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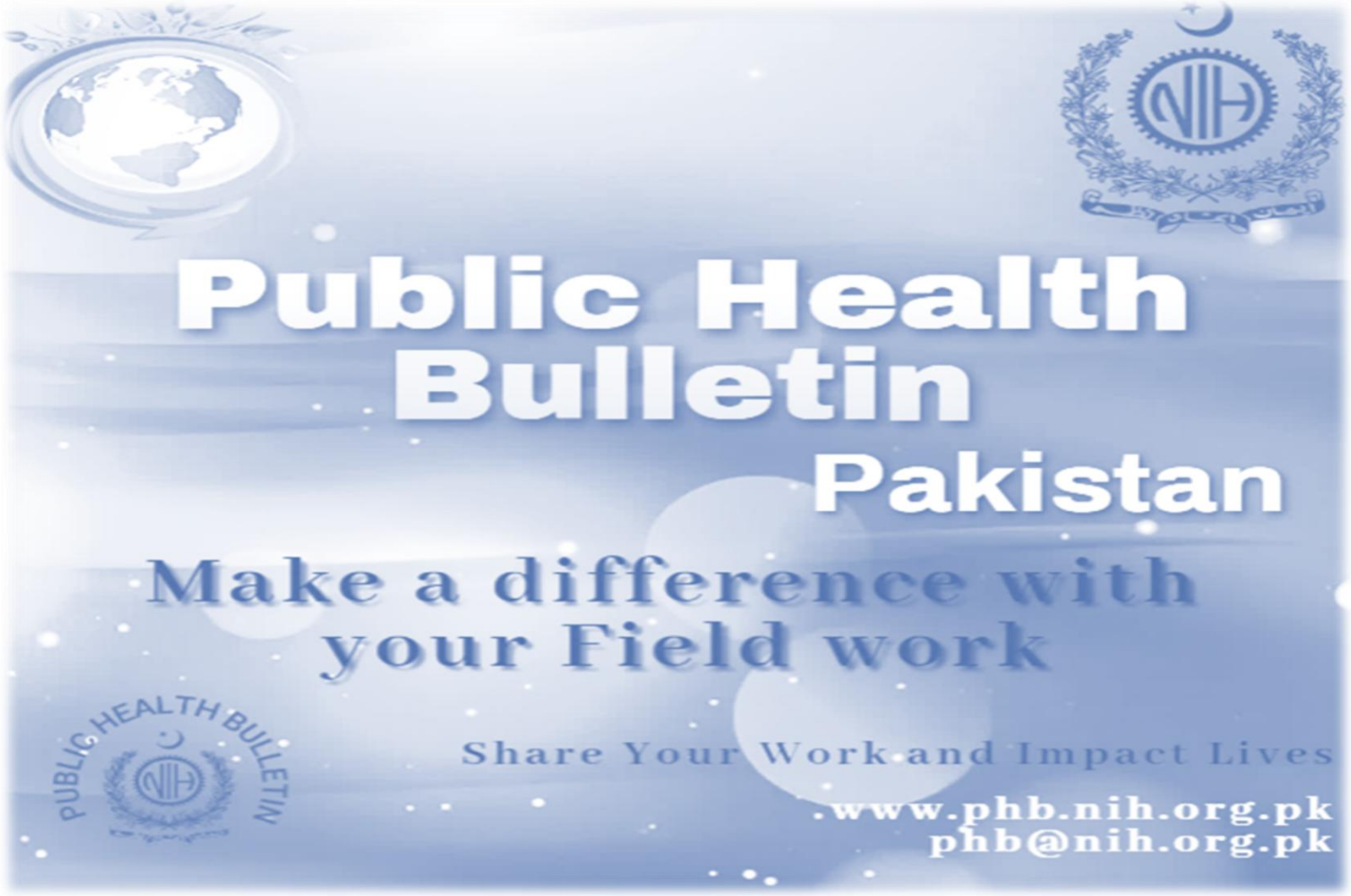
Integrated Disease Surveillance & Response (IDSR) Report

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 30, 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;

- *Strengthening One Health Governance: CDC-NIH Hosts Provincial Workshop in Gilgit*
- *Measles Outbreak Investigation Report, Pishin District, Balochistan (October–December 2024).*
- *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.

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Stay informed. Stay prepared. Stay healthy.

Sincerely,
The Chief Editor

Overview

- *During Week 30, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, ILI, TB, ALRI <5 years, B. Diarrhea, VH (B, C & D), Dog Bite, Typhoid and SARI.*
- *Twenty-four cases of AFP reported from KP, sixteen from Sindh and four from AJK.*
- *Eighteen suspected cases of HIV/ AIDS reported from Balochistan, fifteen from Sindh and five from KP.*
- *Nine suspected cases of Brucellosis reported from KP.*
- *Among VPDs, there is an increase in number of cases of Mumps, AFP, Rubella and Diphtheria this week.*
- *Among Respiratory diseases, there is an increase in number of cases of ILI, TB and SARI this week.*
- *Among Water/food-borne diseases, there is an increase in number of cases of Acute Diarrhea (Non-Cholera), B. Diarrhea and AVH (A & E) this week.*
- *Among Vector-borne diseases, there is an increase in number of cases of Malaria this week.*
- *Among STDs, there is an increase in number of cases of Gonorrhea, HIV/AIDs and Syphilis this week.*
- *Among Zoonotic/Other diseases, there is an increase in number of cases of VH (B,C & D) and dog bite 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 76%*
- *Sindh is the top reporting region with a compliance rate of 96%, followed by AJK 95%, GB 92% and ICT 74%.*
- *The lowest compliance rate was observed in KP 62% and Balochistan 60%.*

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	2704	1682	62
Azad Jammu Kashmir	415	396	95
Islamabad Capital Territory	38	28	74
Balochistan	1308	786	60
Gilgit Baltistan	410	378	92
Sindh	2111	2019	96
National	6986	5289	76

Public Health Actions

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

Chickenpox (Varicella)

- **Strengthen Surveillance and Case Reporting:** Integrate chickenpox into IDSR by training healthcare providers on clinical case definitions (fever with vesicular rash) and ensuring timely reporting of outbreaks, especially in schools and crowded institutions.
- **Expand Laboratory Confirmation:** Enhance laboratory testing (PCR or serology) for atypical or severe cases and for outbreak investigations to distinguish chickenpox from other rash illnesses.
- **Promote Vaccination:** Introduce or strengthen varicella vaccination where feasible through routine immunization or targeted campaigns, prioritizing high-risk groups (children, healthcare workers, immunocompromised contacts).
- **Implement Outbreak Control Measures:** Encourage isolation of cases during the infectious period, conduct contact tracing in schools and daycare centers, and provide post-exposure prophylaxis (vaccination or VZIG) for susceptible high-risk individuals.
- **Raise Community Awareness:** Disseminate health messages about symptoms, modes of transmission (respiratory droplets and contact with lesions), home-based care, and the importance of vaccination and timely care-seeking for complications.

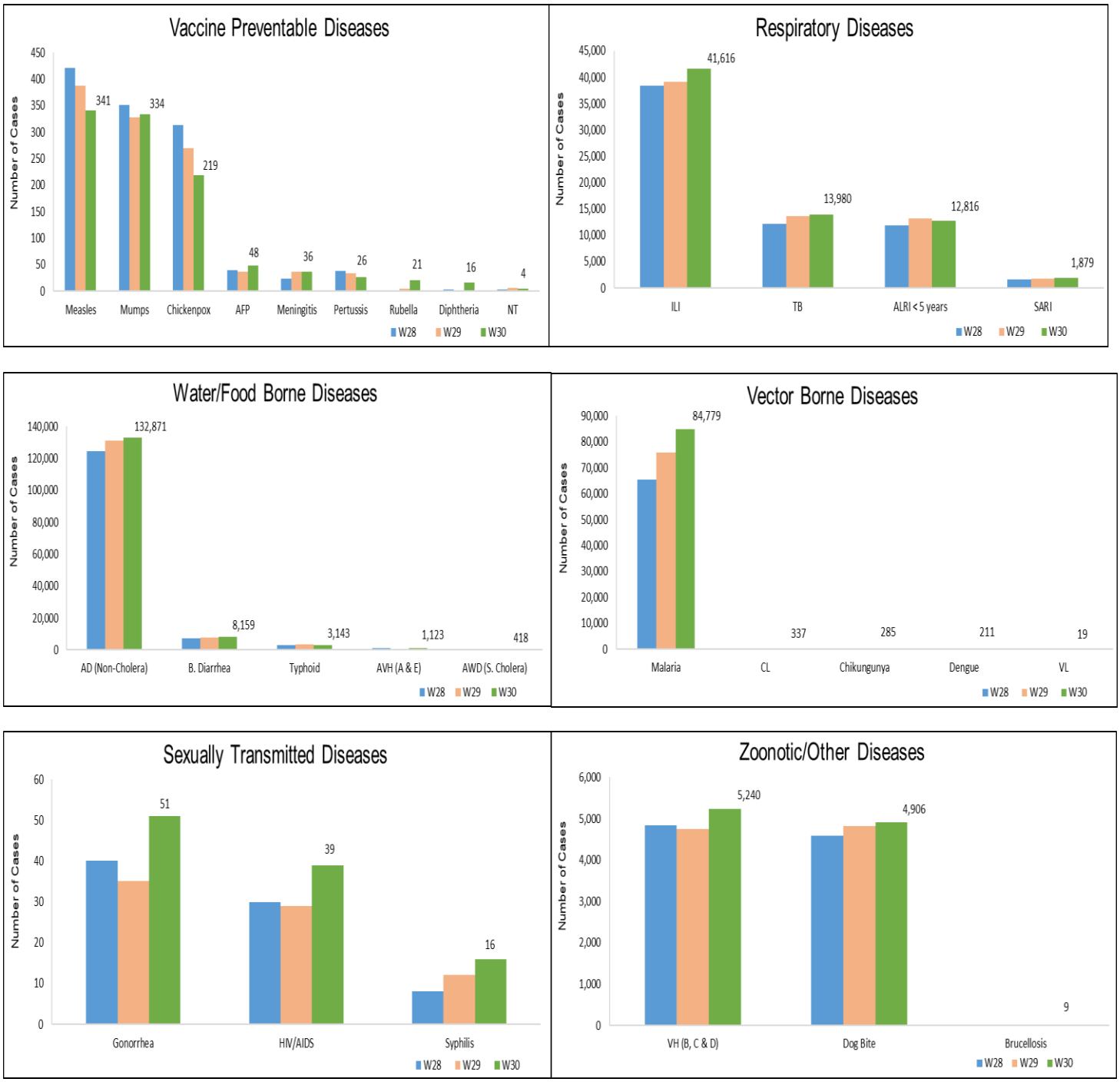
Rubella

- **Strengthen Surveillance and Case Detection:** Enhance rubella case detection within IDSR by training healthcare providers to recognize febrile rash illness, particularly among children and women of reproductive age, and promptly report suspected cases.
- **Expand Laboratory Confirmation:** Strengthen laboratory capacity for rubella IgM and PCR testing, particularly to support outbreak investigation and surveillance of Congenital Rubella Syndrome (CRS).
- **Promote Vaccination:** Ensure high coverage of the Measles-Rubella (MR) vaccine through routine immunization and supplemental campaigns, especially targeting children and women of reproductive age.
- **Prevent Congenital Rubella Syndrome (CRS):** Scale up rubella immunization among adolescent girls and women of childbearing age; strengthen antenatal screening and referral pathways for suspected CRS cases.
- **Raise Community Awareness:** Conduct health education campaigns on rubella risks during pregnancy, vaccine safety and effectiveness, and the importance of early care-seeking for rash and fever illnesses.
- **Strengthen Multi-Sectoral Collaboration:** Engage schools, maternal health services, and community organizations to support vaccination and CRS prevention efforts.

Table 1: Province/Area wise distribution of most frequently reported suspected cases during Week 30, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (non-cholera)	2,805	8,818	2,452	593	48,467	NR	69,736	132,871
Malaria	2	4,160	0	0	7,304	NR	73,313	84,779
ILI	1,852	5,966	402	1,080	3,860	NR	28,456	41,616
TB	98	73	122	7	366	NR	13,314	13,980
ALRI < 5 years	957	1,509	579	3	704	NR	9,064	12,816
B. Diarrhea	101	1,717	173	8	1,364	NR	4,796	8,159
VH (B, C & D)	53	45	4	1	93	NR	5,044	5,240
Dog Bite	121	171	1	0	1,004	NR	3,609	4,906
Typhoid	13	445	126	0	759	NR	1,800	3,143
SARI	271	723	153	0	639	NR	93	1,879
AVH (A & E)	41	25	3	0	271	NR	783	1,123
AWD (S.Cholera)	25	235	55	0	68	NR	35	418
CL	1	48	0	0	287	NR	1	337
Measles	15	14	35	0	195	NR	82	341
Mumps	10	49	19	1	202	NR	53	334
Chikungunya	0	0	0	0	0	NR	285	285
Chickenpox/ Varicella	7	12	30	3	134	NR	33	219
Dengue	1	2	0	0	34	NR	174	211
Gonorrhea	0	37	0	0	7	NR	7	51
AFP	4	3	1	0	24	NR	16	48
HIV/AIDS	1	18	0	0	5	NR	15	39
Meningitis	4	0	3	0	11	NR	18	36
Pertussis	0	15	4	0	7	NR	0	26
Rubella (CRS)	0	20	0	0	0	NR	1	21
VL	0	1	0	0	0	NR	18	19
Syphilis	0	3	0	0	1	NR	12	16
Diphtheria (Probable)	0	0	0	0	3	NR	13	16
Brucellosis	0	0	0	0	9	NR	0	9
COVID-19	0	0	0	0	9	NR	0	9
NT	0	0	0	0	4	NR	0	4
Leprosy	0	3	0	0	0	NR	0	3

Figure 1: Most frequently reported suspected cases during Week 30, 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 Sanghar, Larkana and Badin whereas AD (Non-Cholera) cases are from Karachi South, Mirpurkhas and Badin.
- Sixteen cases of AFP are reported from Sindh. They are suspected cases and need field verification.
- There is a decline in number of cases of ALRI<5 Years, SARI, Measles, Mumps, Chickenpox, Meningitis, HIV/ AIDS and Gonorrhea while an increase in number of cases of Malaria, AD (Non-Cholera), ILI, TB, VH (B, C, D), B. Diarrhea, Dog Bite, Typhoid, AVH (A & E), Dengue, AFP, Diphtheria and Syphilis this week.

Table 2: District wise distribution of most frequently reported suspected cases during Week 30, Sindh

Districts	Malaria	AD (non-cholera)	ILI	TB	ALRI < 5 years	VH (B, C & D)	B. Diarrhea	Dog Bite	Typhoid	AVH (A & E)
Badin	5,150	4,464	2,666	899	399	105	405	180	77	5
Dadu	3,695	3,326	568	482	929	57	609	566	123	36
Ghotki	3,877	1,698	28	573	398	520	153	291	0	12
Hyderabad	1,161	3,395	1,521	368	181	149	106	65	14	11
Jacobabad	704	788	590	148	489	97	121	193	30	0
Jamshoro	3,141	2,272	67	642	307	312	129	93	28	11
Kamber	4,132	2,047	0	806	218	125	118	165	22	0
Karachi Central	42	1,390	1,338	237	6	23	15	11	161	10
Karachi East	59	311	107	30	8	1	3	3	19	0
Karachi Keamari	12	891	349	3	20	0	1	0	5	0
Karachi Korangi	81	399	2	16	4	0	12	2	4	1
Karachi Malir	265	2,213	3,086	204	383	14	78	43	21	5
Karachi South	240	7,257	31	432	164	305	374	225	456	220
Karachi West	275	837	1,089	79	169	24	23	65	19	0
Kashmore	1,939	568	402	215	130	10	66	114	1	0
Khairpur	4,979	3,515	6,622	1,026	886	86	318	264	272	21
Larkana	5,164	1,759	0	859	174	27	230	20	2	5
Matiari	4,124	2,465	0	742	208	279	78	68	2	9
Mirpurkhas	3,720	4,806	2,636	761	353	279	162	111	23	15
Naushero Feroze	2,257	1,687	776	440	271	43	378	241	233	28
Sanghar	5,792	2,555	136	1,143	420	1,425	98	227	66	5
Shaheed Benazirabad	2,776	2,127	6	338	202	124	92	151	118	0
Shikarpur	1,956	1,205	4	264	141	131	168	137	2	0
Sujawal	1,733	3,883	7	145	326	73	197	59	9	10
Sukkur	2,230	1,366	1,633	392	359	104	123	112	6	0
Tando Allahyar	3,117	2,359	849	499	158	326	146	55	17	3
Tando Muhammad Khan	2,210	2,403	125	688	180	64	217	51	3	0
Tharparkar	3,406	3,182	1,466	516	486	55	214	1	31	34
Thatta	2,315	2,431	2,352	58	715	193	75	96	14	341
Umerkot	2,761	2,137	0	309	380	93	87	0	22	1
Total	73,313	69,736	28,456	13,314	9,064	5,044	4,796	3,609	1,800	783

Figure 2: Most frequently reported suspected cases during Week 30 Sindh

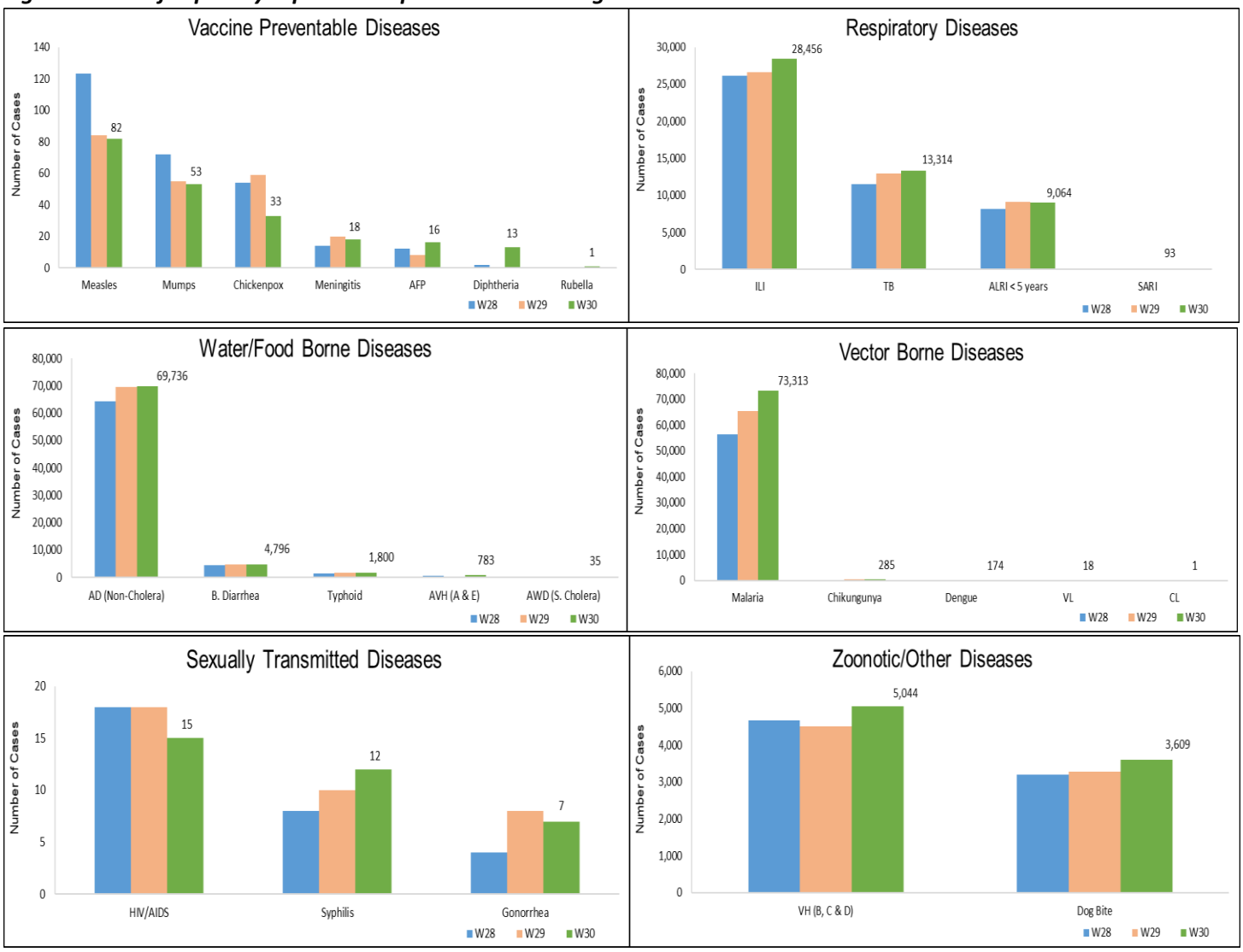
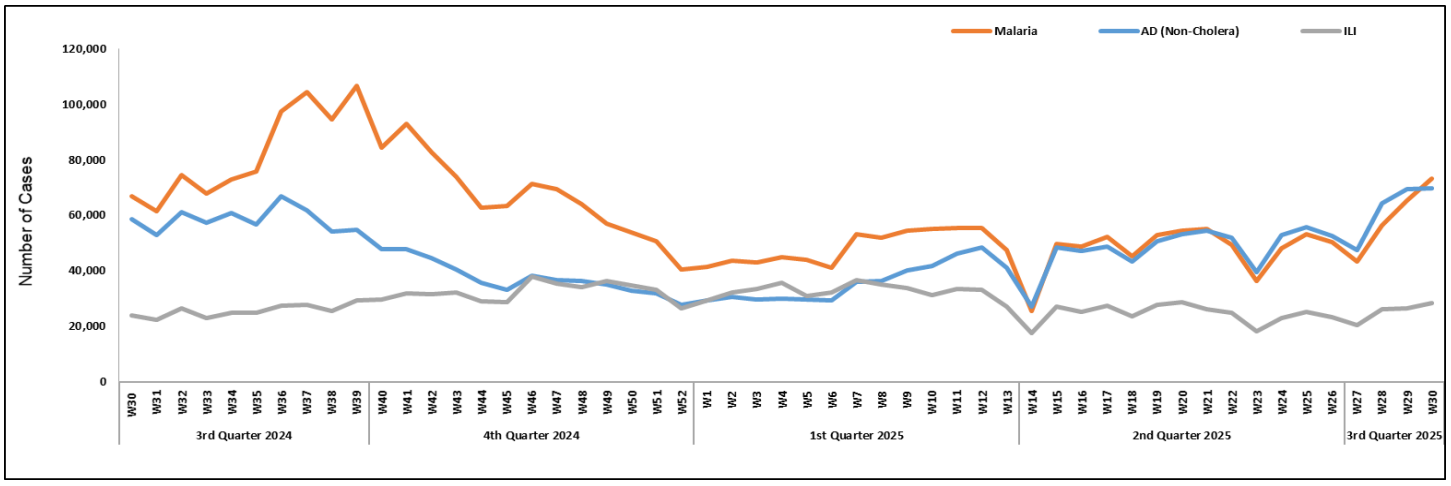


Figure 3: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Sindh



Balochistan

- AD (Non-Cholera), ILI, Malaria, B. Diarrhea, ALRI <5 years, SARI, Typhoid, AWD (S. Cholera), Dog Bite and TB cases were the most frequently reported diseases from Balochistan province.
- AD (Non-Cholera) cases are mostly reported from Pishin, Quetta and Lasbella while ILI cases are mostly reported from Kech (Turbat), Gwadar and Quetta.
- Eighteen cases of HIV/AIDs reported from Balochistan. Field investigation is required to confirm the cases.
- AD (Non-Cholera), Malaria, B. Diarrhea, SARI, AWD (S. Cholera), Dog Bite, CL, Gonorrhea, AVH (A & E), Rubella, HIV/ AIDS, Measles, Chickenpox and AFP showed an increase while ILI, ALRI <5 years, Typhoid, Mumps VH (B, C & D), Pertussis and Dengue showed a decrease in number of cases this week.

Table 3: District wise distribution of most frequently reported suspected cases during Week 30, Balochistan

Districts	AD (non-cholera)	ILI	Malaria	B. Diarrhea	ALRI < 5 years	SARI	Typhoid	AWD (S. Cholera)	Dog Bite	TB
Awaran	29	19	48	8	0	0	4	0	0	0
Barkhan	121	71	83	19	20	0	27	8	13	0
Chagai	146	185	60	59	0	0	4	0	0	1
Chaman	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Dera Bugti	74	0	70	6	0	0	9	0	0	0
Duki	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Gwadar	394	592	86	32	4	0	10	0	4	0
Harnai	231	7	106	65	151	0	0	0	0	0
Hub	166	38	244	17	0	15	0	0	0	0
Jaffarabad	255	121	299	79	7	15	2	15	10	43
Jhal Magsi	266	250	592	3	28	0	6	0	21	6
Kachhi (Bolan)	148	22	54	55	6	154	16	16	0	1
Kalat	109	1	52	42	11	0	34	0	0	0
Kech (Turbat)	576	919	401	64	77	4	2	0	0	0
Kharan	246	504	53	110	0	18	4	0	0	0
Khuzdar	127	159	82	7	3	13	20	5	2	0
Killa Abdullah	181	131	11	54	15	42	28	64	13	1
Killa Saifullah	250	4	231	74	163	4	21	9	6	0
Kohlu	37	94	32	36	6	4	8	0	2	2
Lasbella	687	55	344	43	172	1	11	0	16	3
Loralai	332	305	78	36	24	77	19	3	2	0
Mastung	172	187	84	22	29	72	25	1	2	5
MusaKhel	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Naseerabad	381	37	114	5	11	23	45	4	26	4
Nushki	212	5	31	146	5	0	0	14	0	0
Panjgur	206	91	209	50	50	2	2	12	0	0
Pishin	781	561	64	258	122	54	44	17	6	0
Quetta	744	572	24	88	114	53	27	20	1	0
Sherani	42	53	0	18	0	0	0	0	0	0
Sibi	427	386	170	39	73	100	35	24	10	3
Sohbat pur	323	15	97	89	125	0	13	3	4	2
Surab	16	58	2	0	0	0	0	0	0	0
Usta Muhammad	567	123	221	71	101	1	9	0	33	0
Washuk	224	236	101	78	28	40	8	4	0	0
Zhob	73	35	11	0	138	22	0	0	0	2
Ziarat	275	130	106	44	26	9	12	16	0	0
Total	8,818	5,966	4,160	1,717	1,509	723	445	235	171	73

Figure 4: Most frequently reported suspected cases during Week 30, Balochistan

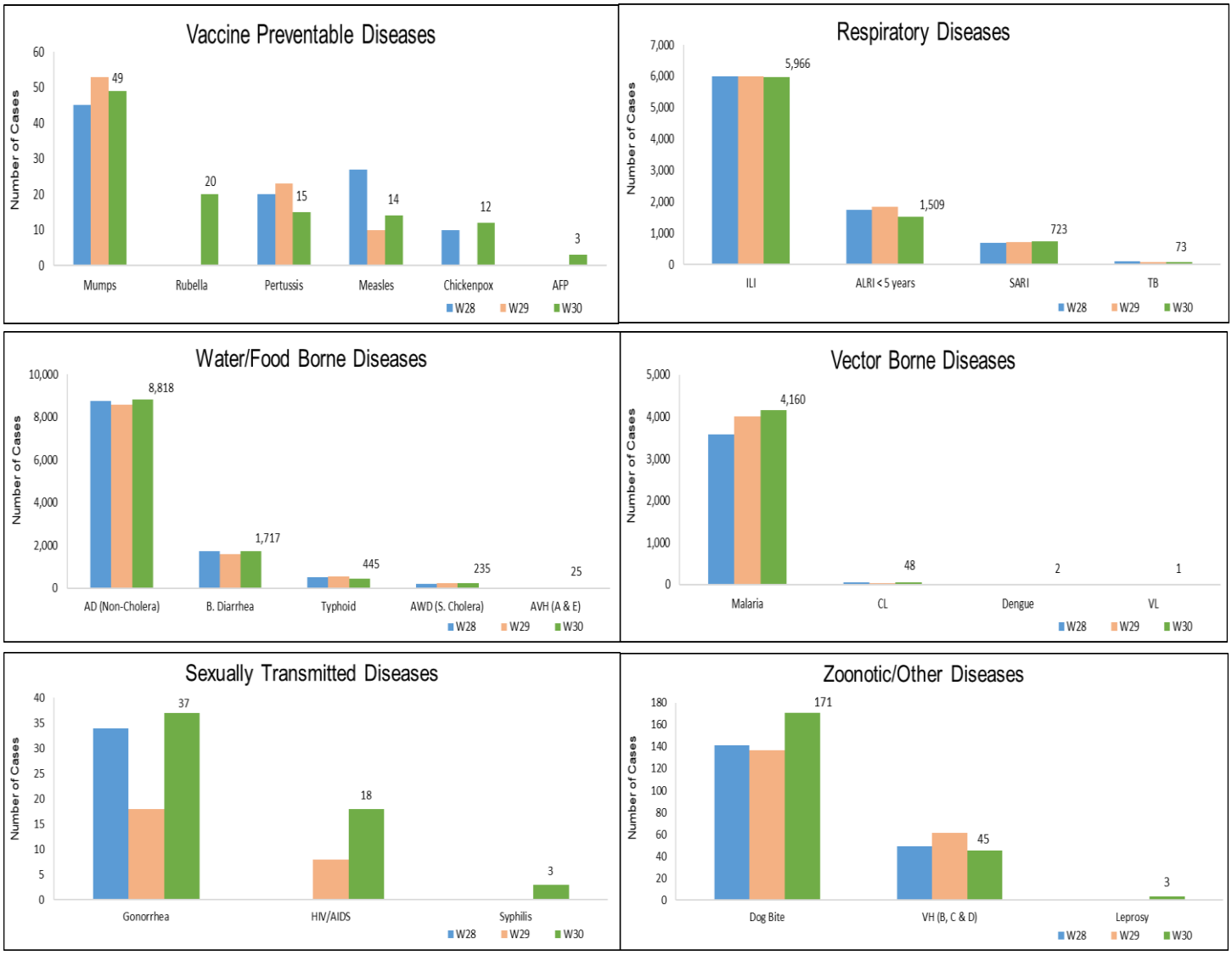
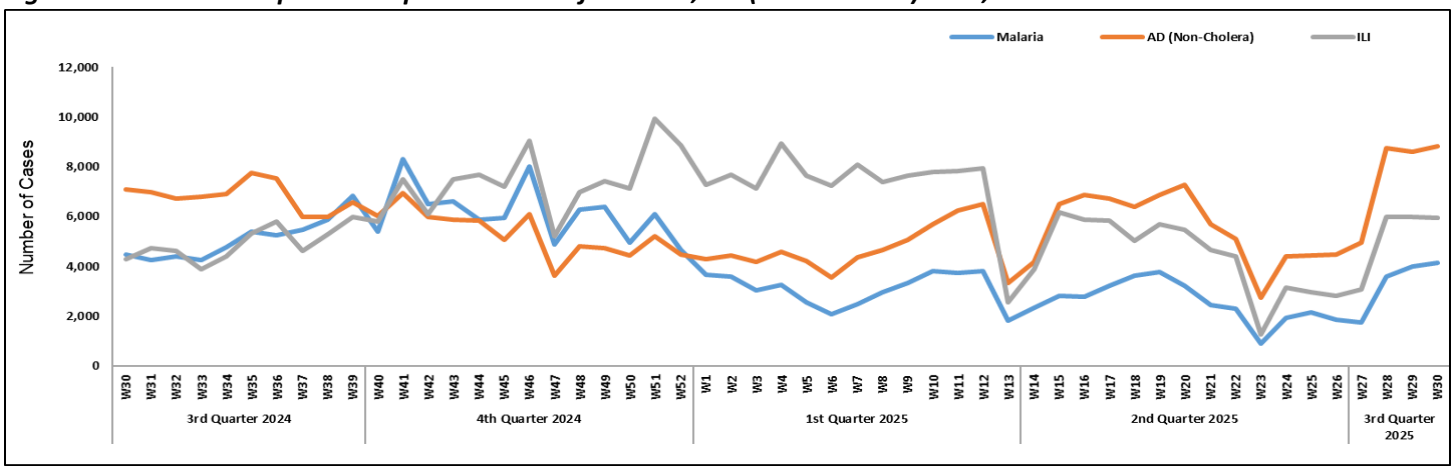


Figure 5: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Balochistan



Khyber Pakhtunkhwa

- Cases of AD (Non-Cholera) were maximum followed by Malaria, ILI, B. Diarrhea, Dog Bite, Typhoid, ALRI<5 Years, SARI, TB and CL.
- B. Diarrhea, Dog Bite, Typhoid, ALRI<5 Years, SARI, TB, CL, AVH (A & E), Mumps, Measles, Chickenpox, VH (B, C & D), AWD (S. Cholera), Dengue, Gonorrhea, Pertussis, NT and Syphilis cases showed a decline in number while AD (Non-Cholera), Malaria, ILI, AFP, Brucellosis, HIV/AIDs and Diphtheria showed an increase in number this week.
- Twenty-four 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.

Table 4: District wise distribution of most frequently reported suspected cases during Week 30, KP

Districts	AD (non-cholera)	Malaria	ILI	B. Diarrhea	Dog Bite	Typhoid	ALRI < 5 years	SARI	TB	CL
Abbottabad	1,912	0	54	31	132	19	8	0	6	0
Bajaur	1,338	418	38	133	83	6	6	29	10	17
Bannu	966	1,249	7	21	3	83	6	0	18	0
Battagram	890	91	629	12	12	NR	8	NR	26	3
Buner	452	355	0	0	0	3	0	0	0	0
Charsadda	2,391	441	1,179	139	22	71	291	86	28	0
Chitral Lower	1,147	17	15	28	15	2	12	9	4	7
Chitral Upper	249	5	18	11	5	15	4	25	2	0
D.I. Khan	1,861	387	0	25	46	3	6	0	30	0
Dir Lower	2,348	193	0	51	41	46	5	0	3	0
Dir Upper	2,347	14	31	35	19	10	73	0	9	5
Hangu	200	93	91	NR	NR	6	23	NR	3	8
Haripur	1,728	4	250	0	18	0	10	0	0	0
Karak	711	226	61	5	59	3	28	2	8	97
Khyber	947	577	57	190	36	98	31	239	13	58
Kohat	1,228	192	0	30	34	18	2	0	0	14
Kohistan Lower	240	4	0	8	1	0	0	0	0	0
Kohistan Upper	314	11	1	39	2	3	1	0	0	0
Kolai Palas	104	0	10	14	5	0	2	0	0	0
L & C Kurram	6	0	0	4	0	0	0	0	0	0
Lakki Marwat	958	487	0	8	66	10	0	0	6	0
Malakand	1,789	71	23	0	0	25	0	0	2	6
Mansehra	2,090	1	209	4	0	12	0	0	0	0
Mardan	1,497	111	7	10	86	17	34	5	4	2
Mohmand	274	294	90	36	13	14	1	111	1	49
North Waziristan	125	142	0	16	2	14	5	2	2	0
Nowshera	3,415	267	18	24	14	29	3	10	21	12
Orakzai	163	49	9	12	4	0	0	0	0	0
Peshawar	5,473	103	356	149	14	144	15	32	21	0
SD Kohat	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SD Peshawar	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
SD Tank	33	16	2	6	0	3	0	0	0	0
Shangla	2,470	970	0	15	73	6	3	0	91	0
South Waziristan (Lower)	48	147	71	3	16	15	1	7	2	9
South Waziristan (Upper)	34	5	8	0	0	0	0	0	0	0
Swabi	1,875	81	348	27	68	41	37	2	30	0
Swat	5,770	47	131	140	102	12	77	12	15	0
Tank	753	161	59	49	1	10	8	3	4	0
Tor Ghar	151	57	0	33	6	7	1	25	4	0
Upper Kurram	170	18	88	56	6	14	3	40	3	0
Total	48,467	7,304	3,860	1,364	1,004	759	704	639	366	287

Figure 6: Most frequently reported suspected cases during Week 30, KP

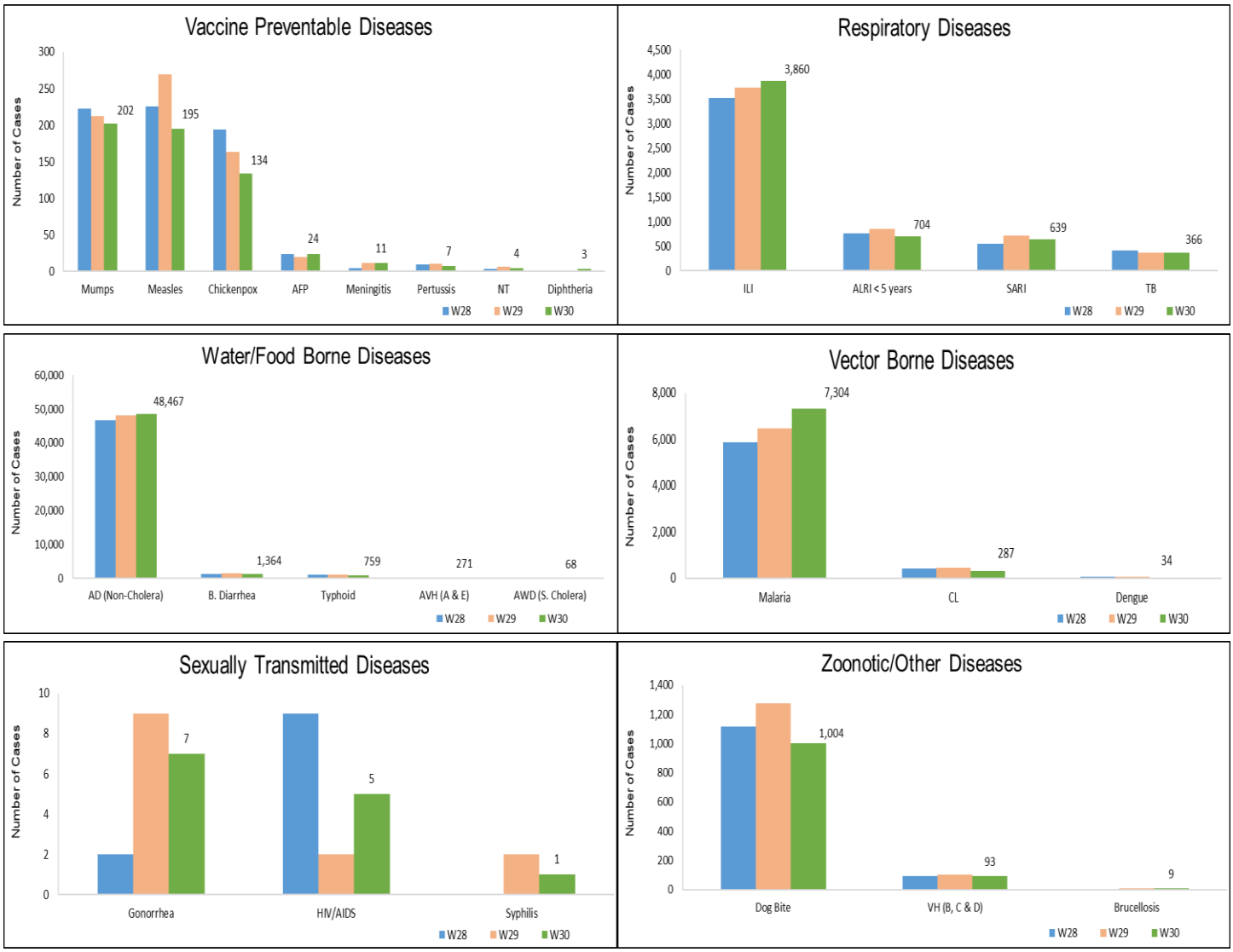
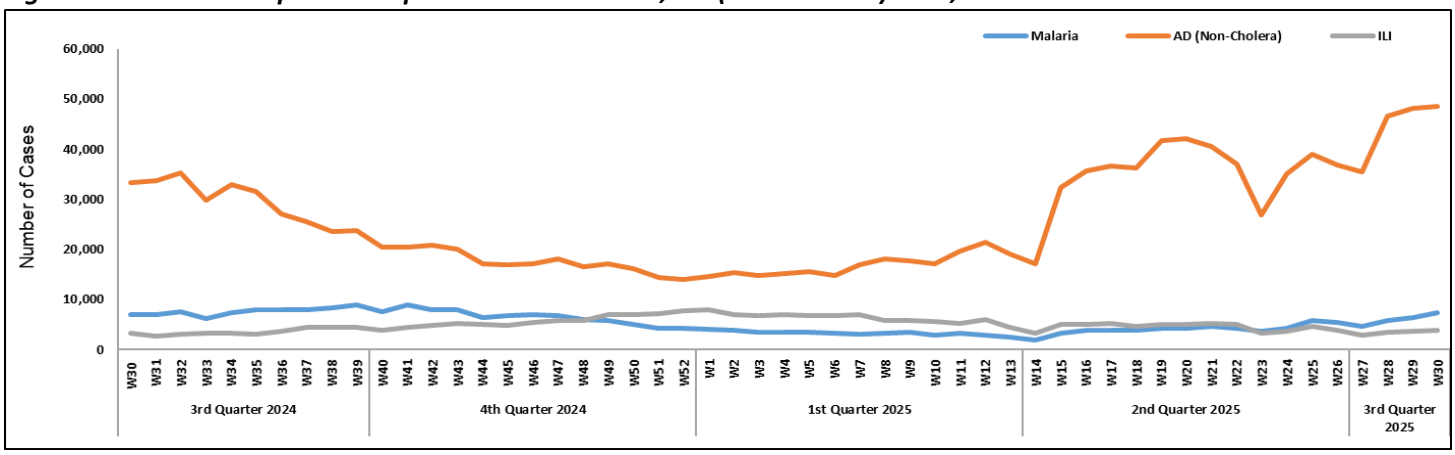


Figure 7: Week wise reported suspected cases Malaria, AD (Non-Cholera) & ILI, KP



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

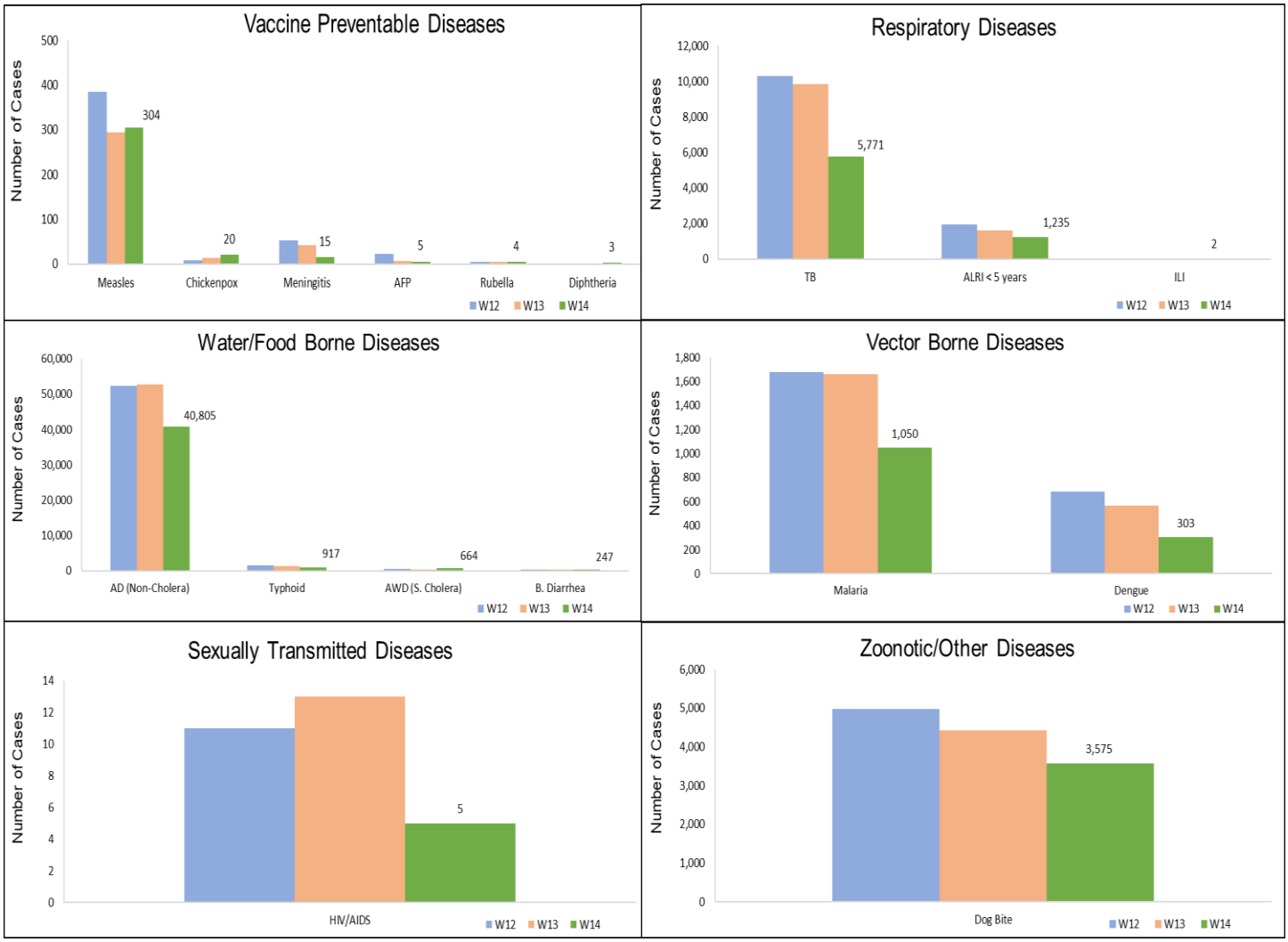
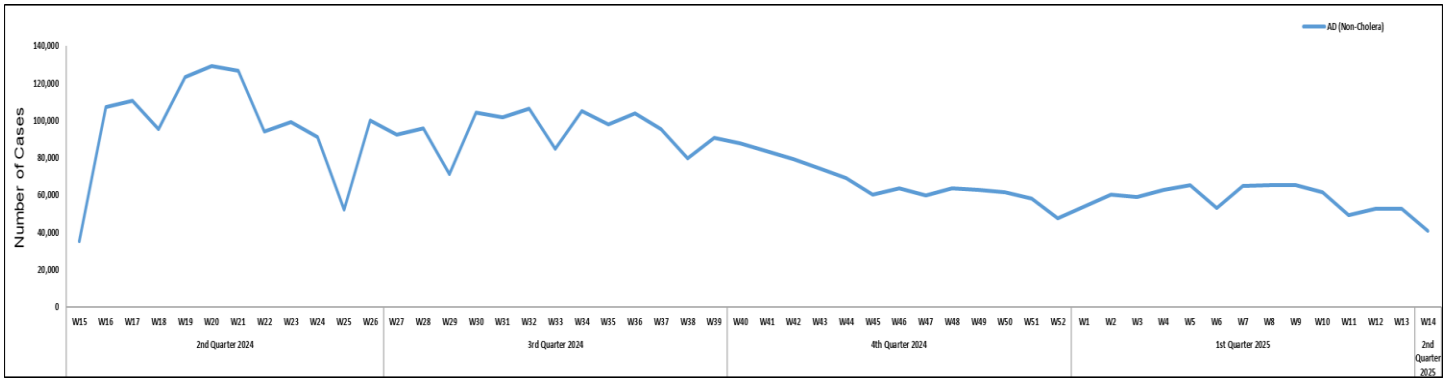


Figure 9: Week wise reported suspected cases of AD (Non-Cholera), Punjab



ICT, AJK & GB

ICT: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera), B. Diarrhea, TB, ALRI < 5years and Chickenpox. ILI and AD (Non-Cholera) cases showed an increase in number this week.

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

GB: AD (Non-Cholera) cases were the most frequently reported disease followed by ALRI <5 Years, ILI, B. Diarrhea, SARI, Typhoid, TB, AWD (S. Cholera), Measles, Chickenpox and Mumps cases. An increase in number of cases was observed for AD (Non-Cholera), ALRI <5 Years, B. Diarrhea, SARI, Typhoid, AWD (S. Cholera), Measles and Mumps while a decline in cases observed for ILI, TB, Chickenpox and VH (B, C & D) this week.

Figure 10: Most frequently reported suspected cases during Week 30, AJK

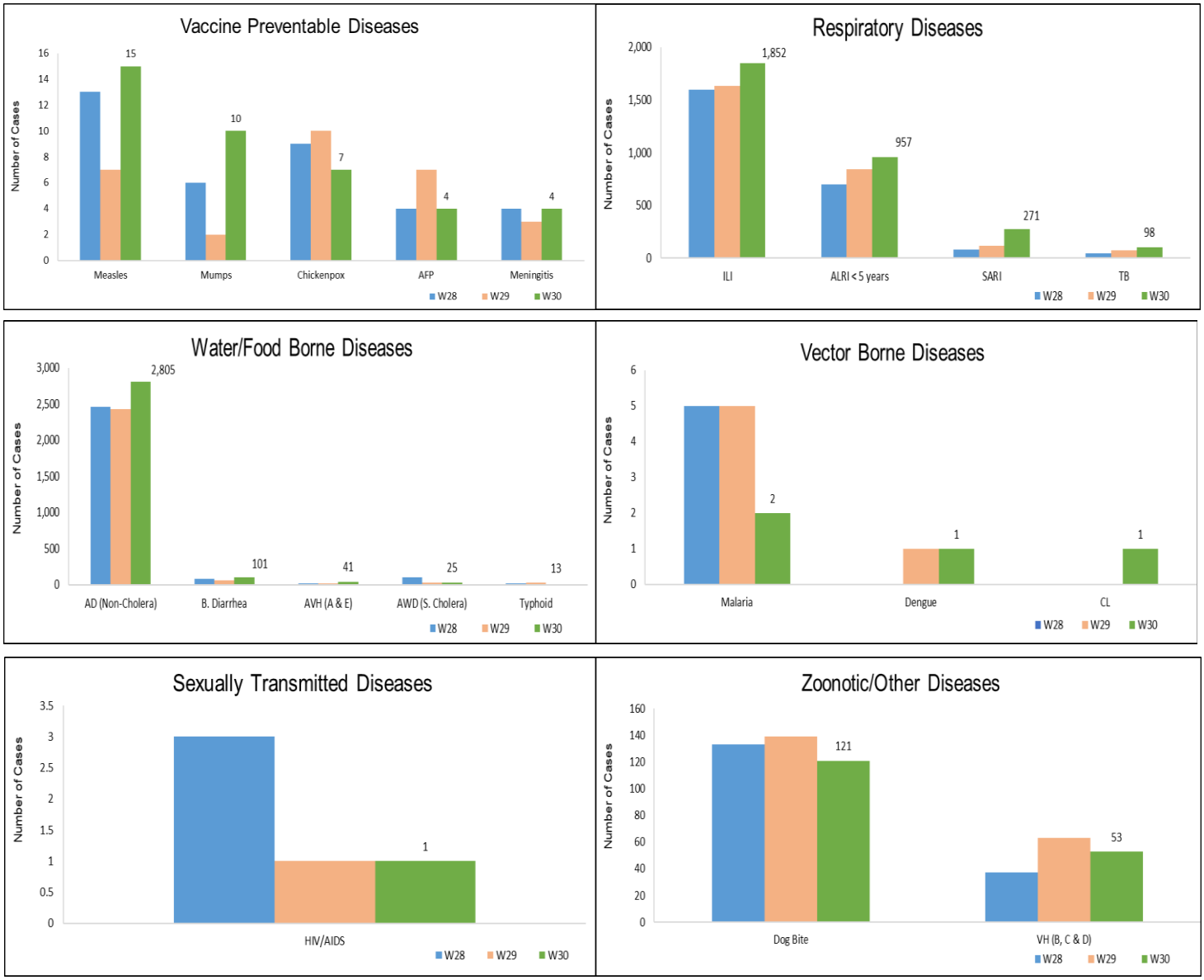


Figure 11: Week wise reported suspected cases of ILI and AD (Non-Cholera)

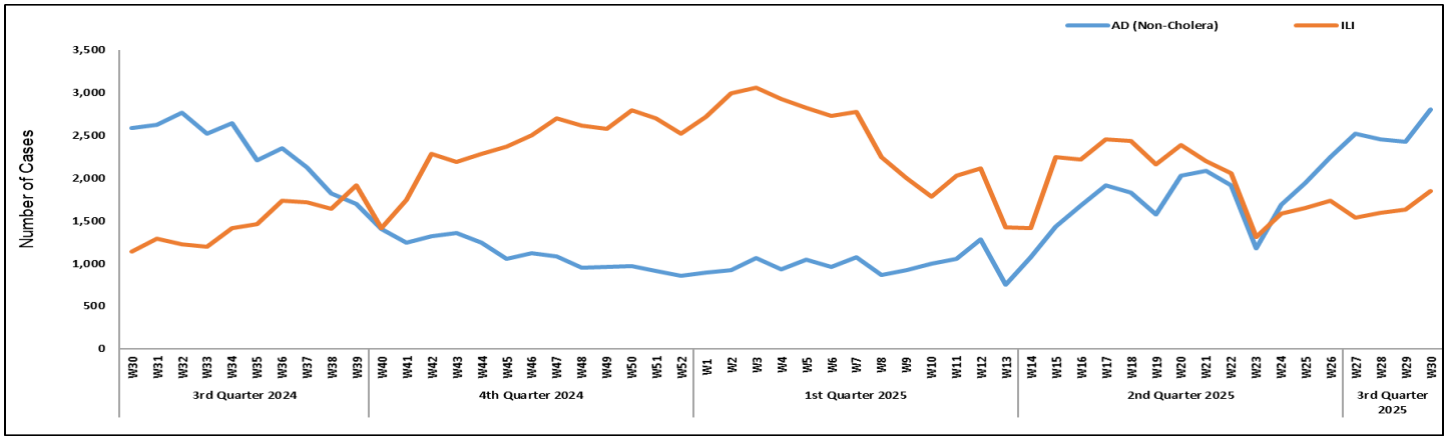


Figure 12: Most frequently reported suspected cases during Week 30, ICT

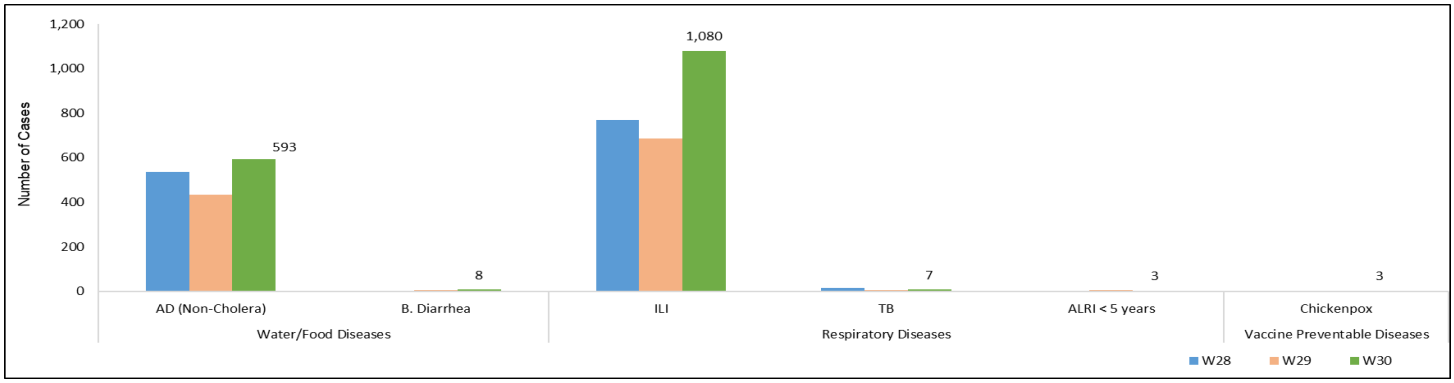


Figure 13: Week wise reported suspected cases of ILI, ICT

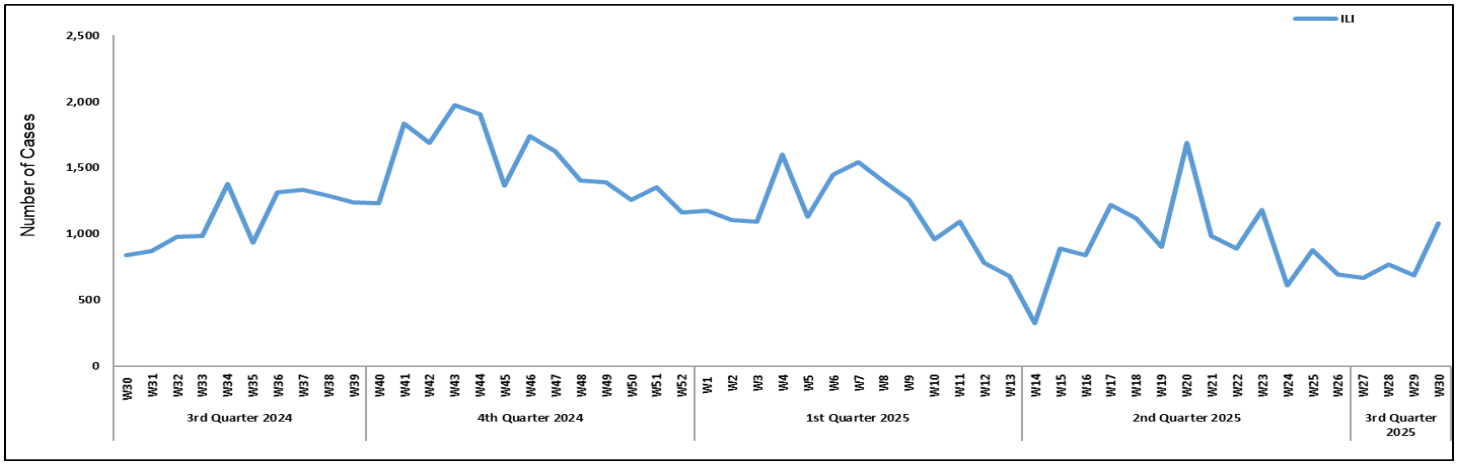


Figure 14: Most frequent cases reported during Week 30, GB

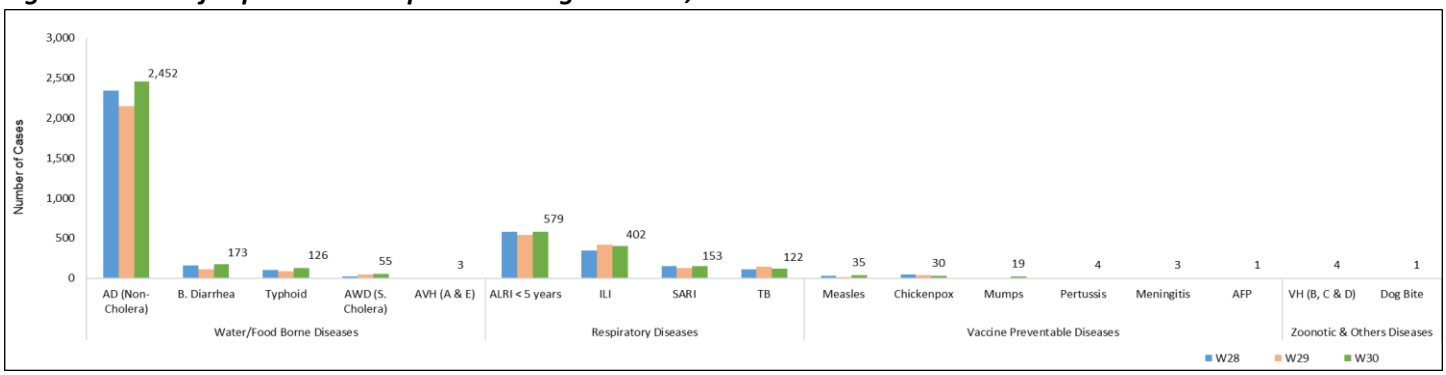


Figure 15: Week wise reported suspected cases of AD (Non-Cholera), GB

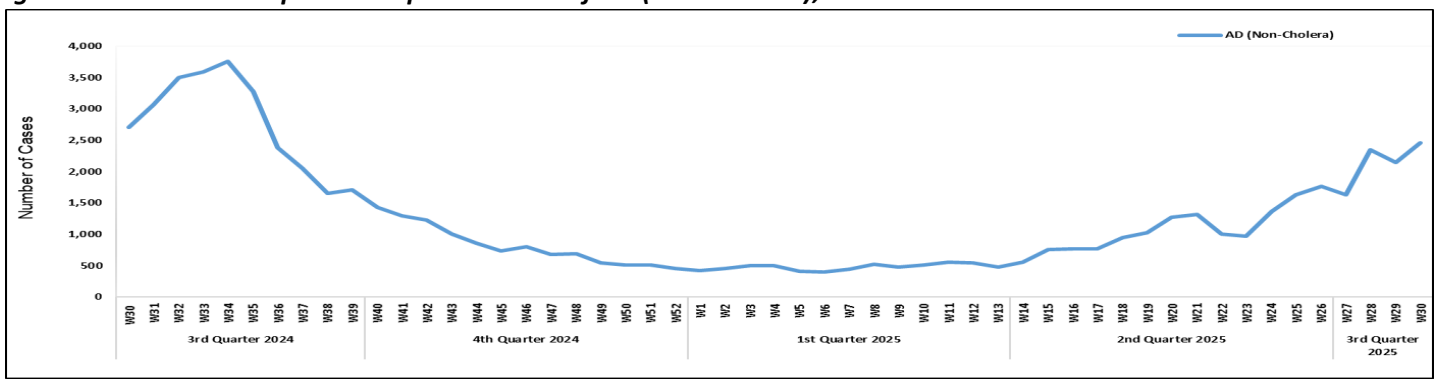


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epi Week 30

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)		208	6	-	-	-	-	-	-	0	0	-	-	0	0
Stool culture & Sensitivity		387	4	-	-	-	-	-	-	0	0	-	-	0	0
Malaria		11,538	1,184	-	-	-	-	-	-	127	0	-	-	20	0
CCHF		1	0	14	1	1	0	-	-	0	0	-	-		
Dengue		3,419	492	1	0	-	-	-	-	0	0	-	-	17	0
VH (B)		16,786	413	163	124	-	-	-	-	970	23	-	-	403	7
VH (C)		16,389	1,295	93	27	-	-	-	-	947	1	-	-	403	14
VH (D)		89	18	62	14	-	-	-	-			-	-	0	0
VH (A)		184	45			-	-	-	-	1	0	-	-	0	0
VH (E)		121	10	-	-	-	-	-	-	0	0	-	-	0	0
Bloody Diarrhea		3	1	-	-	-	-	-	-	0	0	-	-	0	0
Chikungunya		21	1	-	-	-	-	-	-	0	0	-	-	0	0
Covid-19		19	0	3	0	3	1	-	-	0	0	-	-	14	0
TB		531	74	-	-	-	-	-	-	42	2	-	-	94	4
HIV/ AIDS		6,454	61	-	-	-	-	-	-	157	0	-	-	468	0
Syphilis		1,486	27	-	-	-	-	-	-	0	0	-	-	0	0
Gonorrhea		3	1	-	-	-	-	-	-	0	0	-	-	0	0
Typhoid		1,968	40	-	-	-	-	-	-	120	10	-	-	0	0
Diphtheria		5	0	-	-	-	-	-	-	0	0	-	-	0	0
ILI		10	1	-	-	1	0	-	-	0	0	-	-	0	0
Pneumonia (ALRI)		236	98	-	-	-	-	-	-	0	0	-	-	0	0
Meningitis		29	2	-	-	-	-	-	-	0	0	-	-	0	0
Measles		163	76	17	12	171	70	20	14	2	1	349	68	15	3
Rubella		163	0	17	0	171	5	20	0	2	0	349	0	15	0
Rubella (CRS)		4	3	0	0	-	-	0	0	0	0	0	0	0	0
Leishmaniansis (cutaneous)		39	3	0	0	-	-	0	0	0	0	0	0	0	0
Covid-19	Out of SARI	-	-	0	0	-	-	-	-	-	-	41	0	-	-
	Out of ILI	-	-	0	0	-	-	-	-	-	-	8	0	-	-
Influenza A	Out of SARI	-	-	0	0	-	-	-	-	-	-	41	0	-	-
	Out of ILI	-	-	0	0	-	-	-	-	-	-	8	0	-	-
	Out of SARI	-	-	0	0	-	-	-	-	-	-	41	0	-	-

Influenza B	**Out of ILI**	-	-	0	0	-	-	-	-	-	-	8	0	-	-
RSV	**Out of SARI**	-	-	0	0	-	-	-	-	-	-	41	0	-	-
	Out of ILI	-	-	0	0	-	-	-	-	-	-	8	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 30, 2024

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	111	102	92%
	Bannu	238	124	52%
	Battagram	59	38	64%
	Buner	34	19	56%
	Bajaur	44	42	95%
	Charsadda	59	58	98%
	Chitral Upper	34	29	85%
	Chitral Lower	35	34	97%
	D.I. Khan	114	113	99%
	Dir Lower	74	62	84%
	Dir Upper	37	34	92%
	Hangu	22	13	59%
	Haripur	72	72	100%
	Karak	36	36	100%
	Khyber	53	43	81%
	Kohat	61	61	100%
	Kohistan Lower	11	10	91%
	Kohistan Upper	20	15	75%
	Kolai Palas	10	9	90%
	Lakki Marwat	70	69	99%
	Lower & Central Kurram	42	2	5%
	Upper Kurram	41	26	63%
	Malakand	42	24	57%
	Mansehra	133	88	66%
	Mardan	80	56	70%

	Nowshera	56	55	98%
	North Waziristan	13	7	54%
	Peshawar	156	132	85%
	Shangla	37	31	84%
	Swabi	64	58	91%
	Swat	77	74	96%
	South Waziristan (Upper)	93	1	1%
	South Waziristan (Lower)	42	24	57%
	Tank	34	32	94%
	Torghar	14	14	100%
	Mohmand	68	58	85%
	SD Peshawar	5	0	0%
	SD Tank	58	6	10%
	Orakzai	69	11	16%
Azad Jammu Kashmir	Mirpur	37	37	100%
	Bhimber	42	36	86%
	Kotli	60	60	100%
	Muzaffarabad	45	45	100%
	Poonch	46	46	100%
	Haveli	39	39	100%
	Bagh	40	40	100%
	Neelum	39	37	95%
	Jhelum Velley	29	29	100%
	Sudhnooti	27	27	100%
Islamabad Capital Territory	ICT	23	23	100%
	CDA	15	5	33%
Balochistan	Gwadar	26	20	77%
	Kech	44	34	77%
	Khuzdar	74	10	14%
	Killa Abdullah	26	25	96%
	Lasbella	55	55	100%
	Pishin	69	44	64%
	Quetta	55	36	65%
	Sibi	36	33	92%
	Zhob	39	8	21%
	Jaffarabad	16	16	100%
	Naserabad	32	31	97%
	Kharan	30	30	100%
	Sherani	15	4	27%
	Kohlu	75	11	15%
	Chagi	36	23	64%
	Kalat	41	40	98%
	Harnai	17	16	94%
	Kachhi (Bolan)	35	12	34%
	Jhal Magsi	28	24	86%
	Sohbat pur	25	25	100%
	Surab	32	8	25%
	Mastung	45	45	100%
	Loralai	33	26	79%
	Killa Saifullah	28	23	82%

	Ziarat	29	17	59%
	Duki	31	0	0%
	Nushki	32	0	0%
	Dera Bugti	45	23	51%
	Washuk	46	24	52%
	Panjgur	38	14	37%
	Awaran	23	14	61%
	Chaman	24	0	0%
	Barkhan	20	20	100%
	Hub	33	13	39%
	Musakhel	41	0	0%
	Usta Muhammad	34	33	97%
Gilgit Baltistan	Hunza	32	32	100%
	Nagar	25	20	80%
	Ghizer	38	38	100%
	Gilgit	42	41	98%
	Diamer	62	60	97%
	Astore	55	55	100%
	Shigar	27	25	93%
	Skardu	53	53	100%
	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	224	81%
	Shikarpur	60	60	100%
	Thatta	52	52	100%
	Larkana	67	55	82%
	Kamber Shadadkot	71	71	100%
	Karachi-East	21	13	62%
	Karachi-West	20	20	100%
	Karachi-Malir	35	33	94%
	Karachi-Kemari	22	22	100%
	Karachi-Central	12	11	92%
	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	90	100%
	Sanghar	100	99	99%
	Jacobabad	44	44	100%
	Khairpur	170	164	96%
	Kashmore	59	59	100%
	Matiari	42	42	100%

	Jamshoro	75	74	99%
	Tando Allahyar	54	54	100%
	Tando Muhammad Khan	41	41	100%
	Shaheed Benazirabad	122	122	100%

Table 7: IDSR reporting Tertiary care hospital Week 30, 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	3	67%
	Sukkur	1	0	0%
	Shaheed Benazirabad	1	0	0%
	Karachi-East	1	1	100%
	Karachi-Central	1	0	0%
KP	Peshawar	3	0	0%
	Swabi	1	0	0%
	Nowshera	1	0	0%
	Mardan	1	1	100%
	Abbottabad	1	0	0%
	Swat	1	0	0%

Toward Stronger Laboratory Networks: A National Review on IDSR and Public Health Laboratories

National Institute of Health (NIH) Pakistan, in collaboration with the UK Health Security Agency's International Health Regulations Strengthening Project (UKHSA IHR-SP), recently convened a high-level National Review Meeting in Islamabad to assess the progress and future direction of Public Health Laboratories and their integration within the IDSR Laboratory Networks. This significant gathering brought together an impressive array of stakeholders: Directors of all six Provincial Public Health Reference Laboratories (PPHRLs), provincial IDSR focal persons, global leads from UKHSA IHR-SP, representatives from the UK Department of Health and Social Care (DHSC) and the Fleming Fund, members of the UKHSA country team, senior officials from the Ministry of NHSR&C, as well as experts from WHO and other development partners.

At the core of the meeting was a shared recognition of laboratories as a backbone of effective surveillance. Each PPHRL presented its progress, highlighting how far provinces have come in operationalizing laboratory networks that can generate timely, reliable data for disease detection and response. These presentations also shed light on the challenges that persist ranging from resource constraints to gaps in coordination and outlined practical pathways for strengthening capacity.

Discussions went beyond achievements and challenges, focusing on sustainability, integration, and future priorities. Participants deliberated on how to ensure that PPHRLs are not short-term projects but enduring assets in Pakistan's public health architecture. The integration of laboratory and surveillance systems, especially under IDSR, was underscored as a critical step toward ensuring that laboratory data informs real-time decision-making. Equally important were exchanges on culture and sensitivity testing, which is central to antimicrobial resistance (AMR) surveillance a pressing global and national health concern.

The convening underscored NIH's leadership role in fostering a coherent and interconnected laboratory network that is resilient, data-driven, and responsive to emerging threats. By aligning national efforts with international expertise and support, this initiative reflects Pakistan's continued commitment to advancing health security under the framework of IDSR and IHR.

Notes from the field:

Measles Outbreak Investigation in G-6/1, Islamabad, July 2025

Introduction

Measles is one of the most contagious viral diseases of humans, caused by the measles virus, a member of the *Paramyxoviridae* family. The disease typically presents with fever, maculopapular rash, cough, coryza, and

conjunctivitis, and patients remain infectious from about four days before to four days after rash onset. Globally, measles remains a leading cause of vaccine-preventable child mortality, with outbreaks particularly affecting under-immunized populations despite the availability of a safe and effective vaccine (1). In the Eastern Mediterranean Region, periodic outbreaks continue to burden health systems due to gaps in vaccination coverage (2). Pakistan, being endemic for measles, experiences recurrent localized outbreaks, often linked to low vaccination uptake and poor living conditions (3).

Objectives

The objectives of this investigation were:

- To confirm the existence and magnitude of the measles outbreak in the G-6/1 sector of Islamabad.
- To determine the outbreak in terms of time, place, and person, and identify possible sources and modes of transmission.
- To assess vaccination status of cases & controls and identify risk factors associated with measles transmission in the affected community.
- To provide recommendations to prevent future outbreaks.

Methods

We conducted a case–control study among residents of Street 31, G-6/1, Islamabad, during July 9–15, 2025. The outbreak period was defined between June 15 and July 15, 2025. The study population included individuals aged 12 years and older residing in the affected area. A suspected case was defined as any resident meeting the clinical criteria of fever, maculopapular rash, and at least one of cough, coryza, or conjunctivitis, while a confirmed case was any suspected case with laboratory confirmation of measles IgM antibodies or an epidemiological link to a confirmed case.

Data were collected using the standardized measles case investigation form under the national IDSR-DHIS2 system. The investigation team reviewed hospital records from the isolation ward of Pakistan Institute of Medical Sciences (PIMS), conducted contact tracing, and performed door-to-door surveillance in the affected neighborhood. Blood samples from admitted patients were collected at PIMS and sent to the National Institute of Health (NIH) for laboratory confirmation. All data were entered into Microsoft Excel and analyzed descriptively to determine outbreak magnitude, demographic distribution, vaccination status, and risk factors.

Results

Between June 25 and July 15, 2025, a total of seven measles cases were identified in Street 31, G-6/1, Islamabad, with no fatalities. The mean age of cases was 5.7 years, compared to 8 years among controls. Most cases 71% (n=5) were female children. Vaccination history revealed that five of the seven cases were unvaccinated, whereas the majority of controls (22 out of 24) had received measles vaccine. The odds ratio for vaccination was calculated as 0.03, indicating that vaccination provided a strong and statistically significant protective effect against measles.

Living conditions also appeared to play a major role in transmission. Five of the seven cases (71%) resided in overcrowded households compared with only six of the 24 controls (26%). The odds ratio for overcrowding was 7.5, suggesting that cases had nearly eight times greater odds of living in overcrowded conditions compared with controls. Clinically, all cases presented with fever, maculopapular rash, and at least one of cough, coryza, or conjunctivitis. Laboratory analysis confirmed all collected blood samples as positive for measles IgM, thereby validating the outbreak.

Discussion

This investigation confirmed a measles outbreak in Street 31, G-6/1, Islamabad, affecting seven individuals, primarily unvaccinated female children. The findings highlight the dual role of inadequate vaccination coverage and household overcrowding in driving measles transmission. Vaccination demonstrated a protective effect, with cases 97% less likely to be vaccinated compared to controls. Similar associations between low vaccination coverage and outbreaks have been documented globally and regionally (4,5).

The presence of overcrowded living conditions significantly increased transmission risk. Measles is known for its high basic reproductive number (R0 12–18), making transmission almost inevitable in unvaccinated and close-contact settings (6).

Strengths of this investigation include laboratory confirmation and use of a case control design. However, limitations include the small sample size and reliance on self-reported vaccination history for some controls.

Conclusion

The outbreak of measles in G-6/1, Islamabad, was confirmed, with transmission facilitated by low vaccination coverage and overcrowded living conditions. Vaccination showed strong protective efficacy, while overcrowding posed a major risk factor.

Recommendations

Immediate control measures

- Conduct catch-up vaccination campaigns in Street 31 and surrounding sectors.
- Isolate suspected and confirmed measles cases for at least four days after rash onset.
- Intensify contact tracing and surveillance.

Long-term measures

- Strengthen IDSR surveillance for early detection of measles outbreaks.
- Strengthen routine immunization coverage in Islamabad, particularly targeting unvaccinated children.
- Enhance risk communication and community engagement to address vaccine hesitancy.
- Address overcrowding by promoting awareness on household infection prevention.

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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.

Key benefits of ART:

- Reduces viral load to undetectable levels
- Prevents transmission (U=U: Undetectable = Untransmittable)
- Improves quality of life

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 Programme (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. Addressing social determinants of health and ensuring the inclusion of marginalized groups is key to ending AIDS as a public health threat by 2030.

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 Programme

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UK Health Security Agency

World Health Organization

CDC U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION