PUBLIC HEALTH BULLETIN-PAKISTAN

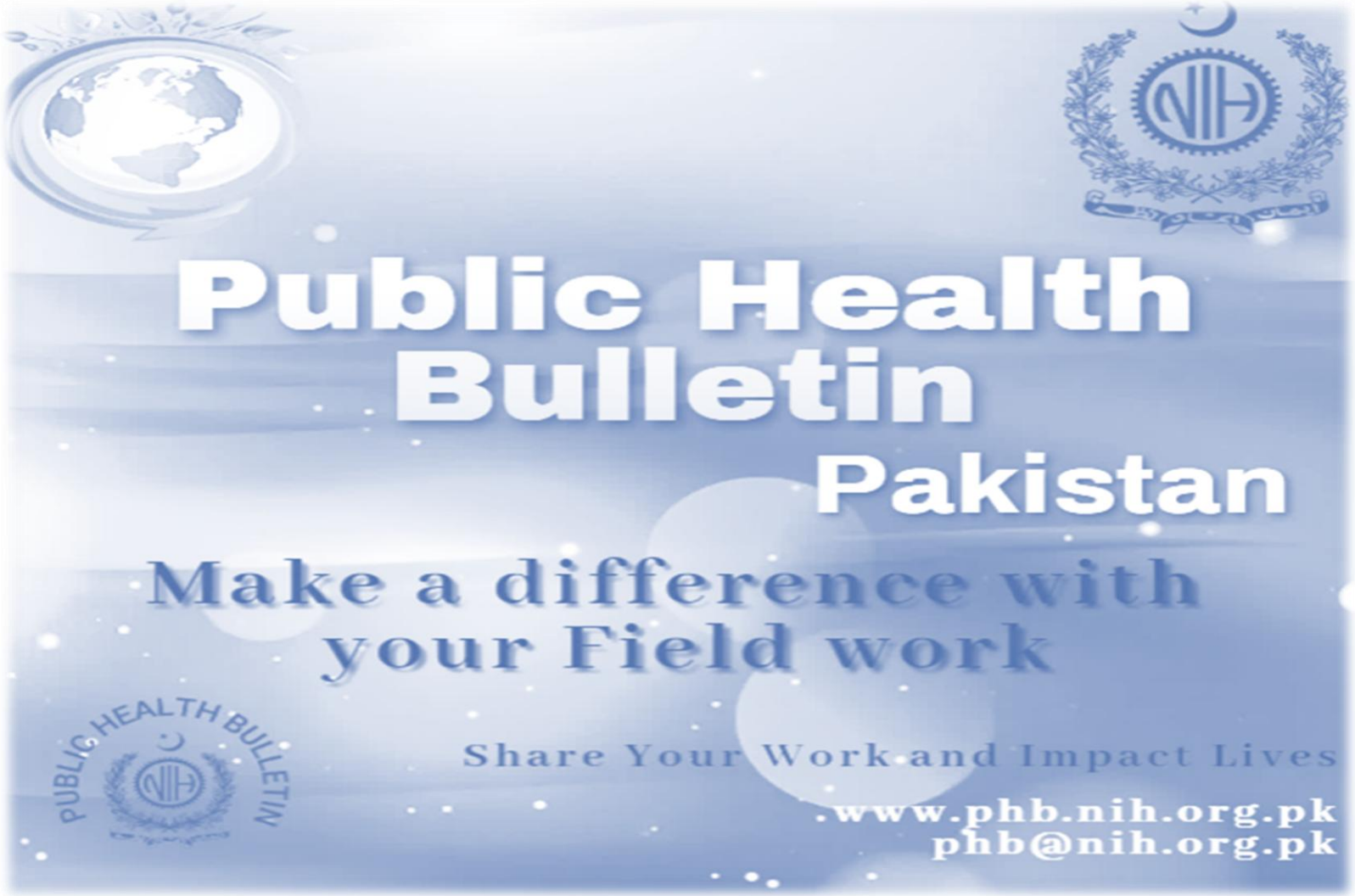
Vol. 5 | Week 23
02nd JUNE – 08th JUNE
17th JUNE, 2025

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.



Overview

IDSR Reports

Ongoing Events

Field Reports

Public Health Bulletin - Pakistan, Week 23, 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;

- *Towards Standardized Mortality Reporting: National ToT Workshop at NIH, Islamabad*
- *Outbreak Investigation Report of Suspected HIV Outbreak at AIMS Hospital, Muzaffarabad, AJK*
- *Knowledge hub on Understanding HIV/AIDS: 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.

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 23, 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.*
- *Ten cases of AFP reported from KP, Seven from Sindh and one each from GB and AJK.*
- *Seventeen suspected cases of HIV/ AIDS reported from Punjab, five from KP, two from Balochistan and one from AJK.*
- *Eight suspected cases of Brucellosis reported from KP.*
- *Among VPDs, there is an increase in number of cases of Meningitis and Diphtheria this week.*
- *Among Respiratory diseases, there is decrease in number of cases of ILI, ALRI < 5years, TB and SARI this week.*
- *Among Water/food-borne diseases, there is decrease in number of cases of Acute Diarrhea (Non-Cholera), Typhoid, AWD (S. Cholera) and AVH (A & E) this week.*
- *Among Vector-borne diseases, there is decrease in number of cases.*
- *Among STDs, there is an increase in number of cases of HIV/AIDs this week.*

IDSR compliance attributes

- *The national compliance rate for IDSR reporting in 158 implemented districts is 66%*
- *AJK is the top reporting regions with a compliance rate of 94%, followed by Sindh 92%, GB 90% and ICT 74%.*
- *The lowest compliance rate was observed in KP 58% and Balochistan 27%.*

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	2704	1557	58
Azad Jammu Kashmir	404	379	94
Islamabad Capital Territory	38	28	74
Balochistan	1308	353	27
Gilgit Baltistan	410	368	90
Sindh	2111	1943	92
National	6975	4628	66

Public Health Actions

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

HIV/AIDS

- **Enhance Surveillance and Case Reporting:** Strengthen HIV case-based surveillance within IDSR and through HIV/AIDS control programs; improve data sharing between testing centers, treatment sites, and public health authorities.
- **Expand Testing and Linkage to Care:** Scale up community-based testing, and targeted outreach among key populations; ensure immediate linkage to antiretroviral therapy (ART) for all positives.
- **Ensure Universal Access to Treatment and Retention in Care:** Maintain a consistent supply of ART and support adherence through differentiated care models, peer support groups, and community health worker follow-up.
- **Promote Combination Prevention Strategies:** Implement comprehensive HIV prevention, including harm reduction for people who inject drugs, pre-exposure prophylaxis (PrEP), and ensuring safe sex practices.
- **Prevent Mother-to-Child Transmission:** Integrate HIV testing in antenatal care and ensure ART initiation and follow-up for HIV-positive pregnant women and their infants.
- **Combat Stigma and Raise Awareness:** Conduct advocacy and public education campaigns to reduce stigma, promote testing, and encourage disclosure and support for people living with HIV/AIDS.

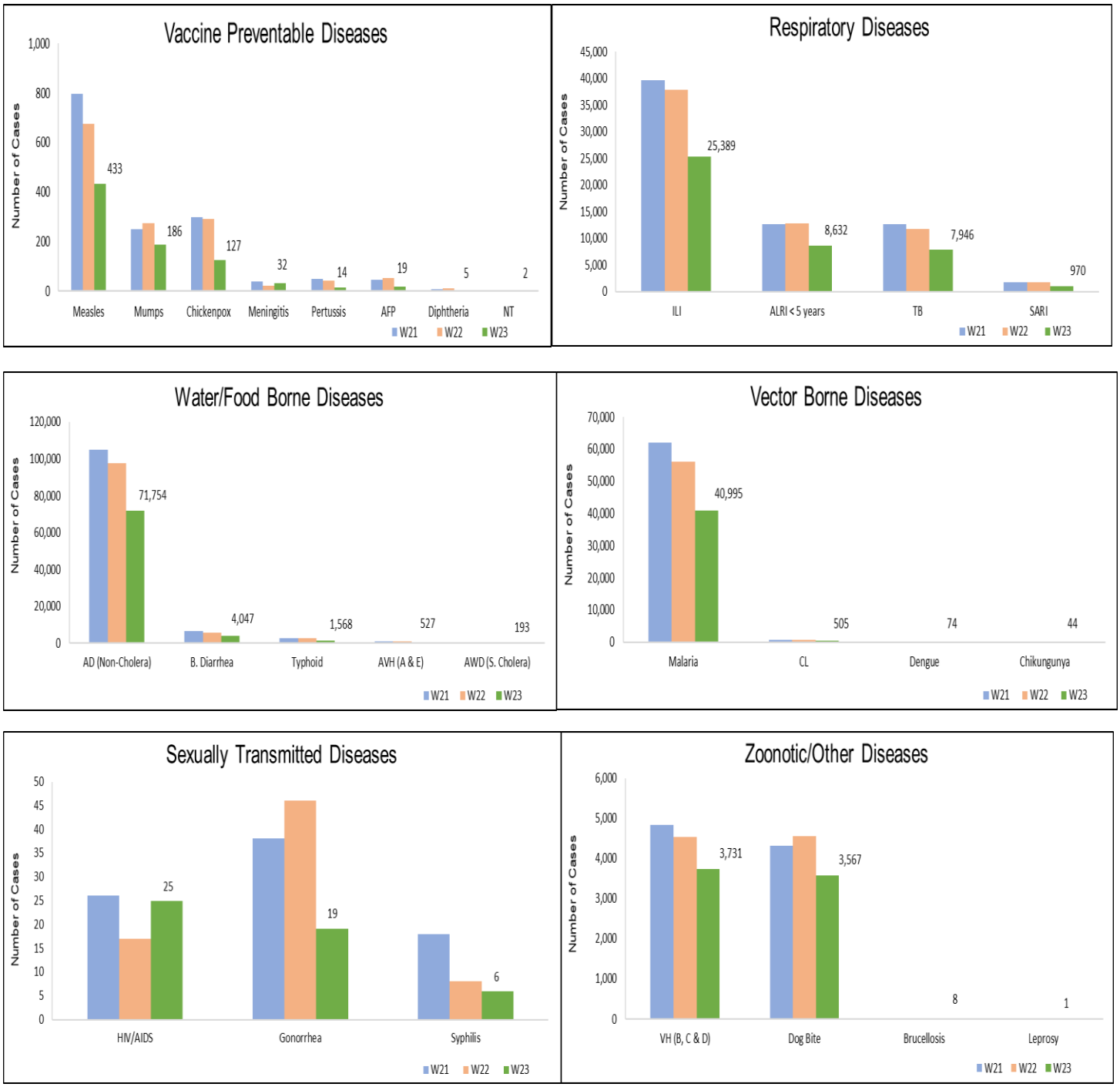
Syphilis

- **Strengthen Surveillance and Case Notification:** Integrate syphilis case reporting into the IDSR system by training healthcare workers to use standard case definitions and improve detection in antenatal clinics and key populations.
- **Improve Diagnostic Services**: Expand access to rapid syphilis tests and confirmatory testing (e.g., RPR, TPHA) at primary and secondary healthcare levels, with linkage to care and partner testing.
- **Ensure Access to Treatment:** Ensure uninterrupted availability of Benzathine penicillin and other recommended antibiotics; implement partner notification and treatment to prevent reinfection.
- **Prevent Congenital Syphilis:** Enhance routine syphilis screening and treatment during antenatal care to prevent adverse birth outcomes, including stillbirth and congenital infection.
- **Raise Public Awareness and Promote Safer Behaviors:** Conduct behavior change communication campaigns promoting condom use, STI testing, and early treatment-seeking, especially in adolescents and high-risk groups.

Table 1: Province/Area wise distribution of most frequently reported suspected cases during Week 23, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (non-cholera)	1,176	2,713	962	460	26,849	NR	39,594	71,754
Malaria	0	881	0	2	3,725	NR	36,387	40,995
ILI	1,306	1,226	234	1,183	3,240	NR	18,200	25,389
ALRI < 5 years	447	442	505	4	583	NR	6,651	8,632
TB	78	5	96	6	344	NR	7,417	7,946
B. Diarrhea	38	371	68	8	893	NR	2,669	4,047
VH (B, C & D)	12	12	0	0	54	NR	3,653	3,731
Dog Bite	100	15	6	0	786	NR	2,660	3,567
Typhoid	5	93	59	2	584	NR	825	1,568
SARI	59	202	85	0	546	NR	78	970
AVH (A & E)	16	16	8	0	187	NR	300	527
CL	0	4	0	0	499	NR	2	505
Measles	6	7	13	1	309	NR	97	433
AWD (S. Cholera)	6	29	10	3	43	NR	102	193
Mumps	4	3	3	1	136	NR	39	186
Chickenpox/ Varicella	2	0	5	2	73	NR	45	127
Dengue	0	12	0	0	4	NR	58	74
Chikungunya	0	0	0	0	0	NR	44	44
Meningitis	0	0	0	0	21	NR	11	32
HIV/AIDS	1	2	0	0	5	NR	17	25
Gonorrhea	0	2	0	0	13	NR	4	19
AFP	1	0	1	0	10	NR	7	19
Pertussis	0	1	2	0	7	NR	4	14
Brucellosis	0	0	0	0	8	NR	0	8
Syphilis	0	4	0	0	0	NR	2	6
Diphtheria (Probable)	0	1	0	0	1	NR	3	5
NT	0	0	0	0	1	NR	1	2
Leprosy	0	0	0	0	1	NR	0	1

Figure 1: Most frequently reported suspected cases during Week 23, Pakistan.



Sindh

- AD (Non-Cholera) cases were maximum followed by Malaria, ILI, TB, ALRI<5 Years, VH (B, C, D), B. Diarrhea, dog bite, Typhoid and AVH (A & E).
- AD (Non-Cholera) cases are mostly from Karachi South, Khairpur and Dadu whereas Malaria cases are from Khairpur, Larkana and Kamber.
- Seven cases of AFP reported from Sindh. They are suspected cases and need field verification.
- There is a decline in number of cases of AD (Non-Cholera), Malaria, ILI, ALRI<5 Years, TB, dog bite, VH (B, C, D), B. Diarrhea, AVH (A & E) and Meningitis while an increase in number of cases of HIV/AIDS this week.

.

Table 2: District wise distribution of most frequently reported suspected cases during Week 23, Sindh

Districts	AD (non-cholera)	Malaria	ILI	TB	ALRI < 5 years	VH (B, C & D)	B. Diarrhea	Dog Bite	Typhoid	AVH (A & E)
Badin	1,879	2,411	739	508	330	95	180	126	70	9
Dadu	2,395	2,467	331	321	744	43	455	372	92	55
Ghotki	878	1,770	0	298	218	318	40	174	0	3
Hyderabad	1,891	457	945	140	66	85	35	51	6	2
Jacobabad	546	392	467	49	485	161	64	156	1	0
Jamshoro	1,616	1,428	24	451	166	162	85	70	19	5
Kamber	1,629	2,539	0	582	206	131	97	186	10	0
Karachi Central	1,043	15	618	45	186	6	22	0	60	14
Karachi East	195	32	134	8	3	0	3	12	8	0
Karachi Keamari	374	4	285	12	15	1	2	0	4	1
Karachi Korangi	238	56	0	10	1	9	3	0	1	1
Karachi Malir	1,239	169	1,838	87	192	29	38	44	21	6
Karachi South	5,141	80	27	264	117	218	93	279	161	140
Karachi West	602	257	864	87	179	37	17	80	27	0
Kashmore	433	1,611	367	155	168	29	67	30	1	0
Khairpur	2,882	3,489	6,211	654	893	114	273	233	127	16
Larkana	1,616	2,972	0	470	164	50	227	30	4	5
Matiari	1,188	1,278	0	340	127	244	34	46	6	0
Mirpurkhas	2,241	1,602	1,656	407	230	110	71	101	14	5
Naushero Feroze	984	1,322	636	317	235	20	128	146	51	0
Sanghar	1,333	2,295	45	620	280	918	54	81	27	8
Shaheed Benazirabad	1,462	1,617	0	246	129	71	55	131	70	0
Shikarpur	852	1,582	1	121	113	361	113	117	1	0
Sindh Labs	209	9	0	1	0	0	0	6	0	0
Sujawal	905	715	0	104	91	61	95	27	3	0
Sukkur	1,198	1,249	1,479	231	353	50	74	70	1	0
Tando Allahyar	1,300	1,205	590	265	87	95	79	55	4	1
Tando Muhammad Khan	913	584	25	275	88	42	62	19	0	0
Tharparkar	927	1,446	727	152	305	17	60	0	8	20
Thatta	337	247	191	30	178	106	33	18	11	9
Umerkot	1,148	1,087	0	167	302	70	110	0	17	0
Total	39,594	36,387	18,200	7,417	6,651	3,653	2,669	2,660	825	300

Figure 2: Most frequently reported suspected cases during Week 23, Sindh

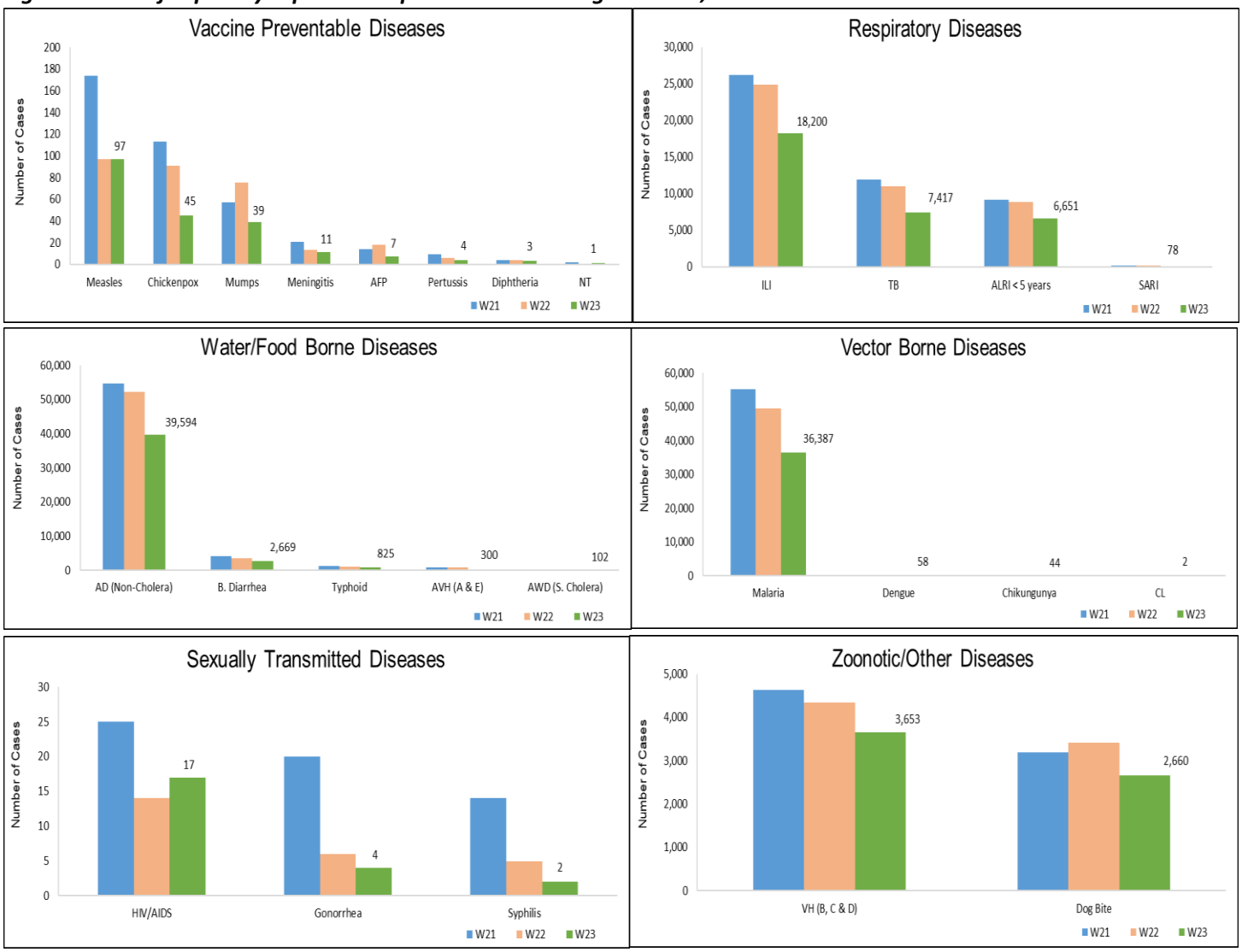
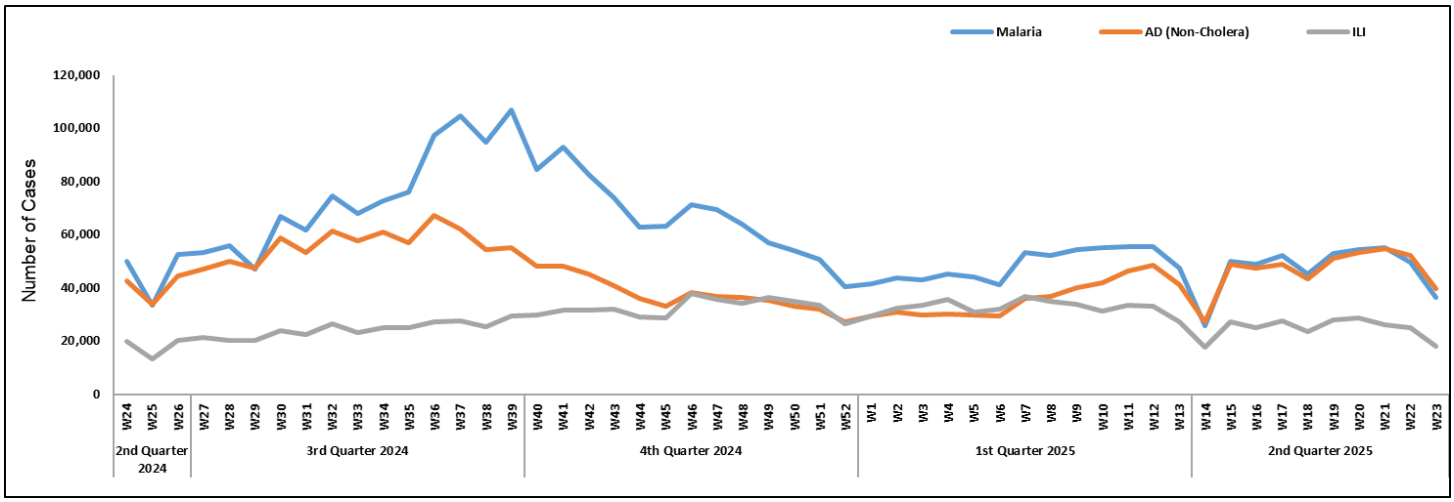


Figure 3: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Sindh



Balochistan

- AD (Non-Cholera), ILI, Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, AWD (S. Cholera), AVH (A&E) and dog bite were the most frequently reported diseases from Balochistan province.
- AD (Non-Cholera) cases are mostly reported from Usta Muhammad, Lasbela and Suhbat pur while ILI cases are mostly reported from Kharan, Loralai and Washuk.
- Two cases of HIV/AIDs reported from Balochistan. Field investigation is required to confirm the cases.
- AD(Non-Cholera), ILI, Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, dog bite, AWD(S. Cholera), Measles, Mumps, Pertussis & Chickenpox showed decrease in number of cases this week; CL and TB showed an increase in number of

Table 3: District wise distribution of most frequently reported suspected cases during Week 23, Balochistan

Districts	AD (non-cholera)	ILI	Malaria	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	AWD (S. Cholera)	AVH (A & E)	Dog Bite
Barkhan	76	38	36	2	14	1	25	0	0	1
Chaman	0	20	0	0	2	0	2	0	0	1
Hub	126	36	52	6	15	0	5	0	0	1
Jaffarabad	0	0	0	0	0	0	0	0	0	0
Jhal Magsi	44	62	30	23	0	0	1	0	0	0
Kachhi (Bolan)	100	31	79	4	47	103	9	19	0	0
Kalat	0	0	0	0	0	0	0	0	0	0
Kharan	155	364	29	0	63	0	9	3	0	0
Khuzdar	12	2	14	0	0	0	0	0	0	2
Killa Abdullah	28	9	0	2	8	17	1	2	0	0
Kohlu	13	19	6	2	1	5	NR	NR	NR	NR
Lasbella	336	42	195	162	21	0	15	0	16	4
Loralai	110	162	18	9	22	57	5	3	0	0
Sibi	167	124	11	16	2	19	4	0	0	0
Sohbat pur	237	20	146	113	39	0	9	2	0	1
Surab	18	61	4	0	0	0	0	0	0	0
Usta Muhammad	1,207	100	169	102	88	0	7	0	0	5
Washuk	84	136	92	1	49	0	1	0	0	0
Total	2,713	1,226	881	442	371	202	93	29	16	15

Figure 4: Most frequently reported suspected cases during Week 23, Balochistan

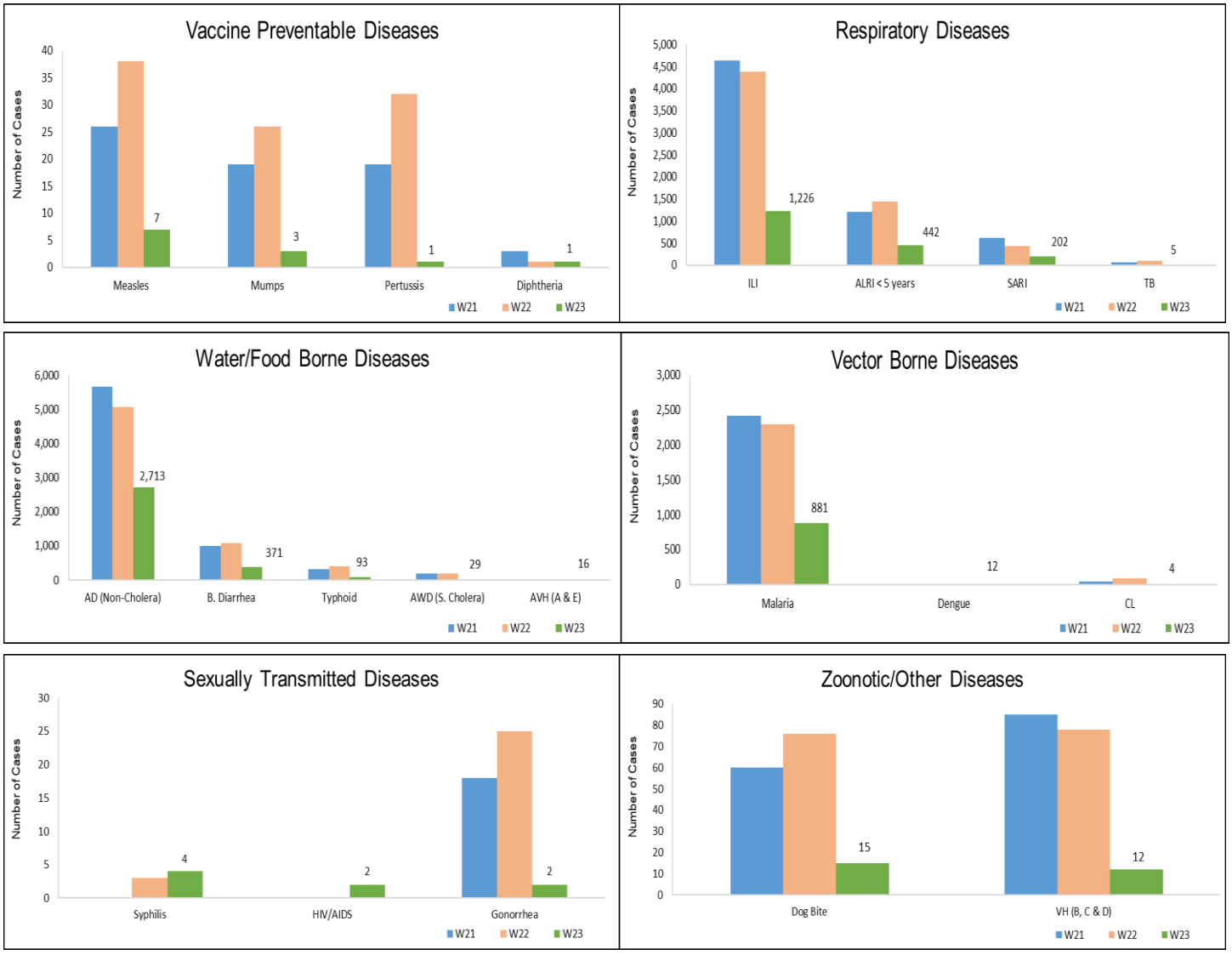
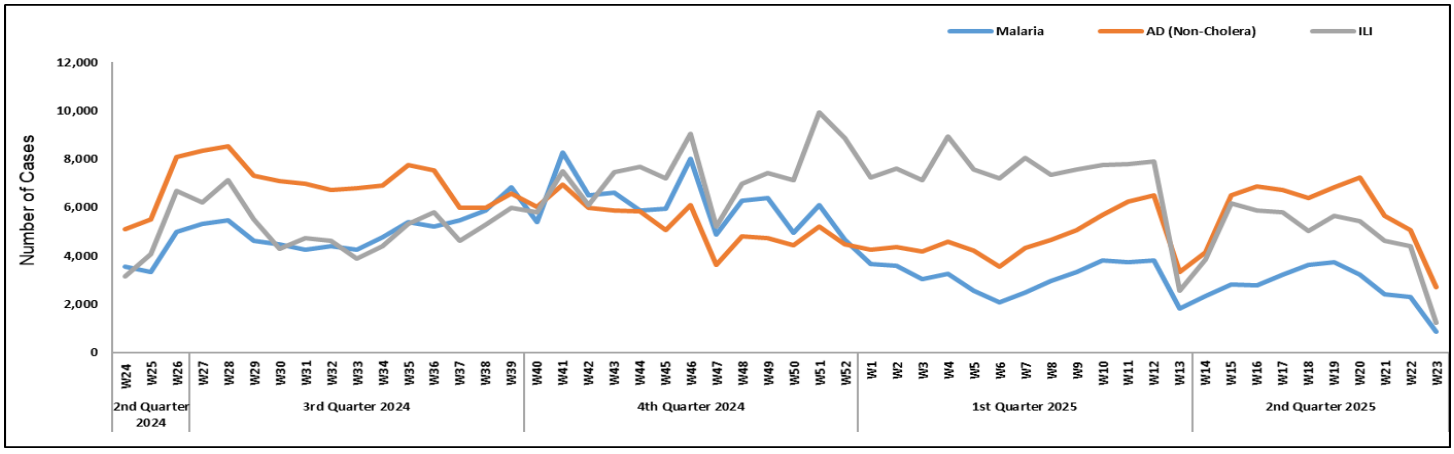


Figure 5: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Balochistan



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

Table 4: District wise distribution of most frequently reported suspected cases during Week 23, KP

Districts	AD (Non-Cholera)	Malaria	ILI	B. Diarrhea	Dog Bite	Typhoid	ALRI < 5 years	SARI	CL	TB
Abbottabad	979	0	56	7	9	23	16	0	0	14
Bajaur	535	148	68	83	33	13	5	47	14	6
Bannu	716	1,156	2	19	5	80	10	6	0	14
Battagram	257	36	424	2	10	NR	NR	NR	5	27
Buner	167	235	0	0	0	5	0	0	0	0
Charsadda	2,046	217	799	68	3	60	220	1	0	2
Chitral Lower	822	19	96	25	10	3	4	8	7	4
Chitral Upper	147	7	21	7	1	7	6	24	0	0
D.I. Khan	1,387	184	0	16	31	0	8	0	3	29
Dir Lower	1,021	86	0	56	52	17	9	0	0	1
Dir Upper	1,152	12	31	28	23	8	20	0	12	16
Hangu	115	45	15	NR	9	2	NR	NR	4	NR
Haripur	1,105	21	223	0	12	17	23	0	0	15
Karak	632	101	47	23	29	3	13	2	287	38
Khyber	466	131	53	56	42	21	29	2	77	7
Kohat	630	58	2	28	33	12	3	0	19	0
Kohistan Lower	108	1	0	7	0	0	0	0	0	0
Kohistan Upper	90	4	0	29	0	4	1	4	0	0
Kolai Palas	91	1	12	1	0	3	2	0	0	1
L & C Kurram	3	0	0	2	0	0	0	0	0	0
Lakki Marwat	699	222	0	12	59	16	0	0	0	3
Malakand	1,005	17	0	0	0	55	0	0	3	0
Mansehra	234	1	84	0	0	8	0	0	0	0
Mardan	711	38	131	7	80	12	41	0	0	0
Mohmand	249	149	87	24	19	2	0	123	43	0
North Waziristan	54	46	0	6	2	4	5	0	12	7
Nowshera	2,298	102	17	9	18	13	0	5	0	10
Orakzai	94	15	12	1	0	0	0	0	0	0
Peshawar	3,341	26	278	117	4	92	36	97	0	7
SD Tank	34	21	0	6	1	0	0	0	3	0
Shangla	1,196	263	0	5	82	10	3	0	0	95
South Waziristan (Lower)	24	130	91	5	4	18	3	26	2	6
SWU	28	8	41	0	0	4	0	0	0	0
Swabi	1,271	39	298	32	148	43	17	8	0	23
Swat	2,416	29	101	105	43	8	97	23	0	6
Tank	419	112	70	10	0	9	5	0	0	2
Tor Ghar	132	32	0	46	18	0	2	26	8	6
Upper Kurram	175	13	181	51	6	12	5	144	0	5
Total	26,849	3,725	3,240	893	786	584	583	546	499	344

Figure 6: Most frequently reported suspected cases during Week 23, KP

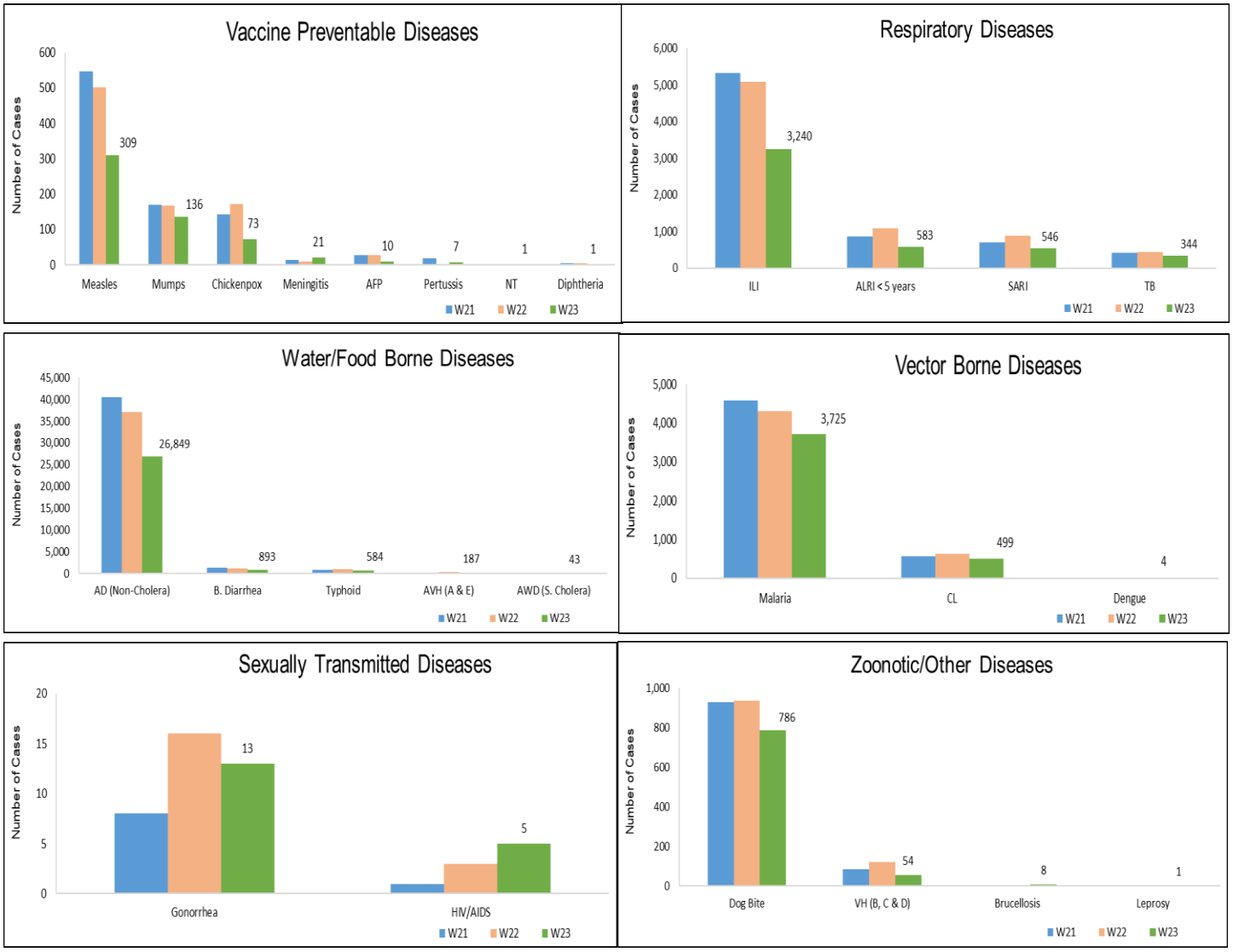
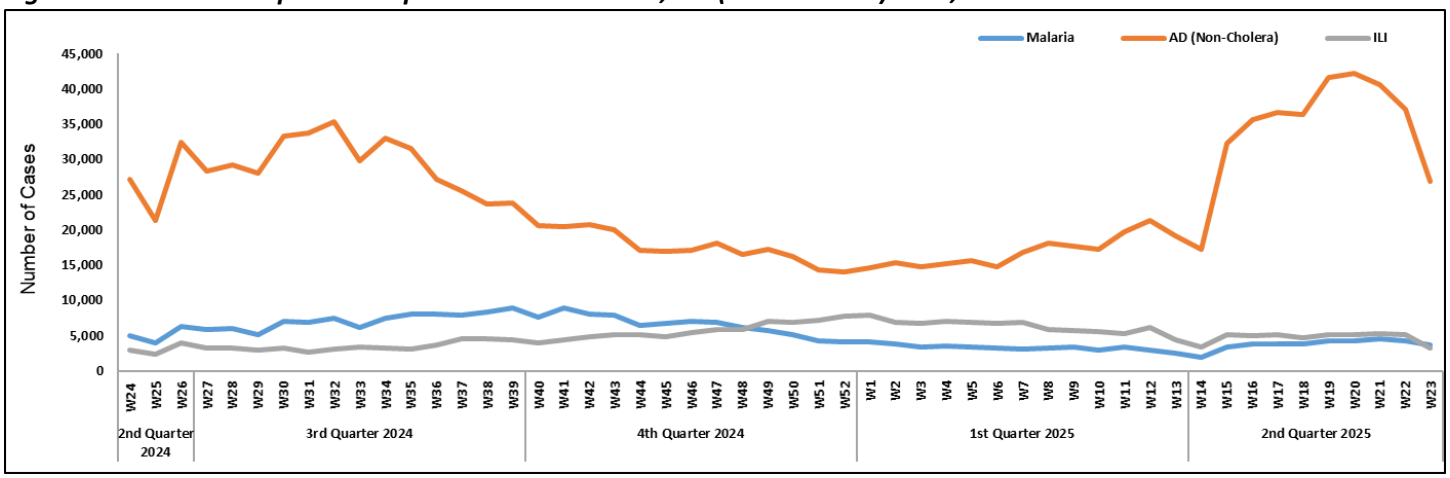


Figure 7: Week wise reported suspected cases Malaria, AD (Non-Cholera) & ILI, KP



PUNJAB

- The most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by TB, dog bite, ALRI <5 years, Malaria, Typhoid and AWD (S. Cholera) this week.
- There is a decline in cases observed for Acute Diarrhea (Non-Cholera), TB, dog bite, ALRI <5 years, Malaria and Typhoid this week.
- Five cases of AFP reported Punjab this week. They are suspected cases and need field verification.
- Five suspected cases of HIV/ AIDS reported from Punjab this week. They require field investigation.

Figure 8: Most frequently reported suspected cases during Week 14, Punjab

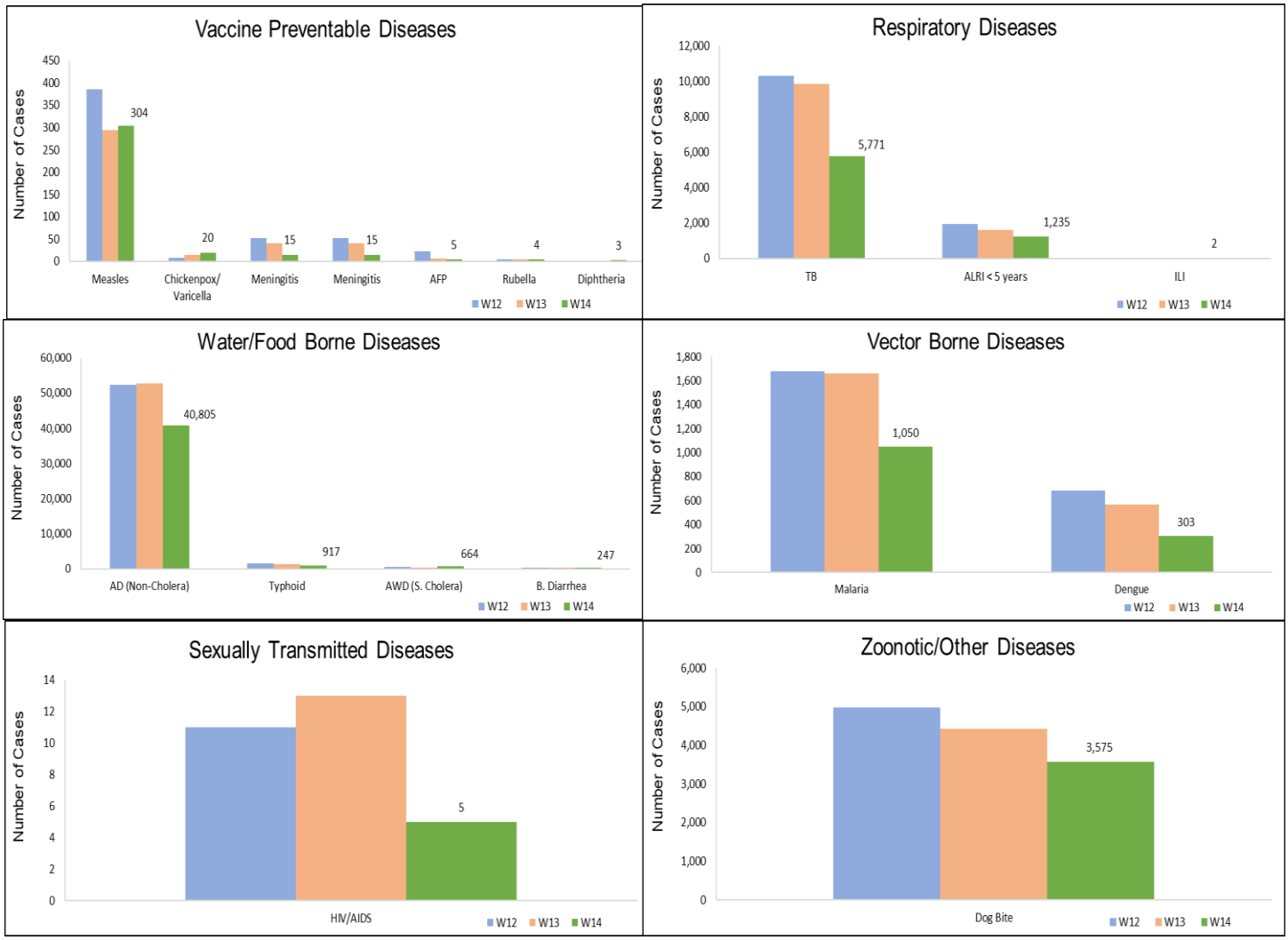
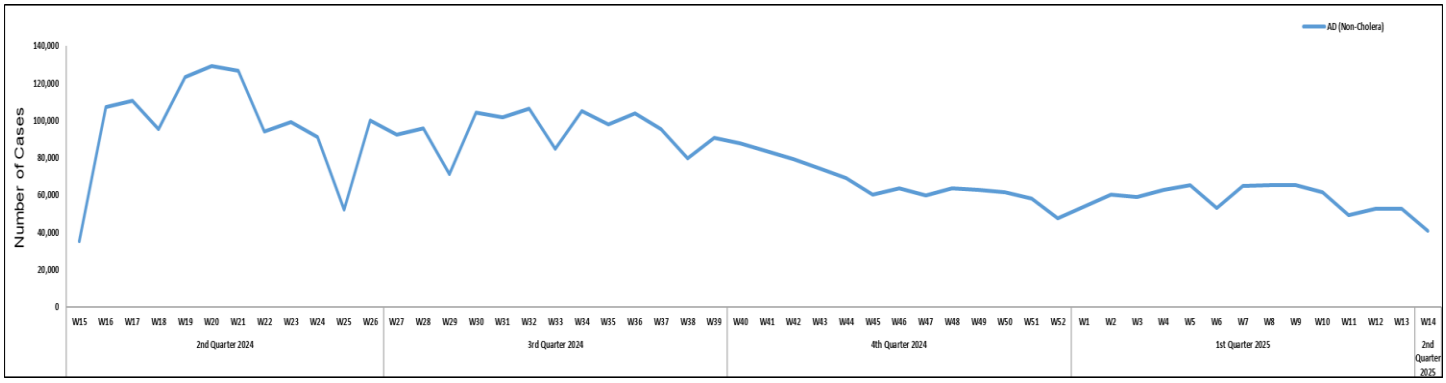


Figure 9: Week wise reported suspected cases of AD (Non-Cholera), Punjab



ICT, AJK & GB

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

AJK: ILI cases were maximum followed by AD (Non-Cholera), ALRI < 5years, SARI, dog bite, TB, B. Diarrhea, VH (B, C & D), Typhoid and AWD (S. Cholera) cases. A decrease in number of suspected cases was observed for AD (Non-Cholera), ALRI < 5years, SARI, dog bite, Typhoid, Measles, Pertussis and Meningitis while an increase in cases observed for TB and VH (B,C &D) this week.

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

.

Figure 10: Most frequently reported suspected cases during Week 23, AJK

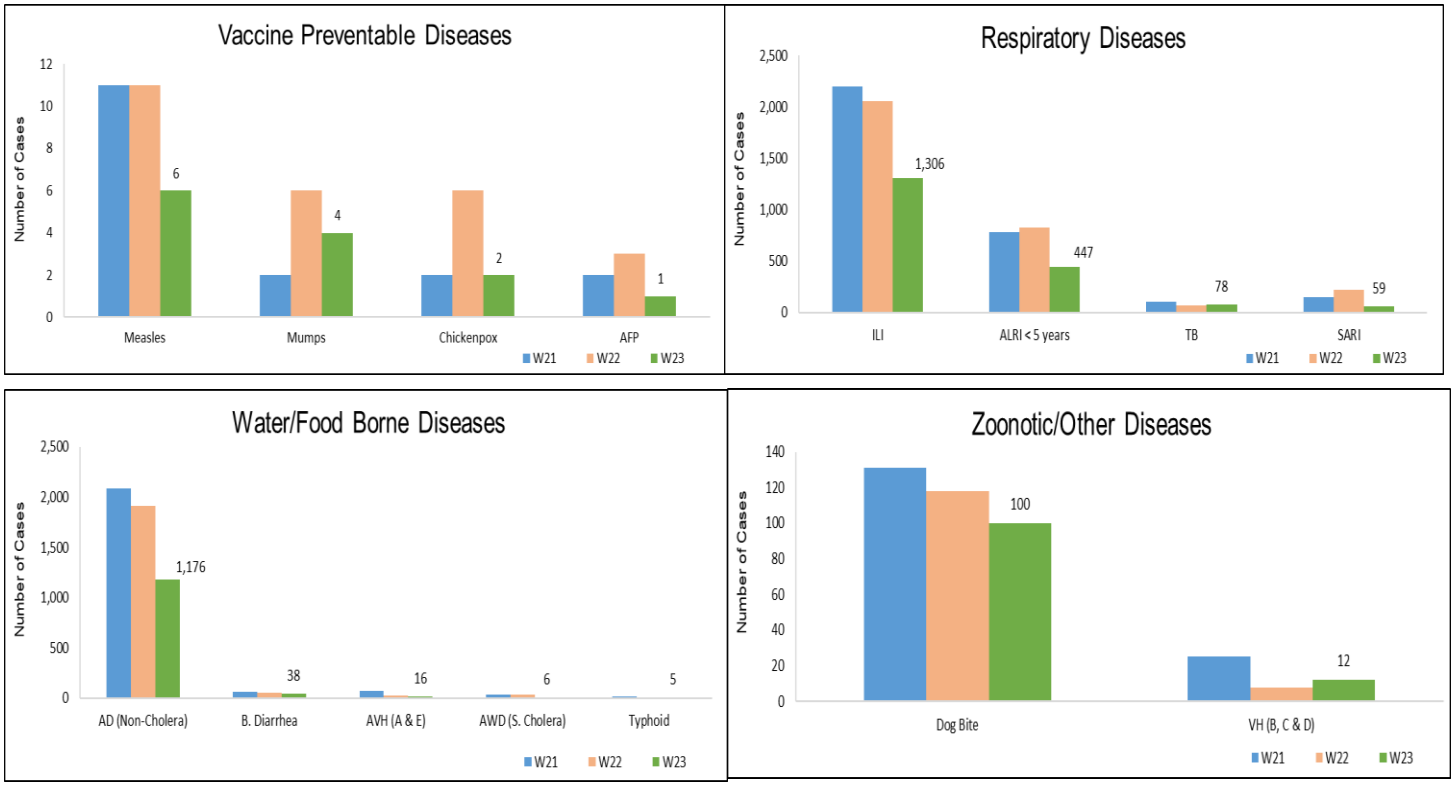


Figure 11: Week wise reported suspected cases of ILI and AD (Non-cholera), AJK

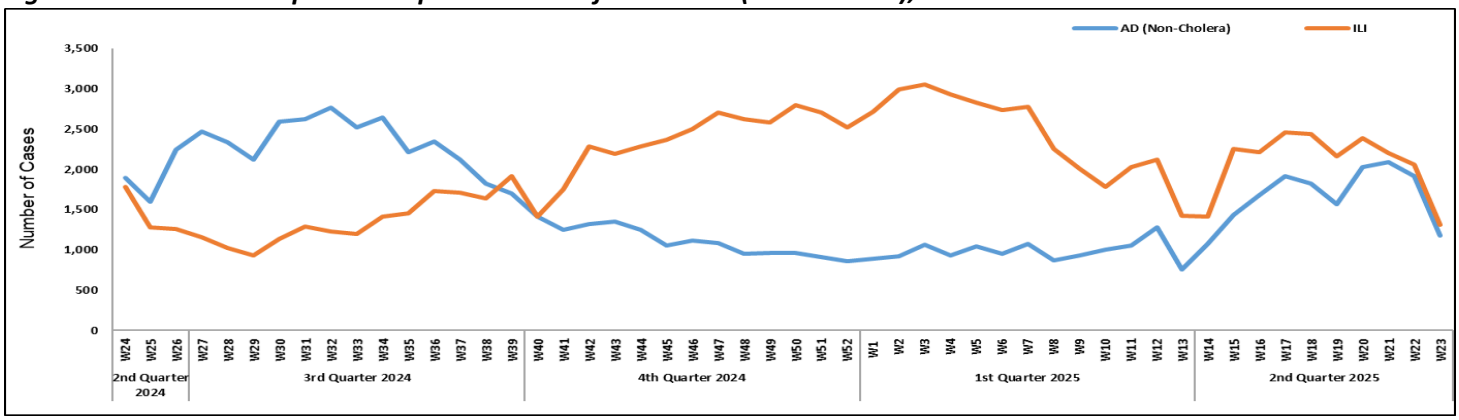


Figure 12: Most frequently reported suspected cases during Week 23, ICT

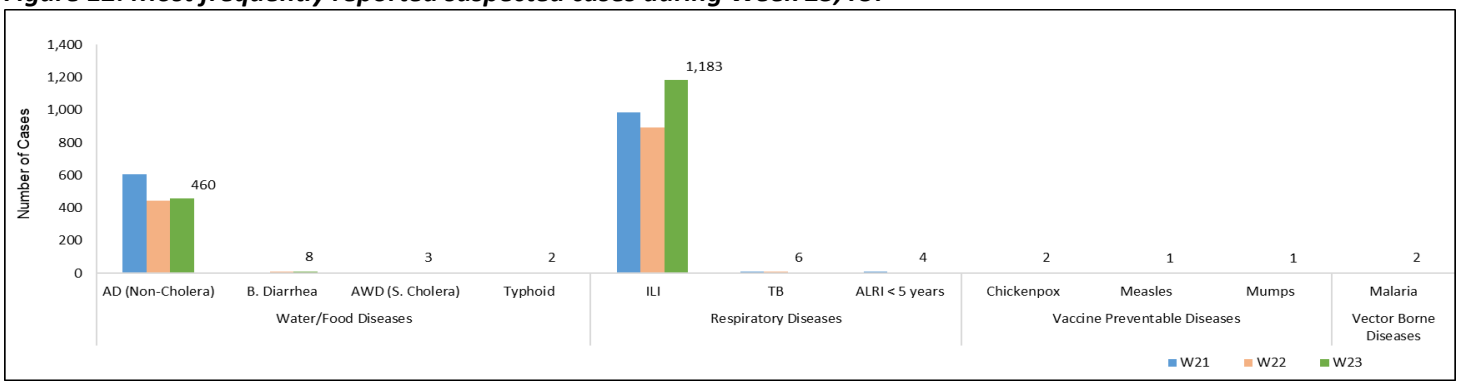


Figure 13: Week wise reported suspected cases of ILI, ICT

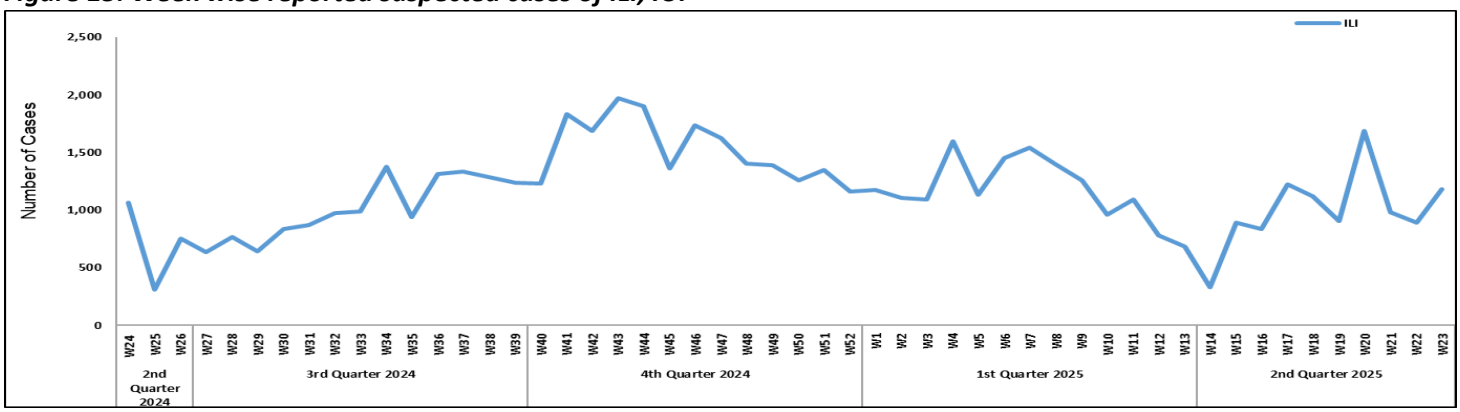


Figure 14: Most frequent cases reported during Week 23, GB

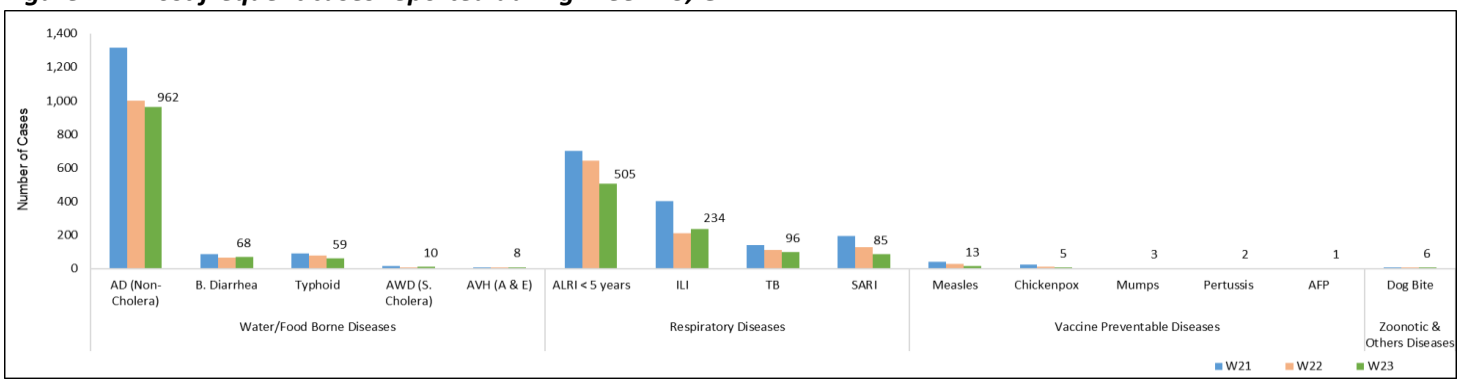


Figure 15: Week wise reported suspected cases of AD (Non-cholera), GB

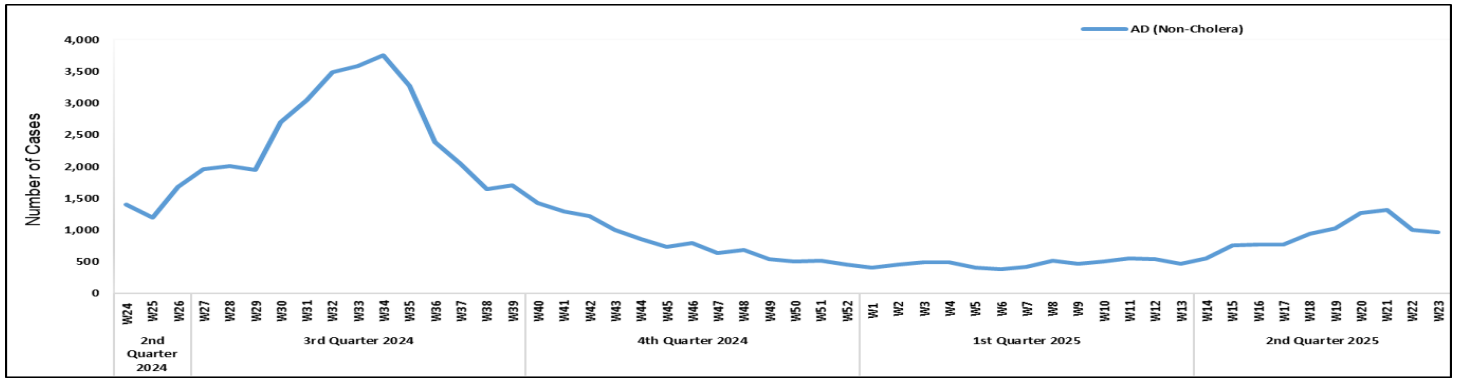


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epi Week 23

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)		45	4	-	-	0	0	-	-	-	-	-	-	0	0
AD (non-cholera)		101	0	-	-	0	0	-	-	-	-	-	-	0	0
Malaria		5,622	366	-	-	149	3	-	-	-	-	-	-	0	0
CCHF		0	0	6	1	0	0	-	-	-	-	-	-	0	0
Dengue		1,017	141	-	-	0	0	-	-	-	-	-	-	0	0
VH (B)		7,516	247	86	62	289	4	-	-	-	-	-	-	42	0
VH (C)		7,362	558	48	21	385	1	-	-	-	-	-	-	42	0
VH (D)		1	0	52	10	0	0	-	-	-	-	-	-	0	0
VH (A)		127	36	-	-	1	1	-	-	-	-	-	-	0	0
VH (E)		75	26	-	-	0	0	-	-	-	-	-	-	0	0
Covid-19		210	24	-	-	0	0	-	-	-	-	-	-	0	0
Chikungunya		13	3	-	-	0	0	-	-	-	-	-	-	0	0
TB		337	53	-	-	0	0	-	-	-	-	-	-	41	3
HIV/ AIDS		1,845	12	-	-	355	2	-	-	-	-	-	-	10	0
Syphilis		866	21	-	-	126	0	-	-	-	-	-	-	0	0
B. Diarrhea		19	0	-	-	0	0	-	-	-	-	-	-	0	0
Typhoid		1,013	13	-	-	0	0	-	-	-	-	-	-	0	0
Diphtheria		6	2	-	-	0	0	-	-	-	-	-	-	0	0
ILI		210	2	-	-	0	0	-	-	-	-	-	-	0	0
M-POX		0	0	-	-	0	0	-	-	-	-	-	-	0	0
Leishmaniasis (cutaneous)		0	0	-	-	0	0	-	-	-	-	-	-	0	0
Pneumonia (ALRI)		16	6	-	-	0	0	-	-	-	-	-	-	0	0
Meningitis		0	0	-	-	0	0	-	-	-	-	-	-	0	0
Measles		252	119	53	39	271	134	20	8	15	5	516	167	46	17
Rubella		252	1	53	1	271	5	20	0	15	0	516	3	46	4
Covid-19	Out of SARI	0	0	0	0	8	0	0	0	32	3	108	0	0	0
	Out of ILI	0	0	0	0	0	0	0	0	24	5	0	0	0	0
Influenza A	Out of SARI	0	0	0	0	8	0	0	0	32	0	108	0	0	0
	Out of ILI	0	0	0	0	0	0	0	0	24	0	0	0	0	0
Influenza B	Out of SARI	0	0	0	0	8	0	0	0	32	0	108	0	0	0
	Out of ILI	0	0	0	0	0	0	0	0	24	0	0	0	0	0
RSV	Out of SARI	0	0	0	0	8	0	0	0	32	0	108	0	0	0
	Out of ILI	0	0	0	0	0	0	0	0	24	0	0	0	0	0

IDSR Reports Compliance

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

Table 6: IDSR reporting districts Week 23, 2024

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	111	94	85%
	Bannu	238	130	55%
	Battagram	59	30	51%
	Buner	34	13	38%
	Bajaur	44	41	93%
	Charsadda	59	52	88%
	Chitral Upper	34	29	85%
	Chitral Lower	35	35	100%
	D.I. Khan	114	113	99%
	Dir Lower	74	61	82%
	Dir Upper	37	26	70%
	Hangu	22	10	45%
	Haripur	72	69	96%
	Karak	36	36	100%
	Khyber	53	37	70%
	Kohat	61	61	100%
	Kohistan Lower	11	8	73%
	Kohistan Upper	20	12	60%
	Kolai Palas	10	9	90%
	Lakki Marwat	70	69	99%
	Lower & Central Kurram	42	2	5%
	Upper Kurram	41	30	73%
	Malakand	42	14	33%
	Mansehra	133	37	28%
	Mardan	80	33	41%
	Nowshera	56	48	86%
	North Waziristan	13	6	46%
	Peshawar	156	122	78%
	Shangla	37	34	92%
	Swabi	64	55	86%
	Swat	77	57	74%
	South Waziristan (Upper)	93	35	38%
	South Waziristan (Lower)	42	27	64%
	Tank	34	32	94%
	Torghar	14	14	100%
	Mohmand	68	59	87%
	SD Peshawar	5	0	0%
	SD Tank	58	8	14%

	Orakzai	69	9	13%
Azad Jammu Kashmir	Mirpur	37	37	100%
	Bhimber	42	20	48%
	Kotli	60	60	100%
	Muzaffarabad	45	0	0%
	Poonch	46	27	59%
	Haveli	39	39	100%
	Bagh	40	40	100%
	Neelum	39	24	62%
	Jhelum Velley	29	29	100%
	Sudhnooti	27	27	100%
Islamabad Capital Territory	ICT	23	22	96%
	CDA	15	6	40%
Balochistan	Gwadar	26	0	0%
	Kech	44	0	0%
	Khuzdar	74	3	4%
	Killa Abdullah	26	6	23%
	Lasbella	55	55	100%
	Pishin	69	0	0%
	Quetta	55	0	0%
	Sibi	36	20	56%
	Zhob	39	0	0%
	Jaffarabad	16	16	100%
	Naserabad	32	0	0%
	Kharan	30	30	100%
	Sherani	15	0	0%
	Kohlu	75	4	5%
	Chagi	36	0	0%
	Kalat	41	40	98%
	Harnai	17	0	0%
	Kachhi (Bolan)	35	11	31%
	Jhal Magsi	28	28	100%
	Sohbat pur	25	25	100%
	Surab	32	9	28%
	Mastung	45	0	0%
	Loralai	33	19	58%
	Killa Saifullah	28	0	0%
	Ziarat	29	0	0%
	Duki	31	0	0%
	Nushki	32	0	0%
	Dera Bugti	45	0	0%
	Washuk	46	19	41%
	Panjgur	38	0	0%
	Awaran	23	0	0%
	Chaman	24	1	4%
	Barkhan	20	19	95%
	Hub	33	25	76%
	Musakhel	41	0	0%
	Usta Muhammad	34	23	68%
Gilgit Baltistan	Hunza	32	32	100%

	Nagar	25	10	40%
	Ghizer	38	38	100%
	Gilgit	42	42	100%
	Diamer	62	60	97%
	Astore	55	55	100%
	Shigar	27	25	93%
	Skardu	53	53	100%
	Ganche	29	28	97%
	Kharmang	46	25	54%
Sindh	Hyderabad	72	72	100%
	Ghotki	64	64	100%
	Umerkot	62	62	100%
	Naushahro Feroze	107	100	93%
	Tharparkar	276	167	61%
	Shikarpur	60	60	100%
	Thatta	52	22	42%
	Larkana	67	66	99%
	Kamber Shadadkot	71	71	100%
	Karachi-East	21	17	81%
	Karachi-West	20	20	100%
	Karachi-Malir	35	35	100%
	Karachi-Kemari	22	20	91%
	Karachi-Central	12	7	58%
	Karachi-Korangi	18	18	100%
	Karachi-South	6	5	83%
	Sujawal	55	54	98%
	Mirpur Khas	106	105	99%
	Badin	124	124	100%
	Sukkur	64	63	98%
	Dadu	90	87	97%
	Sanghar	100	100	100%
	Jacobabad	44	44	100%
	Khairpur	170	169	99%
	Kashmore	59	59	100%
	Matiari	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: IDSR reporting Tertiary care hospital Week 23, 2024

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
AJK	Mirpur	2	2	100%
	Bhimber	1	1	100%
	Kotli	1	1	100%
	Muzaffarabad	2	2	100%
	Poonch	2	2	100%
	Haveli	1	1	100%
	Bagh	1	1	100%
	Neelum	1	1	100%
	Jhelum Vellay	1	1	100%
	Sudhnooti	1	1	100%
Sindh	Karachi-South	1	1	100%
	Sukkur	1	0	0%
	Shaheed Benazirabad	1	0	0%
	Karachi-East	1	1	100%
	Karachi-Central	1	0	0%

Towards Standardized Mortality Reporting: National ToT Workshop at NIH, Islamabad

Centre for Disease Control at the National Institute of Health (NIH), in collaboration with the United Kingdom Health Security Agency (UKHSA), successfully conducted a Training of Trainers (ToT) workshop as part of the national implementation strategy for the Mortality Surveillance System in Pakistan. This workshop represents a pivotal step in the country's efforts to improve the collection, reporting, and utilization of mortality data for informed public health planning and response.

The ToT workshop brought together a diverse group of public health professionals, including surveillance officers, Integrated Disease Surveillance and Response (IDSR) focal persons, and technical staff from all provinces and administrative regions. The primary aim was to strengthen their technical capacity in standardized mortality data reporting, with a particular focus on the application of ICD-11 coding. Furthermore, the training emphasized the critical roles of health facilities, district surveillance units, and provincial health departments in the systematic management and use of mortality data.

The workshop included a series of interactive sessions designed to promote experiential learning. Participants engaged in practical exercises, hands-on training, and the analysis of case studies tailored to real-world scenarios. These sessions not only reinforced technical knowledge but also encouraged participants to actively contribute their field experiences. Through facilitated group discussions, common challenges in mortality surveillance were identified, and practical, context-specific solutions were proposed.

The successful completion of this Training of Trainers workshop marks a significant milestone in Pakistan's journey toward strengthening its health information systems. By building national and sub-national capacity for high-quality mortality surveillance, this initiative will contribute to more effective monitoring of health trends, improved allocation of resources, and ultimately, better health outcomes for the people of Pakistan

Notes from the field:

Outbreak Investigation Report of Suspected HIV Outbreak at AIMS Hospital, Muzaffarabad, AJK

Dr. Hamza Ikram
Dr. Noor Ullah Khan
Dr. Muhammad Imad Khan
Dr Fawad Khan
Israr Khan
FETP Frontline Fellows, 23rd Cohort

Introduction

Human Immunodeficiency Virus (HIV) remains a major global public health issue, with an estimated 39 million people living with HIV worldwide as of 2022. Despite advances in diagnosis, treatment, and prevention, approximately 1.3 million new HIV infections and 630,000 related deaths occurred globally in 2022 alone [1,2]. South Asia, including Pakistan, bears a growing burden of HIV with concentrated epidemics among key populations and rising transmission in healthcare-associated settings due to unsafe medical practices [3,4]. In Pakistan, approximately 240,000 people are estimated to be living with HIV [3], and outbreaks linked to unsafe medical procedures such as the Larkana outbreak in 2019 have raised serious public health concerns [5].

In June 2025, a suspected HIV outbreak was reported among dialysis patients at Abbas Institute of Medical Sciences (AIMS) Hospital in Muzaffarabad, Azad Jammu and Kashmir (AJK). The objectives of this investigation were:

1. To confirm the existence of an HIV outbreak among dialysis patients
2. To determine its magnitude in terms of area and gender
3. To identify associated risk factors, including healthcare exposures
4. To recommend measures for outbreak control and future prevention

Methods

A descriptive outbreak investigation employing a mixed-methods approach was conducted at Abbas Institute of Medical Sciences (AIMS) Hospital, Muzaffarabad, AJK, and surrounding localities, including Garhi Dupatta, from June 30 to July 5, 2025. The study population included all patients who had received dialysis at AIMS Hospital since January 1, 2025. A suspected case was defined as any individual who had undergone dialysis at AIMS Hospital or had an epidemiological link to a dialysis recipient since January 1, 2025, and presented with clinical features suggestive of HIV/AIDS or immunosuppression. A confirmed case was defined as an individual with laboratory-confirmed HIV infection, validated through rapid diagnostic testing followed by ELISA or PCR confirmation. Data were collected using a semi-structured questionnaire designed to capture information on demographic characteristics, clinical symptoms, comorbidities, healthcare exposures, and medical history. Case finding was conducted through a combination of snowball sampling, hospital record review, and active case identification via interviews with patients and their close contacts. Laboratory samples were collected from all confirmed cases and submitted to the National Institute of Health (NIH) for HIV genotyping. Descriptive statistical analysis was performed, including the calculation of frequencies, percentages, and attack rates stratified by demographic and geographic variables.

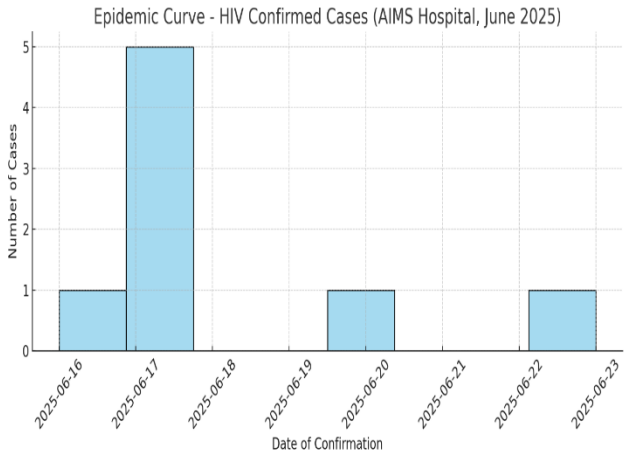
Results

A total of eight confirmed HIV-positive cases were identified during the outbreak investigation. The mean age of cases was 49 years (range: 36–60 years), with a male-to-female ratio of 2:1. Geographically, three cases originated from Garhi Dupatta, while one case each was reported from Dana Kichali, Upper Ambore, Phagwan Dupatta, Sahlian, and Bela Nur Shah. The overall attack rate in the dialysis unit was 6.7%, whereas the attack rate in the Hepatitis B and C designated section was significantly higher at 27.6%. Gender-specific attack rates in the overall dialysis unit were 10% for males and 4% for females, and within the Hep B & C section, 45% of males and 16% of females were affected All cases had received injections from either formal or informal healthcare providers, were undergoing dialysis for chronic kidney disease, and received 4–6 blood transfusions from multiple centers. Additionally, 50% of cases had a history of surgical procedures,

40% were co-infected with Hepatitis B, 60% with Hepatitis C, and 20% reported a history of tuberculosis. No social or occupational links were found among the cases; however, geographic clustering was noted in Garhi Dupatta. Clinically, all patients experienced weight loss (100%), followed by vomiting (60%), fever (50%), diarrhea (50%), hematemesis (20%), and rashes (20%).

Observational findings at AIMS Hospital revealed considerable lapses in IPC practices: Gloves were often reused or omitted during invasive procedures, dialysis machines were not adequately disinfected between uses, hand hygiene compliance was inconsistent. Medical waste handling and disposal practices did not meet basic standards. Although a prior IPC assessment (IPCAF) was reportedly conducted, its recommendations had not been implemented. No healthcare workers had been screened for Hepatitis B, C and HIV to date, representing a major gap in assessing potential occupational exposure or undetected transmission.

Time-wise distribution of cases:



Spot map, HIV positive cases dist. Muzaffarabad:

Discussion

This investigation confirmed a localized HIV outbreak among dialysis patients at AIMS Hospital, primarily concentrated in a section designated for Hepatitis B and C patients. The notably high attack rate in this subgroup (27.6%) and the observed male predominance suggests significant structural and procedural vulnerabilities in infection prevention and control (IPC). Globally, dialysis units have been recognized as high-risk settings for the transmission of bloodborne pathogens due to repeated vascular access, use of invasive equipment, and frequent exposure to blood products [6].

Field observations during the investigation revealed critical lapses in IPC practices, including inadequate disinfection of dialysis machines, reuse or absence of gloves during procedures, poor compliance with hand hygiene, and unsafe medical waste disposal. These findings are consistent with documented outbreaks in similar healthcare settings where poor IPC has facilitated HIV and hepatitis transmission [7,8]. These breaches are particularly concerning in dialysis centers, where strict adherence to IPC standards is essential to protect immunocompromised patients.

A particularly alarming finding was that all confirmed cases had received injections from either formal or informal healthcare providers and had undergone multiple blood transfusions. This highlights broader systemic issues such as unsafe injection practices and the inadequate regulation of transfusion centers in Pakistan

factors previously implicated in HIV outbreaks, such as the one in Larkana in 2019 [5]. Moreover, the clustering of three cases in Garhi Dupatta, all of whom accessed services at the same private health facility, raises concerns about potential community-level healthcare-associated transmission, warranting further epidemiological and microbiological investigation.

The absence of routine screening for HIV, Hepatitis B, and C among healthcare workers represents a missed opportunity to detect occupational exposure and prevent nosocomial transmission [4].

Positively, the hospital administration demonstrated cooperation with the investigation team, maintained digitized dialysis and transfusion records, and had existing capacity for HIV care and treatment services. However, unless IPC practices are urgently strengthened and oversight mechanisms enforced, the risk of recurrent outbreaks remains high.

Conclusion

This outbreak emphasizes on the critical vulnerabilities in infection control practices in high-risk clinical settings. The outbreak was likely multifactorial driven by inadequate IPC during dialysis, unsafe injection practices in the community, and unregulated blood transfusions. While AIMS Hospital showed intent to separate Hep B/C patients, execution of IPC protocols remains insufficient.

Recommendations

Strengthen Surveillance Systems

- Enhance HIV case-based surveillance across all healthcare facilities in Muzaffarabad.
- Ensure timely detection, reporting, and response to outbreaks.
- Establish formal data-sharing mechanisms between dialysis centers, blood banks, and district health authorities.
- Monitor and investigate new HIV cases to map disease burden and transmission networks.

Expand Outbreak Investigation

- Include other dialysis centers, blood transfusion services, and healthcare facilities in the investigation.
- Focus on areas linked to identified cases .

Conduct IPC Audits and Strengthen Practices

- Carry out focused Infection Prevention and Control (IPC) audits in AIMS Hospital and other high-risk settings.

Healthcare Staff Training and Screening

- Organize training for healthcare staff on IPC, safe injections, biomedical waste, and HIV prevention.
- Screen all healthcare workers, especially those involved in invasive procedures.
- Map and Assess High-Risk Providers and Facilities
- List all private healthcare providers (including informal/quack practitioners) conducting invasive procedures**.**

Assess and monitor IPC practices in these settings.

- Identify public/private transfusion centers and review records to detect additional cases.
- Community Awareness for HIV Prevention and Control
- Intensify RCCE activities on HIV transmission, prevention, and treatment.
- Counter myths and stigma via community meetings, IEC materials, and media, with support from local influencers.

Strengthen Laboratory Capacity and Screening

- Enhance HIV diagnostic services at district and facility levels.
- Partner with UNAIDS and NACP to expand screening of patients, surgical cases, donors, and healthcare workers.

References

1. UNAIDS. UNAIDS Data 2023. Geneva: Joint United Nations Programme on HIV/AIDS; 2023 [cited 2025 Jul 25]. Available from: https://www.unaids.org/sites/default/files/media_asset/JC3259-UNAIDS-data-2023_en.pdf
2. World Health Organization. HIV/AIDS: Key facts. Geneva: WHO; 2023 [cited 2025 Jul 25]. Available from: https://www.who.int/news-room/fact-sheets/detail/hiv-aids
3. National AIDS Control Programme. HIV Estimates Report Pakistan 2022. Islamabad: Ministry of National Health Services, Regulations & Coordination; 2022 [cited 2025 Jul 25]. Available from: https://nacp.gov.pk/
4. Altaf A, Zahidie A, Agha A. HIV/AIDS in Pakistan: Trends and behavioral insights. J Pak Med Assoc. 2019;69(12):1856–60.
5. Mir F, Mahmood S, Siddiqui AR, Baqi S, Abidi SH, Kazi AM, et al. HIV outbreak among children in Larkana, Pakistan: Emerging evidence of high HIV prevalence in Pakistan. Lancet Infect Dis. 2020;20(3):263–70. doi:10.1016/S1473-3099(20)30004-6
6. World Health Organization. Infection prevention and control in dialysis settings. Geneva: WHO; 2022.
7. Hutin Y, Harpaz R, Drobeniuc J, et al. Transmission of bloodborne pathogens in healthcare settings: risk assessment and strategies for prevention. Infect Control Hosp Epidemiol. 2015;36(7):873–9. doi:10.1017/ice.2015.85
8. Nguyen DB, Gutowski J, Ghiselli M, et al. A large outbreak of hepatitis C virus infections in a hemodialysis clinic. Infect Control Hosp Epidemiol. 2016;37(2):125–33. doi:10.1017/ice.2015.258

Knowledge Hub

Understanding HIV/AIDS: A Public Health Priority

Introduction

Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) remain major global public health challenges. Despite advances in medical science, the epidemic continues to affect millions of people worldwide, with significant social, economic, and health consequences. This article provides an overview of HIV/AIDS, including its transmission, prevention, treatment, and the global and regional response.

What is HIV?

HIV is a virus that attacks the body's immune system, specifically the **CD4+ T cells**, which are crucial for fighting infections. If left untreated, HIV reduces the number of these cells, weakening the immune system and making the person more vulnerable to opportunistic infections and certain cancers.

What is AIDS?

AIDS is the most advanced stage of HIV infection, defined by the occurrence of specific diseases or conditions related to severe immunodeficiency. Not everyone with HIV will develop AIDS, especially with early diagnosis and proper treatment.

How is HIV Transmitted?

HIV is transmitted through:

- Unprotected sexual contact with an infected person
- Sharing of needles or syringes
- Transfusion of contaminated blood products
- From mother to child during pregnancy, childbirth, or breastfeeding

HIV is not transmitted through casual contact such as hugging, shaking hands, or sharing utensils.

Symptoms of HIV

HIV infection typically progresses through three stages:

1. **Acute HIV Infection** (2-4 weeks post-infection): flu-like symptoms such as fever, sore throat, rash, or fatigue
2. **Chronic HIV Infection**: virus multiplies at low levels, often asymptomatic
3. **AIDS**: severe immune damage, with symptoms such as weight loss, recurrent fever, persistent diarrhea, and opportunistic infections

Diagnosis

HIV can be diagnosed through:

- **Rapid diagnostic tests (RDTs)** that detect antibodies and/or antigens
- **Enzyme-linked immunosorbent assay (ELISA)**
- **PCR tests** to detect viral RNA, especially in early infection or infants

Early testing enables timely treatment and reduces the risk of onward transmission.

Treatment

There is no cure for HIV, but it can be effectively managed with **antiretroviral therapy (ART)**. ART suppresses viral replication, improves immune function, and prevents the progression to AIDS. With consistent treatment, people living with HIV can lead long, healthy lives.

Prevention Strategies

Effective HIV prevention includes:

- **Consistent use of condoms**
- **HIV testing and counseling**
- **Pre-exposure prophylaxis (PrEP)** for high-risk populations
- **Post-exposure prophylaxis (PEP)** after potential exposure
- **Harm reduction** strategies for people who inject drugs (e.g., needle exchange programs)
- **Safe blood transfusion practices**
- **Mother-to-child transmission prevention** through ART

Global and Regional Response

Global Snapshot:

- As of 2023, **39 million** people were living with HIV
- Over **29 million** were receiving ART
- Sub-Saharan Africa remains the most affected region

Progress:

- New infections have declined by 59% since the peak in 1995
- AIDS-related deaths have declined by 69% since 2004

Remaining Challenges:

- Stigma and discrimination
- Inequitable access to services
- Vulnerability of key populations (e.g., sex workers, MSM, people who inject drugs)

HIV/AIDS in Pakistan

- Approximately **190,000 people** are living with HIV
- Concentrated epidemic among **key populations**, especially **injecting drug users**
- Ongoing efforts led by **National AIDS Control Program (NACP)** with support from global partners
- Integration with **One Health**, TB, and hepatitis programs is being explored

Looking Forward: Ending the Epidemic

The **UNAIDS 95-95-95** targets aim for:

- 95% of people living with HIV to know their status
- 95% of diagnosed individuals to receive ART
- 95% of those on ART to achieve viral suppression

To reach these goals, a combination of biomedical, behavioral, and structural interventions is essential.

Key Takeaways

- HIV is preventable and manageable with early diagnosis and consistent treatment.
- ART transforms HIV from a life-threatening condition to a chronic manageable illness.
- Public awareness, testing, and stigma reduction are essential to curbing the epidemic.
- Strong health systems, international cooperation, and community engagement are vital.

Further Resources

- UNAIDS
- WHO – HIV/AIDS
- CDC – HIV
- Pakistan National AIDS Control Program

.

	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