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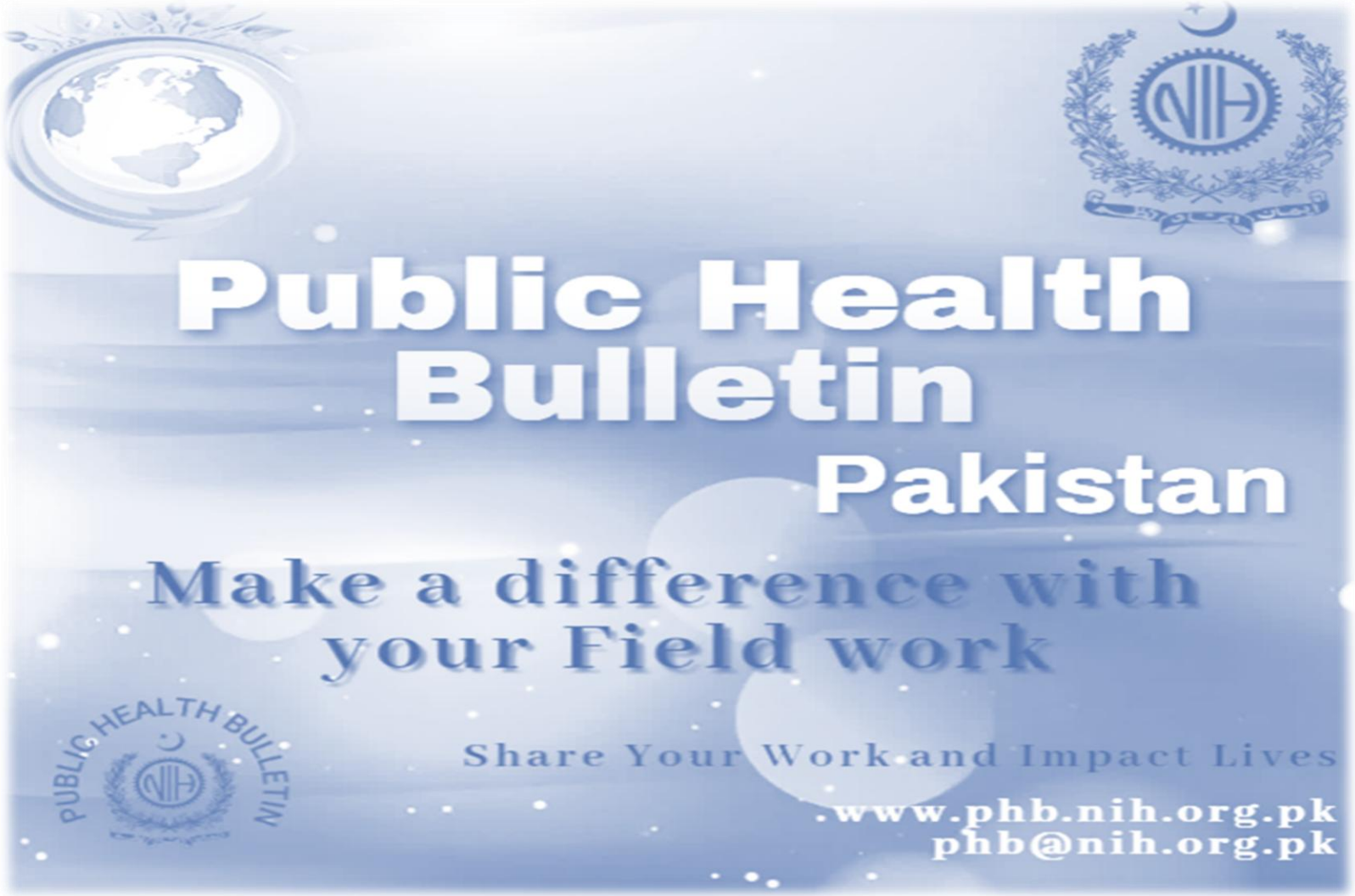
Integrated Disease Surveillance & Response (IDSR) Report

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 14, 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.

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 14, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, ILI, TB, ALRI <5 years, dog bite, B. Diarrhea, VH (B, C & D), Typhoid and SARI.*
- *Eleven cases of AFP reported from KP, five from Punjab and two from Sindh.*
- *Five suspected cases of HIV/ AIDS reported from Punjab, three from KP and two from Balochistan.*
- *Six suspected cases of Brucellosis reported from KP.*
- *Among VPDs, there is an increase in number of cases of Measles, Meningitis, AFP and Diphtheria this week.*
- *Among Respiratory diseases, there is an increase in number of cases of TB this week.*
- *Among Water/food-borne diseases, there is an increase 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 an increase in number of cases of CL and Dengue this week.*
- *Among STDs, there is an increase in number of cases of HIV/AIDs this week.*
- *Among Zoonotic/Other diseases, there is an increase in number of cases of dog bite this week.*

IDSR compliance attributes

- *The national compliance rate for IDSR reporting in 158 implemented districts is 80%*
- *Sindh is the top reporting regions with a compliance rate of 95%, followed by AJK 94%, GB 92% and ICT 81%.*
- *The lowest compliance rate was observed in KP 75% and Balochistan 57%.*

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	2315	1725	75
Azad Jammu Kashmir	404	380	94
Islamabad Capital Territory	36	29	81
Balochistan	1308	751	57
Gilgit Baltistan	405	371	92
Sindh	2095	1982	95
National	6563	5238	80

Public Health Actions

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

Typhoid

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

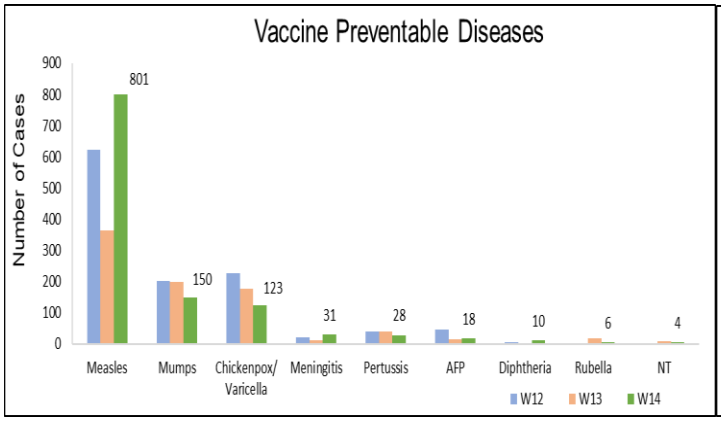
Acute Viral Hepatitis (A & E)

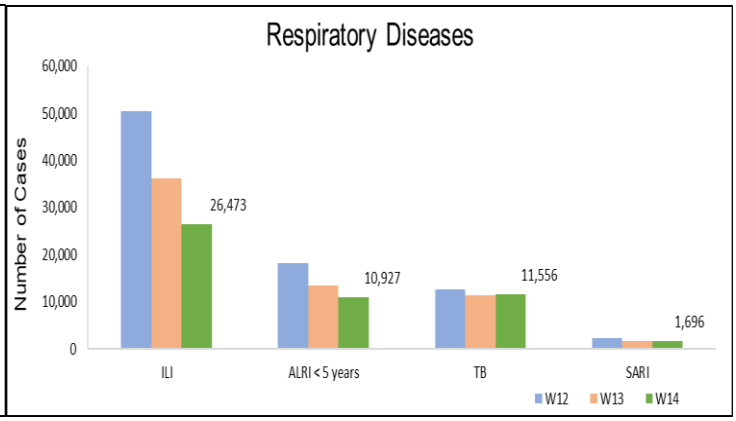
- **Enhance Case Detection and Reporting:** Strengthen AHV (A & E) surveillance in the IDSR system by training health personnel to recognize symptoms and ensure timely reporting, especially during seasonal peaks or in outbreak-prone areas.
- **Strengthen Laboratory Confirmation:** Improve diagnostic capacity by ensuring availability of rapid and confirmatory tests (e.g., IgM for HAV/HEV) at regional laboratories to facilitate timely outbreak response.
- **Improve WASH Infrastructure:** Coordinate with municipal and rural development authorities to upgrade water supply systems, prevent sewage contamination, and promote latrine use to interrupt fecal-oral transmission.
- **Engage in Risk Communication:** Design and disseminate targeted messages through community channels to raise awareness about safe drinking water, personal hygiene, food safety, and the risks of consuming contaminated water or raw produce.

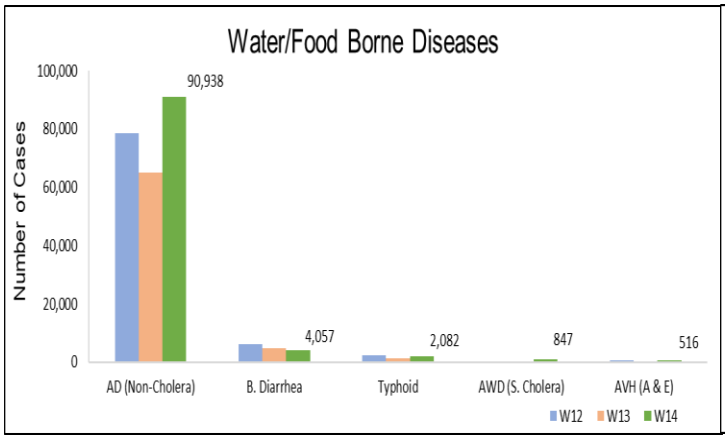
Table 1: Province/Area wise distribution of most frequently reported suspected cases during Week 14, Pakistan.

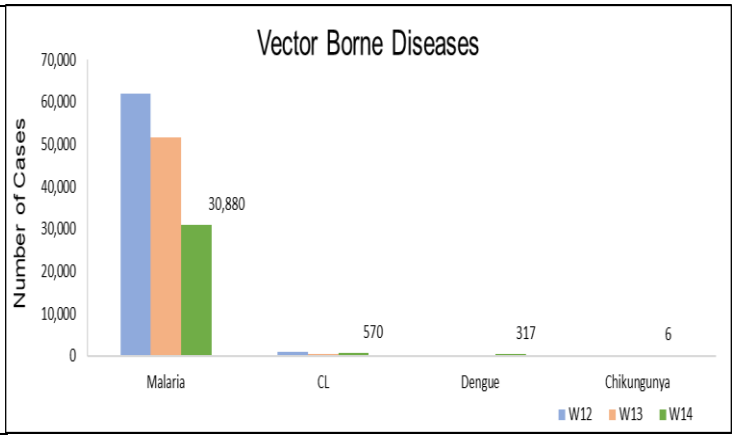
Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	1,073	4,157	559	152	17,222	40,805	26,970	90,938
Malaria	0	2,331	0	0	1,938	1,050	25,561	30,880
ILI	1,413	3,866	293	328	3,316	2	17,255	26,473
TB	36	94	22	4	211	5,771	5,418	11,556
ALRI < 5 years	835	1358	674	0	1,064	1,235	5,761	10,927
Dog Bite	106	149	6	0	701	3,575	2,605	7,142
B. Diarrhea	30	1,115	52	2	696	247	1,915	4,057
VH (B, C & D)	15	76	0	0	100	0	2,079	2,270
Typhoid	7	298	39	0	315	917	506	2,082
SARI	144	535	149	2	714	0	152	1,696
AWD (S. Cholera)	6	119	10	0	38	664	10	847
Measles	6	33	4	0	367	304	87	801
CL	0	49	0	0	521	0	0	570
AVH (A & E)	5	14	9	0	167	0	321	516
Dengue	0	5	0	0	1	303	8	317
Mumps	1	20	8	0	93	0	28	150
Chickenpox/ Varicella	1	18	3	1	33	20	47	123
Gonorrhea	0	23	0	0	9	0	5	37
Meningitis	1	0	1	0	3	15	11	31
Pertussis	1	19	2	0	5	0	1	28
AFP	0	0	0	0	11	5	2	18
Diphtheria (Probable)	0	0	0	0	7	3	0	10
HIV/AIDS	0	2	0	0	3	5	0	10
Chikungunya	0	2	0	0	0	0	4	6
Brucellosis	0	0	0	0	6	0	0	6
Rubella (CRS)	0	0	0	0	1	4	1	6
Syphilis	0	0	0	0	0	0	5	5
NT	0	0	0	0	4	0	0	4

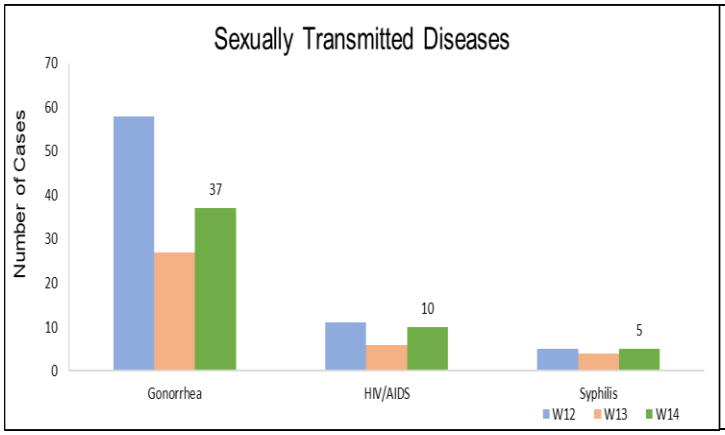
Figure 1: Most frequently reported suspected cases during Week 14, Pakistan.

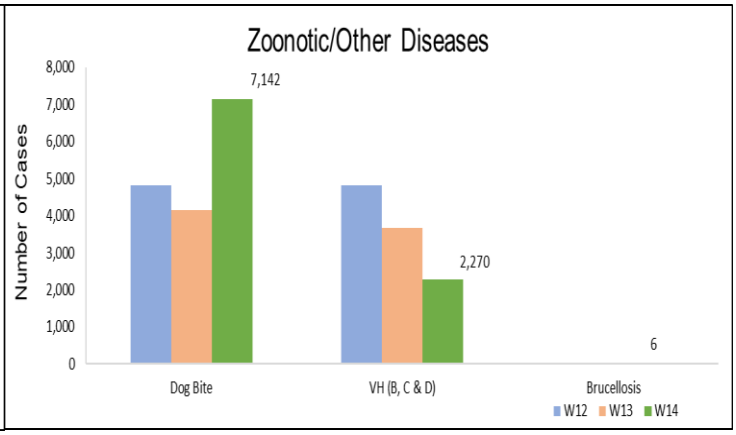












Sindh

- AD (Non-Cholera) cases were maximum followed by Malaria, ILI, ALRI<5 Years, TB, dog bite, VH (B, C, D), B. Diarrhea, Typhoid and AVH (A & E).
- AD (Non-Cholera) cases are mostly from Khairpur, Badin and Mirpurkhas whereas Malaria cases are from Larkana, Khairpur and Sanghar.
- Two 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) and B. Diarrhea while an increase in number of cases of AVH (A & E) and Meningitis this week.

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Table 2: District wise distribution of most frequently reported suspected cases during Week 14, Sindh

Districts	AD (non-cholera)	Malaria	ILI	ALRI < 5 years	TB	Dog Bite	VH (B, C & D)	B. Diarrhea	Typhoid	AVH (A & E)
Badin	1,914	1,353	3,736	243	306	125	119	122	46	0
Dadu	1,293	1,616	145	322	187	453	34	141	50	20
Ghotki	542	517	35	246	204	169	49	37	0	0
Hyderabad	1,271	367	754	40	93	71	32	20	5	7
Jacobabad	431	318	366	305	57	143	84	47	18	0
Jamshoro	1,295	1,101	68	238	309	87	72	75	27	10
Kamber	1,010	1,614	0	197	398	182	74	78	11	0
Karachi Central	152	0	158	0	0	0	2	0	17	2
Karachi East	147	0	94	10	10	4	5	2	0	0
Karachi Keamari	154	1	129	11	1	0	0	3	0	0
Karachi Korangi	134	19	1	0	6	0	0	3	1	0
Karachi Malir	412	109	508	62	17	38	0	4	0	0
Karachi South	28	0	0	0	0	0	0	0	0	0
Karachi West	469	151	618	99	53	93	29	21	18	0
Kashmore	233	849	137	85	98	25	3	35	1	0
Khairpur	1,915	2,682	4,334	658	592	161	115	209	92	1
Larkana	1,056	2,769	29	274	442	13	64	154	0	10
Matiari	1,152	1,015	0	68	277	54	216	38	0	1
Mirpurkhas	1,575	898	1,069	187	223	95	107	67	3	1
Naushero Feroze	956	1,006	1,182	182	191	216	27	139	23	0
Sanghar	1,170	1,784	91	244	563	144	357	62	36	8
Shaheed Benazirabad	1,175	1,010	0	137	218	125	52	54	88	0
Shikarpur	620	1,076	2	95	92	125	274	89	2	0
Sujawal	1,446	646	5	212	141	63	55	61	8	11
Sukkur	767	1,040	1,066	375	197	43	35	58	4	0
Tando Allahyar	1,104	823	500	84	171	58	142	75	6	0
Tando Muhammad Khan	706	372	28	70	185	13	15	53	0	0
Tharparkar	1,269	1,031	791	493	148	0	69	83	15	20
Thatta	1,480	652	1,406	496	15	105	30	88	12	225
Umerkot	1,094	742	3	328	224	0	18	97	23	5
Total	26,970	25,561	17,255	5,761	5,418	2,605	2,079	1,915	506	321

Figure 2: Most frequently reported suspected cases during Week 14 Sindh

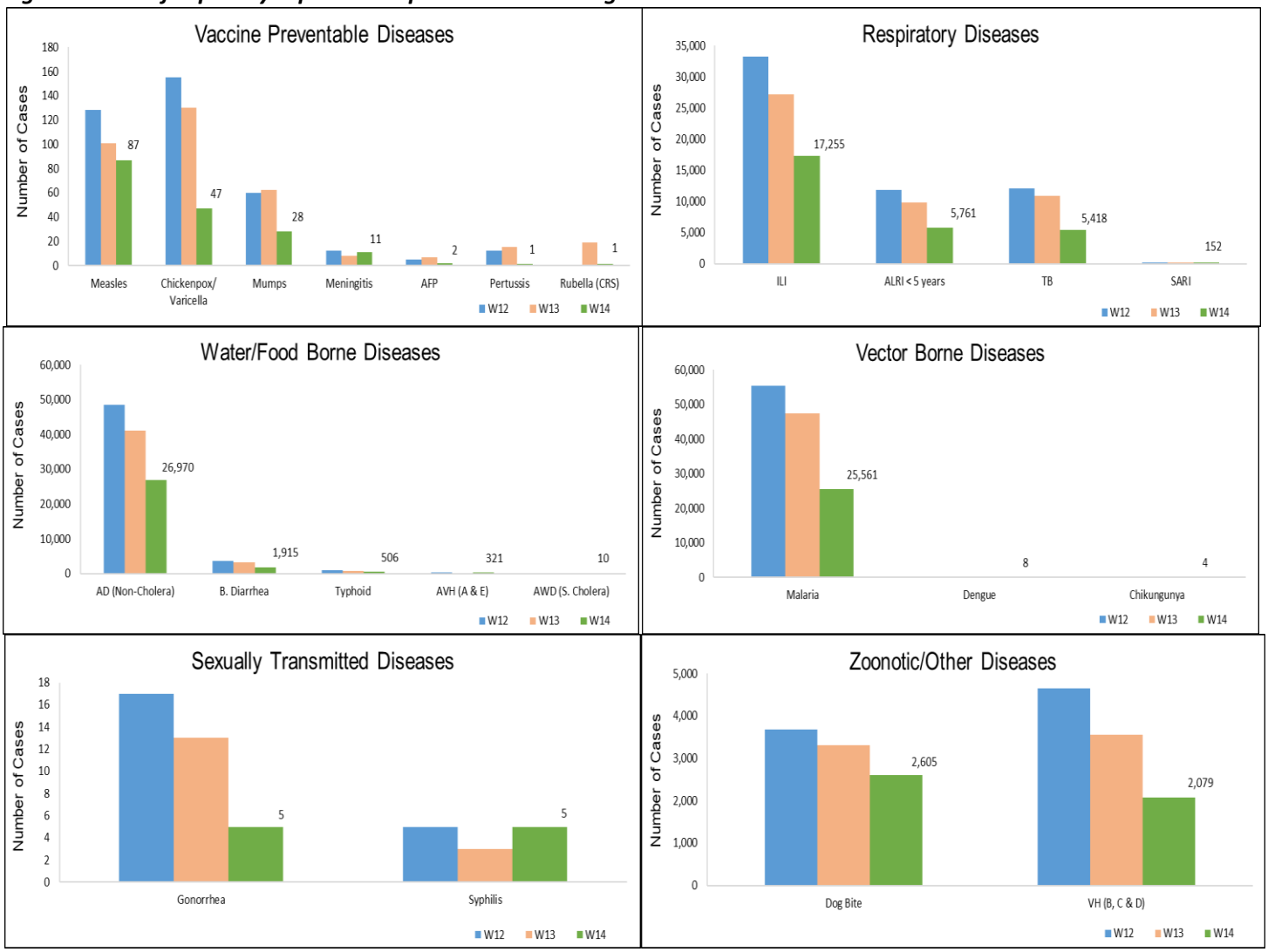
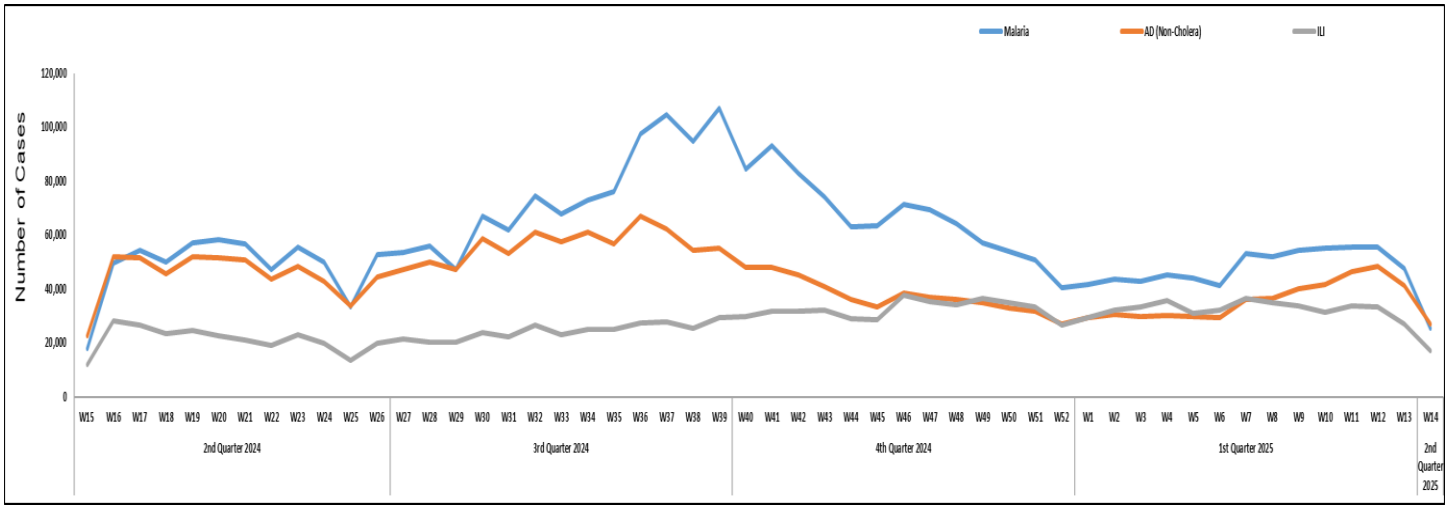


Figure 3: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Sindh



Balochistan

- AD (Non-Cholera), ILI, Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, dog bite, AWD (S. Cholera) and TB cases were the most frequently reported diseases from Balochistan province.
- AD (Non-Cholera) cases are mostly reported from Jaffarabad, Quetta and Usta Muhammad while ILI cases are mostly reported from Quetta, Kharan and Gwadar.
- 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), TB, Measles, Mumps, Pertussis and Chickenpox showed an increase in number of cases this week.

Table 3: District wise distribution of most frequently reported suspected cases during Week 14, Balochistan

Districts	AD (non-cholera)	ILI	Malaria	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	Dog Bite	AWD (S. Cholera)	TB
Barkhan	59	33	26	21	1	6	35	12	5	1
Chagai	120	136	18	0	29	0	5	0	0	0
Dera Bugti	57	21	43	42	12	0	1	0	0	0
Gwadar	144	332	64	7	35	0	11	1	12	0
Harnai	24	3	36	116	64	0	0	2	2	0
Hub	119	41	47	14	4	0	5	1	0	3
Jaffarabad	375	93	393	31	92	8	4	49	0	50
Jhal Magsi	226	120	349	253	0	0	15	9	0	8
Kachhi (Bolan)	127	71	116	33	35	88	17	0	13	1
Kalat	11	2	13	6	11	1	5	0	0	0
Kech (Turbat)	159	218	115	25	27	NR	NR	NR	NR	NR
Kharan	161	397	25	0	67	0	2	0	0	0
Khuzdar	234	291	115	0	148	22	42	0	1	0
Killa Abdullah	62	60	6	10	22	41	13	15	41	0
Killa Saifullah	90	0	121	82	64	17	18	0	0	0
Kohlu	158	170	66	13	37	41	13	NR	NR	NR
Lasbella	293	41	174	54	38	2	6	19	0	0
Loralai	117	230	26	19	25	57	4	0	0	0
Naseerabad	229	34	150	24	8	23	35	18	1	6
Panjgur	42	49	19	35	9	0	3	0	1	0
Pishin	208	293	14	96	82	34	18	3	22	1
Quetta	326	453	8	87	25	51	5	1	0	0
Sibi	23	88	5	9	11	2	0	1	0	0
Sohbat pur	177	20	146	71	58	14	17	1	1	5
Surab	44	151	20	0	0	0	0	0	0	0
Usta Muhammad	317	131	99	113	100	4	3	17	0	0
Washuk	172	283	98	20	83	28	16	0	20	0
Zhob	83	105	19	177	28	96	5	0	0	19
Total	4,157	3,866	2,331	1,358	1,115	535	298	149	119	94

Figure 4: Most frequently reported suspected cases during Week 14, Balochistan

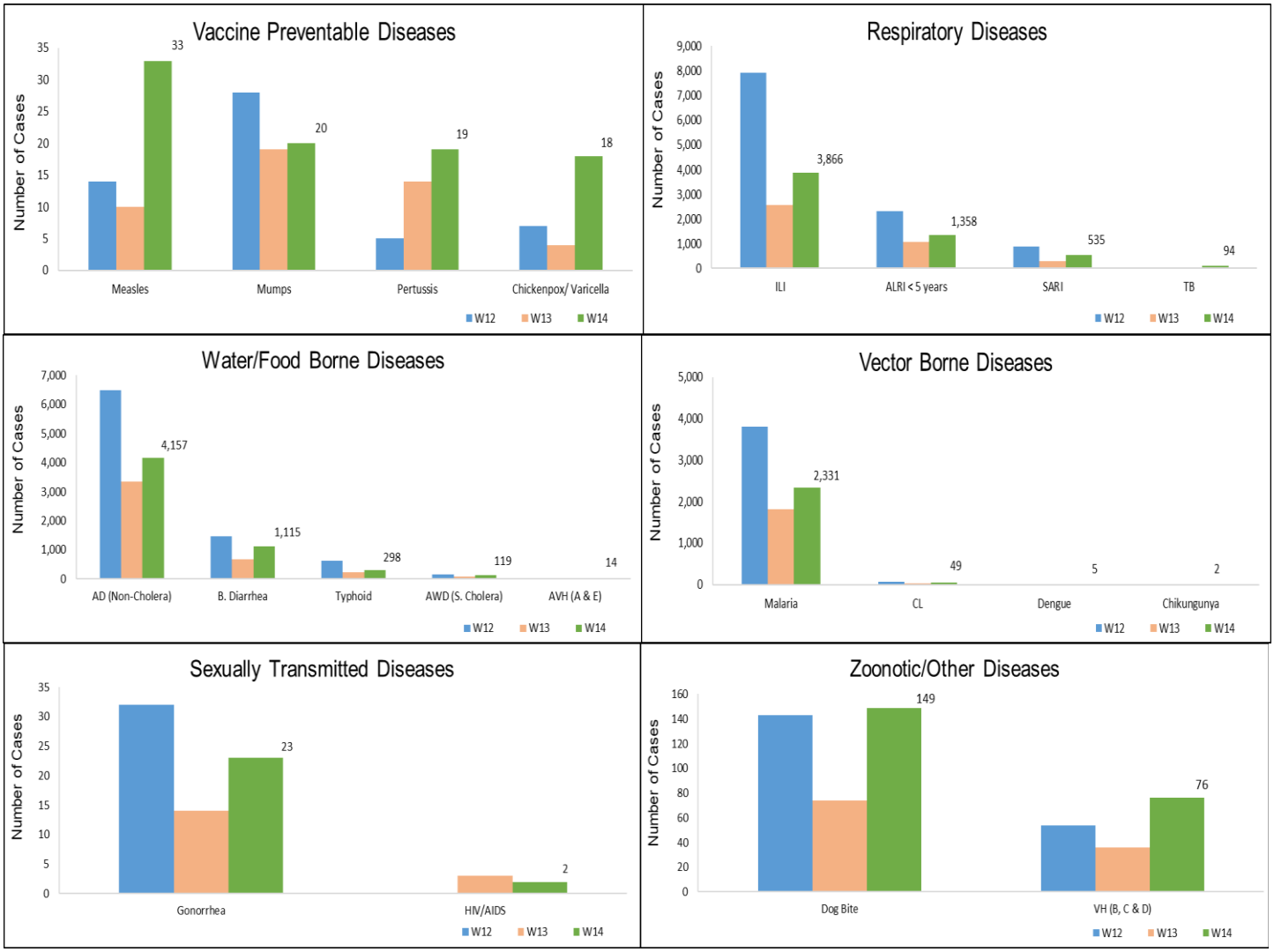
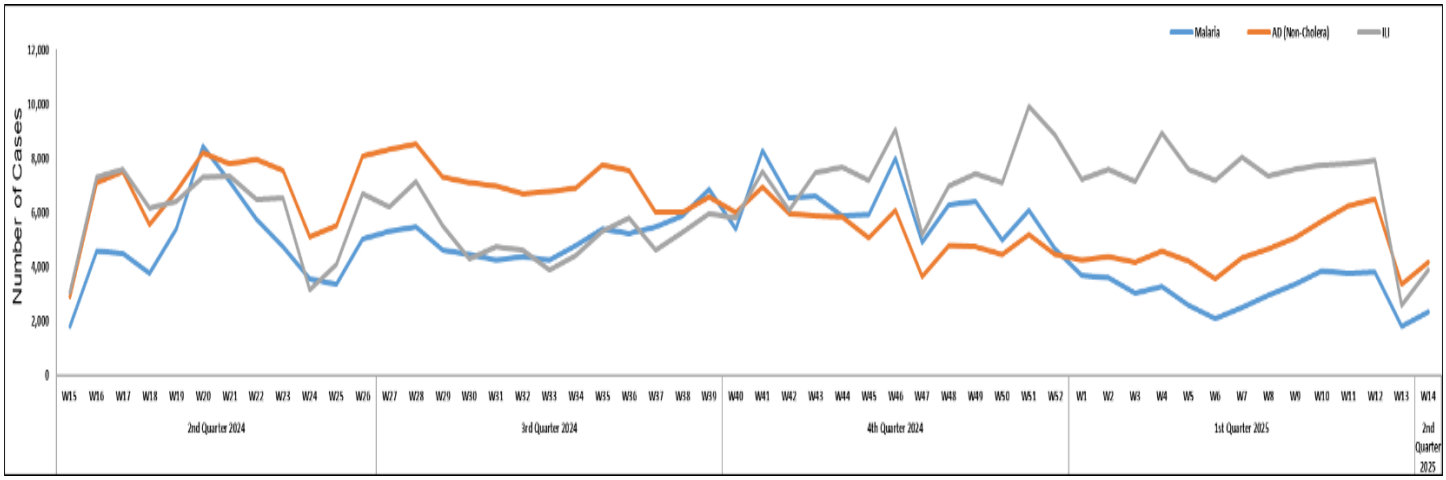


Figure 5: Week wise reported suspected cases of Malaria, AD (Non-Cholera) & ILI, Balochistan



Khyber Pakhtunkhwa

- Cases of AD (Non-Cholera) were maximum followed by ILI, Malaria, ALRI<5 Years, SARI, dog bite, B. Diarrhea, CL, Measles and Typhoid.
- AD (Non-Cholera), ILI, Malaria, ALRI<5 Years, SARI and B. Diarrhea cases showed a decline in number while dog bite, CL, Measles, AFP, Diphtheria and HIV/AIDs showed an increase in number this week.
- Eleven cases of AFP reported from KP. All are suspected cases and need field verification.
- Three cases of HIV/AIDs reported from KP. Field investigation is required.
- Six suspected cases of Brucellosis reported from KP. They require field verification.

Table 4: District wise distribution of most frequently reported suspected cases during Week 14, KP

Districts	AD (non-cholera)	ILI	Malaria	ALRI < 5 years	SARI	Dog Bite	B. Diarrhea	CL	Measles	Typhoid
Abbottabad	483	96	0	19	5	31	3	0	1	14
Bajaur	254	91	83	22	66	61	60	26	17	4
Bannu	577	5	812	10	8	2	15	1	66	39
Battagram	127	229	6	8	NR	5	2	4	7	2
Buner	155	0	115	1	0	11	0	0	0	0
Charsadda	1,317	629	139	257	5	4	83	0	18	24
Chitral Lower	451	99	3	10	17	13	14	4	1	1
Chitral Upper	85	12	3	6	5	0	3	1	1	7
D.I. Khan	1,365	0	73	21	0	12	14	0	72	0
Dir Lower	1,011	0	79	9	0	62	65	0	8	14
Dir Upper	426	51	3	9	10	0	0	11	6	9
Hangu	136	115	39	5	0	8	0	43	0	5
Haripur	667	273	0	67	20	12	0	0	5	3
Karak	443	34	40	62	16	48	21	316	16	7
Khyber	461	36	42	134	126	27	119	31	26	11
Kohat	346	0	8	0	0	31	19	5	1	0
Kohistan Lower	46	0	0	0	0	1	16	0	0	0
Kohistan Upper	241	0	8	3	7	2	21	0	7	2
Kolai Palas	38	4	0	0	0	0	2	0	0	1
L & C Kurram	8	1	11	0	0	2	7	0	0	0
Lakki Marwat	535	2	53	0	0	40	16	0	4	6
Malakand	456	89	3	7	1	0	39	25	6	31
Mansehra	423	209	0	0	4	0	0	0	0	0
Mardan	273	63	0	138	0	60	3	5	3	5
Mohmand	171	110	80	6	95	16	17	45	5	2
North Waziristan	24	0	31	4	0	2	2	2	8	8
Nowshera	1,444	21	19	1	11	21	13	2	3	11
Orakzai	53	18	4	0	0	1	11	0	2	0
Peshawar	1,925	198	6	57	32	2	43	0	57	31
SD Tank	19	1	12	0	0	0	5	0	0	0
Shangla	200	0	143	6	1	18	0	0	2	3
South Waziristan (Lower)	15	120	4	1	34	6	0	0	1	5
SWU	5	2	2	0	2	0	0	0	0	0
Swabi	900	385	49	45	43	154	21	0	15	34
Swat	1,449	116	6	129	21	27	25	0	6	14
Tank	518	132	48	21	0	3	3	0	2	18
Tor Ghar	70	0	6	2	27	3	12	0	1	2
Upper Kurram	102	175	8	4	158	16	22	0	0	2
Total	17,222	3,316	1,938	1,064	714	701	696	521	367	315

Figure 6: Most frequently reported suspected cases during Week 14, KP

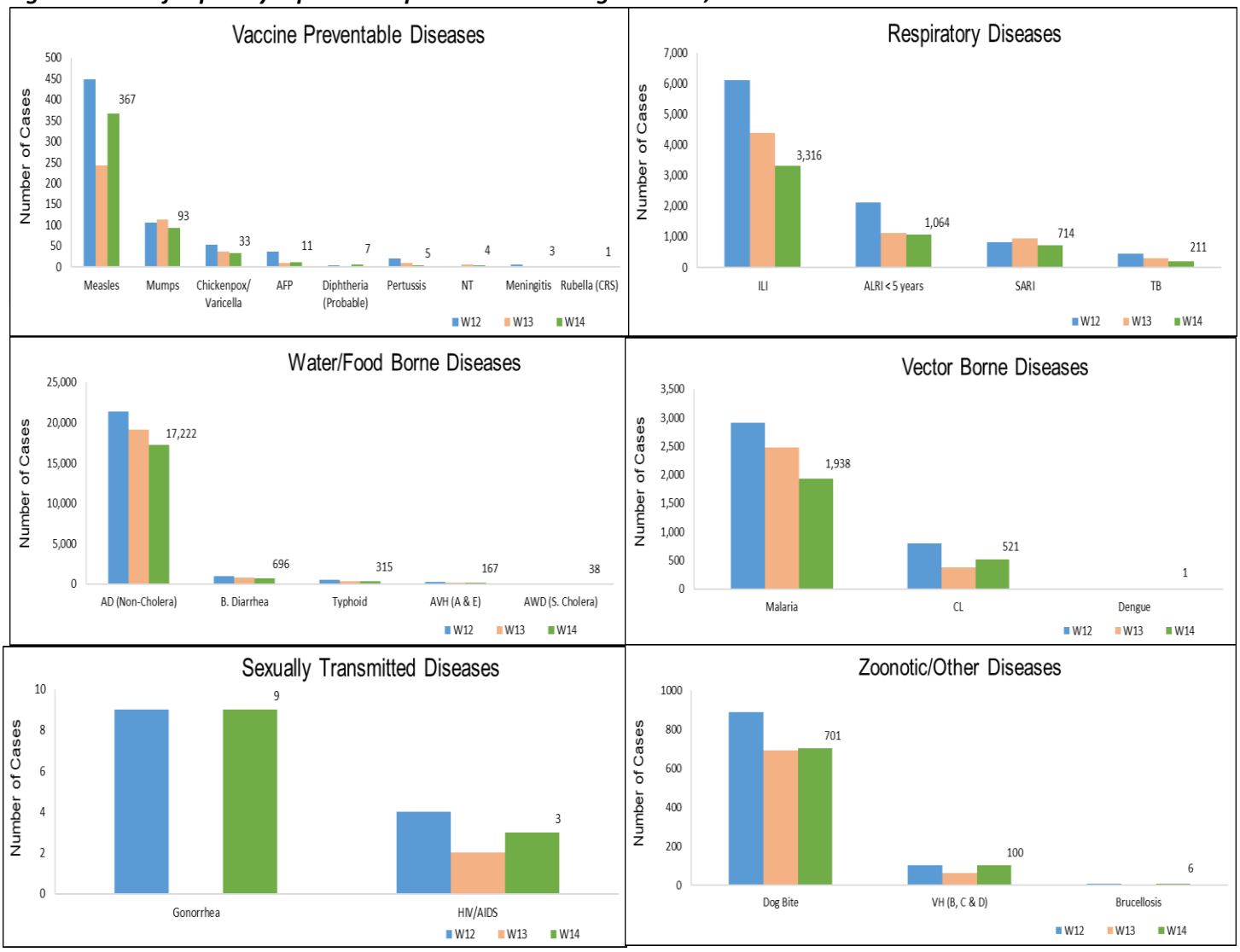
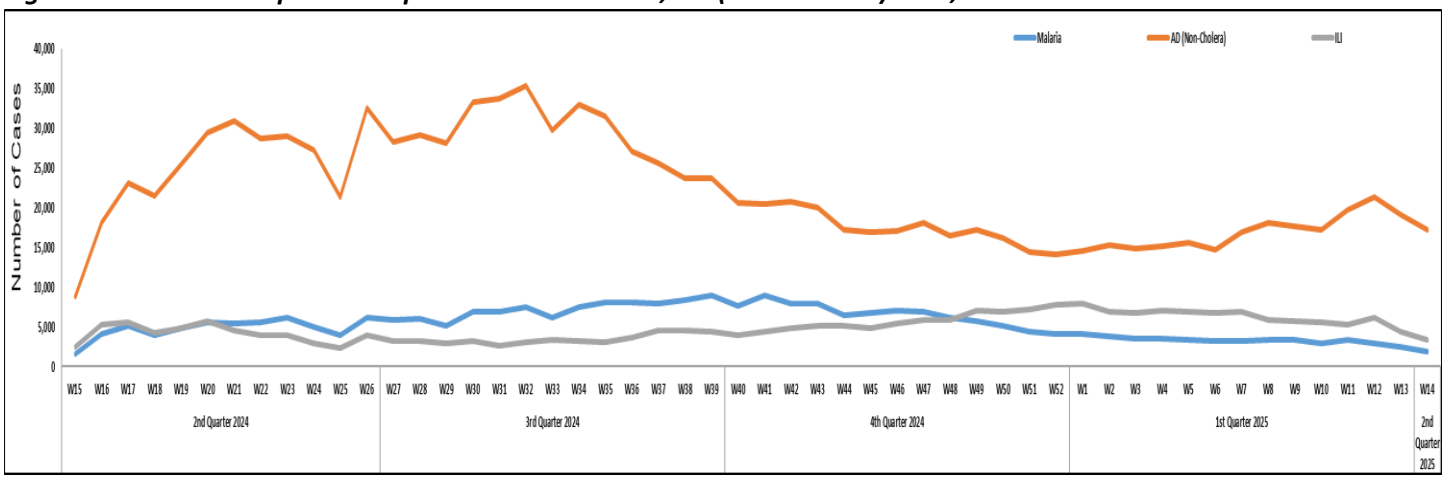


Figure 7: Week wise reported suspected cases Malaria, AD (Non-Cholera) & ILI, KP



UK Health Security Agency

World Health Organization

U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

- 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

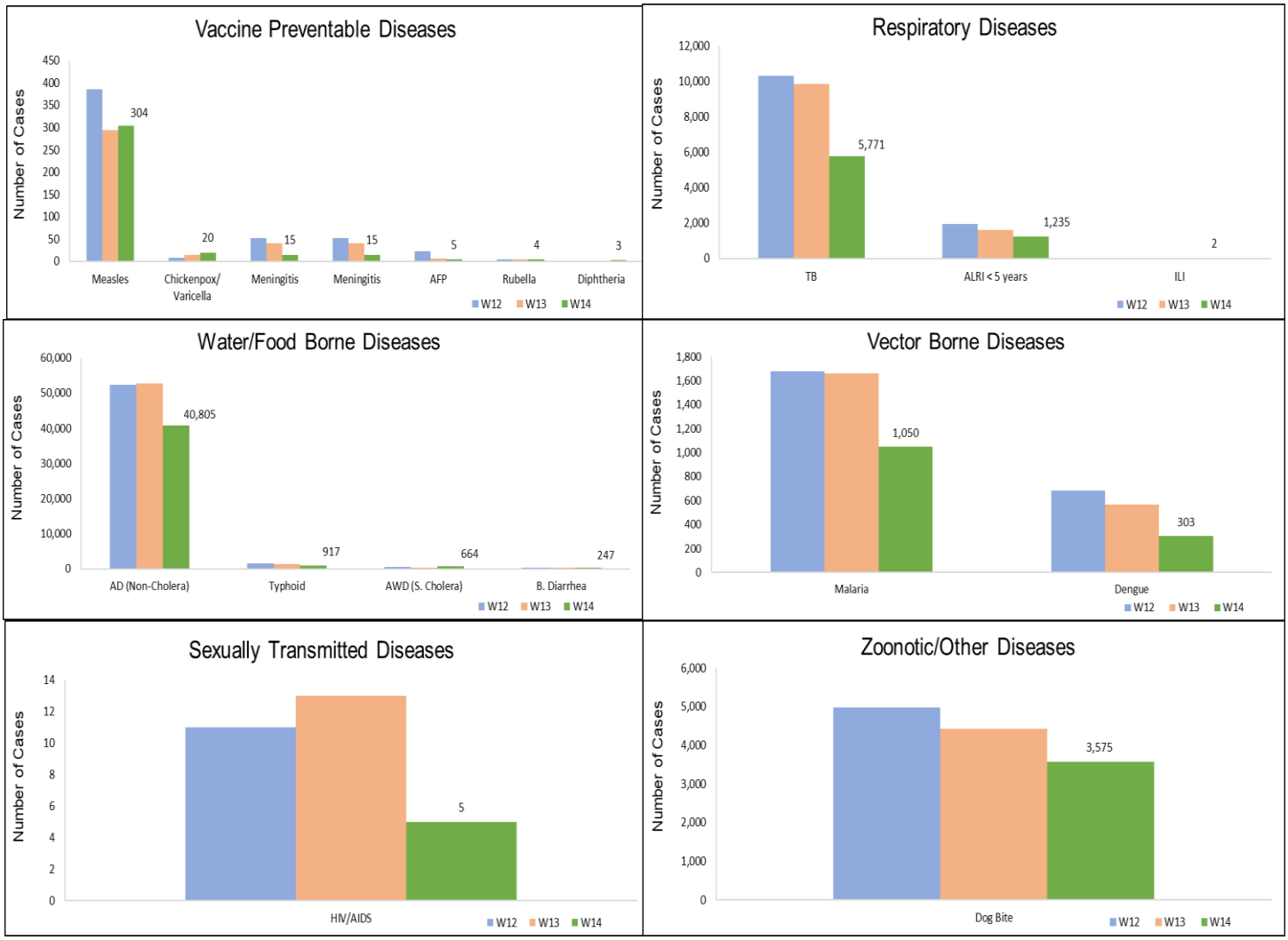
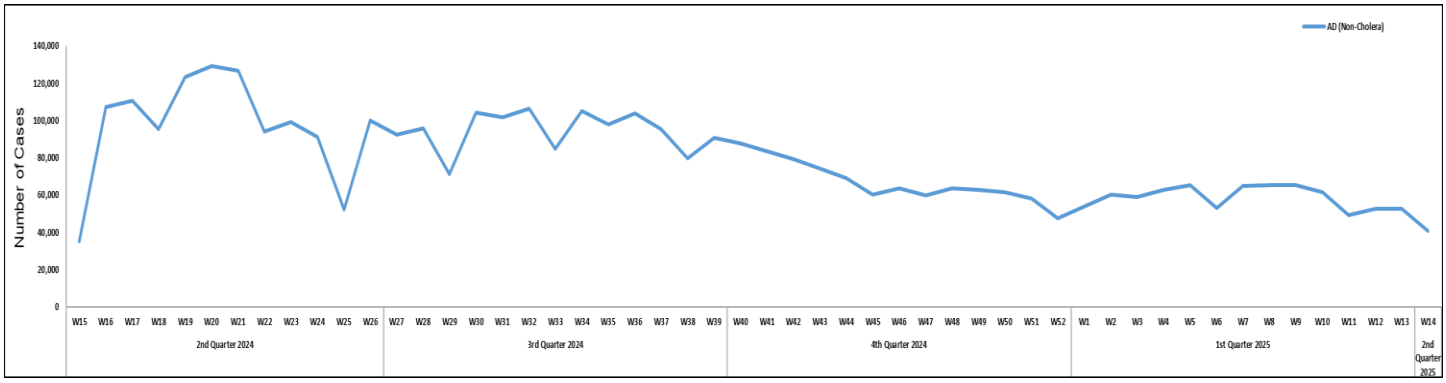


Figure 9: Week wise reported suspected cases of AD (Non-Cholera), Punjab



ICT, AJK & GB

ICT: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera) 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. An increase in number of suspected cases was observed for AD (Non-Cholera), ALRI < 5years, SARI, dog bite, VH (B, C & D), Typhoid, Measles, Pertussis and Meningitis while a decline in cases observed for ILI and AWD (S. Cholera) this week.

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

Figure 10: Most frequently reported suspected cases during Week 14, AJK

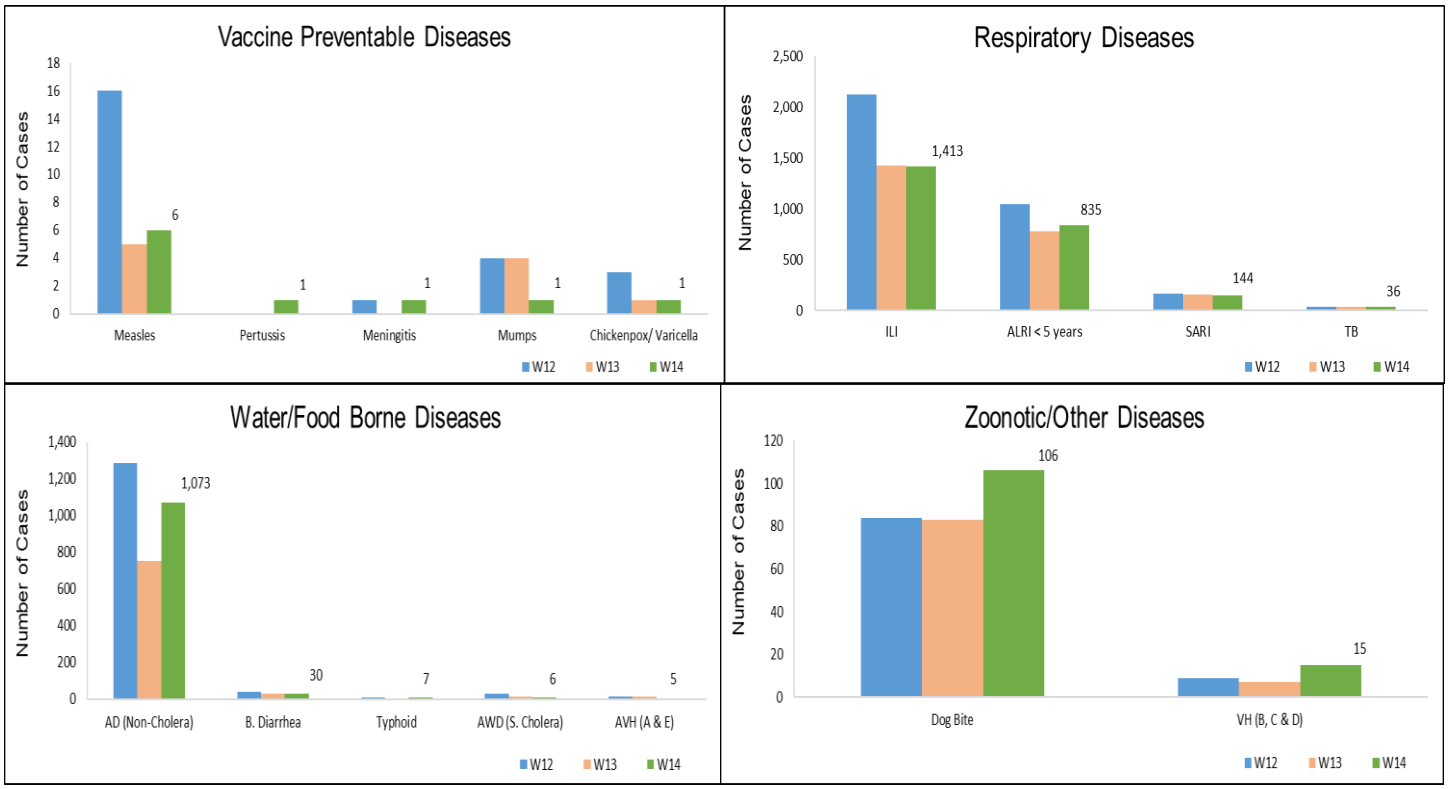


Figure 11: Week wise reported suspected cases of ILI and ARI <5 years, AJK

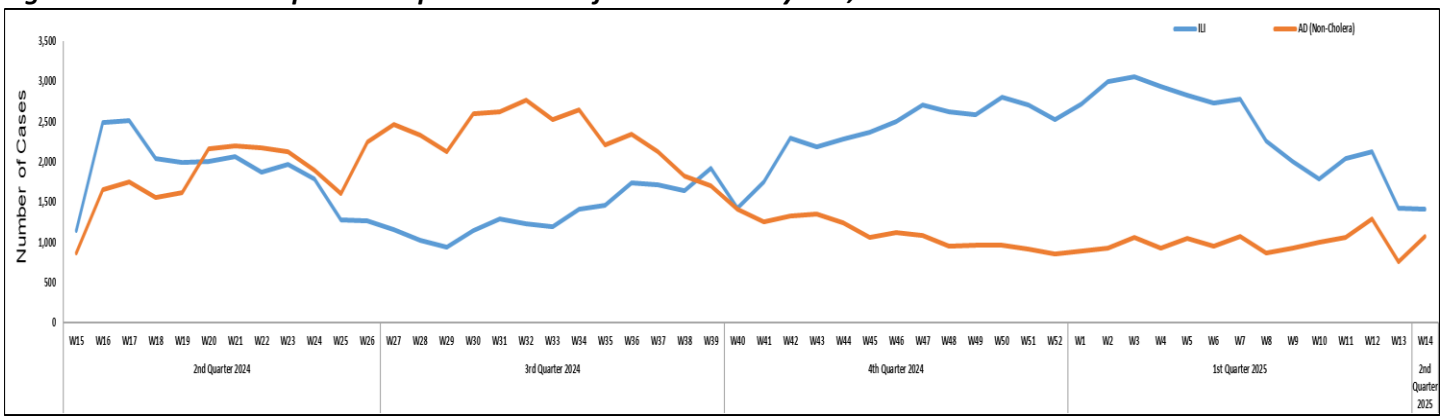


Figure 12: Most frequently reported suspected cases during Week 14, ICT

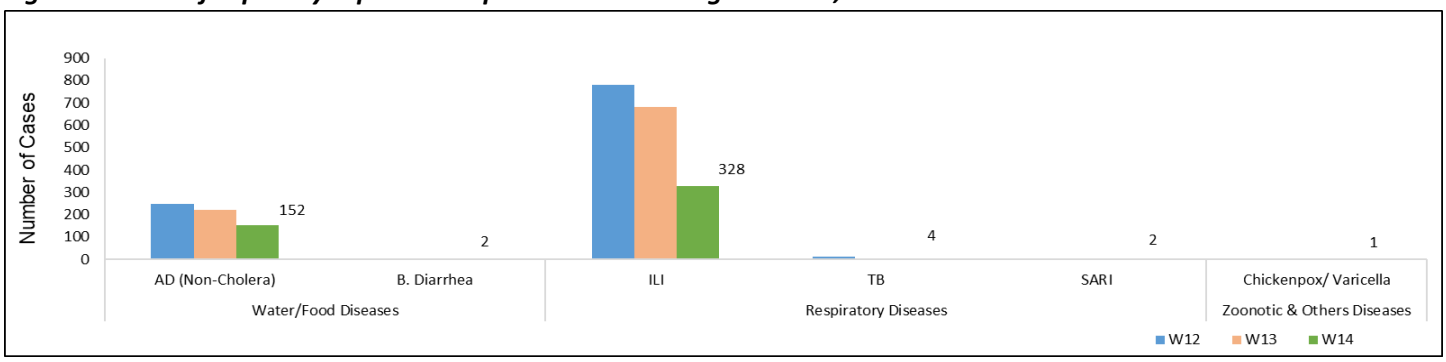


Figure 13: Week wise reported suspected cases of ILI, ICT

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

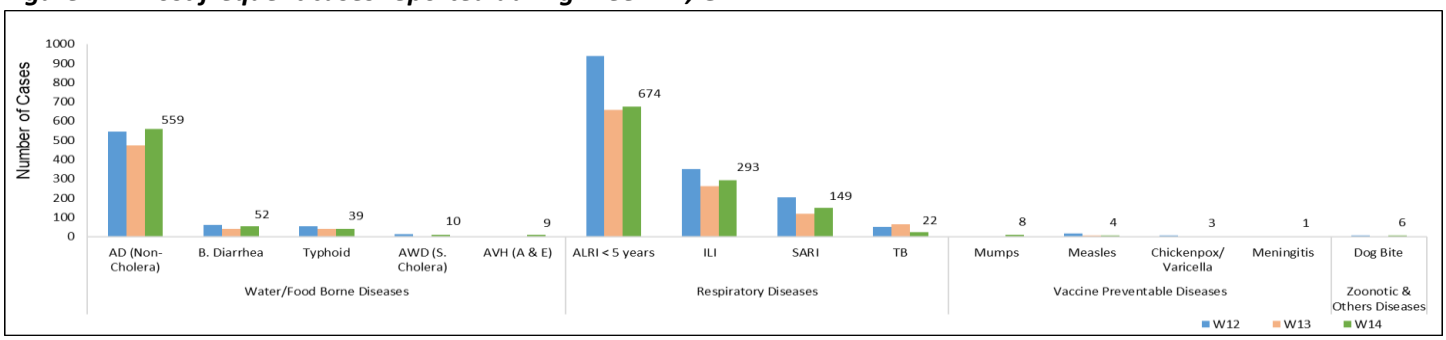
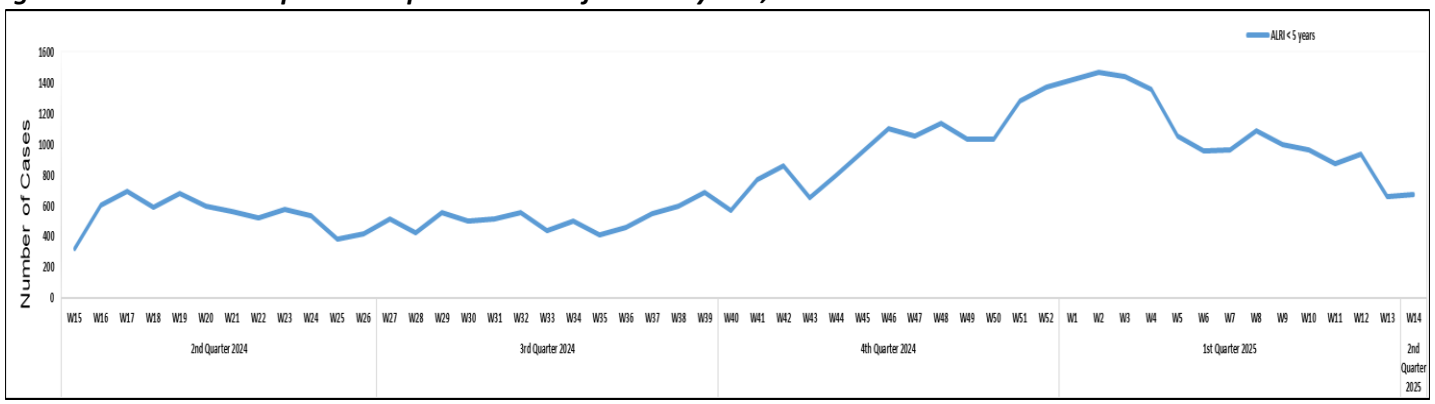


Figure 15: Week wise reported suspected cases of ALRI <5 years, GB



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CDC U.S. CENTERS FOR DISEASE CONTROL AND PREVENTION

Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 14

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)		162	4	-	-	-	-	-	-	-	-	-	-	0	0
AD (non-cholera)		209	2	-	-	-	-	-	-	-	-	-	-	0	0
Malaria		5,946	225	-	-	4	0	-	-	-	-	-	-	12	0
CCHF		0	0	12	2	0	0	-	-	-	-	-	-	0	0
Dengue		1,020	52	2	0	1	0	-	-	-	-	-	-	9	0
VH (B)		5,230	129	90	69	14	1	-	-	-	-	-	-	257	3
VH (C)		5,463	455	45	32	7	1	-	-	-	-	-	-	258	5
VH (D)		63	13	16	2	-	-	-	-	-	-	-	-	0	0
VH (A)		236	90	-	-	1	0	-	-	-	-	-	-	0	0
VH (E)		125	36	-	-	1	0	-	-	-	-	-	-	0	0
Covid-19		0	0	4	1	-	-	-	-	-	-	-	-	0	0
Chikungunya		5	1	2	0	-	-	-	-	-	-	-	-	0	0
TB		207	26	-	-	-		-	-	-	-	-	-	0	0
HIV/ AIDS		1,654	10	5	0	2	1	-	-	-	-	-	-	257	0
Syphilis		758	18	-	-	-	-	-	-	-	-	-	-	0	0
B. Diarrhea		148	8	-	-	-	-	-	-	-	-	-	-	0	0
Typhoid		896	17	-	-	-		-	-	-	-	-	-	0	0
Diphtheria		11	1	-	-	-	-	-	-	-	-	-	-	0	0
ILI		6	1	2	0	-	-	-	-	-	-	-	-	0	0
Pneumonia (ALRI)		53	6	-	-	-		-	-	-	-	-	-	0	0
Measles		286	124	43	25	181	54	14	9	4	1	231	48	32	16
Rubella		286	2	43	3	181	0	14	0	4	0	231	1	32	0
Covid-19	Out of SARI	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Out of ILI	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Influenza A	Out of SARI	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Out of ILI	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Influenza B	Out of SARI	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Out of ILI	-	-	-	-	-	-	-	-	-	-	-		-	-
RSV	Out of SARI	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Out of ILI	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 6: IDSR reporting districts Week 14, 2024

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	111	99	89%
	Bannu	238	135	57%
	Battagram	59	30	51%
	Buner	34	29	85%
	Bajaur	44	41	93%
	Charsadda	59	58	98%
	Chitral Upper	34	30	88%
	Chitral Lower	35	35	100%
	D.I. Khan	113	113	100%
	Dir Lower	74	63	85%
	Dir Upper	37	29	78%
	Hangu	22	20	91%
	Haripur	72	71	99%
	Karak	36	36	100%
	Khyber	53	43	81%
	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	5	12%
	Upper Kurram	41	27	66%
	Malakand	42	34	81%
	Mansehra	133	99	74%
	Mardan	80	24	30%
	Nowshera	55	53	96%
	North Waziristan	13	7	54%
	Peshawar	155	133	86%
	Shangla	37	32	86%
	Swabi	64	58	91%
	Swat	77	76	99%
	South Waziristan (Upper)	93	36	39%
	South Waziristan (Lower)	42	15	36%
	Tank	34	32	94%
	Torghar	14	14	100%
	Mohmand	68	64	94%
	SD Peshawar	5	0	0%
	SD Tank	58	10	17%
	Orakzai	69	12	17%
	Mirpur	37	37	100%
	Bhimber	42	20	48%

Azad Jammu Kashmir	Kotli	60	60	100%
	Muzaffarabad	45	43	96%
	Poonch	46	46	100%
	Haveli	39	39	100%
	Bagh	40	40	100%
	Neelum	39	39	100%
	Jhelum Velley	29	29	100%
Islamabad Capital Territory	Sudhnooti	27	27	100%
	ICT	21	21	100%
Balochistan	CDA	15	8	53%
	Gwadar	26	26	100%
	Kech	44	18	41%
	Khuzdar	74	49	66%
	Killa Abdullah	26	19	73%
	Lasbella	55	55	100%
	Pishin	69	40	58%
	Quetta	55	34	62%
	Sibi	36	20	56%
	Zhob	39	28	72%
	Jaffarabad	16	16	100%
	Naserabad	32	32	100%
	Kharan	30	30	100%
	Sherani	15	0	0%
	Kohlu	75	36	48%
	Chagi	36	19	53%
	Kalat	41	40	98%
	Harnai	17	12	71%
	Kachhi (Bolan)	35	13	37%
	Jhal Magsi	28	28	100%
	Sohbat pur	25	25	100%
	Surab	32	23	72%
	Mastung	45	0	0%
	Loralai	33	23	70%
	Killa Saifullah	28	22	79%
	Ziarat	29	0	0%
	Duki	31	0	0%
	Nushki	32	0	0%
	Dera Bugti	45	25	56%
	Washuk	46	34	74%
	Panjgur	38	4	11%
	Awaran	23	0	0%
	Chaman	24	0	0%
	Barkhan	20	20	100%
	Hub	33	27	82%
	Musakhel	41	0	0%
Gilgit Baltistan	Usta Muhammad	34	33	97%
	Hunza	32	32	100%
	Nagar	25	16	64%
	Ghizer	38	38	100%

	Gilgit	40	40	100%
	Diamer	62	60	97%
	Astore	54	54	100%
	Shigar	27	25	93%
	Skardu	52	52	100%
	Ganche	29	29	100%
Sindh	Kharmang	46	25	54%
	Hyderabad	73	70	96%
	Ghotki	64	64	100%
	Umerkot	43	43	100%
	Naushahro Feroze	107	96	90%
	Tharparkar	276	233	84%
	Shikarpur	61	60	98%
	Thatta	52	52	100%
	Larkana	67	63	94%
	Kamber Shadadkot	71	71	100%
	Karachi-East	24	19	79%
	Karachi-West	20	20	100%
	Karachi-Malir	37	17	46%
	Karachi-Kemari	18	18	100%
	Karachi-Central	12	7	58%
	Karachi-Korangi	18	18	100%
	Karachi-South	6	4	67%
	Sujawal	55	55	100%
	Mirpur Khas	106	98	92%
	Badin	124	124	100%
	Sukkur	64	63	98%
	Dadu	90	90	100%
	Sanghar	100	100	100%
	Jacobabad	44	43	98%
	Khairpur	170	168	99%
	Kashmore	59	57	97%
	Matiari	42	42	100%
	Jamshoro	75	74	99%
	Tando Allahyar	54	51	94%
	Tando Muhammad Khan	41	41	100%
	Shaheed Benazirabad	122	121	99%

Table 7: IDSR reporting Tertiary care hospital Week 14, 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	0	0%
	Sukkur	1	0	0%
	Shaheed Benazirabad	1	1	100%
	Karachi-East	1	1	100%
	Karachi-Central	1	1	100%

Strengthening One Health Governance: CDC-NIH Hosts Provincial Workshop in Gilgit

The Centers for Disease Control (CDC) at the National Institutes of Health (NIH), in collaboration with CDC-US, organized a two-day workshop titled "Operationalizing Provincial One Health Hubs" from May 7–8, 2025, in Gilgit. The event focused on developing a robust and collaborative governance structure to implement the One Health approach in Gilgit-Baltistan (GB).

Bringing together key stakeholders from the human, animal, and environmental health sectors, the workshop facilitated dialogue, knowledge sharing, and joint planning. Representatives from provincial ministries and technical departments shared updates on ongoing One Health activities and identified opportunities for improved coordination.

Through structured group work, participants collaboratively developed a provincial One Health governance framework, laying the foundation for integrated action against shared health threats, including zoonotic diseases, antimicrobial resistance, and environmental hazards.

This workshop represents a pivotal step toward strengthening multisectoral collaboration in GB and advancing the national vision for One Health implementation in Pakistan. Continued engagement at the provincial level is vital for translating policy into action and ensuring health security for all.

Notes from the field:

Measles Outbreak Investigation Report, Pishin District, Balochistan (October–December 2024)

Introduction

Measles is a highly contagious viral disease caused by the measles virus, transmitted via respiratory droplets and direct contact. Globally, measles remains a significant public health concern, especially in low- and middle-income countries, where it causes more than 100,000 deaths annually, primarily in children under five years of age. Despite widespread vaccine availability, gaps in immunization coverage continue to fuel outbreaks worldwide. In the Eastern Mediterranean Region, including Pakistan, measles remains endemic with periodic outbreaks due to suboptimal vaccine uptake. Nationally, Pakistan has experienced repeated outbreaks, with Balochistan reporting some of the lowest coverage rates. On 31st October 2024, a suspected measles case was reported in Pishin District, triggering a formal outbreak investigation.

Objectives

- To determine the magnitude of the outbreak
- To identify associated risk factors

- To recommend control measures to contain the outbreak and prevent future occurrences

Methods

A descriptive outbreak investigation was carried out in the affected village and surrounding areas of Pishin District. The investigation period spanned from 31st October (onset of the index case) to 4th December 2024 (post-containment follow-up).

A **suspected measles case** was defined as "any person residing in Dabkhanzai between 31st October and 4th December with fever and a maculopapular rash, accompanied by at least one of the following: cough, coryza, or conjunctivitis".

Active case finding was conducted via house-to-house visits. Data were collected through structured interviews with caregivers and reviews of medical records. A 30-household cluster survey was conducted to assess measles vaccination coverage and explore reasons for missed immunization. Collected data were analyzed to determine demographic patterns, clinical features, vaccination status, and risk factors. Age-specific and area-specific attack rates were calculated.

Results

A total of 14 suspected measles cases were identified, including the index case, a 9-year-old unvaccinated girl. The mean age of affected individuals was 7 years, and the male-to-female ratio was 1:1. All cases occurred within a single union council. Overall attack rate was 3.5 per 1,000 population. All 14 suspected cases were unvaccinated

All patients exhibited fever and rash, with cough (86%), conjunctivitis (64%), and pneumonia (57%). There were three deaths and two severe complications; however, no hospitalizations were reported.

The cluster survey revealed measles vaccine coverage of only 40% for the first dose and 17% for the second dose. The most frequently cited reason for missed vaccination was caregiver refusal.

All affected individuals reported close contact within households or extended families. The likely source of infection was exposure to visiting relatives from Quetta, some of whom had children with measles-like symptoms.

Discussion

The measles outbreak in Pishin was driven by low immunization coverage, compounded by vaccine refusal. All cases were unvaccinated, consistent with well-documented evidence that unvaccinated populations are at higher risk during measles outbreaks. Despite being included in the EPI microplan, routine immunization coverage in the affected union council was substantially below the 95% threshold required for herd immunity.

Transmission was facilitated by close contact within extended families and was initiated by likely exposure to infectious visitors from Quetta. The prompt field response, including active case finding, ring vaccination, and community sensitization, helped limit the spread. However, the presence of multiple complications and fatalities underscores the severe consequences of immunity gaps.

Surveillance data, clinical presentation, and epidemiological linkage support the diagnosis of a measles outbreak, even as laboratory confirmations are pending. Similar vulnerabilities may exist in neighboring areas with low routine immunization coverage, warranting urgent public health interventions.

Conclusion

This outbreak of measles in Pishin District underscores the critical importance of high routine immunization coverage and the risks posed by unvaccinated populations. The outbreak was likely introduced by visitors from Quetta and propagated in a setting of widespread vaccine refusal. All affected children were unvaccinated, and vaccine refusal emerged as the predominant barrier. While containment was achieved through prompt public health actions, the persistent risk of future outbreaks remains due to underlying vulnerabilities in routine immunization coverage.

Recommendations

1. **Strengthen Surveillance:** Maintain active surveillance for measles and other vaccine-preventable diseases in high-risk districts.
2. **Community Engagement:** Intensify efforts to address vaccine hesitancy using trusted local influencers, religious leaders, and community elders.
3. **Immunization Monitoring:** Strengthen verification of actual vaccine coverage through independent surveys and field validation.
4. **Mop-up Campaigns:** Plan and execute mop-up campaigns in low-coverage areas to close immunity gaps.
5. **Capacity Building:** Continue sensitization and training of local health staff and community volunteers on outbreak response and vaccination promotion.

References

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2. Centers for Disease Control and Prevention. Measles (Rubeola). https://www.cdc.gov/measles/index.html
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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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