PUBLIC HEALTH BULLETIN-PAKISTAN

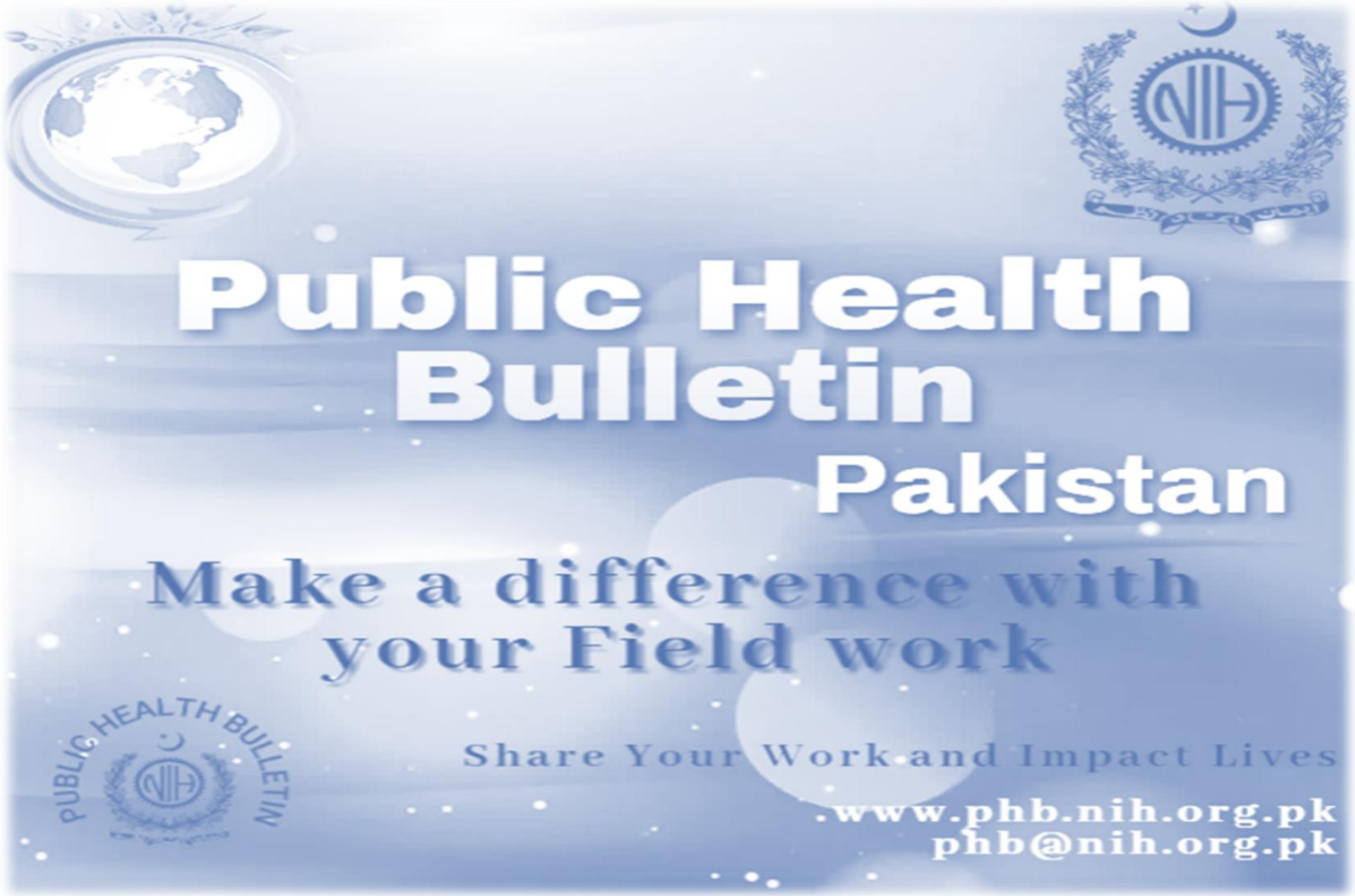
Vol. 5 | Week 21
19th MAY– 25th MAY
20th JUNE, 2025

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, Week 21, 2025

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;

- *Letter to Editor - Navigating the Monsoon – Prioritizing Health and Prevention in Pakistan*
- *Knowledge hub on Dengue: 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.

Subscribe to the Weekly Bulletin today!

Stay informed. Stay prepared. Stay healthy.

Sincerely,
The Chief Editor

Note: All reported cases in this report are suspected cases

- *During Week 21, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, ILI, ALRI <5 years, TB, B. Diarrhea, VH (B, C & D), dog bite, Typhoid and SARI.*
- *Twenty-seven cases of AFP reported from KP, eleven from Sindh, six from Balochistan and two from AJK.*
- *Twenty-five suspected cases of HIV/ AIDS reported from Sindh and one from KP.*
- *Five suspected cases of Brucellosis reported from Sindh and four from KP.*
- *One suspected case of CCHF reported from Sindh.*
- *Among VPDs, there is an increase in number of cases of Measles, AFP, Meningitis and Diphtheria this week.*
- *Among Respiratory diseases, there is an increase in number of cases of TB 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 78%*
- *Sindh is the top reporting regions with a compliance rate of 96%, followed by AJK 93%, GB 92% and ICT 75%.*
- *The lowest compliance rate was observed in KP 72% and Balochistan 49%.*

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	*2315*	*1661*	*72*
Azad Jammu Kashmir	*404*	*377*	*93*
Islamabad Capital Territory	*36*	*27*	*75*
Balochistan	*1304*	*644*	*49*
Gilgit Baltistan	*409*	*375*	*92*
Sindh	*2107*	*2022*	*96*
National	*6575*	*5106*	*78*

Public Health Actions

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

Diphtheria

- **Enhance Surveillance and Rapid Case Detection**: Strengthen diphtheria case detection through IDSR by training health workers on early clinical recognition, especially in children, and ensuring immediate notification of suspected cases.
- **Improve Laboratory Diagnostic Capacity**: Equip laboratories to confirm cases through culture and PCR testing of throat swabs, and support toxigenicity testing for definitive diagnosis.
- **Ensure Prompt Treatment and Case Management**: Ensure availability of diphtheria antitoxin (DAT) and appropriate antibiotics at referral facilities; train healthcare providers in clinical management and isolation procedures.
- **Boost Immunization Coverage**: Strengthen DPT (Diphtheria, Pertussis, Tetanus) vaccine coverage through routine services and outreach in low-coverage areas; provide booster doses as per national immunization schedule.
- **Implement Outbreak Control and Contact Management**: Conduct immediate contact tracing, chemoprophylaxis for close contacts, and community vaccination campaigns in outbreak-affected areas.
- **Promote Risk Communication**: Educate the public about diphtheria symptoms, the importance of complete immunization, and seeking prompt medical care.

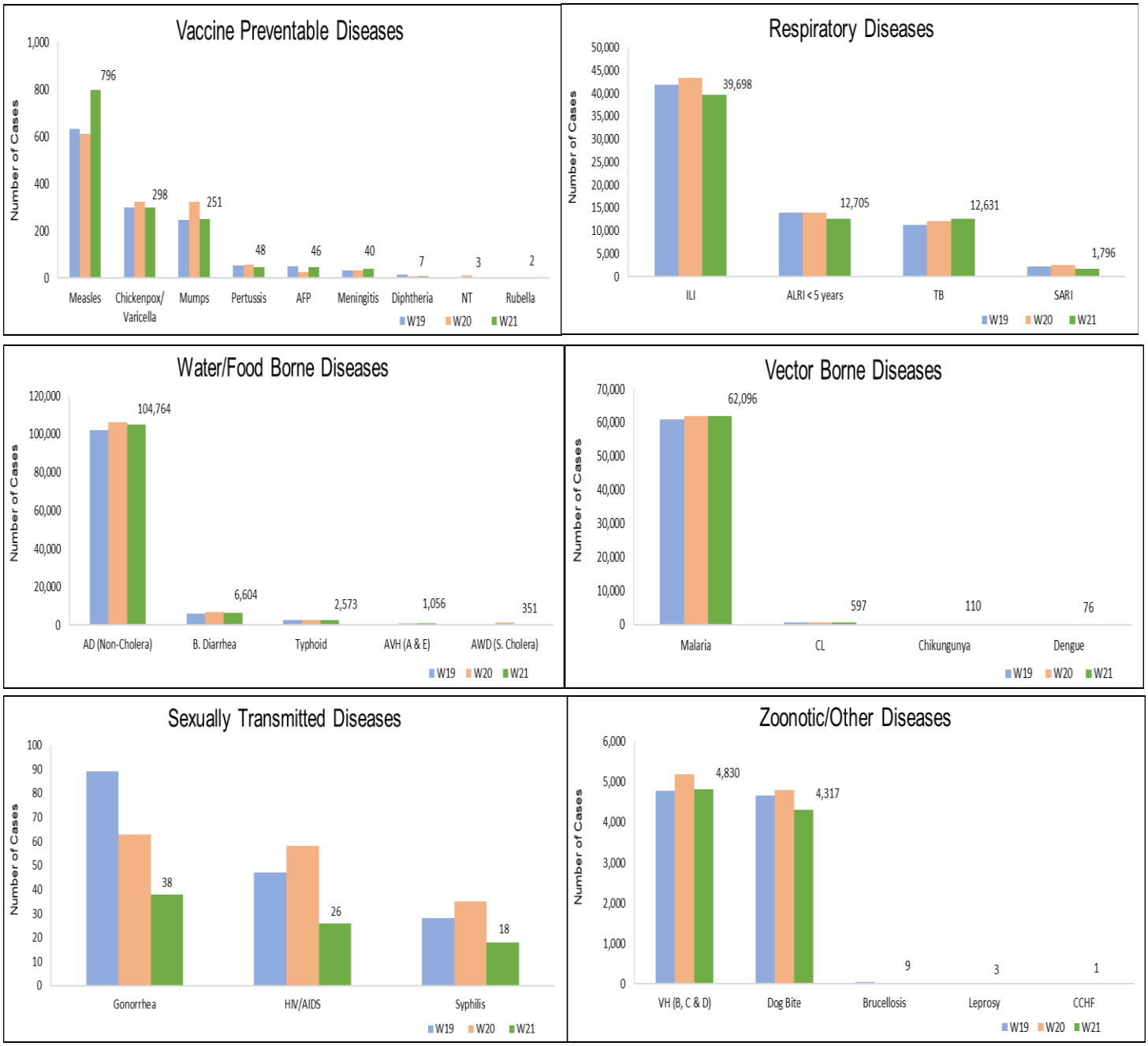
Meningitis

- **Enhance Surveillance and Outbreak Detection:** Strengthen syndromic surveillance for meningitis through IDSR, focusing on early detection of clusters and outbreaks, particularly in settings with known seasonal or regional patterns.
- **Improve Laboratory Capacity and Case Confirmation:** Expand access to cerebrospinal fluid (CSF) collection, culture, Gram stain, and PCR for accurate diagnosis and identification of bacterial strains, including *Neisseria meningitidis, Streptococcus pneumoniae*, and *Haemophilus influenzae*.
- **Ensure Prompt Treatment and Referral:** Train healthcare workers in early recognition, case management, and referral of meningitis cases; ensure availability of essential antibiotics at all levels.
- **Support Preventive Vaccination:** Promote the use of meningococcal, pneumococcal, and Hib vaccines in routine immunization schedules and outbreak response strategies, targeting high-risk populations.
- **Conduct Community Education and Risk Communication:** Raise awareness about signs and symptoms (e.g., sudden fever, stiff neck, altered consciousness), importance of prompt care-seeking, and preventive practices, including avoiding overcrowded settings during outbreaks.

Table 1: Province/Area wise distribution of most frequently reported suspected cases during Week 21, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	2,087	5,658	1,314	608	40,535	NR	54,562	104,764
Malaria	0	2,418	0	1	4,582	NR	55,095	62,096
ILI	2,199	4,641	403	985	5,317	NR	26,153	39,698
ALRI < 5 years	781	1,214	700	8	868	NR	9,134	12,705
TB	103	62	139	11	417	NR	11,899	12,631
B. Diarrhea	64	989	84	7	1,328	NR	4,132	6,604
VH (B, C & D)	25	85	3	3	86	NR	4,628	4,830
Dog Bite	131	60	7	0	929	NR	3,190	4,317
Typhoid	10	318	90	0	859	NR	1,296	2,573
SARI	147	616	195	0	700	NR	138	1,796
AVH (A & E)	65	23	5	0	225	NR	738	1,056
Measles	11	26	38	0	547	NR	174	796
CL	0	41	0	0	556	NR	0	597
AWD (S. Cholera)	34	185	14	0	59	NR	59	351
Chickenpox/ Varicella	2	11	25	4	143	NR	113	298
Mumps	2	19	4	0	169	NR	57	251
Chikungunya	0	3	0	0	0	NR	107	110
Dengue	0	9	0	0	21	NR	46	76
Pertussis	0	19	2	0	18	NR	9	48
AFP	2	6	0	0	27	NR	11	46
Meningitis	2	1	2	0	14	NR	21	40
Gonorrhea	0	18	0	0	0	NR	20	38
HIV/AIDS	0	0	0	0	1	NR	25	26
Syphilis	0	0	0	0	4	NR	14	18
Brucellosis	0	0	0	0	4	NR	5	9
Diphtheria (Probable)	0	3	0	0	0	NR	4	7
NT	0	0	0	0	1	NR	2	3
Leprosy	0	0	0	0	0	NR	3	3

Figure 1: Most frequently reported suspected cases during Week 21, Pakistan.



Sindh

- Malaria cases were maximum followed by AD (Non-Cholera), ILI, TB, ALRI<5 Years, VH (B, C, D), B. Diarrhea, dog bite, Typhoid and AVH (A & E).
- Malaria cases are mostly from Larkana, Khairpur and Sanghar whereas AD (Non-Cholera) cases are from Karachi South, Khairpur and Dadu.
- Twenty-five suspected cases of HIV/ AIDS reported from Sindh. They need field investigation.
- Eleven cases of AFP reported from Sindh. They are suspected cases and need field verification.
- One case of CCHF reported from Sindh. It is suspected case and requires field verification.
- There is an increase in number of cases of Malaria, AD (Non-Cholera), TB, ALRI<5 Years, Typhoid and VPDs including Measles, AFP, Pertussis and Diphtheria this week.

Table 2: District wise distribution of most frequently reported suspected cases during Week 21, Sindh

Districts	Malaria	AD (Non-Cholera)	ILI	TB	ALRI < 5 years	VH (B, C & D)	B. Diarrhea	Dog Bite	Typhoid	AVH (A & E)
Badin	3,495	2,825	1,991	829	678	202	219	96	84	4
Dadu	3,575	3,204	744	507	691	56	596	457	171	64
Ghotki	1,138	985	110	193	330	96	87	67	0	4
Hyderabad	714	2,762	1,326	304	111	133	76	26	5	0
Jacobabad	819	708	562	171	436	150	112	176	26	0
Jamshoro	1,670	1,747	15	551	260	154	106	85	31	12
Kamber	3,547	2,178	0	776	260	127	336	238	18	0
Karachi Central	6	837	725	8	12	5	2	0	69	14
Karachi East	43	321	259	22	10	0	5	15	16	1
Karachi Keamari	5	552	302	38	37	0	1	0	3	0
Karachi Korangi	72	387	0	20	0	1	5	0	3	1
Karachi Malir	203	1,824	3,019	180	327	28	20	50	27	6
Karachi South	82	5,115	45	171	51	285	119	268	287	170
Karachi West	327	797	1,015	114	222	45	22	94	31	0
Kashmore	2,220	555	533	227	191	17	86	46	1	0
Khairpur	5,151	3,664	6,048	1,209	996	213	352	298	226	28
Larkana	5,620	2,267	61	986	242	92	426	38	8	9
Matiari	2,288	1,905	0	496	188	551	50	77	1	1
Mirpurkhas	2,320	3,036	2,458	706	393	217	112	117	16	10
Naushero Feroze	1,547	1,382	831	494	410	20	167	231	50	1
Sanghar	4,489	1,931	48	1,166	466	930	108	217	38	5
Shaheed Benazirabad	2,196	2,014	4	350	190	65	100	143	90	0
Shikarpur	2,444	1,369	4	217	184	474	179	156	6	0
Sindh Labs	10	276	0	0	0	0	0	3	0	0
Sujawal	972	2,292	0	75	229	2	203	57	7	15
Sukkur	2,008	1,571	1,968	420	433	106	127	70	2	0
Tando Allahyar	1,889	1,894	763	461	173	319	151	56	17	4
Tando Muhammad Khan	1,067	1,263	45	451	151	76	100	12	0	0
Tharparkar	2,376	1,754	1,209	371	554	53	86	0	20	29
Thatta	1,370	1,388	2,068	74	416	151	64	97	20	358
Umerkot	1,432	1,759	0	312	493	60	115	0	23	2

Figure 2: Most frequently reported suspected cases during Week 21 Sindh

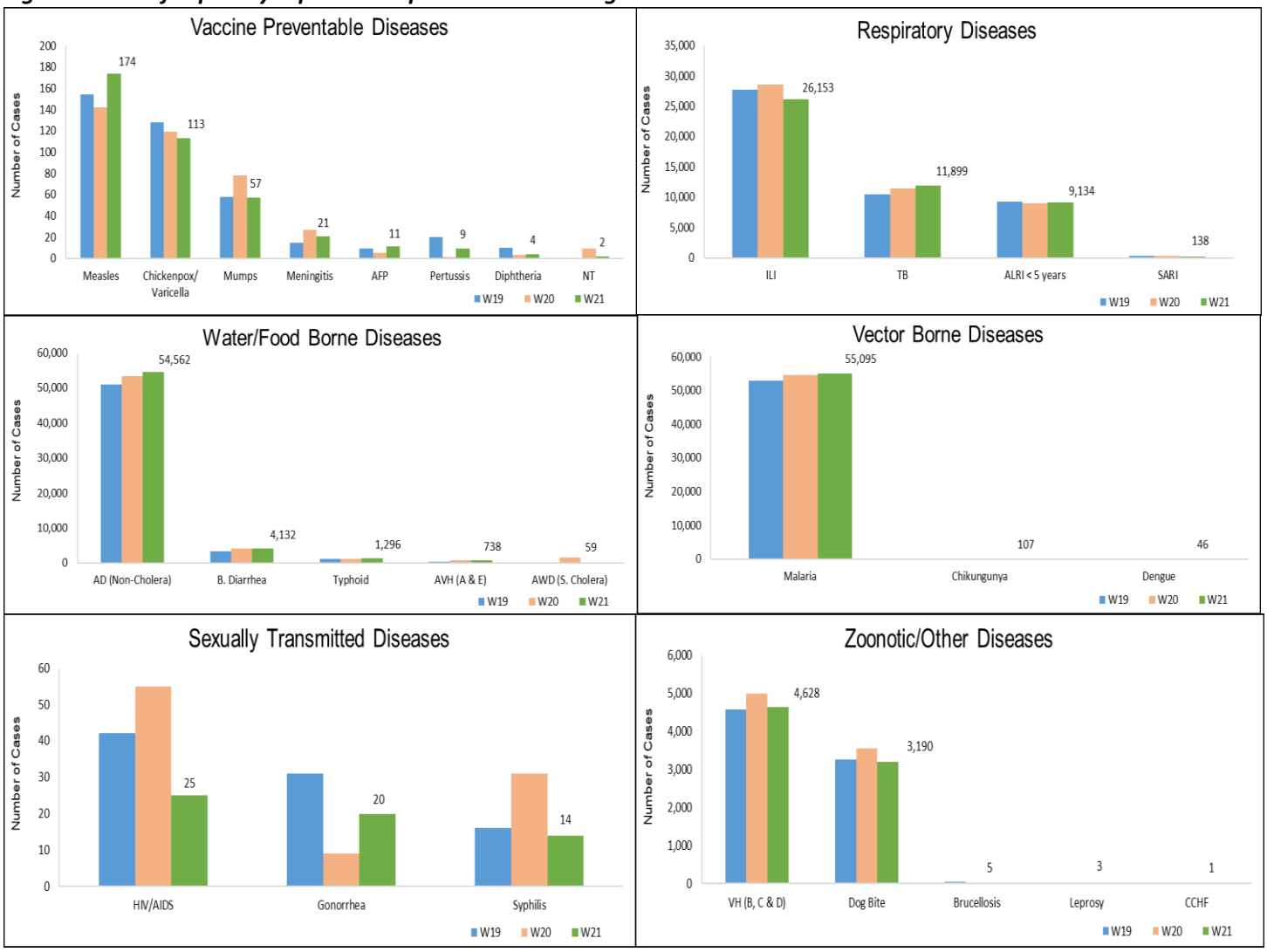
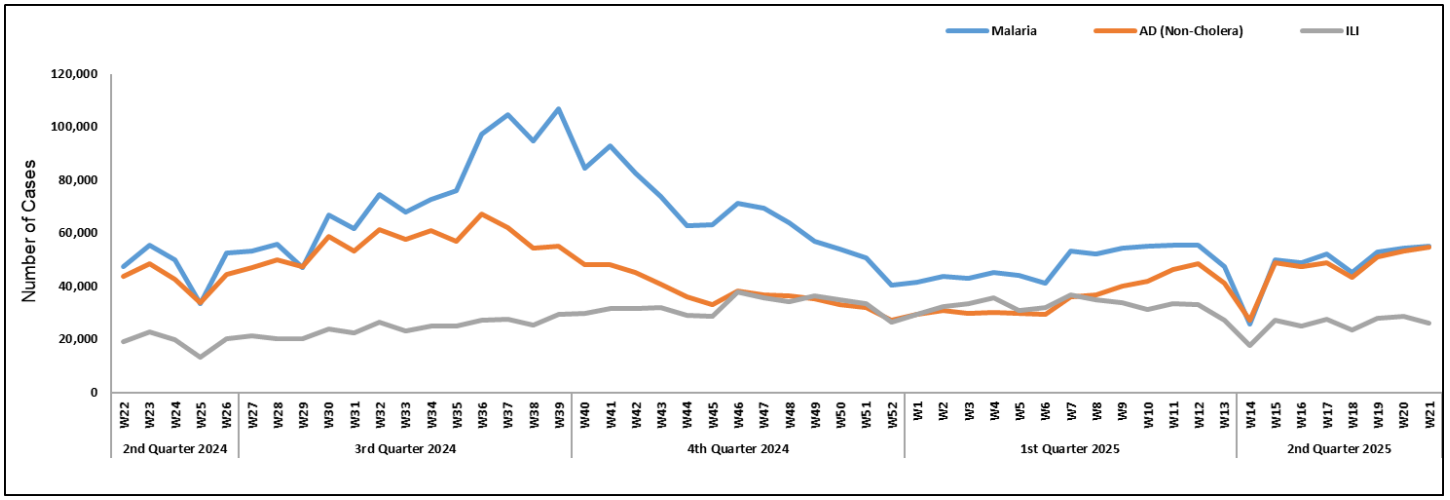


Figure 3: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Sindh



Balochistan

- AD (Non-Cholera), ILI, Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, AWD (S. Cholera), VH (B, C & D) and TB cases were the most frequently reported diseases from Balochistan province.
- AD (Non-Cholera) cases are mostly reported from Usta Muhammad, Quetta and Lasbella while ILI cases are mostly reported from Gwadar, Quetta and Kharan.
- Six suspected cases of AFP reported from Balochistan. They require field investigation.
- AD (Non-Cholera), ILI, Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid and TB showed a decline in number of cases while AWD (S. Cholera), VH (B, C & D) and VPDs including AFP, Diphtheria and Rubella (CRS) showed an increase in number of

Table 3: District wise distribution of most frequently reported suspected cases during Week 21, Balochistan

Districts	AD (Non-Cholera)	ILI	Malaria	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	AWD (S. Cholera)	VH (B, C & D)	TB
Barkhan	91	46	55	35	7	1	21	1	0	4
Chagai	157	174	41	0	48	0	11	0	1	1
Dera Bugti	72	0	73	4	3	0	3	0	0	0
Gwadar	320	843	96	32	71	0	21	1	1	0
Hub	62	28	97	7	18	0	0	0	0	0
Jaffarabad	0	0	0	0	0	0	0	0	0	0
Jhal Magsi	134	410	192	1	1	0	1	0	0	2
Kachhi (Bolan)	131	67	103	13	59	165	16	14	0	1
Kalat	30	3	19	11	22	0	23	0	0	0
Kharan	202	502	34	3	91	21	8	0	0	0
Khuzdar	23	11	35	0	5	0	0	4	0	0
Killa Abdullah	182	84	14	22	49	45	14	56	1	0
Kohlu	168	220	85	11	28	34	14	NR	NR	NR
Lasbella	455	61	355	210	34	6	9	0	5	1
Loralai	205	327	50	29	39	101	9	2	0	0
Mastung	216	157	58	24	33	20	19	0	0	0
MusaKhel	50	40	115	11	12	2	13	16	0	0
Naseerabad	356	6	297	15	5	18	50	1	28	24
Pishin	447	410	41	72	158	36	22	62	1	2
Quetta	619	627	15	142	27	29	17	4	0	0
Sibi	28	90	26	2	9	2	5	0	0	0
Sohbat pur	300	21	286	154	94	11	27	2	1	2
Surab	20	69	3	0	0	0	0	0	0	0
Usta Muhammad	925	69	154	80	70	0	4	0	47	0
Washuk	167	239	117	15	74	16	4	21	0	0
Zhob	298	137	57	321	32	109	7	1	0	25
Total	5,658	4,641	2,418	1,214	989	616	318	185	85	62

Figure 4: Most frequently reported suspected cases during Week 21, Balochistan

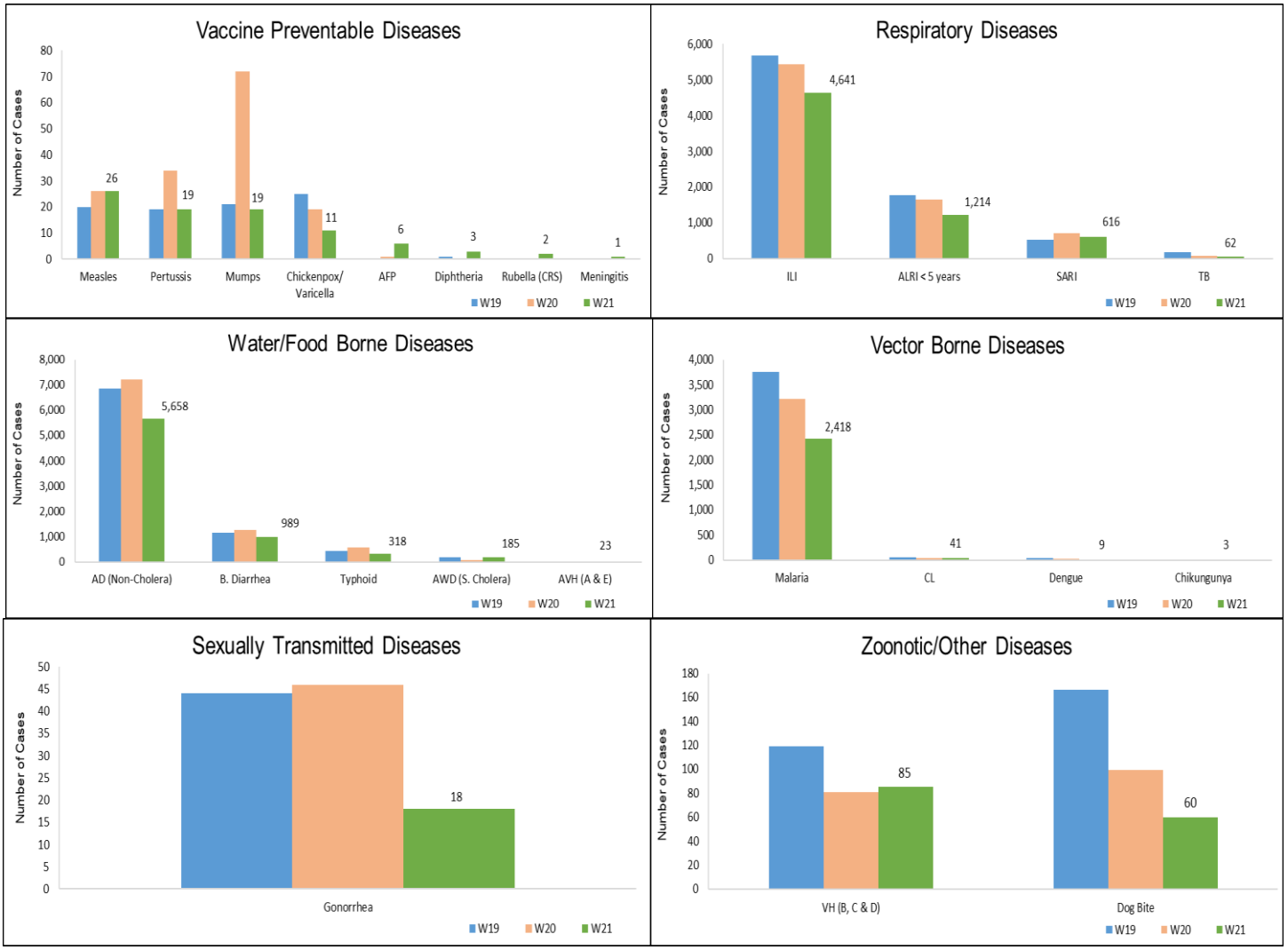
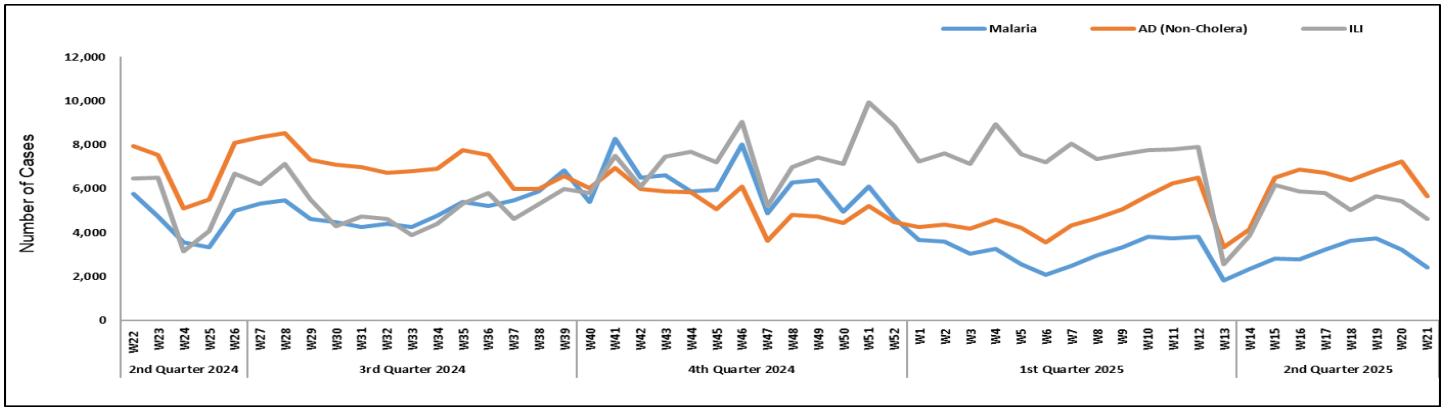


Figure 5: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Balochistan



Khyber Pakhtunkhwa

- Cases of AD (Non-Cholera) were maximum followed by ILI, Malaria, B. Diarrhea, dog bite, ALRI<5 Years, Typhoid, SARI, CL and Measles.
- ILI, Malaria, CL and VPDs including Measles, Mumps, AFP, Pertussis and Meningitis showed an increase in number of cases while AD (Non-Cholera), B. Diarrhea, dog bite, ALRI<5 Years and SARI showed a decline in number of cases this week.
- Twenty-seven cases of AFP reported from KP. All are suspected cases and need field verification.
- Four suspected cases of Brucellosis reported from KP. They require field verification.
- One case of HIV/AIDs reported from KP. It is suspected case and needs field verification.

Table 4: District wise distribution of most frequently reported suspected cases during Week 21, KP

Districts	AD (Non-Cholera)	ILI	Malaria	B. Diarrhea	Dog Bite	ALRI < 5 years	Typhoid	SARI	CL	Measles
Abbottabad	1,620	170	0	5	40	6	20	4	0	3
Bajaur	763	73	222	100	83	12	10	100	23	35
Bannu	787	2	1,435	41	24	10	85	2	0	100
Battagram	325	648	32	4	14	NR	NR	NR	5	NR
Buner	396	0	215	0	11	0	8	0	0	0
Charsadda	2,985	1,262	338	142	0	322	75	3	2	48
Chitral Lower	857	175	22	31	14	10	9	16	10	1
Chitral Upper	204	33	5	5	4	10	13	27	0	2
D.I. Khan	2,000	0	190	26	46	13	0	0	2	91
Dir Lower	1,924	0	143	92	76	9	33	0	1	26
Dir Upper	1,335	93	32	25	3	14	18	0	0	6
Hangu	234	265	69	7	7	14	8	0	47	0
Haripur	1,402	30	0	0	16	48	0	0	0	0
Karak	740	74	195	30	31	33	4	21	335	5
Khyber	1,293	51	227	138	61	44	92	5	63	15
Kohat	1,366	5	82	29	41	3	18	1	19	1
Kohistan Lower	131	0	2	8	1	0	0	0	0	0
Kohistan Upper	349	1	10	40	5	4	5	2	0	2
Kolai Palas	146	10	2	7	0	1	1	0	0	0
L & C Kurram	5	0	1	10	0	0	0	0	0	0
Lakki Marwat	948	0	243	8	55	0	24	0	0	9
Malakand	1,404	39	10	11	0	0	65	0	1	16
Mansehra	1,039	323	2	2	0	0	0	0	0	0
Mardan	1,211	339	73	34	8	142	15	0	10	3
Mohmand	102	14	169	32	0	2	5	18	13	0
North Waziristan	110	5	88	26	9	12	12	26	5	24
Nowshera	2,655	19	114	14	6	5	12	16	2	7
Orakzai	146	12	24	16	1	0	0	0	0	0
Peshawar	5,096	382	36	162	14	47	124	17	1	85
SD Tank	26	0	12	8	0	0	0	0	3	3
Shangla	1,326	1	230	7	61	8	26	1	0	10
South Waziristan (Lower)	94	251	86	4	4	7	19	58	14	3
SWU	31	21	12	1	0	0	0	10	0	1
Swabi	1,967	527	73	20	193	28	62	45	0	33
Swat	4,626	178	23	122	78	48	69	84	0	7
Tank	538	95	112	7	4	9	9	0	0	10
Tor Ghar	139	0	33	62	11	1	5	25	0	1
Upper Kurram	215	219	20	52	8	6	13	219	0	0
Total	40,535	5,317	4,582	1,328	929	868	859	700	556	547

Figure 6: Most frequently reported suspected cases during Week 21, KP

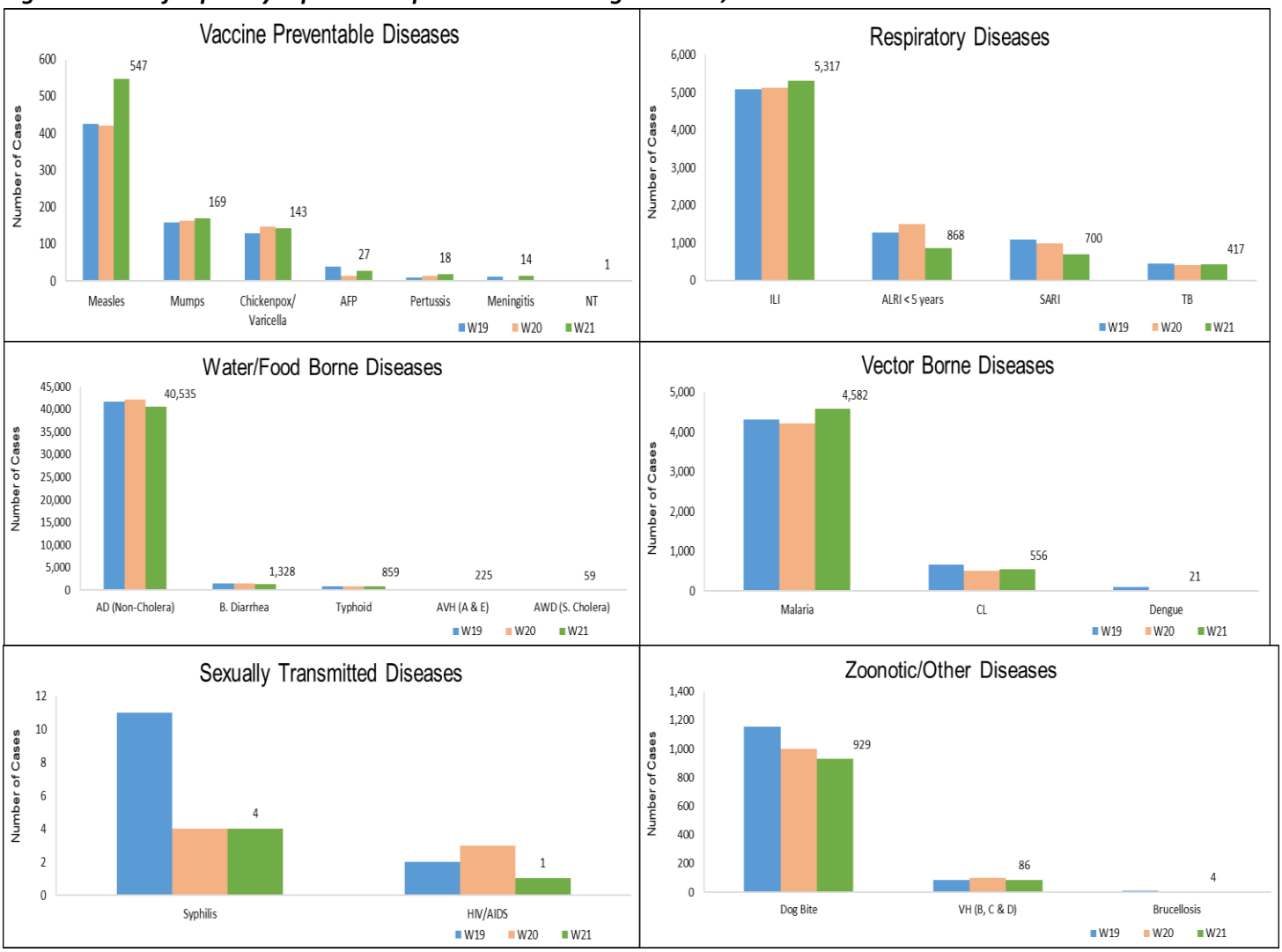
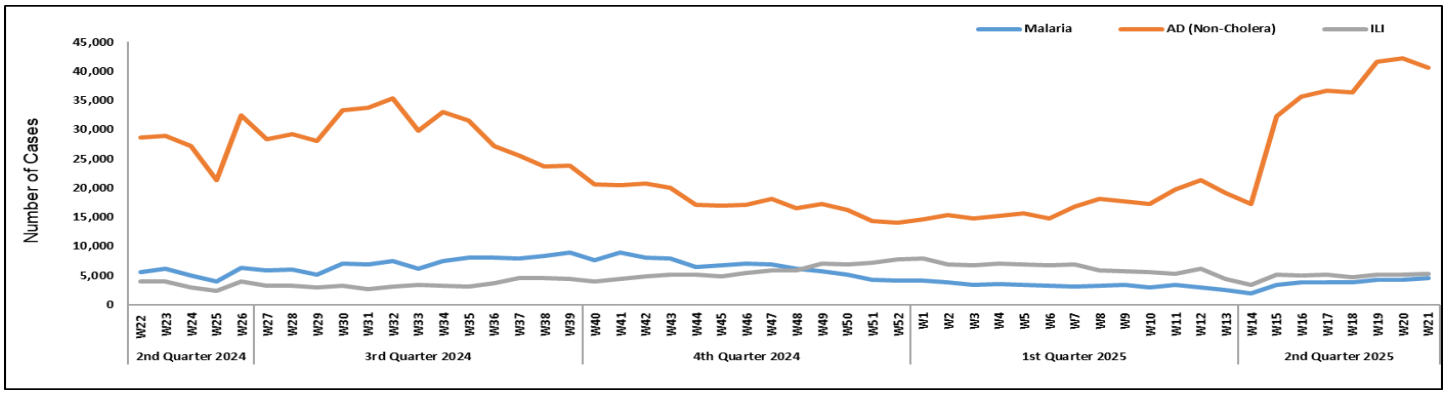


Figure 7: Week wise reported suspected cases Malaria, AD (Non-Cholera) & ILI, KP



ICT, AJK & GB

ICT: The most frequently reported cases from Islamabad were ILI and AD (Non-Cholera). AD (Non-Cholera) cases showed an increase in number while ILI cases showed a decline in cases this week.

AJK: ILI cases were maximum followed by AD (Non-Cholera), ALRI < 5years, SARI, dog bite, TB, AVH (A & E), B. Diarrhea, AWD (S. Cholera) and VH (B, C & D) cases. An increase in cases observed for AD (Non-Cholera), TB, AVH (A & E), AWD (S. Cholera), VH (B, C & D) and VPDs including Measles, Meningitis and Chickenpox while a decline in cases observed for ILI, ALRI < 5years, SARI, dog bite and B. Diarrhea this week. Two cases of AFP reported from AJK. They require field investigation.

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

Figure 10: Most frequently reported suspected cases during Week 21, AJK

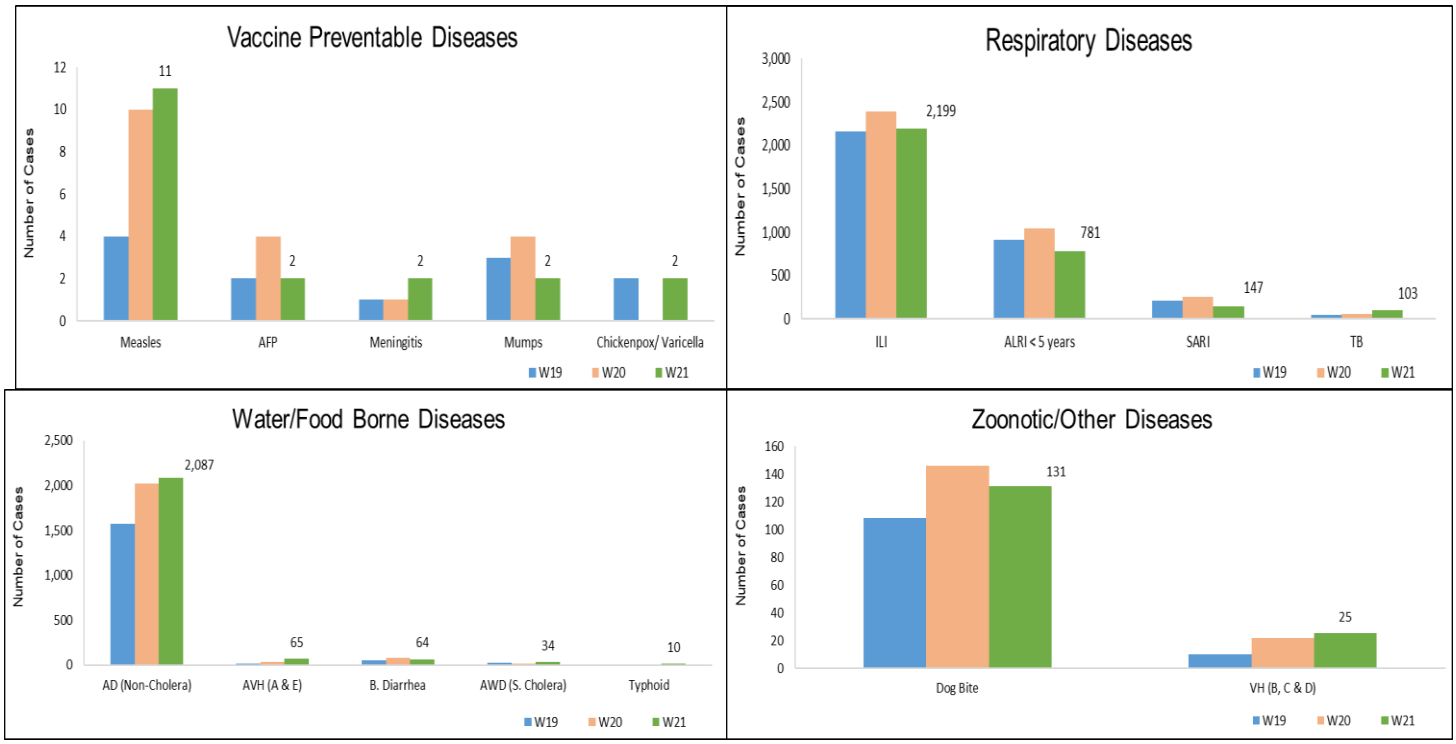


Figure 11: Week wise reported suspected cases of ILI and ARI <5 years, AJ

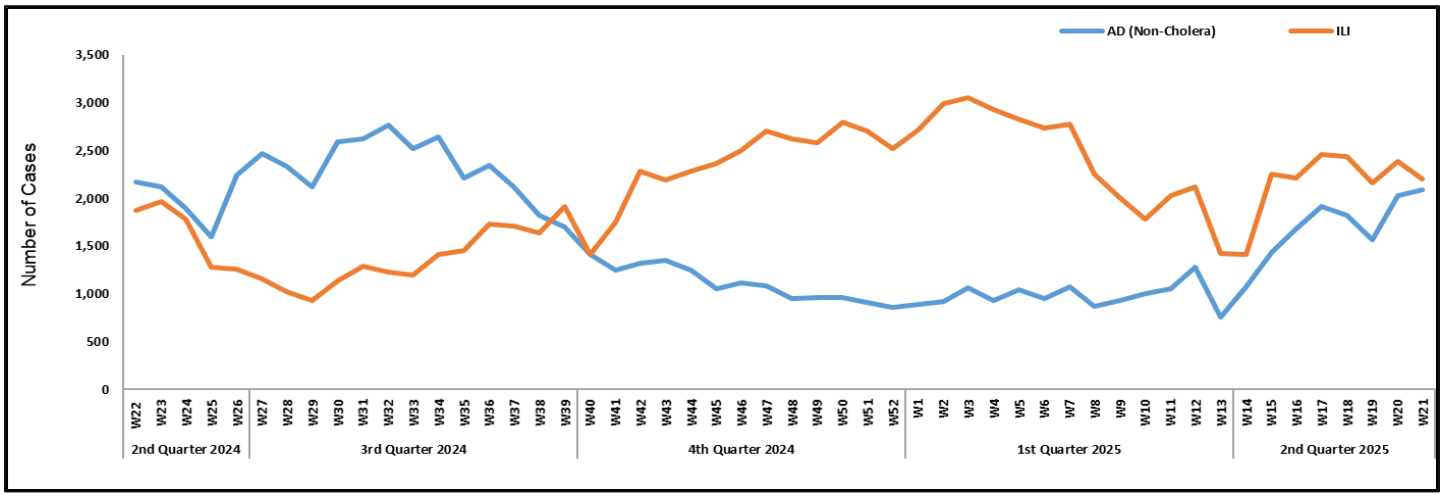


Figure 12: Most frequently reported suspected cases during Week 21, ICT

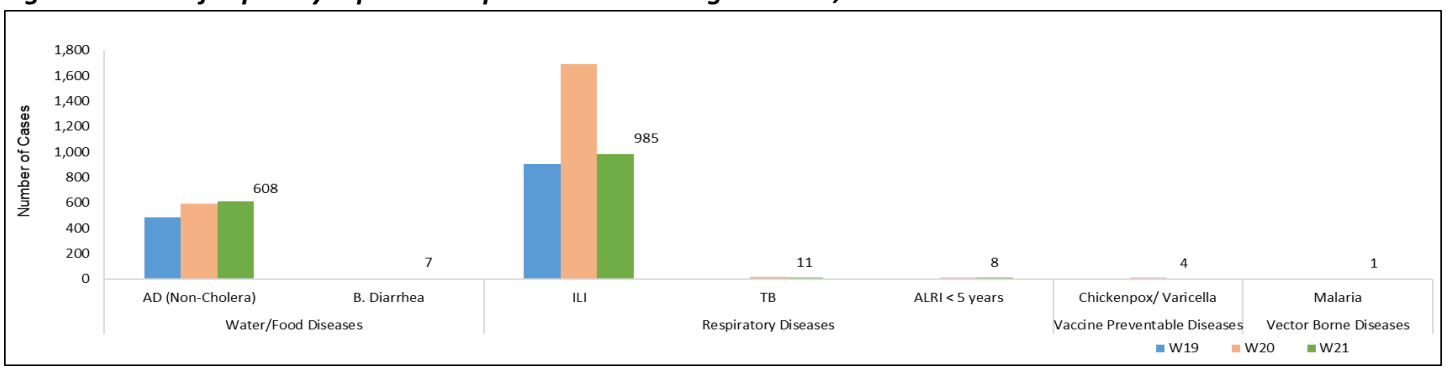


Figure 13: Week wise reported suspected cases of ILI, ICT

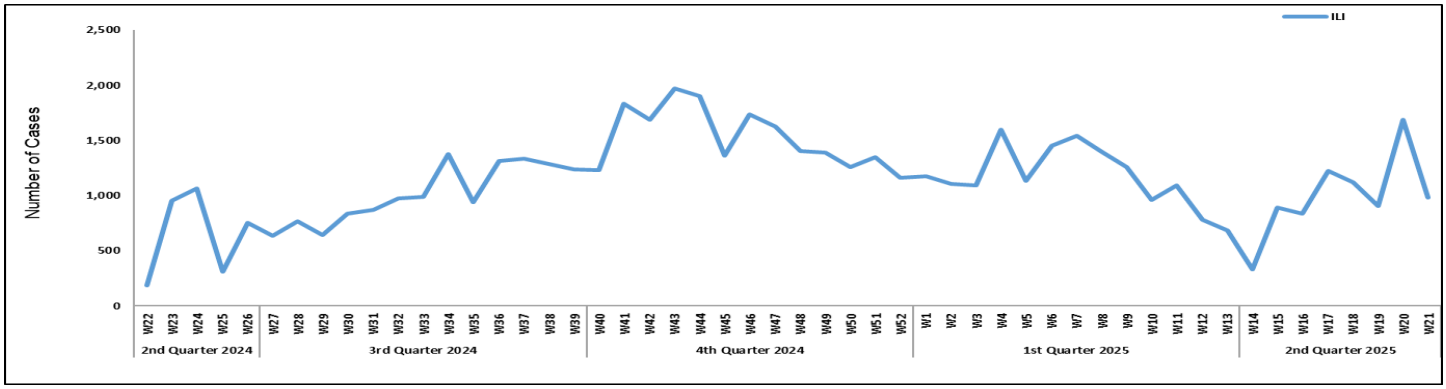


Figure 14: Most frequent cases reported during Week 21, GB

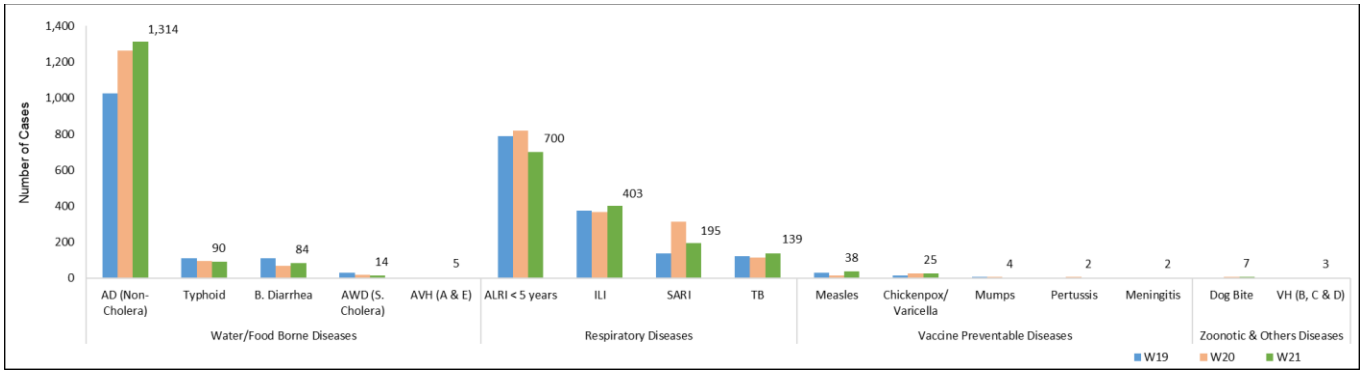


Figure 15: Week wise reported suspected cases of AD-Non-Cholera, GB

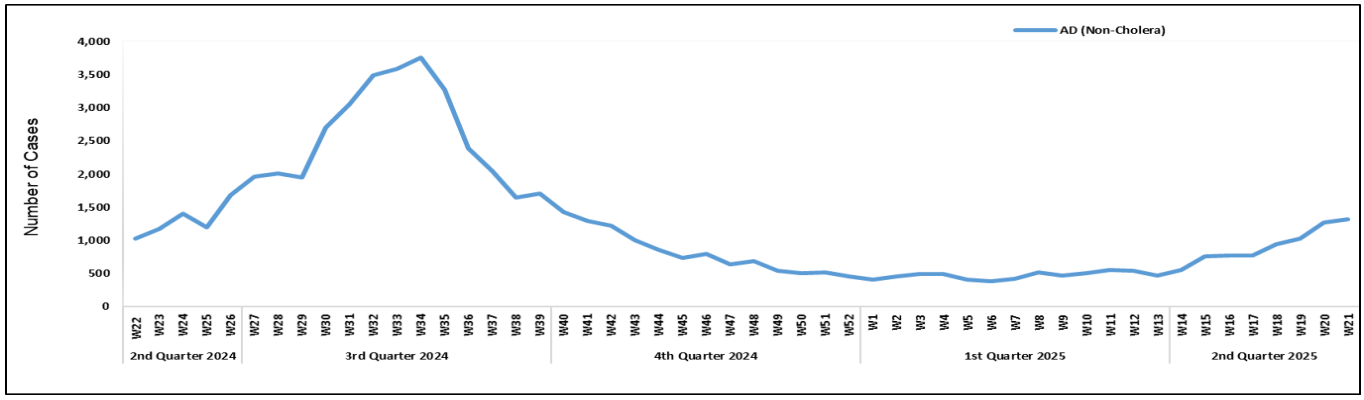


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 21

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	Tota l Pos	Total Test	Total Pos	Total Test	Total Pos
AWD (S. Cholera)		89	1	-	-	0	0	-	-	-	-	-	-	0	0
AD (non-cholera)		155	1	-	-	0	0	-	-	-	-	-	-	0	0
Malaria		8,342	574	-	-	399	13	-	-	-	-	-	-	16	0
CCHF		2	0	-	-	0	0	-	-	-	-	-	-	0	0
Dengue		1,872	179	-	-	5	0	-	-	-	-	-	-	0	0
VH (B)		14,826	439	-	-	868	4	-	-	-	-	-	-	162	0
VH (C)		14,800	1,452	-	-	868	1	-	-	-	-	-	-	162	1
VH (D)		327	110	-	-	0	0	-	-	-	-	-	-	0	0
VH (A)		167	59	-	-	0	0	-	-	-	-	-	-	0	0
VH (E)		83	39	-	-	0	0	-	-	-	-	-	-	0	0
Covid-19		32	24	-	-	0	0	-	-	-	-	-	-	0	0
Chikungunya		0	0	-	-	0	0	-	-	-	-	-	-	0	0
TB		516	67	-	-	2	0	-	-	-	-	-	-	56	6
HIV/ AIDS		5,565	53	-	-	794	0	-	-	-	-	-	-	42	0
Syphilis		1,273	26	-	-	275	0	-	-	-	-	-	-	0	0
B. Diarrhea		55	0	-	-	0	0	-	-	-	-	-	-	0	0
Typhoid		1,136	23	-	-	0	0	-	-	-	-	-	-	0	0
Diphtheria		8	7	-	-	0	0	-	-	-	-	-	-	0	0
Pneumonia (ALRI)		40	19	-	-	0	0	-	-	-	-	-	-	0	0
Meningitis		6	2	-	-	0	0	-	-	-	-	-	-	0	0
Measles		296	144	19	9	341	158	19	10	54	32	674	140	33	11
Rubella		296	4	19	2	341	3	19	1	54	1	674	7	33	0
Covid-19	Out of SARI	1	0	0	0	10	0	57	8	-	-	135	0	0	0
	Out of ILI	16	2	0	0	2	0	22	8	-	-	30	0	0	0
Influenza A	Out of SARI	1	0	0	0	10	0	57	0	-	-	135	0	0	0
	Out of ILI	16	0	0	0	2	0	22	0	-	-	30	0	0	0
Influenza B	Out of SARI	1	0	0	0	10	0	57	0	-	-	135	0	0	0
	Out of ILI	16	0	0	0	2	0	22	0	-	-	30	0	0	0
RSV	Out of SARI	1	0	0	0	10	0	57	0	-	-	135	0	0	0
	Out of ILI	16	0	0	0	2	0	22	0	-	-	30	0	0	0

Table 6: IDSR reporting districts Week 21, 2025

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	111	98	88%
	Bannu	238	129	54%
	Battagram	59	29	49%
	Buner	34	19	56%
	Bajaur	44	40	91%
	Charsadda	59	57	97%
	Chitral Upper	34	30	88%
	Chitral Lower	35	34	97%
	D.I. Khan	113	113	100%
	Dir Lower	74	63	85%
	Dir Upper	37	30	81%
	Hangu	22	17	77%
	Haripur	72	69	96%
	Karak	36	36	100%
	Khyber	53	34	64%
	Kohat	61	61	100%
	Kohistan Lower	11	8	73%
	Kohistan Upper	20	15	75%
	Kolai Palas	10	9	90%
	Lakki Marwat	70	69	99%
	Lower & Central Kurram	42	2	5%
	Upper Kurram	41	0	0%
	Malakand	42	20	48%
	Mansehra	133	89	67%
	Mardan	80	52	65%
	Nowshera	55	50	91%
	North Waziristan	13	9	69%
	Peshawar	155	128	83%
	Shangla	37	33	89%
	Swabi	64	62	97%
	Swat	77	75	97%
	South Waziristan (Upper)	93	36	39%
	South Waziristan (Lower)	42	22	52%
	Tank	34	32	94%
	Torghar	14	14	100%
	Mohmand	68	61	90%
	SD Peshawar	5	0	0%
	SD Tank	58	6	10%
	Orakzai	69	10	14%
Azad Jammu Kashmir	Mirpur	37	37	100%
	Bhimber	42	20	48%

	Kotli	60	60	100%
	Muzaffarabad	45	41	91%
	Poonch	46	46	100%
	Haveli	39	39	100%
	Bagh	40	40	100%
	Neelum	39	39	100%
	Jhelum Velley	29	28	97%
	Sudhnooti	27	27	100%
Islamabad Capital Territory	ICT	21	21	100%
	CDA	15	6	40%
Balochistan	Gwadar	26	23	88%
	Kech	44	0	0%
	Khuzdar	74	3	4%
	Killa Abdullah	26	23	88%
	Lasbella	55	55	100%
	Pishin	65	37	57%
	Quetta	55	30	55%
	Sibi	36	19	53%
	Zhob	39	29	74%
	Jaffarabad	16	16	100%
	Naserabad	32	31	97%
	Kharan	30	30	100%
	Sherani	15	0	0%
	Kohlu	75	30	40%
	Chagi	36	21	58%
	Kalat	41	40	98%
	Harnai	17	0	0%
	Kachhi (Bolan)	35	13	37%
	Jhal Magsi	28	26	93%
	Sohbat pur	25	25	100%
	Surab	32	10	31%
	Mastung	45	45	100%
	Loralai	33	23	70%
	Killa Saifullah	28	0	0%
	Ziarat	29	0	0%
	Duki	31	0	0%
	Nushki	32	0	0%
	Dera Bugti	45	29	64%
	Washuk	46	25	54%
	Panjgur	38	0	0%
	Awaran	23	0	0%
	Chaman	24	0	0%
	Barkhan	20	19	95%
	Hub	33	9	27%
	Musakhel	41	16	39%
	Usta Muhammad	34	17	50%
Gilgit Baltistan	Hunza	32	32	100%
	Nagar	25	20	80%
	Ghizer	38	38	100%

	Gilgit	42	40	95%
	Diamer	62	60	97%
	Astore	55	54	98%
	Shigar	27	25	93%
	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	220	80%
	Shikarpur	60	60	100%
	Thatta	52	48	92%
	Larkana	67	66	99%
	Kamber Shadadkot	71	71	100%
	Karachi-East	21	14	67%
	Karachi-West	20	20	100%
	Karachi-Malir	35	35	100%
	Karachi-Kemari	18	18	100%
	Karachi-Central	12	6	50%
	Karachi-Korangi	18	18	100%
	Karachi-South	6	6	100%
	Sujawal	55	55	100%
	Mirpur Khas	106	105	99%
	Badin	124	124	100%
	Sukkur	64	63	98%
	Dadu	90	90	100%
	Sanghar	100	99	99%
	Jacobabad	44	44	100%
	Khairpur	170	169	99%
	Kashmore	59	59	100%
	Matiari	42	42	100%
	Jamshoro	75	74	99%
	Tando Allahyar	54	53	98%
	Tando Muhammad Khan	41	41	100%
	Shaheed Benazirabad	122	122	100%

Table 7: IDSR reporting Tertiary care hospital Week 21, 2025

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	1	0	0%
	Sukkur	1	0	0%
	Shaheed Benazirabad	1	1	100%
	Karachi-East	1	1	100%
	Karachi-Central	1	1	100%

Letter to the Editor

Navigating the Monsoon – Prioritizing Health and Prevention in Pakistan

Dear Editor,

As the monsoon season sweeps across Pakistan, bringing much-needed relief from the summer heat, it also ushers in a distinct set of public health challenges. The heavy rainfall and subsequent flooding create ideal breeding grounds for disease vectors and contaminate water sources, making proactive health measures essential for our communities.

One of the most immediate concerns during the monsoon is the surge in waterborne diseases. Contaminated drinking water, often due to overflowing sewers and compromised supply lines, leads to outbreaks of **cholera, typhoid, diarrhea, and giardiasis**. [1, 2] These illnesses, particularly dangerous for children and the elderly, can quickly spread and overwhelm healthcare facilities if not contained. Recent data consistently shows a significant increase in diarrheal diseases during the monsoon months in various parts of the country. [3]

Simultaneously, stagnant water collected in puddles, open drains, and discarded containers becomes a breeding paradise for mosquitoes. This directly translates to a heightened risk of **vector-borne diseases like dengue fever and malaria**. [4] While dengue outbreaks have become a recurring post-monsoon challenge, the risk begins with the onset of rains. Furthermore, other infections like **skin infections, fungal infections, and leptospirosis** (a bacterial disease spread through contaminated water or contact with infected animal urine) also see an uptick during this period due to increased humidity and exposure to floodwaters. [1, 5]

The consequences extend beyond individual illness; these outbreaks place immense strain on our already stretched healthcare system, diverting resources and manpower. Moreover, they lead to economic losses due to missed workdays and increased medical expenditures for families.

While government agencies and local authorities often issue advisories, a collective, community-wide effort is crucial for effective prevention. We must emphasize:

Ensuring Safe Drinking Water: Communities must prioritize boiling drinking water, using water purification tablets, or consuming bottled water, especially in flood-affected areas. Authorities must ensure the integrity of water supply lines and implement robust water quality monitoring. [1, 6]

Vigorous Mosquito Control: Eliminating stagnant water sources around homes and in public spaces is paramount. This includes regularly emptying water from coolers, tires, and flowerpots, and ensuring proper drainage. Using mosquito nets and repellents, particularly during dawn and dusk, is also vital. [4]

Promoting Food Safety: During humid conditions, food spoils quickly. Emphasizing the consumption of freshly prepared and properly stored food, and avoiding street food, is critical to prevent foodborne illnesses. [1]

Maintaining Personal Hygiene: Frequent handwashing with soap and water, especially before meals and after using the restroom, is a simple yet powerful preventive measure against various infections. Avoiding wading through floodwaters where possible, and promptly cleaning any cuts or wounds, can prevent skin infections. [1]

Early Symptom Recognition and Healthcare Access: Public awareness campaigns should educate communities on the symptoms of common monsoon-related illnesses and encourage immediate consultation with

healthcare professionals. This can prevent complications and reduce transmission.

The monsoon season, while essential for our agriculture and environment, demands heightened vigilance regarding public health. By collectively adhering to these preventive measures, we can significantly mitigate the health risks and ensure a safer, healthier monsoon for all Pakistanis.

Sincerely,

Dr. Muhammad Hamza Ikram

Scientific Officer, CDC-NIH

References:

[1] Daily Parliament Times. (2024, July 15). *Monsoon health hazards and how to prevent them*.https://www.dailyparliamenttimes.com/2024/07/15/monsoon-health-hazards-and-how-to-prevent-them/

[3] Dawn.com. (2024, August 28). *Diarrhoea cases surge in Sindh as monsoon woes continue*. https://www.dawn.com/news/1855845

[4] The News International. (2024, July 22). *Monsoon season heightens dengue fever risk in Pakistan*.https://www.thenews.com.pk/print/1100552-monsoon-season-heightens-dengue-fever-risk-in-pakistan

[5] Pakistan Observer. (2024, August 1). *Monsoon-related illnesses on the rise*. https://pakobserver.net/monsoon-related-illnesses-on-the-rise/

[6] UNDP Pakistan. (2024, September 5). *Water and Sanitation Challenges in Flood-Affected Areas of Pakistan*. https://www.undp.org/pakistan/press-releases/water-and-sanitation-challenges-flood-affected-areas-pakistan

Knowledge Hub

Dengue: What You Need to Know

Dengue is a mosquito-borne viral infection that is common in tropical and subtropical regions worldwide. It is caused by the dengue virus and transmitted to humans through the bite of infected *Aedes* mosquitoes.

What is Dengue?

Dengue is a viral disease caused by any of four closely related dengue viruses (DENV-1, DENV-2, DENV-3, and DENV-4). Infection with one serotype provides lifelong immunity to that specific serotype but only temporary and partial immunity to the others. Subsequent infections with different serotypes increase the risk of severe dengue.

How Dengue Spreads

Dengue is transmitted primarily by the bite of infected female ***Aedes aegypti*** mosquitoes, and to a lesser extent, *Aedes albopictus* mosquitoes. These mosquitoes are found in tropical and subtropical regions around the world.

Mosquito-to-human: An *Aedes* mosquito bites a person infected with dengue virus and becomes infected. This infected mosquito then bites another person, passing the virus to them.

Human-to-mosquito: An uninfected mosquito bites a dengue-infected person (who may or may not have symptoms) and then transmits the virus to others.

Dengue is not contagious from person to person through direct contact.

Signs & Symptoms

Symptoms of dengue can range from mild to severe. They typically begin **4 to 10 days after the bite** from an infected mosquito and usually last for 2 to 7 days.

Common (Mild) Dengue Symptoms:

High fever (up to $104^\\circ F$ or $40^\\circ C$)

Severe headache

Pain behind the eyes

Muscle, bone, or joint pain

Nausea and vomiting

Swollen glands

Rash (often appears 2-5 days after fever onset)

Warning Signs of Severe Dengue (seek immediate medical attention):

Severe dengue is a more serious form of the disease that can lead to shock, internal bleeding, and even death. Warning signs often appear **24-48 hours after the fever has gone down** (critical phase).

Severe abdominal pain

Persistent vomiting

Bleeding gums or nosebleeds

Blood in vomit or stools

Rapid breathing

Fatigue, restlessness, or irritability

Cold or clammy skin

Severe Dengue (Dengue Hemorrhagic Fever / Dengue Shock Syndrome)

Severe dengue, previously known as Dengue Hemorrhagic Fever (DHF) or Dengue Shock Syndrome (DSS), is a potentially fatal complication. It is characterized by plasma leakage, fluid accumulation, respiratory distress, severe bleeding, or organ impairment. People who have had dengue before are at higher risk of developing severe dengue upon a second infection with a different dengue serotype.

Complications

If severe dengue is not recognized and treated promptly, it can lead to:

Dengue shock syndrome (a dangerous drop in blood pressure)

Severe internal bleeding

Organ failure (e.g., liver, heart, brain)

Death

Prevention

There is currently no specific treatment for dengue fever, so prevention is key. The most effective way to prevent dengue is to **avoid mosquito bites** and **control mosquito populations**.

Mosquito bite prevention:

Use insect repellent: Apply EPA-registered insect repellents containing DEET, picaridin, IR3535, oil of lemon eucalyptus (OLE), para-menthane-diol (PMD), or 2-undecanone to exposed skin and clothing.

Wear protective clothing: Wear long-sleeved shirts, long pants, socks, and shoes when outdoors, especially during peak mosquito biting hours (dawn and dusk, but *Aedes* mosquitoes can bite throughout the day).

Stay in screened or air-conditioned areas: If possible, stay indoors in places with air conditioning or good window/door screens.

Use bed nets: Sleep under an insecticide-treated bed net, especially if sleeping in unscreened areas.

Mosquito control:

Eliminate breeding sites: *Aedes* mosquitoes lay eggs in and near standing water. Regularly empty, clean, or cover containers that hold water (e.g., tires, buckets, flower pots, pet water bowls, birdbaths, trash cans).

"Drain, Cover, Discard, and Clean": Follow these steps to prevent mosquitoes from breeding around your home.

Dengue Vaccine:

A dengue vaccine (Dengvaxia, CYD-TDV) is approved for use in some dengue-endemic countries for individuals aged 9-45 years with confirmed prior dengue infection.

Another vaccine (Qdenga, TAK-003) is also approved in some regions for broader use, regardless of prior infection status.

Diagnosis

Dengue is diagnosed by a healthcare provider based on symptoms, recent travel history to dengue-endemic areas, and laboratory tests.

Blood tests: Specific blood tests can detect the dengue virus or antibodies produced in response to infection. Early testing is crucial.

Treatment

There is no specific antiviral treatment for dengue fever. Treatment focuses on managing symptoms and providing supportive care.

Rest: Get plenty of rest.

Fluids: Drink plenty of fluids (water, oral rehydration solutions, fruit juices, etc.) to prevent dehydration.

Pain relief: Use acetaminophen (paracetamol) for fever and pain. **Avoid aspirin, ibuprofen, or other non-steroidal anti-inflammatory drugs (NSAIDs)**, as these can increase the risk of bleeding.

Medical monitoring: Individuals with dengue, especially those with warning signs, should be closely monitored by a healthcare professional. Severe dengue may require hospitalization for intravenous fluids and other supportive measures.

More Information

For additional authoritative information on dengue, please visit:

World Health Organization (WHO):

https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue

Centers for Disease Control and Prevention (CDC):

https://www.cdc.gov/dengue/index.html

Public Health Agency of Canada (PHAC):

https://www.canada.ca/en/public-health/services/diseases/dengue.html

UK Health Security Agency (UKHSA) / National Health Service (NHS):

https://www.nhs.uk/conditions/dengue-fever/

https://www.gov.uk/guidance/dengue-fever-guidance-data-and-analysis

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

UK Health Security Agency

World Health Organization

CDC U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION