Vol. 4 / Week 06
20th Feb 2024

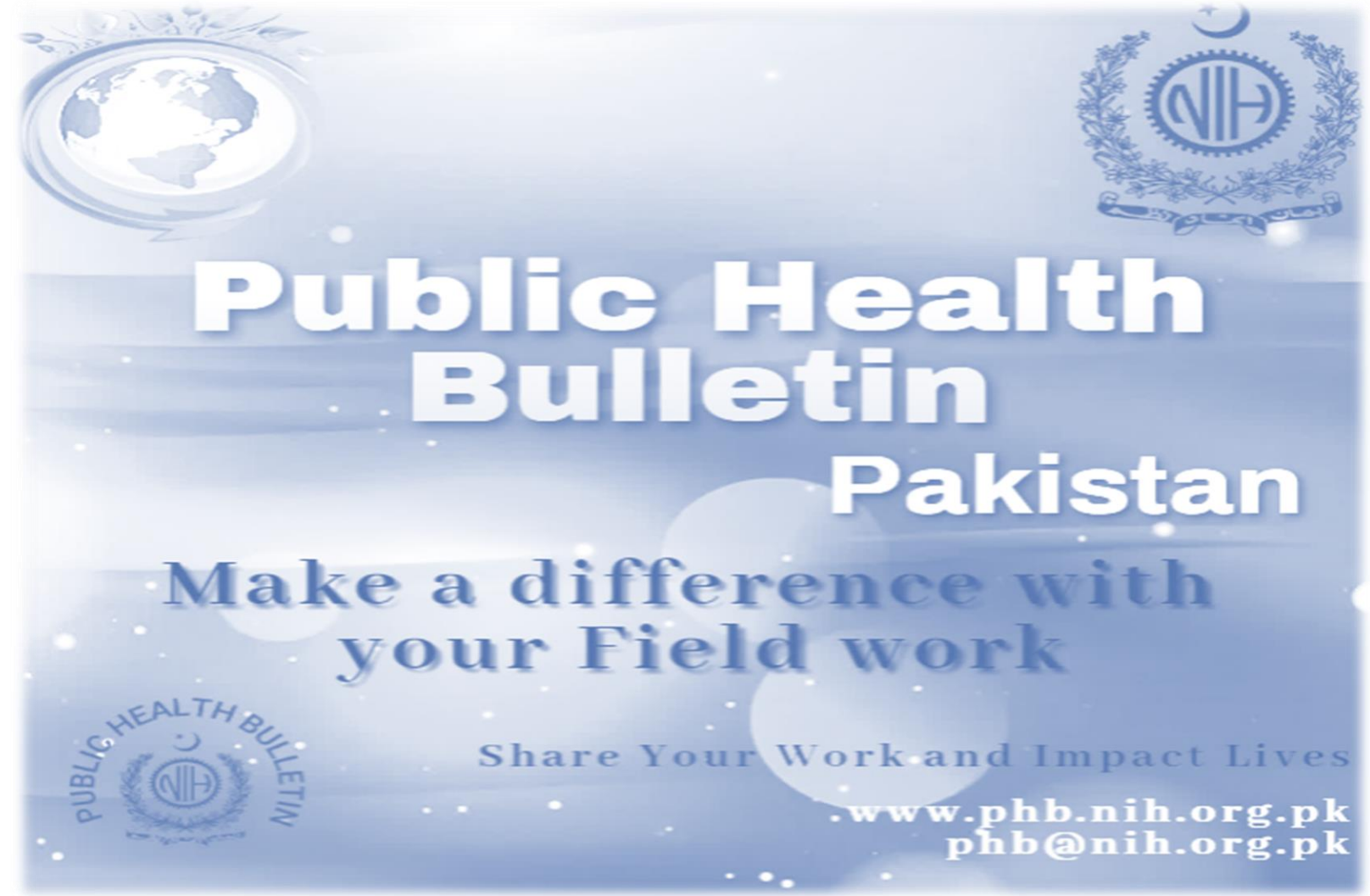
PUBLIC HEALTH BULLETIN-PAKISTAN

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 06, 2024

This week's edition of the Public Health Bulletin Pakistan sheds light on critical trends and valuable insights pertaining to the nation's health landscape. The bulletin identifies prevalent illnesses such as acute diarrhea (non-cholera), respiratory infections (ILI and ALRI), malaria, and tuberculosis as the most commonly reported concerns. Fortunately, a positive trend of decreasing cases is observed for acute diarrhea (non-cholera), ILI, malaria, ALRI in children under five, tuberculosis, B. diarrhea, and viral hepatitis (B, C & D) this week.

However, the report also highlights the presence of suspected cases of serious diseases like AFP, HIV/AIDS, and Brucellosis, demanding further investigation for confirmation, as the currently reported cases lack conclusive diagnoses.

This edition also features a call to action, encouraging field epidemiologists to contribute their invaluable expertise to the Public Health Bulletin Pakistan. For insightful reading, the bulletin includes a surveillance investigation report exploring a suspected cutaneous leishmaniasis outbreak in Jaffarabad, Balochistan. Furthermore, the program director of the Local Hepatitis Elimination and Prevention Program from Rawalpindi, Punjab, shares crucial insights and urges urgent action in response to the high prevalence of hepatitis detected in the region.

Recognizing the crucial role of individual empowerment in disease control, the editor concludes with an informative update on Leishmaniasis infection.

Sincerely,

The Chief Editor

- *During week 6, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by ILI, Malaria, ALRI <5 years, TB, B. Diarrhea, VH (B, C & D), SARI, Typhoid, and dog bite.*
- *Eleven cases of AFP reported from KP and eight from Sindh. All are suspected cases and need field verification.*
- *Six suspected cases of HIV/ AIDS reported from Sindh. Field investigation required to verify the cases.*
- *There is a decreasing trend observed for Acute Diarrhea (Non-Cholera), ILI, Malaria, ALRI <5 years, TB, B. Diarrhea, and VH (B, C & D) cases this week.*

IDSR compliance attributes

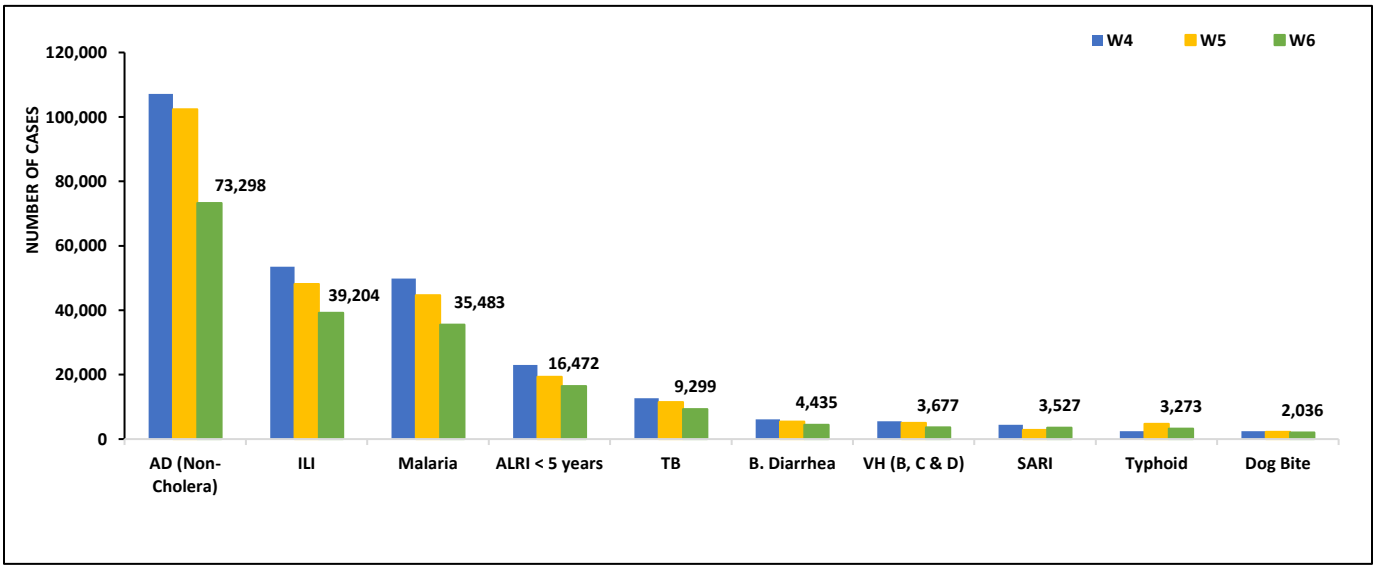
- *The national compliance rate for IDSR reporting in 149 implemented districts* is 75%
- *Gilgit Baltistan and AJK are the top reporting regions with a compliance rate of 99%, followed by Sindh 92% and ICT 71%*
- *The lowest compliance rate was observed in KPK.*

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	*2750*	*1585*	*58*
Azad Jammu Kashmir	*382*	*376*	*99*
Islamabad Capital Territory	*70*	*50*	*71*
Balochistan	*1220*	*840*	*69*
Gilgit Baltistan	*374*	*372*	*99*
Sindh	*2088*	*1914*	*92*
National	*6884*	*5134*	*75*

Table 1: Province/Area wise distribution of most frequently reported suspected cases during week 06, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
AD (Non-Cholera)	1,058	3,692	293	120	9,311	33,874	24,950	73,298
ILI	3,085	6,923	528	891	5,032	42	22,703	39,204
Malaria	1	2,642	0	0	2,474	1,379	28,987	35,483
ALRI < 5 years	1,794	1,556	704	3	2,469	NR	9,946	16,472
TB	60	91	38	3	312	NR	8,795	9,299
B.Diarrhea	42	1,064	30	3	451	762	2,083	4,435
VH (B, C & D)	11	70	0	0	74	NR	3,522	3,677
SARI	494	715	296	0	1,273	NR	749	3,527
Typhoid	13	435	34	1	350	1,467	973	3,273
Dog Bite	23	76	0	0	132	NR	1,805	2,036
Measles	10	26	47	0	338	NR	62	483
AVH(A&E)	24	17	4	0	89	NR	211	345
Mumps	27	26	8	0	65	NR	175	301
CL	0	109	0	0	160	1	22	292
AWD (S. Cholera)	31	60	51	0	35	NR	10	187
Chickenpox/ Varicella	4	8	1	0	45	38	38	134
Pertussis	1	54	5	0	45	NR	1	106
Gonorrhea	0	42	2	0	8	NR	3	55
Dengue	0	1	0	0	1	NR	40	42
Meningitis	4	2	2	0	16	NR	14	38
AFP	4	0	0	0	11	NR	8	23
NT	0	0	0	0	12	NR	0	12
Syphilis	0	0	0	0	0	NR	10	10
Diphtheria (Probable)	0	3	0	0	7	NR	0	10
HIV/AIDS	0	1	0	0	2	NR	6	9
Leprosy	0	0	0	0	8	NR	0	8
VL	0	0	0	0	6	NR	0	6
Brucellosis	0	0	0	0	4	NR	0	4
Rubella (CRS)	2	0	0	0	0	NR	0	2

Figure 1: Most frequently reported suspected cases during week 06, Pakistan.



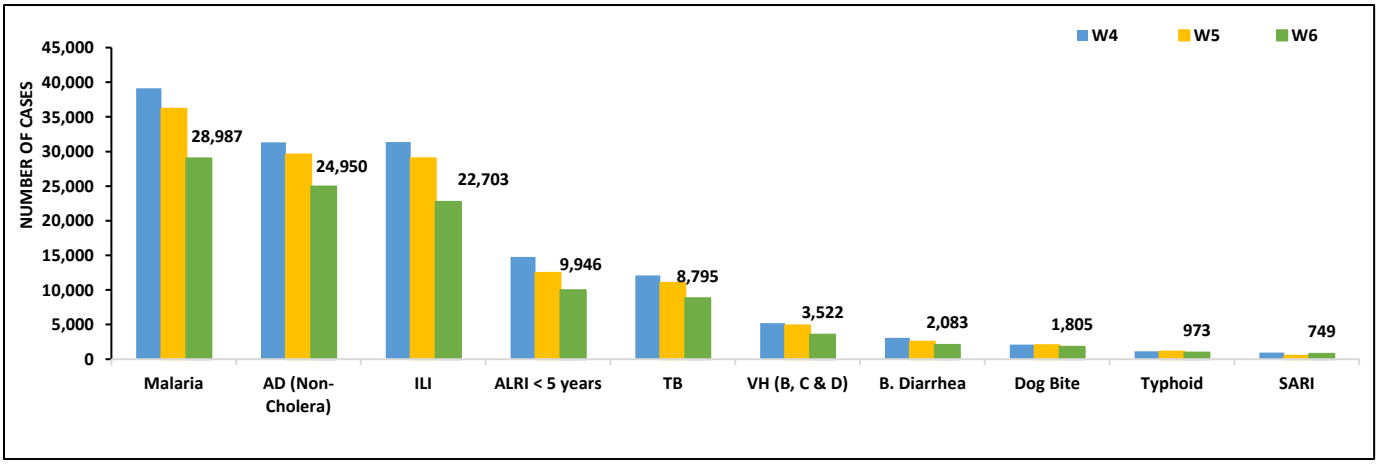
Sindh

- Malaria cases were maximum followed by AD (Non-Cholera), ILI, ALRI<5 Years, TB, VH (B, C, D), B. Diarrhea, dog bite, Typhoid and SARI.
- Malaria cases are from Khairpur, Larkana and Kamber whereas AD cases are mostly from Dadu, Khairpur and Badin.
- Six cases of HIV/AIDS reported from Sindh. All are suspected cases and need field verification.
- Eight cases of AFP reported from Sindh this week. Need field investigation to confirm the cases.
- There is a decreasing trend for Malaria, AD (Non- Cholera), ILI, ALRI<5 Years, TB and VH (B, C, D) cases this week.

Table 2: District wise distribution of most frequently reported suspected cases during week 06, Sindh

Districts	Malaria	AD (Non-Cholera)	ILI	ALRI < 5 years	TB	VH (B, C & D)	B. Diarrhea	Dog Bite	Typhoid	SARI
Badin	1,249	1,696	401	498	539	156	90	67	32	0
Dadu	2,293	1,887	180	699	345	0	207	97	76	320
Ghotki	233	341	0	387	149	197	39	182	0	0
Hyderabad	208	1,044	2,006	248	201	52	51	57	17	0
Jacobabad	858	526	771	429	213	204	73	91	14	21
Jamshoro	1,575	1,097	6	362	330	72	43	14	129	0
Kamber	2,934	1,094	0	417	721	327	108	54	32	0
Karachi Central	33	741	1,531	186	415	318	19	0	62	13
Karachi East	48	430	284	41	17	0	6	8	0	0
Karachi Keamari	4	113	45	21	0	0	4	0	3	0
Karachi Korangi	23	202	81	0	4	0	2	0	1	0
Karachi Malir	55	560	1,706	143	17	17	50	32	11	2
Karachi South	26	70	0	0	0	0	0	0	0	0
Karachi West	183	720	1,734	245	175	72	52	184	97	49
Kashmore	984	342	598	196	247	32	42	191	2	0
Khairpur	3,217	1,868	3,148	1,112	779	175	307	119	160	272
Larkana	3,105	977	15	604	558	104	156	0	2	0
Matiari	670	882	7	475	477	352	43	43	5	0
Mirpurkhas	1,567	1,380	3,810	388	566	149	71	45	12	0
Naushero Feroze	929	520	1,037	169	319	72	54	151	43	0
Sanghar	1,544	929	8	386	771	480	29	104	26	10
Shaheed Benazirabad	1,010	1,269	0	438	240	80	46	82	142	2
Shikarpur	1,456	702	3	164	19	107	115	135	4	6
Sujawal	485	741	0	55	73	15	35	25	27	0
Sukkur	999	1,033	1,751	338	414	166	165	41	6	0
Tando Allahyar	790	644	804	339	250	86	78	0	14	0
Tando Muhammad Khan	415	395	0	155	370	35	40	0	0	1
Tharparkar	1,057	1,181	1,778	897	312	31	71	1	17	50
Thatta	652	881	999	191	14	126	55	82	7	3
Umerkot	385	685	0	363	260	97	32	0	32	0
Total	28,987	24,950	22,703	9,946	8,795	3,522	2,083	1,805	973	749

Figure 2: Most frequently reported suspected cases during week 06 Sindh



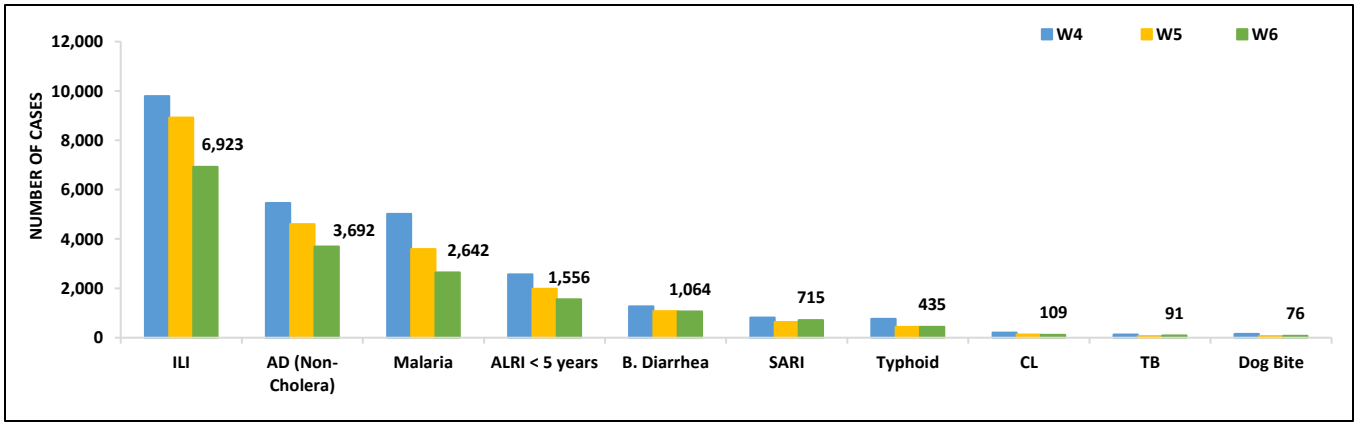
Balochistan

- ILI, AD (Non-Cholera), Malaria, ALRI <5 years, B. Diarrhea, SARI, Typhoid, CL, TB and dog bite were the most frequently reported diseases from Balochistan province.
- ILI, AD (Non-Cholera), Malaria and ALRI <5 years cases showed a decreasing trend this week.
- ILI cases are mostly reported from Sibi, Kech (Turbat) and Kohlu while AD (Non-Cholera) cases are mostly reported from Kech (Turbat), Jaffarabad and Jhal Magsi.

Table 3: District wise distribution of most frequently reported suspected cases during week 06, Balochistan

Districts	ILI	AD Non-Cholera)	Malaria	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	CL	TB	Dog Bite
Awaran	72	12	41	2	15	5	3	0	0	0
Barkhan	131	62	20	67	1	2	27	0	0	4
Chagai	223	116	6	0	47	0	16	0	0	2
Chaman	226	69	6	2	79	24	50	4	1	1
Dera Bugti	46	52	57	47	27	20	13	0	0	0
Duki	48	74	10	31	55	27	7	3	0	7
Gwadar	482	212	51	2	34	1	1	0	0	0
Harnai	18	62	39	130	60	0	1	0	0	1
Hub	46	115	79	19	20	0	2	2	1	13
Jaffarabad	82	274	278	30	46	14	1	14	29	13
Jhal Magsi	241	230	520	22	11	8	11	0	14	9
Kachhi (Bolan)	40	75	94	11	23	70	25	4	0	0
Kalat	9	25	5	10	15	7	24	0	1	0
Kech (Turbat)	869	288	96	77	53	NR	1	NR	NR	NR
Kharan	332	107	20	0	65	10	4	0	0	0
Khuzdar	179	80	52	0	42	4	5	10	0	13
Killa Saifullah	3	92	95	146	37	31	16	13	3	0
Kohlu	566	169	85	38	91	99	33	0	1	0
Lasbella	119	167	208	79	12	20	5	1	0	0
Loralai	323	101	32	53	32	128	7	0	0	0
Naseerabad	1	137	159	26	10	3	31	7	2	6
Nushki	48	104	4	0	29	0	0	0	0	0
Panjgur	70	101	47	36	25	3	2	2	0	0
Pishin	178	10	1	6	24	0	3	4	0	0
Quetta	532	188	9	21	33	17	9	23	0	0
Sherani	48	3	0	0	2	0	1	0	0	0
Sibi	1,046	102	38	32	16	14	9	10	7	1
Sohbat pur	18	178	291	114	50	21	38	12	7	1
Surab	132	67	16	8	0	63	64	0	0	0
Usta Muhammad	172	212	190	228	34	12	9	0	1	2
Washuk	146	59	42	19	33	31	5	0	0	0
Zhob	307	70	34	292	27	73	9	0	24	0
Ziarat	170	79	17	8	16	8	3	0	0	3
Total	6,923	3,692	2,642	1,556	1,064	715	435	109	91	76

Figure 3: Most frequently reported suspected cases during week 06, Balochistan



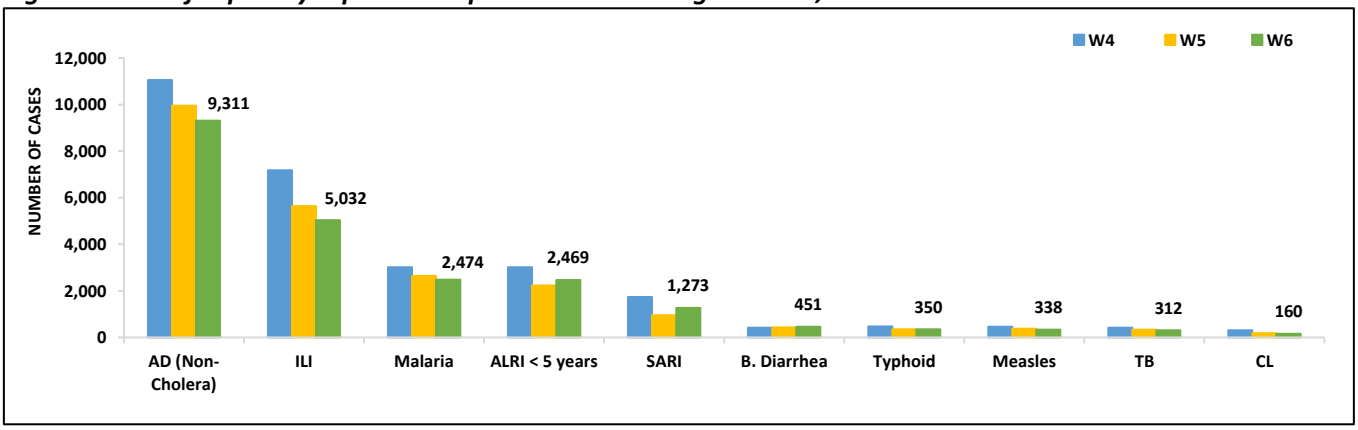
Khyber Pakhtunkhwa

- Cases of AD (Non-Cholera) were maximum followed by ILI, Malaria, ALRI<5 Years, SARI, B. Diarrhea, Typhoid, Measles, TB, and CL cases.
- AD (Non-Cholera), ILI and Malaria cases showed a decreasing trend while ALRI<5 Years and SARI cases showed an increasing trend this week.
- Eleven cases of AFP reported from KP. All are suspected cases and need field verification.

Table 4: District wise distribution of most frequently reported suspected cases during week 06, KP

Districts	AD (Non-Cholera)	ILI	Malaria	ALRI <5 Years	SARI	B. Diarrhea	Typhoid	Measles	TB	CL
Abbottabad	293	106	1	15	17	2	4	5	23	0
Bajaur	84	36	41	10	35	12	1	3	0	2
Bannu	486	0	881	18	3	8	53	15	19	4
Battagram	70	132	4	7	0	0	0	0	0	0
Buner	188	0	113	87	0	1	4	0	0	0
Charsadda	513	703	230	328	164	23	18	34	2	0
Chitral Lower	109	65	2	46	40	10	7	0	8	4
Chitral Upper	48	8	0	24	6	7	6	0	3	1
D.I. Khan	494	0	73	81	33	13	0	37	36	1
Dir Lower	450	2	353	175	0	104	23	29	14	2
Dir Upper	148	148	2	7	7	0	28	1	14	6
Hangu	108	354	316	11	22	5	1	10	7	8
Haripur	553	351	4	164	2	6	17	2	21	0
Karak	208	59	54	41	0	0	7	49	7	35
Khyber	39	21	42	25	80	10	6	0	0	3
Kohat	47	29	7	2	4	0	1	1	0	2
Kohistan Lower	76	0	0	3	0	12	0	1	0	0
Kohistan Upper	146	12	0	26	0	1	12	19	0	0
Kolai Palas	35	0	0	6	50	2	0	0	0	0
L & C Kurram	0	44	0	0	0	3	0	0	0	0
Lakki Marwat	182	24	68	72	0	7	9	4	2	4
Malakand	295	123	14	57	31	35	15	24	4	11
Mansehra	304	466	1	31	148	6	1	2	4	0
Mardan	501	5	15	735	2	13	0	4	12	0
Mohmand	60	35	76	15	15	10	8	2	0	24
Nowshera	587	50	7	5	11	11	5	18	4	13
Orakzai	1	12	0	0	1	0	0	0	0	0
Peshawar	1,372	620	8	192	83	91	69	48	35	14
SD DI Khan	0	0	0	0	0	0	0	0	0	0
SD Peshawar	1	0	0	1	0	0	0	0	0	0
Shangla	135	0	82	20	0	0	14	4	21	3
SWA	25	246	8	49	51	3	10	1	0	12
Swabi	506	638	11	116	118	2	13	14	47	0
Swat	748	198	1	81	7	4	0	0	17	0
Tank	295	222	52	5	0	1	8	5	8	9
Tor Ghar	43	0	8	0	26	18	5	0	2	2
Upper Kurram	161	323	0	14	317	31	5	6	2	0
Total	9,311	5,032	2,474	2,469	1,273	451	350	338	312	160

Figure 4: Most frequently reported suspected cases during week 06, KP



ICT, AJK & GB

ICT: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera). cases showed decreasing trend this week.

AJK: ILI cases were maximum followed by ALRI <5 years, AD (Non-Cholera), SARI, TB, B. Diarrhea, AWD (S. Cholera), Mumps, AVH (A & E) and dog bite cases. Cases of ILI and AD (Non-Cholera) showed an increasing trend while that of ALRI <5 years and SARI showed an almost same trend this week.

GB: ALRI<5 years cases were the most frequently reported diseases followed by ILI, SARI, AD (Non-Cholera), AWD (S. Cholera) Measles and Typhoid. Increasing trend for Measles cases while decreasing trend for ALRI<5 years and AD (Non-Cholera) cases observed this week.

Figure 5: Week wise reported suspected cases of ILI, ICT

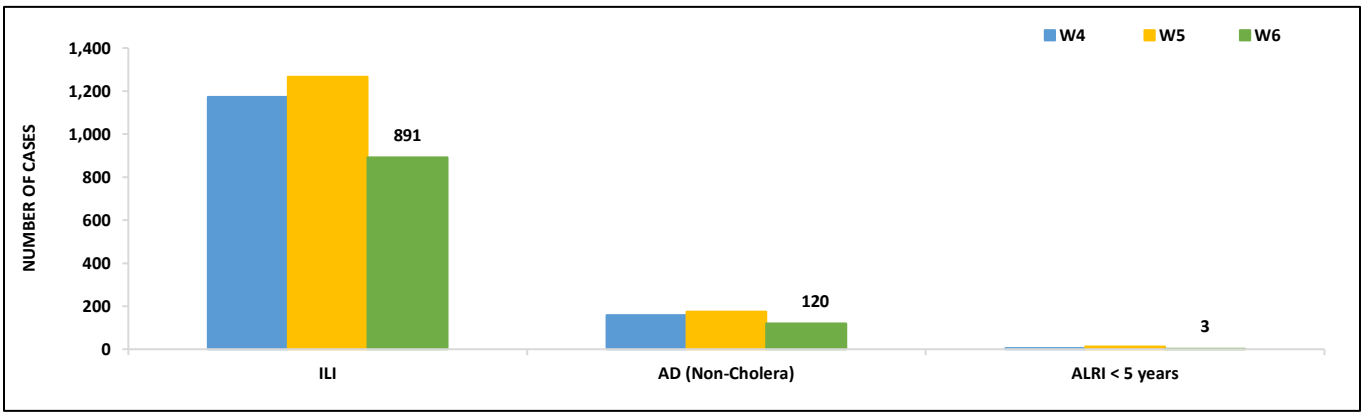


Figure 6: Week wise reported suspected cases of ILI, ICT

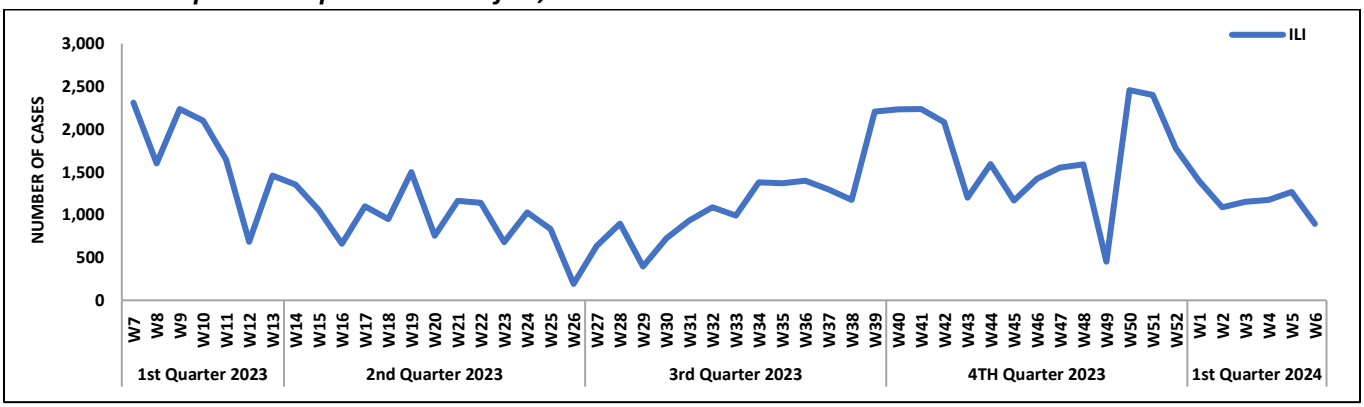


Figure 7: Most frequently reported suspected cases during week 06, AJK

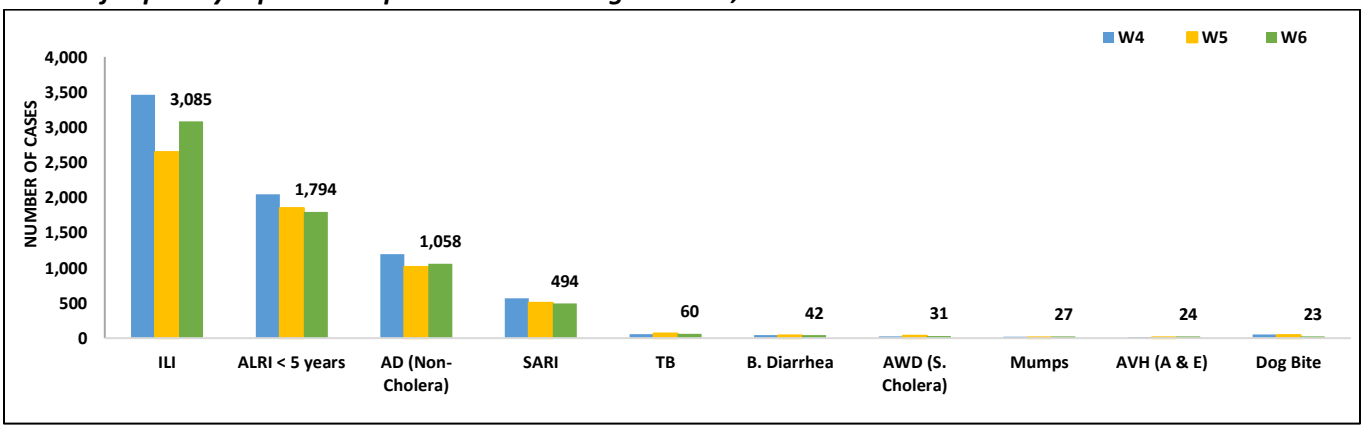


Figure 8: Week wise reported suspected cases of ILI and ALRI<5 years AJK

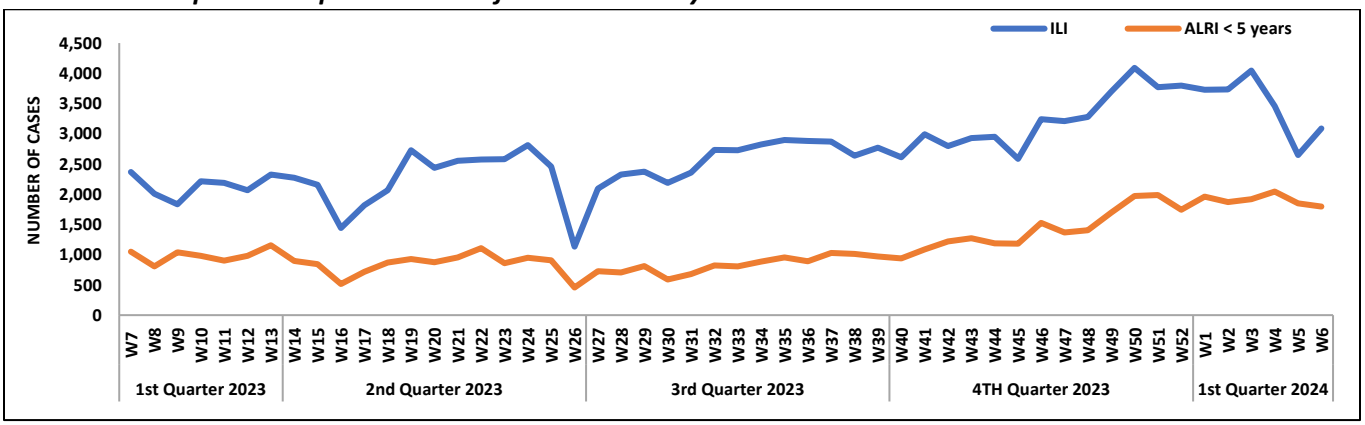


Figure 9: Most frequent cases reported during Wk 04, GB

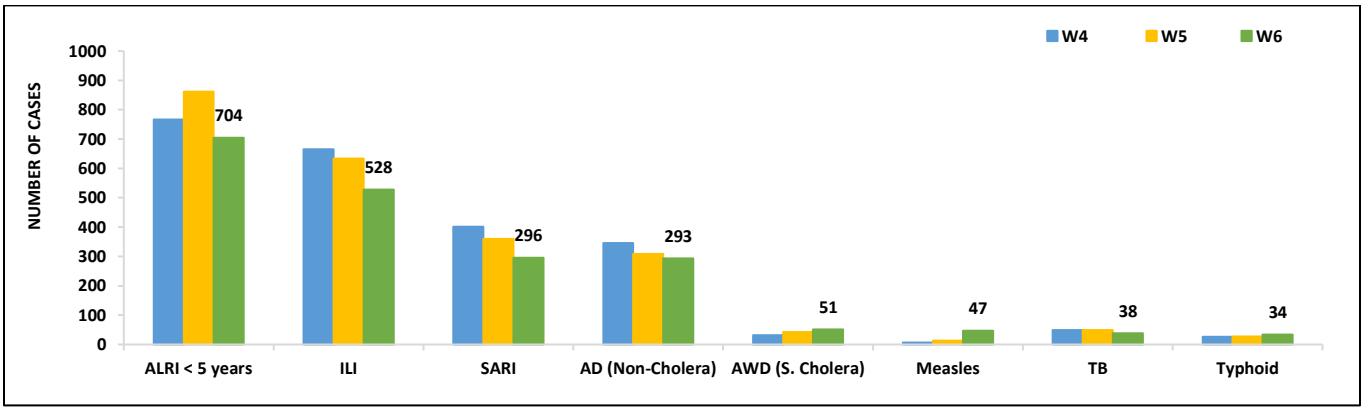
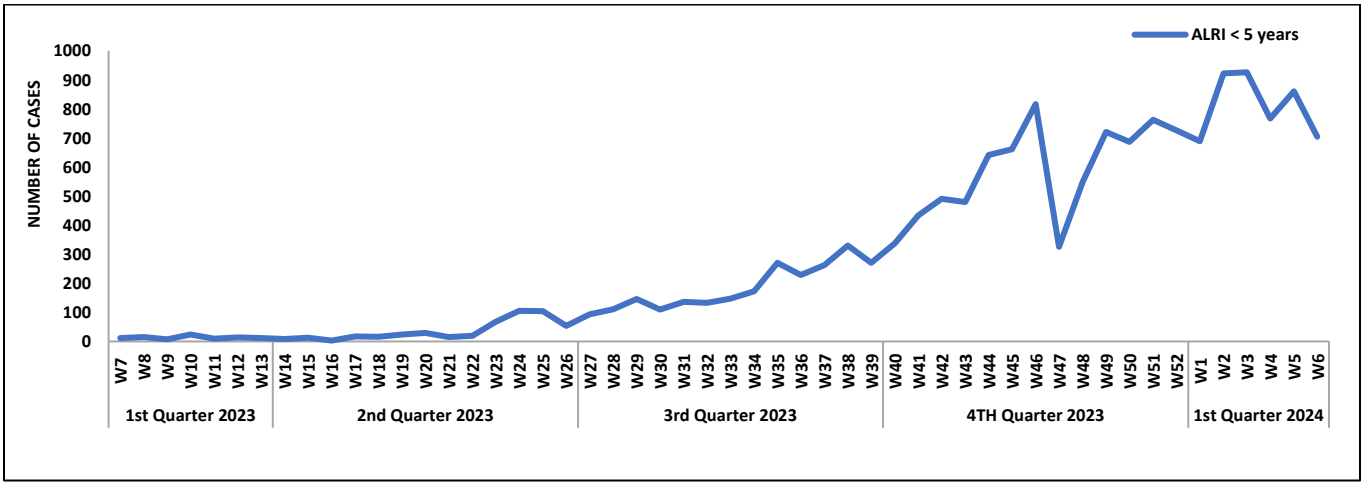


Figure 10: Week wise reported suspected cases of ALRI, GB



Punjab

- Cases of AD (Non-Cholera) were maximum followed by Typhoid, Malaria, B. Diarrhea, ILI and Chickenpox. AD (Non-Cholera), Typhoid, Malaria and B. Diarrhea cases showed a decreasing trend this week.

Figure 11: District wise distribution of most frequently reported suspected cases during week 06, Punjab

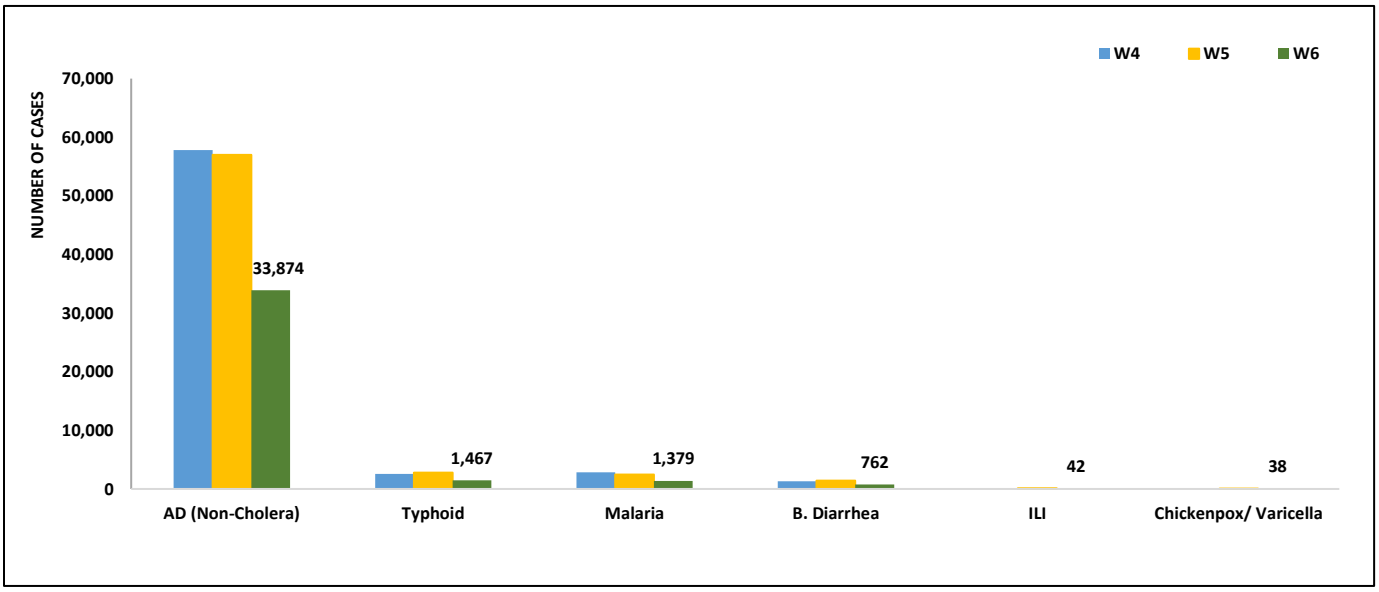


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 06

Diseases	Sindh		Balochistan		KPK		ISL		GB	
	Total Test	Total Positive	Total Test	Total Positive	Total Test	Total Positive	Total Test	Total Positive	Total Test	Total Positive
AWD (S. Cholera)	62	0	-	-	1	0	0	0	-	-
AD (Non-Cholera)	62	0	-	-	0	0	0	0	-	-
Malaria	1,728	66	-	-	0	0	0	0	4	0
CCHF	-	-	18	0	0	0	0	0	-	-
Dengue	22	1	0	0	0	0	0	0	-	-
VH (B&C)	1,429	452	24	16	0	0	36	1	240	0
Typhoid	384	7	-	-	0	0	2	0	-	-
Covid-19	-	-	26	0	4	0	412	1	-	-
HIV	24	0	-	-	0	0	1	0	-	-
Pertussis	-	-	-	-	0	0	9	0	-	-
Diphtheria	-	-	-	-	1	0	1	0	-	-
Influenza A	-	-	-	-	6	0	41	4	-	-
TB	69	4	-	-	0	0	-	-	-	-
Syphilis	81	0	-	-	0	0	-	-	-	-

IDSR Reports Compliance

- Out OF 149 IDSR implemented districts, compliance is low from KPK. Green color showing >50% compliance while red color is <50% compliance

Table 6: IDSR reporting districts Week 06, 2024

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	110	103	94%
	Bannu	234	120	51%
	Battagram	63	14	22%
	Buner	34	25	74%
	Bajaur	44	17	39%
	Charsadda	59	56	95%
	Chitral Upper	34	28	82%
	Chitral Lower	35	35	100%
	D.I. Khan	94	94	100%
	Dir Lower	74	74	100%
	Dir Upper	52	44	85%
	Hangu	22	21	95%
	Haripur	71	61	86%
	Karak	35	35	100%
	Khyber	64	13	20%
	Kohat	61	61	100%
	Kohistan Lower	11	11	100%
	Kohistan Upper	20	20	100%
	Kolai Palas	10	10	100%
	Lakki Marwat	70	70	100%
	Lower & Central Kurram	40	2	5%
	Upper Kurram	42	11	26%
	Malakand	48	37	77%
	Mansehra	136	79	58%
	Mardan	80	77	96%
	Nowshera	55	54	98%
	North Waziristan	380	0	0%
	Peshawar	153	131	86%
	Shangla	65	15	23%
	Swabi	63	62	98%
	Swat	76	72	95%
	South Waziristan	134	47	35%
	Tank	34	33	97%
	Torghar	14	14	100%
	Mohmand	86	25	29%
	SD DI Khan	19	1	5%
	SD Peshawar	5	2	40%
	SD Tank	58	0	0%
	Orakzai	68	11	16%
	Mirpur	37	37	100%
	Bhimber	20	19	95%
	Kotli	60	60	100%
	Muzaffarabad	45	44	98%
	Poonch	46	45	98%

Azad Jammu Kashmir	Haveli	39	35	90%
	Bagh	40	40	100%
	Neelum	39	38	97%
	Jhelum Vellay	29	28	97%
	Sudhnooti	27	27	100%
Islamabad Capital Territory	ICT	35	25	71%
	CDA	35	25	71%
Balochistan	Gwadar	25	24	96%
	Kech	40	32	80%
	Khuzdar	20	20	100%
	Killa Abdullah	20	0	0%
	Lasbella	55	55	100%
	Pishin	62	8	13%
	Quetta	43	19	44%
	Sibi	36	19	53%
	Zhob	39	33	85%
	Jaffarabad	16	15	94%
	Naserabad	32	32	100%
	Kharan	30	30	100%
	Sherani	15	4	27%
	Kohlu	75	71	95%
	Chagi	35	28	80%
	Kalat	41	40	98%
	Harnai	17	14	82%
	Kachhi (Bolan)	35	35	100%
	Jhal Magsi	26	26	100%
	Sohbat pur	25	25	100%
	Surab	32	31	97%
	Mastung	45	0	0%
	Loralai	33	29	88%
	Killa Saifullah	28	27	96%
	Ziarat	29	15	52%
	Duki	31	20	65%
	Nushki	32	30	94%
	Dera Bugti	45	18	40%
	Washuk	46	14	30%
	Panjgur	38	15	39%
	Awaran	23	7	30%
	Chaman	24	19	79%
	Barkhan	20	18	90%
	Hub	33	30	91%
	Musakhel	41	0	0%
	Usta Muhammad	34	34	100%
Gilgit Baltistan	Hunza	32	31	97%
	Nagar	20	20	100%
	Ghizer	40	40	100%
	Gilgit	40	40	100%
	Diamer	62	62	100%

	Astore	54	54	100%
	Shigar	27	26	96%
	Skardu	52	52	100%
	Ganche	29	29	100%
	Kharmang	18	18	100%
Sindh	Hyderabad	73	64	88%
	Ghotki	64	64	100%
	Umerkot	43	30	70%
	Naushahro Feroze	107	62	58%
	Tharparkar	282	240	85%
	Shikarpur	60	60	100%
	Thatta	53	51	96%
	Larkana	67	65	97%
	Kamber Shadadkot	71	70	99%
	Karachi-East	23	21	91%
	Karachi-West	20	20	100%
	Karachi-Malir	37	19	51%
	Karachi-Kemari	18	5	28%
	Karachi-Central	11	9	82%
	Karachi-Korangi	18	17	94%
	Karachi-South	4	4	100%
	Sujawal	54	53	98%
	Mirpur Khas	106	103	97%
	Badin	123	116	94%
	Sukkur	64	64	100%
	Dadu	90	90	100%
	Sanghar	100	100	100%
	Jacobabad	44	44	100%
	Khairpur	169	165	98%
	Kashmore	59	56	95%
	Matiari	42	39	93%
	Jamshoro	68	68	100%
	Tando Allahyar	54	54	100%
	Tando Muhammad Khan	40	37	93%
	Shaheed Benazirabad	124	124	100%

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Calling All Field Epidemiologists:

Contribute Your Voice to the Public Health Bulletin Pakistan!

As field epidemiologists, you stand at the frontlines, gathering crucial data and insights into Pakistan's public health landscape. Your tireless efforts in disease surveillance, outbreak investigations, and program evaluations provide invaluable knowledge that shapes public health policy and interventions.

But your expertise deserves a wider audience beyond technical reports and internal discussions. That's where the Public Health Bulletin Pakistan comes in. This platform serves as a vital channel to share your unique perspectives and findings with a broader community, including fellow public health professionals, policymakers, and the public.

Here's why you should consider contributing:

- **Amplify your impact:** Your work has the potential to influence public health practices and decisions across the country. Sharing your experiences and findings in the Bulletin allows you to reach a wider audience, fostering collaboration and knowledge exchange.
- **Shape the narrative:** Public health challenges require informed public discourse. By sharing your insights in an accessible format, you can contribute to raising awareness, dispelling myths, and promoting evidence-based understanding of health issues.
- **Inspire the next generation:** Your stories of dedication and problem-solving can serve as an inspiration to aspiring field epidemiologists and public health professionals. Showcasing your work can encourage others to join the fight for a healthier Pakistan.
- **Develop your writing skills:** Writing for publication is a valuable skill that strengthens your communication and advocacy abilities. The Bulletin provides a platform to hone your writing skills and share your knowledge in a clear and concise manner.

What can you contribute?

- **Case studies:** Share your experiences investigating disease outbreaks or implementing public health programs.
- **Short reports**: Summarize key findings from your research or projects in an easily digestible format.
- **Perspectives:** Offer your insights on current public health challenges and potential solutions.
- **Opinions:** Engage in constructive debate on relevant public health issues.

Remember:

- The Bulletin welcomes diverse perspectives and approaches.
- Focus on the public health implications of your work and its impact on the community.
- Your unique perspective and expertise are invaluable. By sharing your stories, you can make a significant difference in advancing public health knowledge, practices, and policies in Pakistan.
- Articles should be written in a clear and concise style, understandable to a broad audience.

For submission guidelines and contact information, please visit the PHBP website: **www.phb.nih.org.pk**
Or email your submissions on **phb@nih.org.pk**

Don't wait! Submit your article to the Public Health Bulletin Pakistan today and join the conversation that shapes the future of public health. Together, we can build a healthier Pakistan

A note from Field Activities.

Investigation of Suspected Cutaneous Leishmaniasis Outbreak in Jaffarabad, Balochistan, Pakistan (January 8-13, 2024)

Dr. Shahzada Kamran
Fellow FELTP,
Jaffarabad, Balochistan

Background:

Cutaneous leishmaniasis (CL), a neglected tropical disease (NTD) transmitted by sand flies, poses a significant public health challenge in Pakistan, particularly in the southwestern province of Balochistan. The district of Jaffarabad within Balochistan experiences endemic CL, characterized by persistent transmission and recurring outbreaks. In January 2024, concerns arose about a potential surge in CL cases within Jaffarabad. This prompted a swift response from health authorities, leading to a dedicated investigation to assess the situation and guide public health interventions. This report presents the findings of an investigation conducted from January 8th to 13th, 2024, in Jaffarabad. The multidisciplinary investigation team adopted a holistic approach, addressing both the human and vector dimensions of CL transmission.

Methods:

A multidisciplinary team, encompassing medical officers, entomologists, and public health specialists, delved into the suspected CL outbreak in Jaffarabad. Their approach embraced both human and vector perspectives, aiming to understand the full picture of transmission dynamics.

A standardized case definition was established, requiring individuals to exhibit characteristic lesions or scars and/or have confirmatory microscopy results. This ensured accurate diagnosis and prevented misclassification of other skin conditions. Trained medical officer conducted thorough assessments at patients' homes, collecting detailed information. This included clinical features of the lesions, demographic data, travel history, treatment history, and potential contacts with other infected individuals. This information helped identify risk factors, understand transmission patterns, and assess the outbreak's severity.

The team actively captured sand flies within the affected area. Meticulous identification of species, abundance, and distribution allowed them to understand the prevalence of potential vectors and their potential role in transmission. Beyond mere identification, the team conducted in-depth analysis of the sand fly population dynamics. This included factors like breeding sites, seasonal variations, and biting behavior, all crucial for understanding the transmission cycle and designing targeted control strategies.

Results:

Of the 85 individuals tested for CL, 52 (61.2%) confirmed positive, indicating a significant burden of the disease in the investigated area. This high positivity rate highlights the need for immediate and comprehensive interventions.

The detection of 9 sand fly vectors in Dera Allahyar city confirms the presence of active transmission pathways. Identifying the specific sand fly species involved is crucial for designing targeted vector control measures.

The concerning non-adherence to treatment protocols for confirmed CL cases raises concerns about potential treatment failure, increased transmission risk, and development of drug resistance. Addressing this issue through revised treatment guidelines and healthcare worker training is essential.

The lack of prior training for healthcare personnel on CL diagnosis and management necessitates immediate capacity building initiatives. Equipping healthcare workers with the necessary knowledge and skills will ensure timely and accurate diagnosis, appropriate treatment, and effective contact tracing.

Conclusions:

The 2022 floods likely increased sand fly populations and human exposure, contributing to the CL surge. Additionally, travel to/from endemic areas and inadequate diagnosis/treatment exacerbated the outbreak. Unhygienic conditions and limited health education further played a role.

Recommendations:

- Early diagnosis and prompt treatment with effective medications are crucial.

UK Health Security Agency
World Health Organization
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- Implement vector control measures like insecticide spraying, treated nets, and environmental management.
- Strengthen disease surveillance for timely outbreak detection and response.
- Consider animal reservoir control based on the local context.
- Mobilize communities for effective behavior change interventions and partner with stakeholders for comprehensive disease control.

Letter to the Editor:

Urgent Action Needed: High Hepatitis Prevalence Detected in Rawalpindi, Pakistan

Dr. Anser Ishaq
Program Director
Local Hepatitis Elimination and Prevention (LHEAP)
Rawalpindi

A recent project in Rawalpindi, Pakistan, has revealed alarmingly high rates of hepatitis B and C, particularly in the Fauji Colony area. This letter serves to bring this critical public health issue to the attention of relevant authorities and advocate for immediate action.

The Localized Hepatitis Elimination and Prevention Project (LHEAP), launched in July 2023, screened over 36,000 residents in nine union councils for hepatitis B and C. While the overall prevalence across the targeted areas was 2.79%, Fauji Colony near Pirwadhai exhibited a shockingly high rate of 9.95%. This stark difference highlights the need for urgent investigation and targeted interventions in this specific community.

Despite the concerning statistics, there are positive developments. The LHEAP project offers free testing and treatment for hepatitis B and C in the selected areas. To date, hundreds of patients have already begun treatment, and over 20,000 doses of the hepatitis B vaccine have been administered.

However, significant challenges remain:

- High prevalence in Fauji Colony: This necessitates further investigation into underlying causes and tailored intervention strategies.
- Limited awareness: Community education about hepatitis, its transmission risks, and the availability of free testing and treatment is crucial.
- Accessibility to treatment: Guaranteeing uninterrupted access to free testing and treatment for all identified cases is critical.

Therefore, I urge the relevant authorities to take the following decisive steps:

- **Expand screening efforts**: Extend the LHEAP project to encompass more union councils, particularly those with high prevalence.
- **Invest in public awareness campaigns**: Educate communities about hepatitis through culturally appropriate campaigns emphasizing prevention, early detection, and treatment options.
- **Ensure accessible treatment:** Guarantee uninterrupted access to free testing and treatment for all identified cases, removing any barriers that may exist.
- **Conduct further research:** Investigate the reasons behind the high prevalence in Fauji Colony and other hotspots to inform targeted interventions.

Hepatitis is a serious public health threat, but it is preventable and treatable. By taking immediate and comprehensive action, we can safeguard the health and well-being of communities in Rawalpindi and work towards eliminating hepatitis across Pakistan.
Let us work together to ensure that everyone has access to the information, resources, and treatment they need to live healthy lives free from hepatitis.

Knowledge Hub

Leishmaniasis: A Neglected but Prevalent Threat in Pakistan

Introduction:

Leishmaniasis, a potentially disfiguring and life-threatening protozoan parasite transmitted by sandflies, holds a significant but often overlooked position among public health concerns in Pakistan. This essay, classified as a Neglected Tropical Disease (NTD), aims to raise awareness and educate the public

about leishmaniasis, including its various forms, transmission cycle, symptoms, diagnosis, treatment, and preventative measures.

Spectrum of Clinical Manifestations:

Leishmaniasis presents with diverse clinical manifestations, primarily affecting either the skin (cutaneous leishmaniasis, CL) or internal organs (visceral leishmaniasis, VL). CL manifests as ulcers or lesions, potentially leading to disfiguring scars. VL, the more severe form, attacks the liver, spleen, and bone marrow, often culminating in potentially fatal complications.

Pakistan's Burden and Distribution:

Unfortunately, Pakistan bears a heavy burden of leishmaniasis, ranking high in its prevalence. Balochistan, Khyber Pakhtunkhwa, and Punjab are particularly affected, with estimates exceeding 100,000 new cases annually (2). This significant burden poses a substantial challenge to both the healthcare system and individual well-being.

Understanding the Transmission Cycle:

Sandflies, minute nocturnal insects, serve as vectors for leishmaniasis, transmitting the Leishmania parasite from infected animal reservoirs (e.g., rodents) to humans through bites (3). Factors like poor sanitation, inadequate housing, and close proximity to animal reservoirs contribute to increased transmission risk.

Early Detection: Key to Effective Management:

Timely diagnosis is crucial for successful treatment and minimizing complications. Be vigilant for the following symptoms:

- **Skin ulcers or lesions**: These may initially appear painless but can enlarge and become painful.
- **Fever, fatigue, and weight loss**: These symptoms might indicate VL, requiring immediate medical attention.

Seeking Timely Diagnosis and Treatment:

Early diagnosis and prompt treatment are vital for preventing complications. Healthcare professionals can confirm leishmaniasis through various methods, including skin smears, biopsies, or blood tests. Treatment typically involves specific medications, often requiring prolonged courses.

Preventive Strategies:

While a vaccine is still under development, various preventive measures can significantly reduce the risk of contracting leishmaniasis:

- Utilizing insect repellents containing DEET.
- Wearing protective clothing, especially during dusk and dawn when sandflies are most active.
- Improving sanitation and hygiene around homes.
- Controlling rodent populations, which can act as reservoirs.

Collective Effort for Awareness and Control:

Combating leishmaniasis requires a multifaceted approach. Public awareness campaigns are crucial to educate communities about the disease, its transmission, symptoms, and preventive measures. Additionally, strengthening healthcare systems and research efforts are vital for improved diagnosis, treatment, and ultimately, disease control.

Conclusion:

Leishmaniasis poses a significant threat to Pakistan's public health. By understanding the disease, its transmission cycle, and preventive measures, individuals and communities can play a pivotal role in controlling its spread. Advocating for increased awareness, resource allocation, and research efforts can pave the way for a future where leishmaniasis no longer casts a long shadow on Pakistan's health landscape.

References:

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2. Cutaneous Leishmaniasis in Pakistan: a neglected disease needing one health strategy - ncbi.nlm.nih.gov
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