

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.

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Overview

Public Health Bulletin - Pakistan, Week 50, 2024

IDSR Reports

Ongoing Events

Evolving from a basic disease registry, Pakistan's Public Health Bulletin has become an indispensable tool for safeguarding public health. By meticulously tracking disease trends, the Bulletin serves as an early warning system, enabling timely interventions to prevent outbreaks.

Field Reports

Beyond data compilation, this week's bulletin also includes updates on Standardized Mortality data Reporting Tool: A Milestone in National Mortality Surveillance, Outbreak Investigation of Acute Watery Diarrhea, District Tando Allahyar, October 2023 and a knowledge review on Chikungunya.

Stay well-informed about public health matters. Subscribe to the Weekly Bulletin today! By equipping everyone with knowledge, the Public Health Bulletin empowers Pakistanis to build a healthier nation.

*Sincerely,
The Chief Editor*



- During week 50, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, ILI, ALRI <5 years, TB, dog bite, VH (B, C & D), B. Diarrhea, Typhoid and SARI.
- Twenty-seven cases of AFP reported from KP, thirteen from Sindh, eight from Punjab, four from AJK and one from Balochistan. All are suspected cases and need field verification.
- Thirteen suspected cases of HIV/ AIDS reported from Punjab, seven from Sindh, two from KP and one from Balochistan. Field investigation required to verify the cases.
- Ten suspected cases of Brucellosis reported from KP and one from Sindh. Field investigation required to verify the cases.

IDSR compliance attributes

- The national compliance rate for IDSR reporting in 158 implemented districts is 80%
- AJK and Gilgit Baltistan are the top reporting regions with a compliance rate of 94% and 92%, followed by ICT and KP 78%.
- The lowest compliance rate was observed in Sindh 72% and Balochistan 65%.

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	2320	1759	78
Azad Jammu Kashmir	404	378	94
Islamabad Capital Territory	36	28	78
Balochistan	1307	691	65
Gilgit Baltistan	405	367	92
Sindh	2903	2001	72
National	7375	5224	80



Public Health Actions

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

Gonorrhea

- **Enhance Case Detection and Reporting:** Strengthen the implementation of gonorrhea surveillance within IDSR by training healthcare providers on case definitions, diagnostics, and reporting protocols.
- **Address Antimicrobial Resistance (AMR):** Establish routine testing for antibiotic susceptibility in gonorrhea cases to monitor resistance trends and guide treatment protocols.
- **Community Awareness:** Leverage local health workers and community influencers to hold community awareness sessions.

Rubella

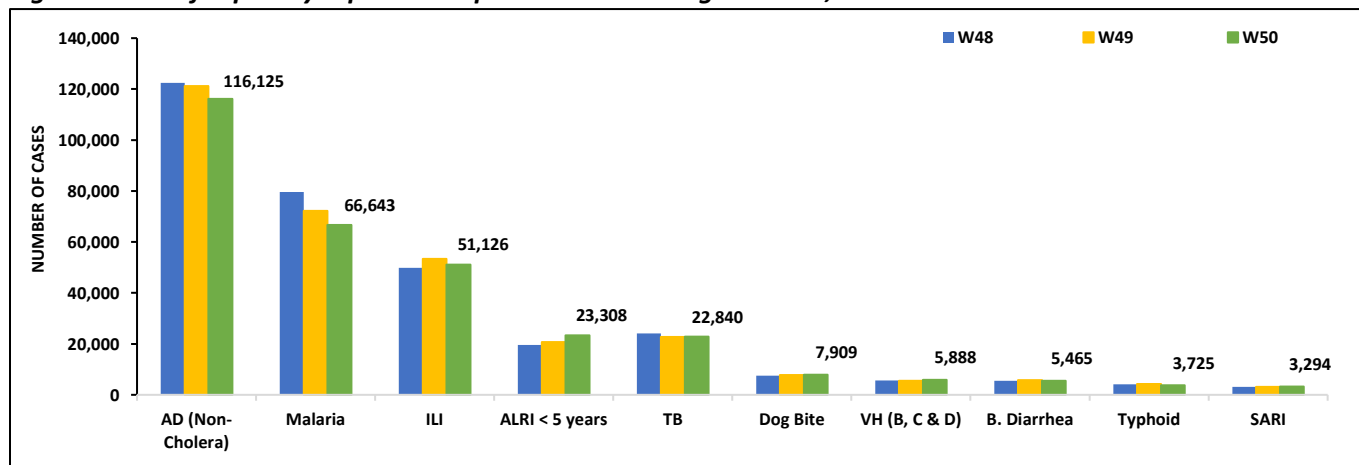
- **Enhance Case Detection and Reporting:** Strengthen rubella surveillance within IDSR by integrating case-based reporting and ensuring laboratory confirmation, especially for congenital rubella syndrome (CRS).
- **Strengthen Immunization Coverage:** Expand measles-rubella (MR) vaccination coverage through routine immunization and periodic supplementary immunization activities (SIAs) targeting children and women of childbearing age.
- **Expand Public Health Education:** Promote awareness about rubella, its complications, and the importance of vaccination, particularly among parents, caregivers, and healthcare providers.



Table 1: Province/Area wise distribution of most frequently reported suspected cases during Week 50, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	966	4,446	507	219	16,084	61,438	32,465	116,125
Malaria	1	4,970	2	0	4,889	3,024	53,757	66,643
ILI	2,796	7,120	450	1,259	6,721	10	32,770	51,126
ALRI < 5 years	1,487	2,040	1,034	18	2,760	1,502	14,467	23,308
TB	47	75	92	2	571	10,334	11,719	22,840
Dog Bite	64	276	3	0	705	4,279	2,582	7,909
VH (B, C & D)	10	112	13	0	206	0	5,547	5,888
B. Diarrhea	51	985	68	0	808	649	2,904	5,465
Typhoid	22	379	57	0	837	1,590	840	3,725
SARI	371	643	366	2	1,672	0	240	3,294
Dengue	1	1	0	0	62	965	31	1,060
AVH (A & E)	29	5	9	0	211	0	655	909
AWD (S. Cholera)	4	60	5	0	53	443	3	568
Measles	5	19	3	0	212	144	72	455
CL	1	58	0	0	187	8	1	255
Mumps	7	24	3	0	106	3	60	203
Chikungunya	0	2	0	0	0	0	100	102
Chickenpox/ Varicella	5	2	18	2	46	8	12	93
Meningitis	2	6	0	0	12	37	15	72
Leprosy	0	1	0	0	57	0	0	58
AFP	4	1	0	0	27	8	13	53
Gonorrhea	0	17	0	0	11	0	10	38
Pertussis	0	15	4	0	8	0	0	27
Diphtheria (Probable)	0	2	0	0	8	4	10	24
HIV/AIDS	0	1	0	0	2	13	7	23
Syphilis	0	0	0	0	0	1	11	12
Brucellosis	0	0	0	0	10	0	1	11
NT	0	1	0	0	8	0	0	9
VL	0	0	1	0	1	0	0	2
Rubella (CRS)	0	1	0	0	0	0	0	1

Figure 1: Most frequently reported suspected cases during Week 50, Pakistan.

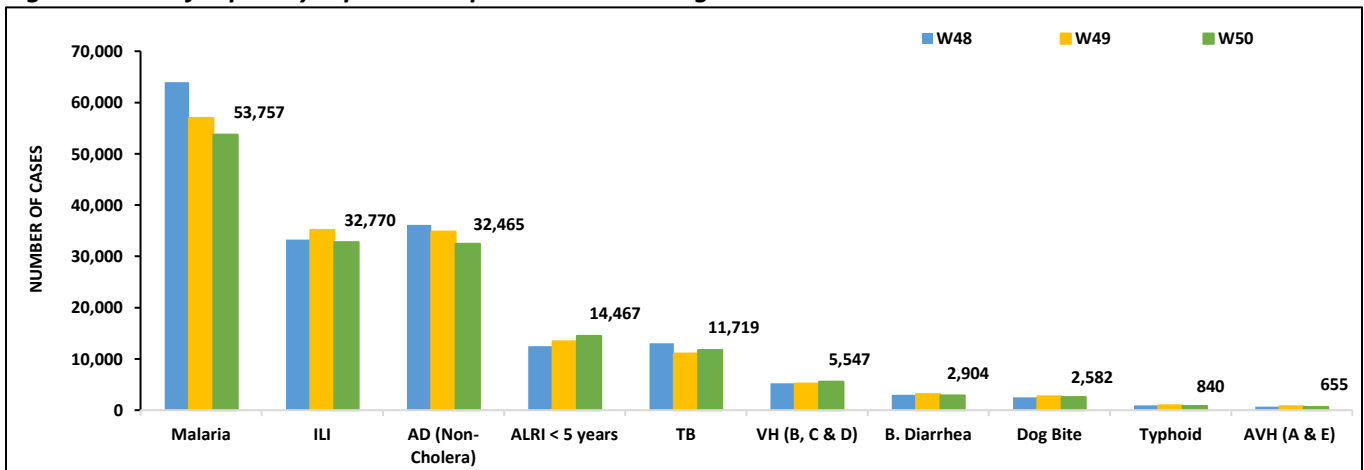


- Malaria cases were maximum followed by ILI, AD (Non-Cholera), ALRI<5 Years, TB, VH (B, C, D), B. Diarrhea, dog bite, Typhoid and AVH (A & E).
- Malaria cases are mostly from Khairpur, Larkana and Dadu whereas ILI cases are from Khairpur, Mirpurkhas and Badin.
- Thirteen cases of AFP, seven suspected cases of HIV/ AIDS, one suspected case of Brucellosis reported from Sindh. All are suspected cases and need field verification.

Table 2: District wise distribution of most frequently reported suspected cases during Week 50, Sindh

Districts	Malaria	AD (Non-Cholera)	ILI	TB	ALRI < 5 years	VH (B, C & D)	B. Diarrhea	Dog Bite	Typhoid	AVH (A&E)
Badin	1,710	3,085	1,704	558	867	252	140	93	49	6
Dadu	5,117	788	1,767	1,207	455	69	411	308	130	52
Ghotki	1,336	86	784	708	351	136	102	207	5	0
Hyderabad	370	1,410	1,082	142	100	50	0	0	6	0
Jacobabad	1,669	1,010	737	553	147	246	134	176	34	0
Jamshoro	2,531	118	1,257	474	604	145	114	61	47	5
Kamber	3,422	0	1,729	380	953	161	107	246	20	0
Karachi Central	3	1,200	504	1	9	6	2	1	37	0
Karachi East	39	604	246	26	11	3	8	13	1	0
Karachi Keamari	1	374	361	56	0	0	3	0	2	2
Karachi Korangi	46	0	241	0	5	0	1	0	0	0
Karachi Malir	326	2,607	961	201	118	44	32	52	7	1
Karachi South	25	0	60	0	0	0	0	0	0	0
Karachi West	295	1,113	772	175	149	100	21	29	22	4
Kashmore	2,483	481	284	275	294	82	42	48	6	0
Khairpur	5,457	7,888	2,189	1,355	1,112	130	288	141	190	1
Larkana	5,277	7	1,620	748	1,076	90	361	51	11	5
Matiali	1,757	5	1,090	498	516	325	39	45	7	1
Mirpurkhas	2,401	4,183	2,081	830	712	198	96	122	10	1
Naushero Feroze	2,034	990	969	525	436	25	113	240	12	1
Sanghar	3,796	150	1,731	1,040	879	1,770	97	225	33	5
Shaheed Benazirabad	1,731	9	1,273	261	322	214	40	139	142	1
Shikarpur	3,056	3	1,146	343	303	779	190	116	5	0
Sujawal	642	0	1,212	559	183	75	52	65	11	13
Sukkur	2,838	1,948	1,040	722	528	92	101	79	9	0
Tando Allahyar	1,241	1,349	856	441	478	255	132	29	5	0
Tando Muhammad Khan	491	0	710	218	393	6	97	0	2	0
Tharparkar	1,498	1,800	1,749	1,034	348	90	103	1	15	34
Thatta	881	1,562	1,071	440	47	119	41	95	16	522
Umerkot	1,284	0	1,239	697	323	85	37	0	6	1
Total	53,757	32,770	32,465	14,467	11,719	5,547	2,904	2,582	840	655

Figure 2: Most frequently reported suspected cases during Week 50 Sindh

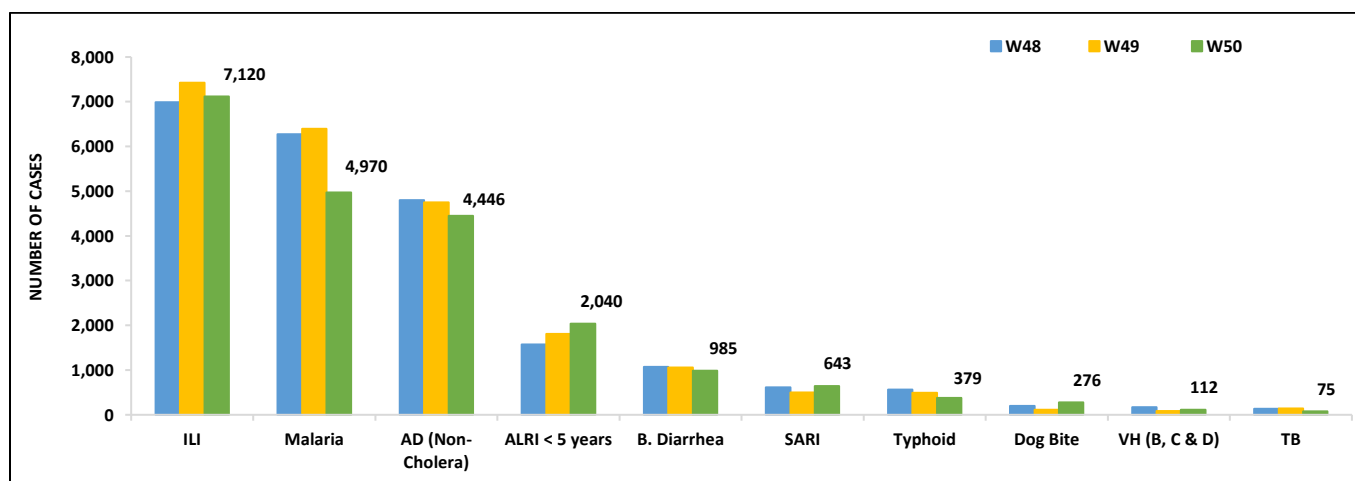


- ILI, Malaria, AD (Non-Cholera), ALRI < 5 years, B. Diarrhea, SARI, Typhoid, dog bite, VH (B, C & D) and TB cases were the most frequently reported diseases from Balochistan province.
- ILI cases are mostly reported from Gwadar, Quetta and Pishin while Malaria cases are mostly reported from Jhal Magsi, Jaffarabad and Sohbat Pur.
- One case of AFP, One suspected case of HIV/ AIDS reported from Balochistan. All are suspected case and needs field verification.

Table 3: District wise distribution of most frequently reported suspected cases during Week 50, Balochistan

Districts	AD (Non-Cholera)	Malaria	ILI	B. Diarrhea	ALRI < 5 years	Typhoid	SARI	AWD (S.Cholera)	TB	CL
Barkhan	73	40	73	47	11	2	27	0	2	2
Chagai	323	50	127	0	34	0	7	1	1	0
Dera Bugti	72	122	50	51	21	0	5	0	0	0
Gwadar	1,382	176	501	30	137	0	33	2	2	0
Harnai	10	57	74	204	63	0	0	3	0	0
Hub	71	118	68	4	6	0	1	0	0	0
Jaffarabad	191	709	307	44	56	27	4	210	21	62
Jhal Magsi	272	989	247	320	0	3	21	11	0	3
Kalat	6	7	16	8	8	2	6	0	0	0
Kharan	512	26	121	0	48	29	1	0	0	0
Khuzdar	331	134	186	5	91	34	19	2	0	1
Killa Abdullah	133	8	97	40	32	66	17	0	0	1
Killa Saifullah	0	101	141	225	47	11	10	0	0	0
Kohlu	418	109	180	25	64	40	41	NR	2	NR
Lasbella	91	535	285	126	31	13	15	15	1	0
Loralai	252	15	77	32	11	97	6	0	0	0
MusaKhel	71	52	29	12	3	5	2	0	0	0
Naseerabad	23	372	263	24	7	0	51	13	54	1
Panjgur	92	30	45	27	15	0	4	0	0	0
Pishin	530	15	191	98	48	23	16	2	0	0
Quetta	861	25	335	133	31	112	37	1	0	0
Sibi	510	72	172	50	11	70	6	1	0	0
Sohbat pur	7	683	228	158	62	36	25	5	11	4
Surab	196	26	53	0	0	0	0	0	0	0
Usta Muhammad	177	340	377	185	39	8	5	10	18	1
Washuk	381	131	142	5	79	8	8	0	0	0
Zhob	120	26	29	147	21	53	6	0	0	0
Ziarat	15	2	32	40	9	4	6	0	0	0
Total	7,120	4,970	4,446	2,040	985	643	379	276	112	75

Figure 3: Most frequently reported suspected cases during Week 50, Balochistan

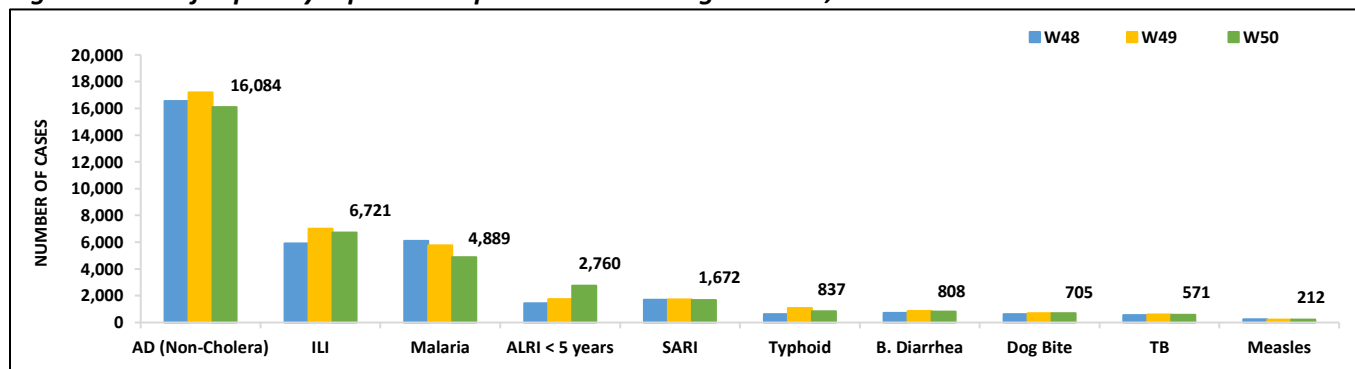


- Cases of AD (Non-Cholera) were maximum followed by ILI, Malaria, ALRI<5 Years, SARI, Typhoid, B. Diarrhea, dog bite, TB and Measles cases.
- Twenty-seven cases of AFP reported from KP. All are suspected cases and need field verification.
- Two suspected cases of HIV/ AIDS reported from KP. Field investigation required to verify the cases.
- Ten suspected cases of Brucellosis reported from KP. They require field verification.

Table 4: District wise distribution of most frequently reported suspected cases during Week 50, KP

Districts	AD (Non-Cholera)	Malaria	ILI	B.Diarrhea	SARI	ALRI <5 Years	Typhoid	Dog Bite	TB	AVH (A&E)
Abbottabad	475	288	0	166	135	353	11	66	178	1
Bajaur	357	8	171	29	70	5	81	39	13	16
Bannu	462	6	1,220	19	22	89	21	6	32	25
Battagram	169	607	29	NR	NR	0	4	4	45	NR
Buner	150	20	170	0	0	5	0	0	0	1
Charsadda	1,343	1,265	470	804	78	65	145	7	24	15
Chitral Lower	325	193	7	15	20	3	11	3	3	0
Chitral Upper	90	14	0	28	12	8	2	0	1	0
D.I. Khan	1,200	0	607	19	0	4	20	11	44	26
Dir Lower	941	3	272	104	0	42	102	58	15	15
Dir Upper	603	121	6	28	4	7	0	16	20	3
Hangu	123	288	126	0	30	3	2	4	2	0
Haripur	384	134	27	68	26	10	7	0	13	3
Karak	292	98	137	23	203	4	15	10	3	3
Khyber	283	89	116	10	38	30	71	16	7	1
Kohat	362	76	89	15	1	4	12	11	0	0
Kohistan Lower	106	0	4	0	0	0	2	0	0	0
Kohistan Upper	302	0	11	39	0	2	10	2	22	2
Kolai Palas	96	16	0	3	0	1	2	0	1	0
L & C Kurram	11	0	0	0	0	0	3	0	0	0
Lakki Marwat	609	15	456	45	0	2	27	24	10	0
Malakand	579	71	34	58	24	13	69	0	2	4
Mansehra	392	314	0	9	197	25	2	0	0	0
Mardan	569	0	8	112	0	21	17	68	9	10
Mohmand	111	195	222	6	180	3	28	7	0	2
North Waziristan	0	0	15	0	0	0	0	0	0	0
Nowshera	720	49	71	0	12	14	9	10	6	3
Orakzai	29	18	8	0	0	1	2	39	0	0
Peshawar	2,078	1,405	41	134	221	57	63	11	13	38
SD Tank	9	0	10	0	0	0	3	0	0	0
Shangla	554	0	179	632	26	36	3	56	46	15
SWA	13	3	11	2	17	1	2	0	0	0
South Waziristan (Lower)	33	166	17	8	29	15	2	11	5	0
Swabi	646	862	50	176	86	2	3	116	34	19
Swat	1,149	88	46	175	5	2	8	66	20	8
Tank	293	0	219	0	0	2	7	0	0	1
Tor Ghar	110	0	32	5	36	0	14	33	1	1
Upper Kurram	116	309	8	28	200	8	28	11	2	0
Total	16,084	6,721	4,889	2,760	1,672	837	808	705	571	212

Figure 4: Most frequently reported suspected cases during Week 50, KP



ICT: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera) and ALRI <5 years.

AJK: ILI cases were maximum followed by ALRI < 5years, AD (Non-Cholera), SARI, dog bite, B. Diarrhea, TB, AVH (A & E), Typhoid and VH (B, C & D) cases. Four suspected cases of AFP reported from AJK. Field investigation required to verify the cases.

GB: ALRI <5 Years cases were the most frequently reported diseases followed by AD (Non-Cholera), ILI, SARI, TB, B. Diarrhea and Typhoid cases.

Figure 5: Most frequently reported suspected cases during Week 50, ICT

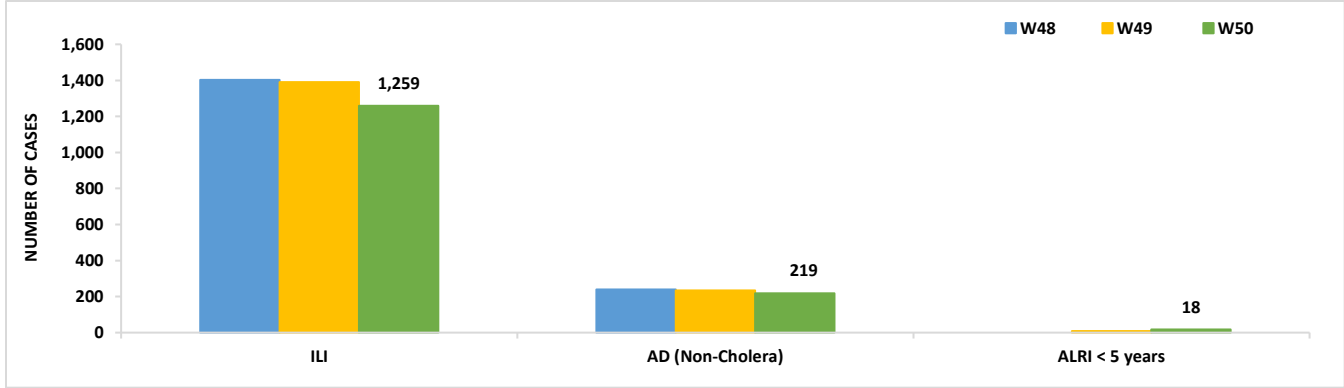


Figure 6: Week wise reported suspected cases of ILI, ICT

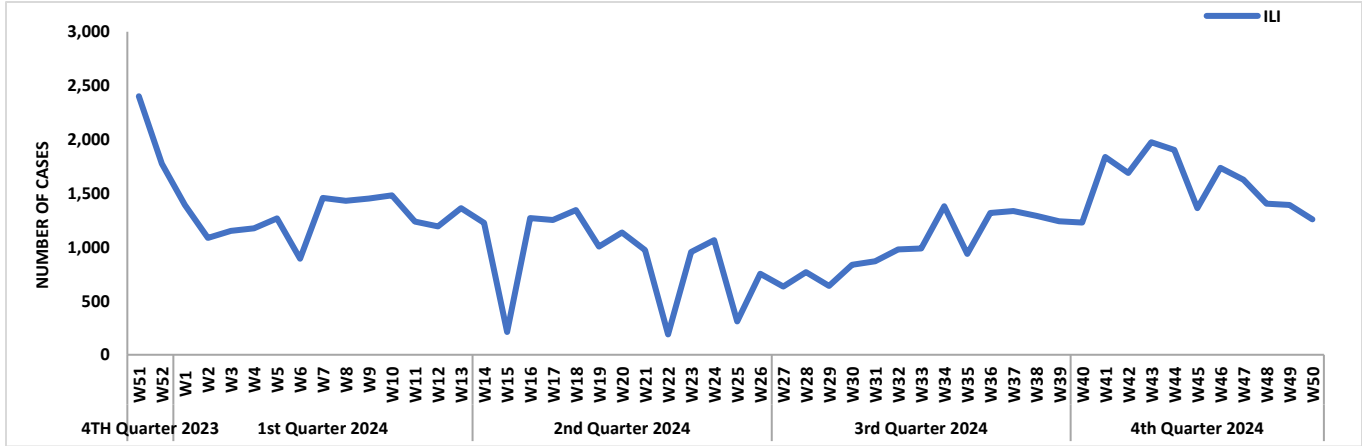


Figure 7: Most frequently reported suspected cases during Week 50, AJK

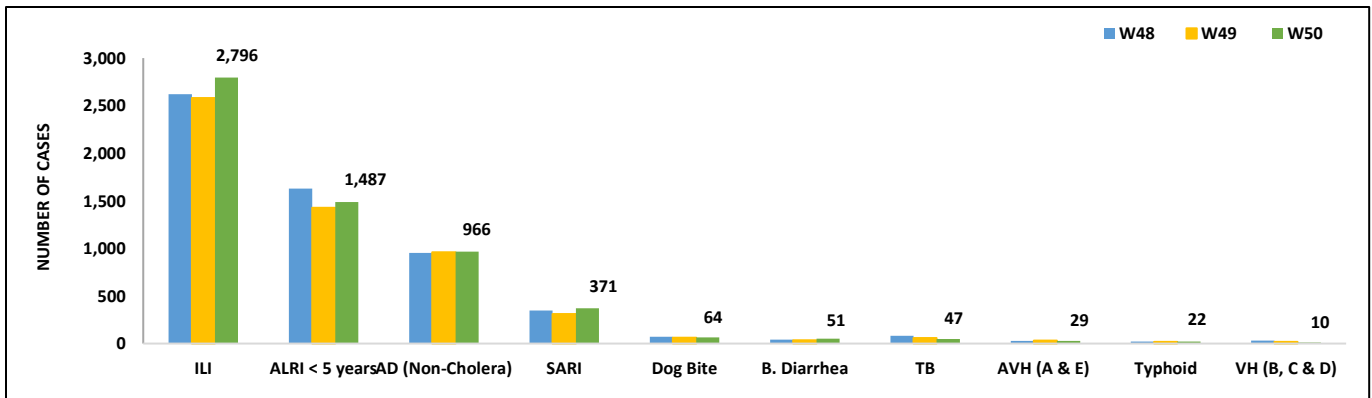


Figure 8: Week wise reported suspected cases of ILI and AD (Non-Cholera) AJK

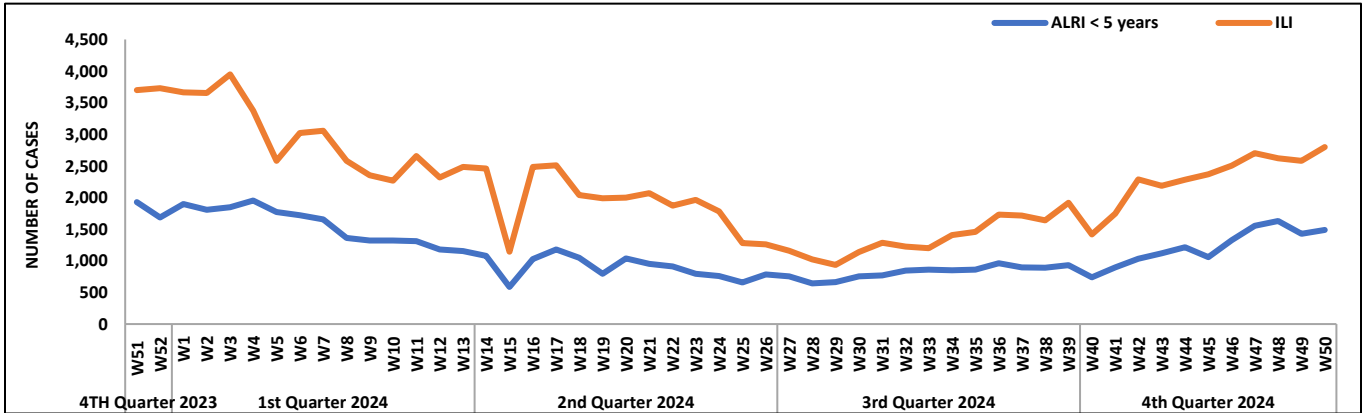


Figure 9: Most frequent cases reported during Week 50, GB

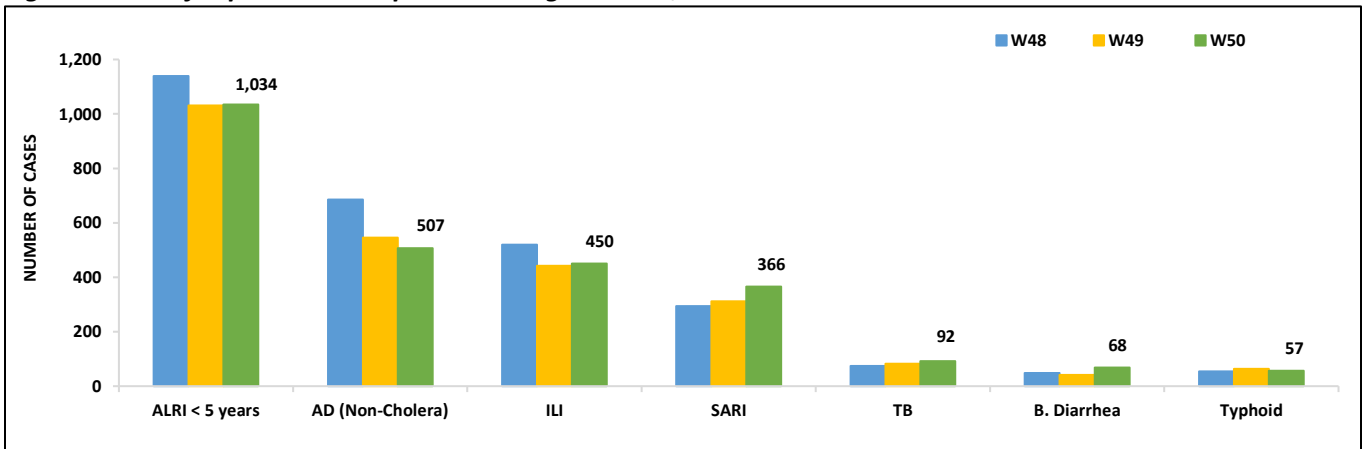
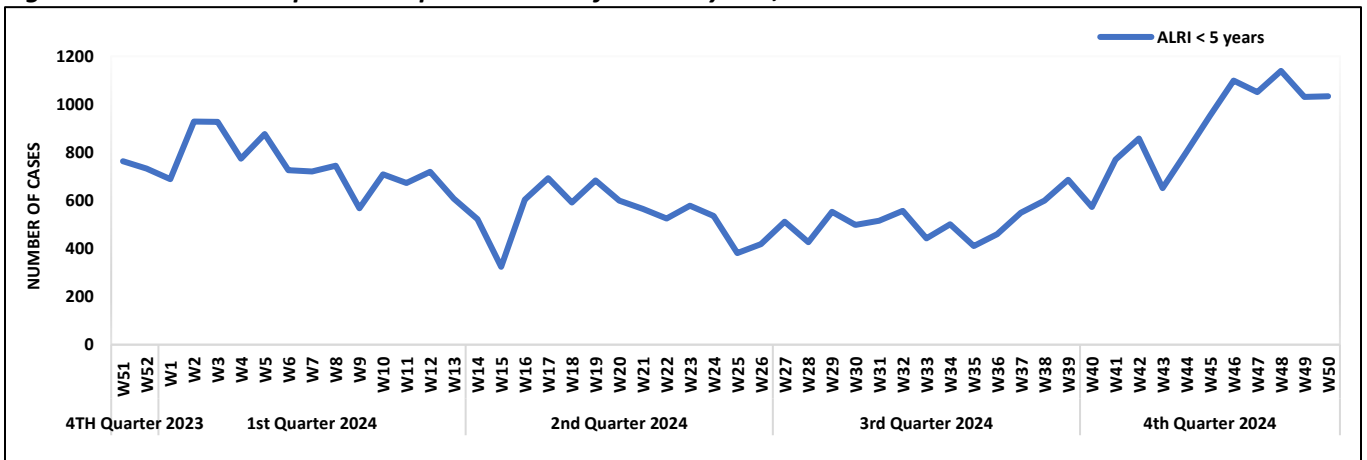


Figure 10: Week wise reported suspected cases of ALRI < 5 years, GB



- AD (Non-Cholera) cases were maximum followed by TB, dog bite, Malaria, Typhoid, ALRI<5 Years, B.Diarrhea , AWD (S. Cholera) and Measles cases.
- Thirteen suspected cases of HIV/ AIDS reported from Punjab. Field investigation required to verify the cases.
- Eight cases of AFP reported from Punjab. All are suspected cases and need field verification.

Figure 11: Most frequently reported suspected cases during Week 50, Punjab.

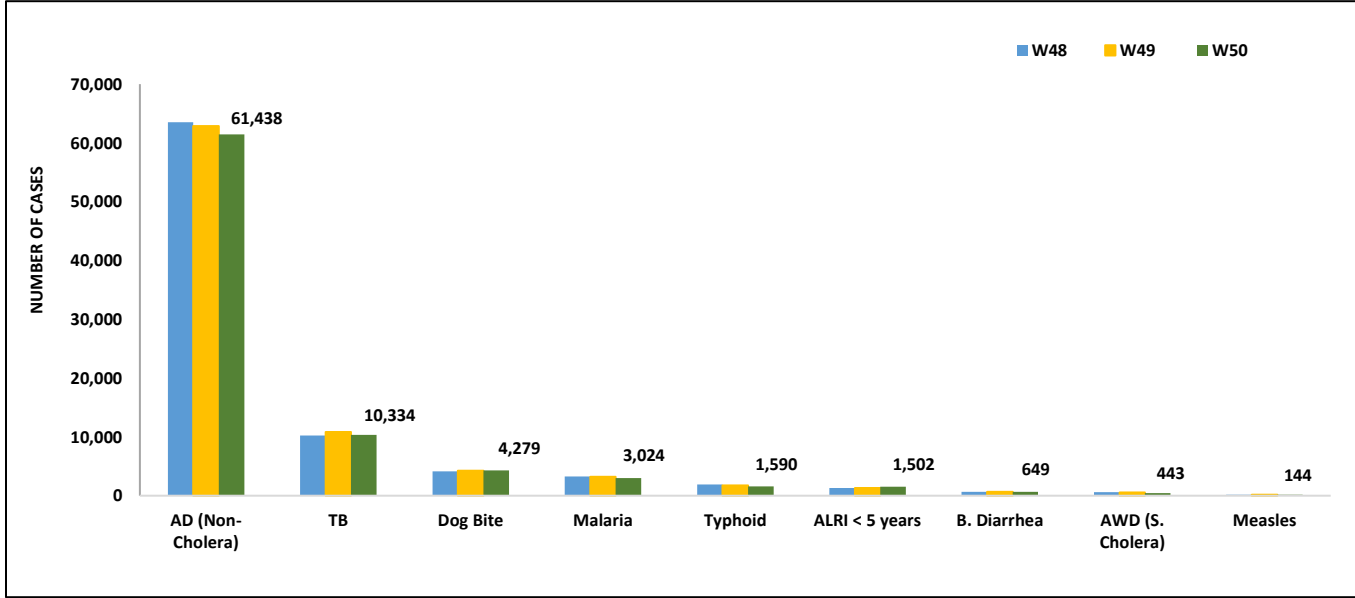


Figure 12: Week wise reported suspected cases of AD (Non-Cholera), Punjab.

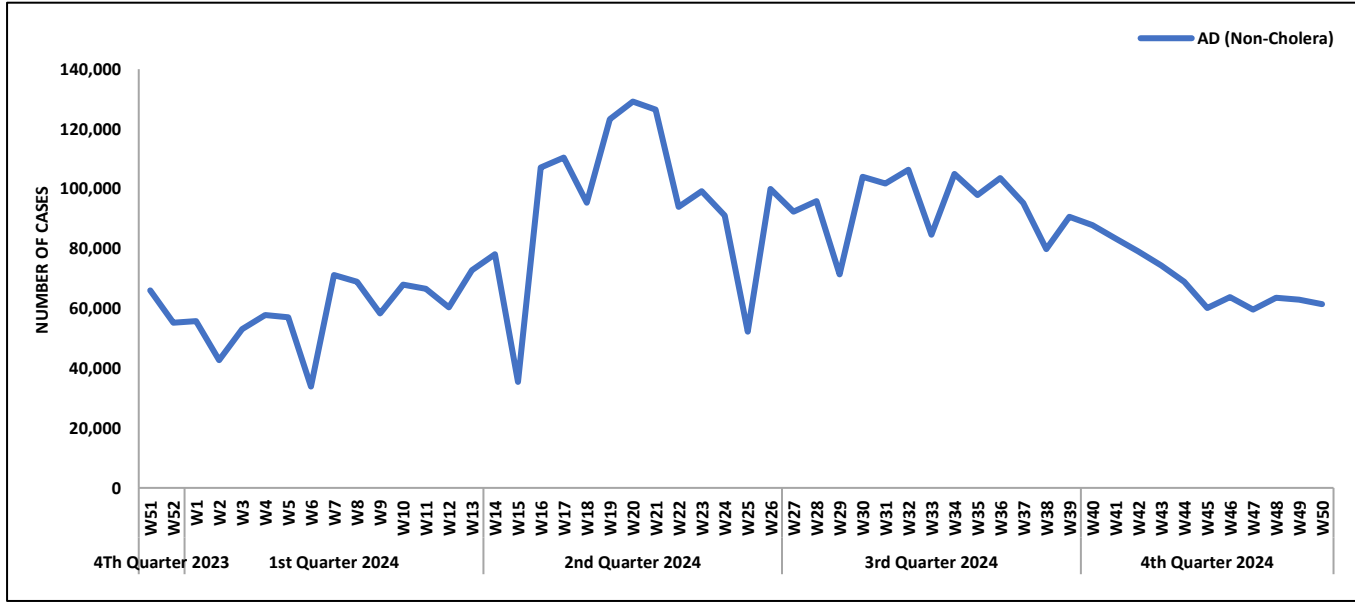


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 50

Diseases	Sindh		Balochistan		KPK		ISL		GB		Punjab		AJK	
	Total Test	Total Pos	Total Test	Total Pos	Total Test	Total Pos	Total Test	Total Pos	Total Test	Total Pos	Total Test	Total Pos	Total Test	Total Pos
AWD (S. Cholera)	10	0	-	-	21	0	-	-	-	-	-	-	32	0
AD (Non-Cholera)	52	1	-	-	21	6	-	-	-	-	-	-	25	0
Malaria	698	48	-	-	656	41	-	-	-	-	-	-	80	1
CCHF	-	-	2	0	1	0	-	-	-	-	-	-	0	0-
Dengue	615	10	-	-	386	23	-	-	-	-	-	-	22	0
VH (B)	2,727	89	76	66	2,126	76	-	-	176	7	-	-	791	4
VH (C)	2,742	217	41	14	2,099	57	-	-	129	0	-	-	693	2
VH (A & E)	-	-	-	-	0	0	-	-	-	-	-	-	113	0
Covid-19	-	-	12	0	2	0	-	-	-	-	-	-	10	0
Chikungunya	-	-	-	-	0	0	-	-	-	-	-	-	0	0
TB	-	-	-	-	52	3	-	-	-	-	-	-	89	7
HIV/ AIDS	-	-	-	-	1,744	1	-	-	-	-	-	-	179	0
Syphilis	-	-	-	-	65	0	-	-	-	-	-	-	13	0
B. Diarrhea	-	-	-	-	21	0	-	-	-	-	-	-	5	0
Typhoid	514	5	-	-	401	20	-	-	-	-	-	-	3	0
Diphtheria (Probabale)	-	-	-	-	0	0	-	-	-	-	-	-	0	0
Pertussis	-	-	-	-	0	0	-	-	-	-	-	-	0	0
M-POX	-	-	-	-	1	0	-	-	-	-	-	-	0	0
Leishmaniansis (cutaneous)	-	-	-	-	10	0	-	-	-	-	-	-	0	0
Meningitis	-	-	-	-	20	4	-	-	-	-	-	-	0	0
Pneumonial (ALRI)	-	-	-	-	0	0	-	-	-	-	-	-	0	0
Brucellosis	-	-	-	-	24	1	-	-	-	-	-	-	0	0
Measles	95	35	36	19	197	100	2	1	5	3	167	45	5	1
Rubella	95	2	36	0	197	2	2	0	5	0	167	2	5	0
Covid-19	Out of SARI	26	0	0	0	32	0	32	0	37	0	95	0	0
	Out of ILI	0	0	0	0	6	0	49	0	0	0	99	3	0
Influenza A	Out of SARI	26	0	0	0	32	3	32	2	37	3	95	4	0
	Out of ILI	0	0	0	0	6	0	49	1	0	0	99	6	0
Influenza B	Out of SARI	26	0	0	0	32	3	32	0	37	0	95	7	0
	Out of ILI	0	0	0	0	6	0	49	2	0	0	99	8	0
RSV	Out of SARI	26	0	0	0	32	2	32	6	37	4	95	0	0
	Out of ILI	0	0	0	0	6	0	49	1	0	0	99	0	0



IDSR Reports Compliance

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

Table 6: IDS reporting districts Week 50, 2024

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	111	83	75%
	Bannu	238	108	45%
	Battagram	63	35	56%
	Buner	34	30	88%
	Bajaur	44	41	93%
	Charsadda	59	59	100%
	Chitral Upper	34	27	79%
	Chitral Lower	35	33	94%
	D.I. Khan	114	112	98%
	Dir Lower	74	74	100%
	Dir Upper	37	28	76%
	Hangu	22	21	95%
	Haripur	72	62	86%
	Karak	35	35	100%
Khyber	53	19	36%	
FATA	Kohat	61	61	100%
	Kohistan Lower	11	11	100%
	Kohistan Upper	20	20	100%
	Kolai Palas	10	10	100%
	Lakki Marwat	70	69	99%
	Lower & Central Kurram	42	9	21%
	Upper Kurram	41	28	68%
	Malakand	42	32	76%
	Mansehra	136	107	79%
	Mardan	80	76	95%
	Nowshera	55	51	93%
	North Waziristan	13	1	8%
	Peshawar	152	130	86%
	Shangla	37	29	78%
	Swabi	64	60	94%
	Swat	77	73	95%
	South Waziristan	93	36	39%
	South Waziristan (Lower)	42	19	45%
	Tank	34	33	97%
	Torghar	14	14	100%
	Mohmand	68	65	96%
	SD Peshawar	5	0	0%
SD Tank	58	6	10%	
Balochistan	Orakzai	69	9	13%
	Mirpur	37	37	100%
	Bhimber	42	20	48%
	Kotli	60	60	100%
	Muzaffarabad	45	44	98%



Azad Jammu Kashmir	Poonch	46	46	100%
	Haveli	39	39	100%
	Bagh	40	40	100%
	Neelum	39	20	51%
	Jhelum Vellay	29	29	100%
Islamabad Capital Territory	Sudhnooti	27	27	100%
	ICT	21	21	100%
Balochistan	CDA	15	7	47%
	Gwadar	25	25	100%
	Kech	44	0	0%
	Khuzdar	74	52	70%
	Killa Abdullah	26	16	62%
	Lasbella	55	55	100%
	Pishin	69	31	45%
	Quetta	55	33	60%
	Sibi	36	20	56%
	Zhob	39	20	51%
	Jaffarabad	16	16	100%
	Naserabad	32	18	56%
	Kharan	30	29	97%
	Sherani	15	0	0%
	Kohlu	75	46	61%
	Chagi	36	22	61%
	Kalat	41	40	98%
	Harnai	17	15	88%
	Kachhi (Bolan)	35	0	0%
	Jhal Magsi	28	28	100%
	Sohbat pur	25	25	100%
	Surab	32	29	91%
	Mastung	45	0	0%
	Loralai	33	30	91%
	Killa Saifullah	28	26	93%
	Ziarat	29	6	21%
	Duki	31	0	0%
	Nushki	32	0	0%
	Dera Bugti	45	30	67%
	Washuk	46	31	67%
	Panjgur	38	8	21%
	Awaran	23	0	0%
	Chaman	24	0	0%
	Barkhan	20	20	100%
	Hub	33	14	42%
Musakhel	41	8	20%	
Gilgit Baltistan	Usta Muhammad	34	34	100%
	Hunza	32	32	100%
	Nagar	25	20	80%
	Ghizer	38	38	100%
	Gilgit	40	39	98%
	Diامر	62	62	100%



	Astore	54	54	100%
	Shigar	27	25	93%
	Skardu	52	52	100%
	Ganche	29	27	93%
Sindh	Kharmang	46	24	52%
	Hyderabad	74	46	62%
	Ghotki	64	64	100%
	Umerkot	43	42	98%
	Naushahro Feroze	107	96	90%
	Tharparkar	276	226	82%
	Shikarpur	59	59	100%
	Thatta	52	48	92%
	Larkana	67	66	99%
	Kamber Shadadkot	71	71	100%
	Karachi-East	23	18	78%
	Karachi-West	20	20	100%
	Karachi-Malir	37	23	62%
	Karachi-Kemari	18	16	89%
	Karachi-Central	11	7	64%
	Karachi-Korangi	18	16	89%
	Karachi-South	4	4	100%
	Sujawal	55	55	100%
	Mirpur Khas	106	104	98%
	Badin	124	124	100%
	Sukkur	64	63	98%
	Dadu	90	88	98%
	Sanghar	100	100	100%
	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%	



Table 7: IDSR reporting Tertiary care hospital Week 50, 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	0	0%



Standardized Mortality data Reporting Tool: A Milestone in National Mortality Surveillance

The National Institutes of Health (NIH) recently concluded a two-day workshop focused on addressing critical gaps in mortality data reporting by developing a standardized mortality data reporting tool. This collaborative initiative brought together 42 participants representing a diverse array of stakeholders, including Integrated Disease Surveillance and Response (IDSR) focal persons, mortality surveillance focal persons from all provinces, representatives from provincial healthcare commissions, and development partners.



A Collaborative Approach to Addressing Challenges

The workshop served as a platform for open dialogue and collaboration among experts and practitioners, fostering a deeper understanding of the challenges surrounding mortality data collection. Participants engaged in meaningful discussions to identify barriers to effective reporting, such as inconsistencies in data formats, lack of standardized procedures, and resource constraints at the provincial and national levels.

Through intensive group work sessions, participants collaborated to propose solutions and refine processes. The culmination of these

efforts was the development of a practical, standardized tool for mortality data collection, which promises to revolutionize how data is gathered and analyzed across the country.



Advancing Mortality Surveillance

By implementing this standardized approach, the tool enables the collection of accurate and comprehensive data, which is essential for understanding mortality trends. This, in turn, provides actionable insights that can inform public health strategies, resource allocation, and policymaking.

Building a Resilient Public Health System

This milestone is not just about improving data collection—it represents a broader commitment to strengthening the overall public health infrastructure in Pakistan. The collaboration between NIH, provincial health departments, provincial healthcare commissions, and development partners highlights the importance of unified efforts in addressing complex health challenges.

By addressing foundational challenges in mortality surveillance, this initiative sets the stage for improved health outcomes and a stronger, more resilient public health system. Through systematic and accurate tracking of



mortality trends, the nation is better equipped to respond to health crises, reduce preventable deaths, and build a healthier future for all.

Notes from the field:

Outbreak Investigation of Acute Watery Diarrhea at Village Alam Chaniyo, Taluka Chamber, District Tando Allahyar, October 2023

Dr. Javeria Saleem- Focal Person DDSRU

Mentor: Dr. Muhammad Asif Syed

Introduction:

Diarrheal diseases remain a significant public health challenge, particularly in developing countries, where they are a leading cause of mortality among children under the age of five. Globally, approximately 1 in 9 child deaths are attributed to diarrheal illnesses, resulting in an estimated 800,000 preventable deaths each year.

On October 8, 2023, a cluster of five cases of acute watery diarrhea was reported in Village Haji Alam Chaniyo, Taluka Chamber, District Tando Allahyar, by the District Health Officer. Given the potential public health implications, the cases were promptly confirmed, and an outbreak investigation was initiated. The objectives of the investigation were to characterize the magnitude of the outbreak, identify potential sources and associated risk factors, and recommend evidence-based measures for disease control.

Methods:

A cross-sectional study was conducted in this outbreak investigation on October 9 and 10, 2023, in Village Alam Chaniyo, Union Council (UC) Rawat Laghar, focusing on Mohalla Jatt-Kalohi with a population of 450 residents. Suspected cholera cases were defined as individuals of any age from the affected area who developed diarrhea, vomiting/nausea, with or

without abdominal cramps, fever, and dehydration between September 24 and October 15, 2023, while confirmed cases required the detection of *Vibrio cholerae* in stool samples. Data were collected using a modified CDC-standard questionnaire through face-to-face interviews and hospital record reviews. Data was analyzed using descriptive statistics, including frequencies and measures of central tendency, along with source-specific attack rates to identify exposure risks.

Results:

A total of 17 suspected cholera cases were identified during the outbreak investigation. The median age of cases was 6 years (range: 8 months to 60 years), with the most affected age group being 0–9 years (64.7%). Females had a higher proportion of cases compared to males, with a female-to-male ratio of 1.8:1. Among the cases, 35.3% required hospitalization. Age-wise distribution showed 11 cases among children aged 0–9 years, 4 cases in the 10–19 years group, and 2 cases in individuals aged 50 years and above. Symptoms reported included diarrhea in all cases (100%), abdominal pain (53%), vomiting (53%), fever (41.2%), and headache (17.6%).

The overall attack rate was 3.7% and gender specific attack rates of 4.7% and 2.7%, in females and males respectively. While source-specific attack rates indicated that Hand Pump 1 had the highest rate at 25%, while no cases were associated with Hand Pump 2. The pond had an attack rate of 5.5%. Environmental observations revealed that villagers used water from hand pumps and ponds for drinking and cooking purposes, lacked a proper sewerage system, practiced open defecation, and kept cattle near living areas. Poor personal and environmental hygiene were evident, highlighting significant risk factors contributing to the outbreak.

Public Health Actions Taken:

In response to the cholera outbreak in Village Alam Chaniyo, several public health actions were swiftly implemented to mitigate the impact and prevent further transmission. Oral rehydration salts (ORS) were distributed to affected individuals to address dehydration and reduce



the risk of mortality. Health education sessions were conducted to raise awareness about proper handwashing techniques, environmental hygiene practices, and the importance of safe water handling. The community was advised to refrain from using water from the suspected contaminated sources, particularly from Hand Pump 1 and the pond, for drinking or cooking purposes. Additionally, residents were instructed to boil and cool water before consumption to ensure its safety.

Discussion:

The cholera outbreak in Village Alam Chaniyo, District Tando Allahyar, highlights the persistent challenges related to inadequate water, sanitation, and hygiene (WASH) infrastructure in rural areas. The higher attack rate in children under 10 years, being most affected, were consistent with global trends where young children are highly vulnerable to cholera due to their underdeveloped immune systems (WHO, 2023). The high hospitalization rate underscores the severity of the outbreak and the need for early intervention to prevent dehydration and death (CDC, 2023).

The higher attack rate among females compared to males may be attributed to gender-specific roles in water collection, increasing their exposure to contaminated sources (Fenn, 2020).

Poor sanitation, including the lack of a sewerage system, open defecation, and the proximity of livestock to residential areas, further compounded the risk of contamination (Mølbak et al., 2006). These findings underscore the urgent need for improved WASH infrastructure, public health education, and a rapid response system to mitigate cholera outbreaks and reduce morbidity and mortality (WHO, 2023).

Conclusion:

In conclusion, the outbreak investigation in Village Alam Chaniyo reveals significant environmental and behavioral risk factors contributing to cholera transmission. The highest attack rate was associated with Hand Pump 1, which is hypothesized as the primary source of contamination. Children aged 0-9 years were most affected, with females experiencing higher

attack rates than males, likely due to gender-specific roles in water collection. These findings highlight the need for improved access to safe water, sanitation, and hygiene, particularly for vulnerable populations, along with strengthened public health surveillance and response systems to prevent future outbreaks.

Recommendations:

To prevent the spread of cholera and other waterborne diseases, the following measures are recommended:

- **Food Hygiene and WASH:** Encourage proper food handling, the use of clean utensils, and the safe disposal of waste. Sanitation practices, including the use of latrines, should be emphasized.
- **Water Safety:** Advise boiling water for at least 5 minutes and cooling it before consumption. Similarly, milk should be boiled before use to prevent contamination.
- **Oral Rehydration Solution (ORS):** Educate the community on the correct use of ORS to manage dehydration caused by diarrhea and vomiting.
- **Animal Management:** Recommend keeping cattle and other livestock away from residential areas to prevent contamination of the environment and water sources.
- **Provision of Safe Drinking Water:** Ensure access to treated and reliable sources of drinking water and discourage reliance on potentially contaminated sources such as hand pumps and ponds.

References:

- Centers for Disease Control and Prevention (CDC). (2023). *Cholera overview*. Retrieved from <https://www.cdc.gov/cholera/index.html>
- Fenn, B. (2020). *Gender and waterborne disease transmission: A review of water collection practices in rural communities*. *International Journal of Environmental Health*, 45(3), 215-223.
- Mølbak, K., et al. (2006). *The role of environmental and behavioral factors in cholera transmission in rural settings*. *Tropical Medicine and International Health*, 11(5), 758-765.
- World Health Organization (WHO). (2023). *Cholera*. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/cholera>



Knowledge Hub

Chikungunya

Chikungunya is a mosquito-borne viral disease caused by the chikungunya virus (CHIKV), an RNA virus belonging to the alphavirus genus of the family Togaviridae. The term "chikungunya" originates from the Kimakonde language, meaning "to become contorted," reflecting the stooped posture of sufferers due to severe joint pain.

Transmission

The virus is primarily transmitted to humans through the bites of infected *Aedes* mosquitoes, predominantly *Aedes aegypti* and *Aedes albopictus*. These mosquitoes are also vectors for other diseases, such as dengue and Zika, and are characterized by their daytime biting activity.

Symptoms

The onset of chikungunya is typically sudden, with the following common symptoms:

Fever: Abrupt development of high fever.

Joint Pain: Severe pain in joints, often debilitating, which can persist for weeks or even months.

Other Symptoms: Muscle pain, headache, nausea, fatigue, rash, and joint swelling.

While most patients recover fully, in some cases, joint pain may persist for several months or even years. Serious complications are uncommon, but the disease can contribute to death in older adults.

Diagnosis

Chikungunya is diagnosed based on clinical, epidemiological, and laboratory criteria. Laboratory confirmation is typically achieved through serological tests detecting antibodies (IgM and IgG) or by reverse transcription-polymerase chain reaction (RT-PCR) to detect viral RNA. Differential diagnosis is crucial, as symptoms can overlap with other arboviral infections like dengue and Zika.

Treatment

There is no specific antiviral treatment for chikungunya. Management focuses on relieving symptoms:

Rest: Adequate rest to support recovery.

Hydration: Maintaining fluid intake to prevent dehydration.

Prevention

Preventing chikungunya largely involves reducing mosquito exposure.

- **Mosquito Control:** Eliminating standing water where mosquitoes breed, using insecticides, and implementing community-based mosquito control programs.
- **Personal Protection:** Using insect repellent, wearing long sleeves and pants, and ensuring living areas are mosquito-proof through screens or nets.

As of November 2023, the U.S. Food and Drug Administration (FDA) approved the first vaccine to prevent disease caused by the chikungunya virus. This vaccine is recommended for individuals aged 18 and older who are at increased risk of exposure.

Key Takeaways:

Chikungunya remains a significant public health concern in many parts of the world. While a vaccine has been approved, prevention through mosquito control and personal protective measures continues to be essential. Early recognition and supportive care are vital to manage symptoms and reduce the risk of complications.

For more detailed information, refer to the following sources

World Health Organization (WHO): Chikungunya Fact Sheet

- [WHO: Chikungunya](#)

Centers for Disease Control and Prevention (CDC): Chikungunya Overview

- [CDC: Chikungunya Virus](#)

CDC Yellow Book: Chikungunya

- [CDC Yellow Book: Chikungunya](#)

CDC: Diagnosis and Testing for Chikungunya Virus

- [CDC: Chikungunya Diagnosis](#)

FDA Announcement on Chikungunya Vaccine Approval (Related Reference)

- [FDA Approves Chikungunya Vaccine](#)

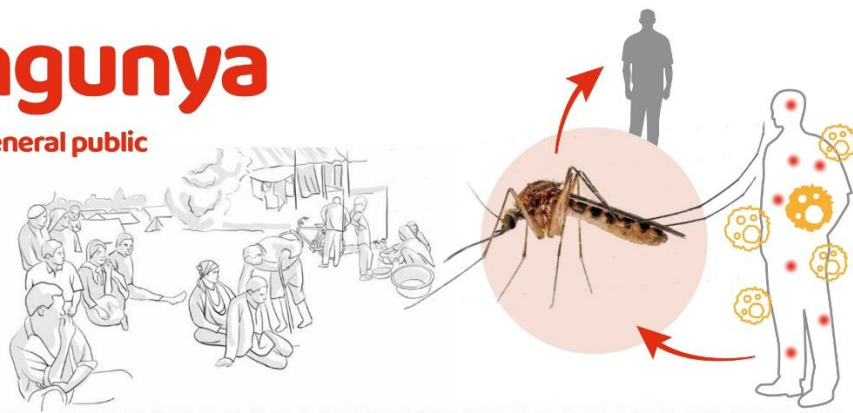


Chikungunya

Information for the general public

Source of infection

Vector-borne, transmitted by mosquitoes.



Type of exposure & prevention

Chikungunya is a viral disease transmitted to humans by infected mosquitoes. It is caused by the chikungunya virus.



Limit opportunities for mosquitoes to breed by removing garbage and covering vessels that allow water to pool such as vases, tyres and buckets.



Use insecticides to reduce mosquito breeding



Use window screens, repellents, insecticide treated bed nets, coils and vaporizers



Wear light coloured clothing that covers your arms and legs



Keep all water containers sealed and clean them regularly

WHO/EM/CSS/19/1/E

Symptoms



Fever



Joint pain



Muscular pain



Joint swelling



Headaches



Nausea



Fatigue



Rash

Actions to take in case of symptoms:



Seek medical advice immediately. There are similarities between the symptoms of chikungunya, dengue and Zika and so it can sometimes be misdiagnosed.



World Health Organization

REGIONAL OFFICE FOR THE Eastern Mediterranean