98%
	Harnai	17	14	82%
	Kachhi (Bolan)	35	18	51%
	Jhal Magsi	28	28	100%
	Sohbat pur	25	25	100%
	Surab	32	11	34%
	Mastung	46	46	100%
	Loralai	33	30	91%
	Killa Saifullah	28	0	0%
	Ziarat	29	25	86%
	Duki	31	0	0%
	Nushki	29	29	100%
	Dera Bugti	45	11	24%
	Washuk	46	0	0%
	Panjgur	38	0	0%
	Awaran	23	0	0%
	Chaman	25	0	0%
	Barkhan	20	19	95%
	Hub	33	14	42%
	Musakhel	41	25	61%
	Usta Muhammad	34	34	100%
Gilgit Baltistan	Hunza	32	32	100%
	Nagar	20	20	100%
	Ghizer	38	38	100%
	Gilgit	44	44	100%
	Diamer	62	56	90%
	Astore	55	55	100%
	Shigar	23	23	100%

	Skardu	54	54	100%
	Ganche	29	29	100%
	Kharmang	25	25	100%
Sindh	Hyderabad	72	72	100%
	Ghotki	64	63	98%
	Umerkot	65	65	100%
	Naushahro Feroze	102	88	86%
	Tharparkar	273	272	100%
	Shikarpur	59	59	100%
	Thatta	50	50	100%
	Larkana	67	67	100%
	Kamber Shadadkot	71	71	100%
	Karachi-East	21	16	76%
	Karachi-West	20	20	100%
	Karachi-Malir	35	24	69%
	Karachi-Kemari	22	21	95%
	Karachi-Central	12	10	83%
	Karachi-Korangi	18	18	100%
	Karachi-South	6	4	67%
	Sujawal	55	51	93%
	Mirpur Khas	106	106	100%
	Badin	123	122	99%
	Sukkur	63	63	100%
	Dadu	90	90	100%
	Sanghar	100	100	100%
	Jacobabad	44	44	100%
	Khairpur	168	168	100%
	Kashmore	59	59	100%
	Matiali	42	42	100%
	Jamshoro	74	74	100%
	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 34, Pakistan.

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
AJK	Mirpur	2	0	0%
	Bhimber	1	0	0%
	Kotli	1	0	0%
	Muzaffarabad	2	0	0%
	Poonch	2	0	0%
	Haveli	1	0	0%
	Bagh	1	0	0%
	Neelum	1	0	0%
	Jhelum Vellay	1	0	0%
	Sudhnooti	1	0	0%
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	1	100%

Pakistan Launches National Wastewater Environmental Surveillance Strategy and Genomics Dashboard to Strengthen Early Warning Systems

The Ministry of National Health Services, Regulations and Coordination (MoNHSR&C), in collaboration with the National Institute of Health (NIH), Pakistan, launched the **Pakistan Wastewater Environmental Surveillance (WES) Strategy and the National WES Genomics Dashboard**, marking an important milestone in strengthening disease surveillance, early warning, and outbreak preparedness in the country.



The initiative was inaugurated by the Honorable Federal Minister for Health, who emphasized the growing importance of wastewater surveillance as a complementary public health tool for the early detection of infectious disease threats. He highlighted its potential to provide timely population-level information, enabling health authorities to identify emerging risks and support evidence-based public health action before widespread transmission occurs.

Chief Executive Officer, NIH, highlighted that the establishment of a national WES system will further strengthen Pakistan's capacity to monitor priority pathogens, identify emerging health threats, and support coordinated preparedness and response. He also emphasized the importance of integrating environmental surveillance with existing disease surveillance systems and advancing a **One Health approach** that recognizes the interconnectedness of human, animal, and environmental health.



During the launch, the NIH team presented key progress made toward establishing the national WES framework. This included the conduct of **three national consultative workshops and two hands-on laboratory capacity-building trainings**, prioritization of **33 pathogens** for wastewater environmental surveillance, development of **metagenomic data analysis pipelines**, and identification of strategic sampling sites and laboratory requirements. The newly launched **National WES Genomics Dashboard** will support the visualization and interpretation of wastewater surveillance and genomic data, facilitating timely monitoring of pathogen trends and emerging public health signals.



Wastewater surveillance offers an important complementary approach to traditional clinical and laboratory surveillance by providing information on pathogen circulation at the community level. When integrated with epidemiology, laboratory, and genomic surveillance, it can strengthen situational awareness and support more timely risk assessment and public health decision-making.

The initiative reflects Pakistan's commitment to building a **sustainable, integrated, and innovative wastewater-based surveillance system**. Through collaboration among MoNHSR&C, NIH, the **Duke-NUS Centre for Outbreak Preparedness**, **Aga Khan University**, **academia**, **government institutions**, and **other national partners**, the program aims to strengthen national capacity for early detection of infectious disease threats and enhance preparedness for future outbreaks and public health emergencies.

Knowledge Hub

Pertussis (Whooping Cough)

Pertussis (whooping cough) is a highly contagious respiratory infection caused by *Bordetella pertussis*. It affects people of all ages but can cause particularly severe disease in **infants and young children**, especially those who are unvaccinated or incompletely vaccinated. Vaccination remains the most effective measure for preventing severe pertussis and reducing disease transmission.

Transmission and Incubation

Pertussis spreads mainly from person to person through **respiratory droplets produced during coughing or sneezing and close contact with respiratory secretions**. Symptoms usually develop within **5–10 days of exposure**, although the incubation period may extend to about 21 days. Patients are particularly infectious during the early stage of illness, when symptoms may resemble a common cold.

Clinical Features

Pertussis typically progresses through three stages:

- **Catarrhal stage:** Runny nose, nasal congestion, low-grade fever and mild cough. Patients are highly infectious during this period.
- **Paroxysmal stage:** Repeated episodes of rapid, forceful coughing, which may be followed by a characteristic inspiratory **“whoop,” post-tussive vomiting, cyanosis or exhaustion**.
- **Convalescent stage:** Coughing gradually decreases but may persist for several weeks or months.

The typical “whoop” may be absent, particularly in vaccinated individuals, adolescents and adults. **Young infants may present with apnoea,**

cyanosis or breathing difficulties with little or no cough, making early recognition particularly important.

Complications

Pertussis can lead to serious complications, particularly among infants. These include **pneumonia, apnea, dehydration, seizures, encephalopathy and, in severe cases, death**. Infants who are too young to have completed their primary vaccination series are particularly vulnerable.

Diagnosis and Treatment

Diagnosis is based on clinical **presentation, epidemiological history and laboratory investigation**. Nasopharyngeal specimens are generally used for laboratory testing, with PCR and culture among the methods used for confirmation.

Antibiotic treatment should be initiated promptly when clinically indicated. **Macrolide antibiotics** are commonly used, and treatment is most effective when started early in the course of illness. Early treatment also helps reduce transmission to others.

Prevention and Public Health Actions

Vaccination is the cornerstone of pertussis prevention. High routine immunization coverage and timely completion of recommended vaccine doses are essential to reduce transmission and protect vulnerable infants.

Suspected cases and clusters should be **promptly identified, investigated and reported** through the appropriate surveillance system. Public health response should include assessment of close contacts, review of vaccination status, appropriate infection prevention and control measures, and consideration of **post-exposure**

antimicrobial prophylaxis for eligible high-risk contacts. Community awareness regarding vaccination, respiratory hygiene, early symptoms and timely healthcare seeking should also be strengthened.

Key Message

Consider pertussis in patients with prolonged or paroxysmal cough, inspiratory whoop or post-tussive vomiting. In young infants, apnea or breathing difficulty may be the presenting feature even without the characteristic cough. Early recognition, appropriate treatment, surveillance and vaccination are essential to prevent severe disease and further transmission.

For More Information

For further information on pertussis, please refer to:

1. **World Health Organization (WHO) – Pertussis**
[WHO: Pertussis](#)
2. **Centers for Disease Control and Prevention (CDC) – Pertussis (Whooping Cough)**
[CDC: Pertussis \(Whooping Cough\)](#)
3. **UK Health Security Agency (UKHSA) – Pertussis Guidance, Data and Analysis**
[UKHSA: Pertussis Guidance, Data and Analysis](#)



Whooping Cough (Pertussis)

Early symptoms may include:



Slight fever.



Mild or occasional coughing.



Runny nose.



A pause in breathing in babies.

After the first or second week, symptoms may include:



Prolonged, repeated or violent coughing episodes.



Whooping sound when inhaling.



Vomiting.



Exhaustion due to prolonged coughing.

 Cleveland Clinic

	https://phb.nih.org.pk/		https://twitter.com/NIH_Pakistan
	idsr-pak@nih.org.pk		https://www.facebook.com/NIH.PK/