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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.

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Greetings
Team PHB-Pakistan

Preface

The Weekly Public Health Bulletin - Pakistan, Week 38, 2023

This bulletin provides a summary of the most important public health events that occurred in Pakistan during Week 38 of 2023. The most frequently reported cases during this week were malaria, followed by acute diarrhea (non-cholera), influenza-like illness (ILI), acute lower respiratory infection (ALRI) in children under 5, bloody diarrhea, viral hepatitis (B and C), typhoid, severe acute respiratory infection (SARI), dog bites, and acute viral hepatitis (A and E).

There has been a significant increase in malaria cases, particularly in the Sindh province. All of these cases are suspected and require field verification. Public health interventions and a multi-sectoral approach are necessary to address this epidemic.

Vaccine-preventable diseases are also on the rise and have been reported from all over the country. Field investigations are also needed to verify these cases.

The PHB team would like to express its sincere gratitude to all of the health workers who have contributed to the reporting of these cases. Their work is essential to safeguarding public health. The team would also like to remind the public to be vigilant and to seek medical attention promptly if they experience any symptoms of these diseases.

By working together, we can safeguard the health of our communities.

Sincerely,
The Chief Editor

- *During week 38, most frequent reported cases were of Malaria followed by Acute Diarrhea (Non-Cholera), ILI, ALRI <5 years, B. Diarrhea, VH(B&C), Typhoid, SARI, dog bite and AVH (A&E).*
- *There is huge rise in Malaria cases especially from Sindh province. All are suspected cases and need field verification. Public health interventions and multi-sectoral approach is required to address this epidemic.*

IDSR compliance attributes

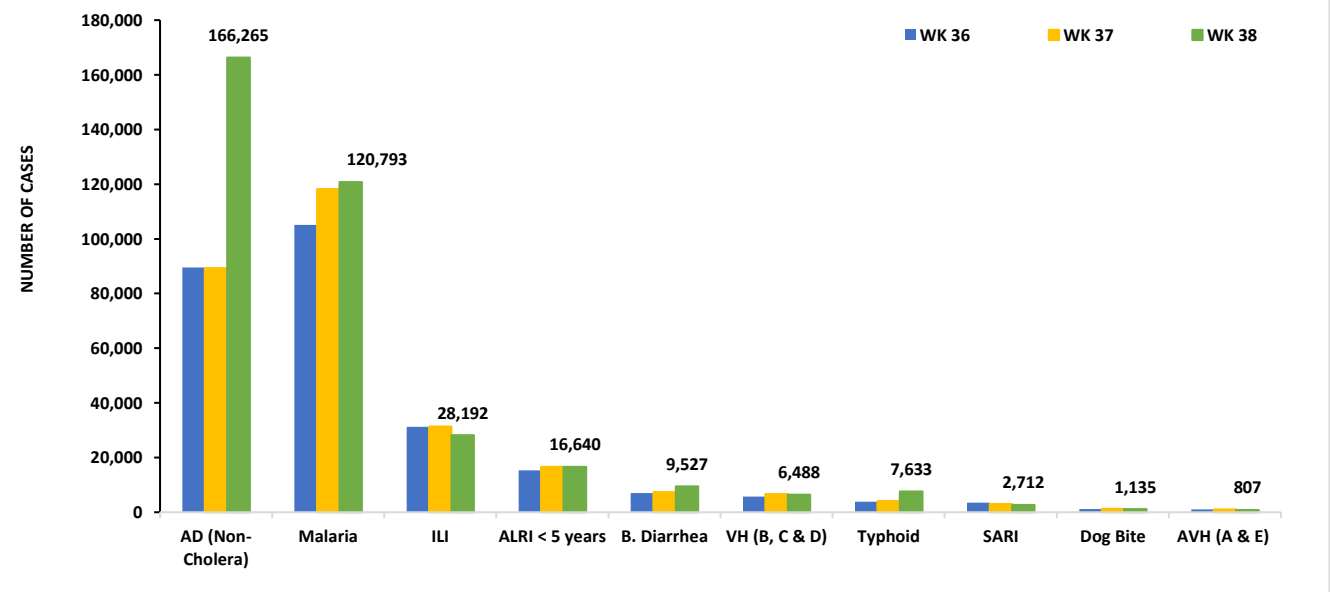
- *The national compliance rate for IDSR reporting in 113 implemented districts* is 76%
- *Sindh and AJK are the top reporting region with a compliance rate of 92% and 82% followed by ICT 78%, and Khyber Pakhtunkhwa with 77%*
- *The lowest compliance rate was observed in Gilgit Baltistan.*

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	1672	1293	77
Azad Jammu Kashmir	375	307	82
Islamabad Capital Territory	27	21	78
Balochistan	1184	740	63
Gilgit Baltistan	427	133	31
Sindh	1834	1679	92
National	5519	4173	76

Table 1: Province/Area wise distribution of most frequently reported cases during week 38, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
Malaria	444	9,760	1	0	6,620	3,951	100,017	120,793
AD (Non-Cholera)	1908	7,290	774	146	23,108	86,570	46,469	166,265
ILI	2,380	5,367	257	399	4,803	211	14,775	28,192
ALRI < 5 years	823	2192	211	0	1168	NR	12246	16,640
B. Diarrhea	132	1749	56	0	1,297	2,486	3807	9,527
VH (B, C & D)	7	68	0	0	106	NR	6307	6,488
Typhoid	71	745	64	3	1,349	4,067	1334	7,633
SARI	324	862	214	0	815	NR	497	2,712
Dog Bite	69	108	0	0	286	NR	672	1,135
AVH (A & E)	37	56	6	0	275	NR	433	807
AWD (S. Cholera)	69	231	112	0	78	NR	31	521
Mumps	88	87	39	0	119	49	305	687
CL	0	140	0	0	261	NR	7	408
Measles	21	53	17	0	126	NR	55	272
Dengue	3	2	2	1	145	NR	99	252
Chickenpox/ Varicella	14	12	16	1	179	143	7	372
HIV/AIDS	0	4	0	0	2	NR	8	198
Pertussis	8	72	0	0	19	NR	2	101
AFP	3	6	0	0	17	NR	10	36
Gonorrhea	0	69	3	0	43	NR	30	145
Leprosy	0	22	0	0	0	NR	0	102
Meningitis	15	23	0	0	0	NR	19	62
VL	0	11	0	0	0	NR	0	24
NT	4	6	0	0	10	NR	1	21
Brucellosis	0	13	0	0	7	NR	0	22
Anthrax	0	0	0	0	0	NR	0	0
Diphtheria (Probable)	0	2	4	0	3	NR	0	9
Syphilis	0	3	0	0	0	NR	3	6
CCHF	0	0	0	0	0	NR	0	0
Chikungunya	0	1	0	0	0	NR	0	1

Figure 1: Most frequently reported suspected cases during week 38, Pakistan



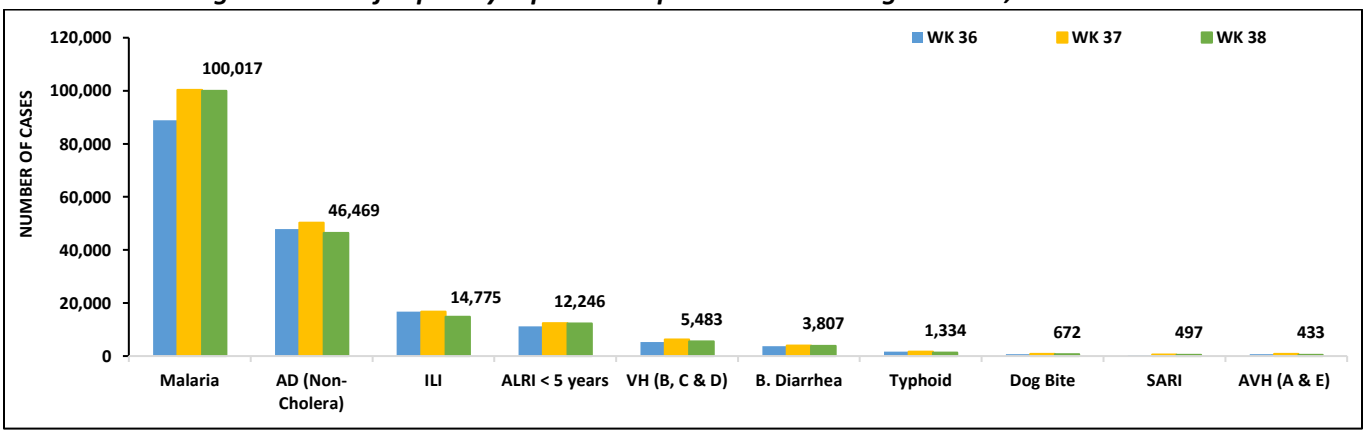
Sindh

- Malaria cases were maximum followed by AD (Non-Cholera), ILI, ALRI<5 Years, VH (B, C, D), B. Diarrhea, Typhoid, dog bite, SARI and AVH (A&E).
- There is rise in trends for Malaria cases whereas for AD cases declined this week.
- Malaria and AD (Non-Cholera) cases were reported in high numbers from Larkana, Kahirpur, Dadu and Badin. All are suspected cases and need field verification.
- Khairpur, Mitiari and Badin districts reported VH (B&C). Field investigation is required to verify cases and to identify the source to control the spread of disease.

Table 2: District wise distribution of most frequently reported suspected cases during week 38, Sindh

DISTRICTS	Malaria	AD (Non-Cholera)	ILI	ALRI < 5 years	VH (B, C & D)	B. Diarrhea	Typhoid	Dog Bite	SARI	AVH (A & E)
Badin	5,567	2,685	232	719	466	205	32	71	2	2
Dadu	7,071	4,485	507	2,039	20	712	117	0	5	37
Ghotki	2,505	957	0	440	404	111	0	0	0	3
Hyderabad	668	1,976	606	105	56	36	14	0	0	2
Jacobabad	3,468	1,153	127	1,342	101	138	10	53	0	48
Jamshoro	2,366	2,095	111	242	111	106	85	29	14	3
Kamber	9,312	2,858	0	408	260	221	20	0	0	9
Karachi Central	167	1,076	1,467	163	209	87	145	0	0	36
Karachi East	149	499	81	2	1	13	5	2	0	0
Karachi Keamari	7	344	229	42	8	1	8	0	0	6
Karachi Korangi	49	240	0	17	0	3	3	0	0	1
Karachi Malir	160	891	1,377	265	18	32	24	7	17	2
Karachi South	46	168	0	0	0	0	1	0	0	0
Karachi West	158	872	694	116	22	27	38	27	29	2
Kashmore	3,129	730	545	328	95	111	18	0	0	0
Khairpur	7,041	3,407	1,179	1,037	549	351	301	55	315	14
Larkana	19,378	2,595	1	497	138	474	5	0	0	2
Matiari	1,598	1,676	7	394	315	66	8	19	1	3
Mirpurkhas	4,393	2,252	2,855	543	141	89	17	25	59	8
Naushero Feroze	1,789	1,318	550	142	53	45	91	54	0	0
Sanghar	3,762	1,860	65	525	1,077	94	94	153	34	8
Shaheed Benazirabad	2,333	1,998	0	490	128	76	176	0	3	0
Shikarpur	5,363	1,548	3	177	90	164	4	143	7	0
Sujawal	1,865	1,133	0	258	409	38	0	17	0	216
Sukkur	5,480	1,785	1,988	491	295	239	12	0	1	0
Tando Allahyar	1,566	1,012	786	192	154	112	12	11	1	12
Tando Muhammad Khan	1,834	1,438	18	187	115	55	44	0	0	0
Tharparkar	2,876	1,478	1,345	589	70	102	28	2	9	18
Thatta	2,064	239	2	149	0	35	1	4	0	0
Umerkot	3,853	1,701	0	347	178	64	21	0	0	1
Total	100,017	46,469	14,775	12,246	5,483	3,807	1,334	672	497	433

Figure 2: Most frequently reported suspected cases during week 38, Sindh



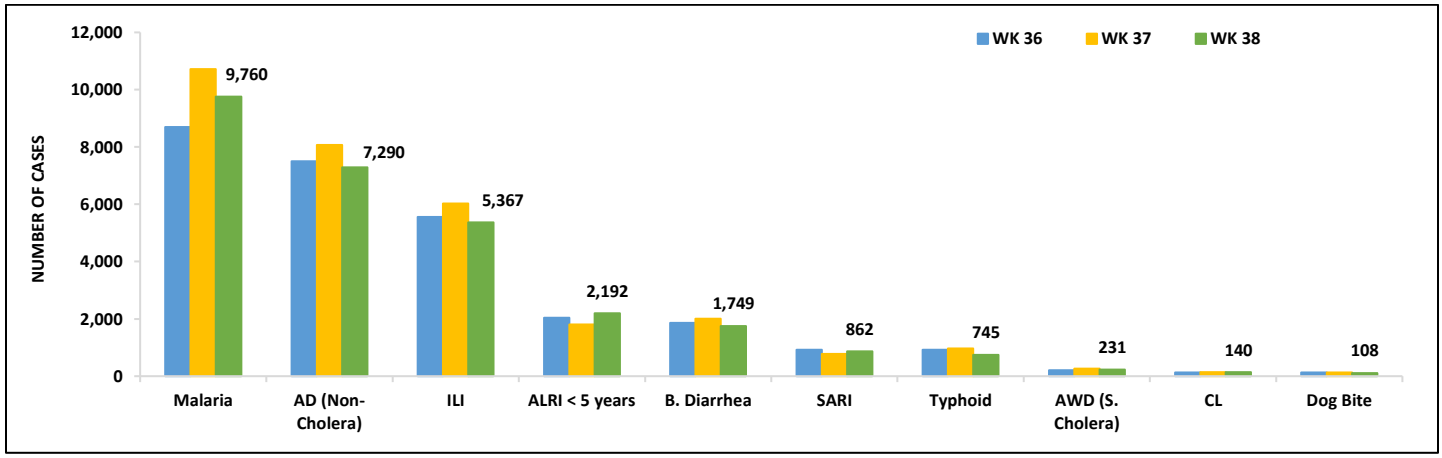
Balochistan

- Malaria, AD (Non-Cholera), ILI, ALRI <5 years, B. Diarrhea, SARI,Typhoid, AWD (S. Cholera), VH (A&E), CL and dog bite were the most frequently reported diseases from Balochistan province.
- ILI, AD and Malaria showed a downward trend in cases r this week.
- Cases of ALRI <5 years were reported in high numbers from Lesbella, Harnai and Zhob. All are suspected cases and need field investigation to verify the cases. Sohbatpur and Loralai districts increased numbers of SARI 111 and 88 respectively.

Table 3: District wise distribution of most frequently reported suspected cases during week 38, Balochistan

Districts	Malaria	AD (Non-Cholera)	ILI	ALRI < 5 years	B. Diarrhea	SARI	Typhoid	AWD (S. Cholera)	CL	Dog Bite
Chagai	0	143	261	0	50	0	26	7	0	0
Chaman	32	73	162	0	43	40	33	35	7	0
Duki	114	122	90	21	100	72	17	25	4	0
Harnai	123	114	11	262	170	0	7	11	0	3
Hub	436	381	223	7	64	66	5	9	2	0
Jaffarabad	1,975	493	82	61	48	26	4	0	39	32
Jhal Magsi	703	353	136	40	9	0	6	5	3	17
Kachhi (Bolan)	932	786	646	76	35	57	73	29	8	0
Kalat	31	38	22	15	38	0	14	3	1	0
Kech (Turbat)	234	148	196	63	8	0	0	0	0	0
Kharan	78	131	271	0	69	0	8	6	8	0
Khuzdar	136	51	101	0	35	5	9	0	8	7
Kohlu	142	106	259	27	95	57	33	9	2	0
Lasbella	949	504	56	787	22	29	16	0	13	8
Loralai	82	259	366	69	84	111	32	4	0	0
Mastung	118	595	149	44	102	77	114	23	0	15
Naseerabad	492	292	0	31	30	5	30	0	3	14
Nushki	114	198	0	0	84	7	0	33	0	0
Panjgur	236	71	28	24	52	2	23	9	0	0
Pishin	13	94	163	18	68	0	12	0	12	3
Quetta	61	567	1,065	43	98	57	19	0	12	0
Sherani	15	20	30	0	15	0	0	0	8	0
Sibi	299	243	422	35	67	38	49	20	8	2
Sohbat pur	1,230	497	34	162	149	88	97	1	1	0
SURAB	62	40	112	0	12	9	67	0	0	5
Usta Muhammad	780	607	80	69	59	48	9	0	0	2
Washuk	144	256	294	6	84	32	16	0	1	0
Zhob	229	108	108	332	59	36	26	2	0	0
Total	9,760	7,290	5,367	2,192	1,749	862	745	231	140	108

Figure 3: Most frequently reported suspected cases during week 38, Balochistan



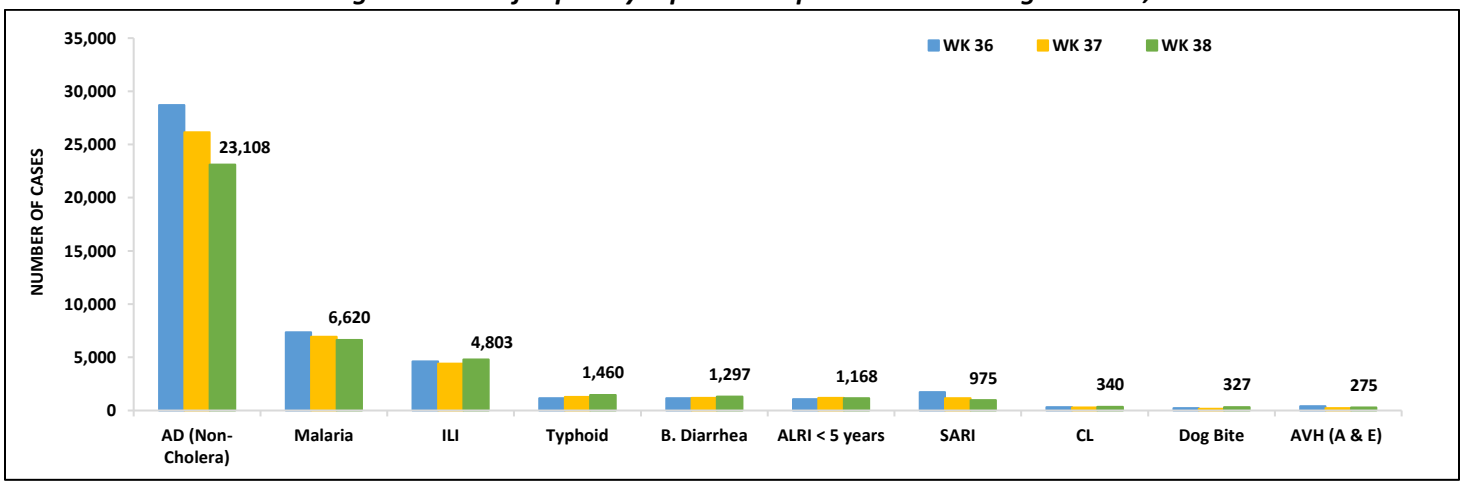
Khyber Pakhtunkhwa

- Cases of AD (Non-Cholera) were maximum followed by Malaria, ILI, Typhoid, B. Diarrhea, ALRI<5 Years, SARI, CL and AVH (A&E).
- ILI showed slight upward trend in cases this week while AD and Malaria cases remained same this week.
- Malaria cases reported in increased numbers from geographically linked districts namely D.I.Khan, Tank, Lakki marwat and Hangu. These are suspected cases and a field investigation is required to verify cases for timely control of epidemic.

Table 4: District wise distribution of most frequently reported suspected cases during week 38, KP

Districts	AD (Non-Cholera)	Malaria	ILI	Typhoid	B. Diarrhea	ALRI <5 Years	SARI	CL	Dog Bite	AVH (A & E)
Abbottabad	548	3	18	13	1	11	14	0	2	0
Bajaur	193	79	56	1	30	9	2	3	0	0
Bannu	708	1,215	69	38	6	1	0	6	0	2
Battagram	125	117	337	0	0	0	0	32	9	1
Buner	609	525	0	19	0	49	0	0	6	0
Charsadda	958	76	174	0	0	5	14	0	0	0
Chitral Lower	308	38	81	26	23	13	28	12	1	10
Chitral Upper	114	3	15	18	13	23	53	0	1	4
D.I. Khan	1,031	646	12	2	28	10	46	7	6	0
Dir Lower	1,860	599	2	60	167	144	0	14	3	32
Dir Upper	541	30	1	14	38	26	0	5	0	4
Hangu	161	456	57	24	23	6	65	19	3	8
Haripur	1,106	71	402	53	5	129	11	0	0	38
Karak	307	286	62	6	1	8	25	55	26	0
Khyber	5	0	0	4	5	0	2	0	0	0
Kohat	67	46	0	0	0	0	0	7	5	0
Kohistan Lower	106	3	0	0	29	7	0	1	0	0
Kohistan Upper	220	0	87	41	15	0	16	0	0	0
Kolai Palas	81	1	0	0	8	2	2	0	0	0
L & C Kurram	18	54	154	6	10	0	0	0	0	0
Lakki Marwat	586	373	0	13	10	60	0	7	0	0
Malakand	726	64	0	30	87	22	14	9	0	32
Mansehra	471	20	758	12	11	61	16	0	166	2
Mardan	739	194	0	0	25	137	0	5	0	14
Mohmand	109	110	32	35	39	19	19	54	8	13
Nowshera	2,061	174	3	28	24	1	22	34	0	2
Peshawar	3,264	121	771	195	219	138	107	21	0	27
Shangla	355	234	0	14	0	11	0	0	7	3
SWA	233	270	104	76	159	55	141	25	33	26
Swabi	1,252	69	687	29	34	141	48	0	0	23
Swat	3,237	64	245	11	33	26	0	0	12	18
Tank	506	524	0	332	0	19	0	18	0	0
Tor Ghar	91	129	0	27	17	1	11	6	10	0
Upper Kurram	412	26	676	333	237	34	319	0	29	16
Total	23,108	6,620	4,803	1,460	1,297	1,168	975	340	327	275

Figure 4: Most frequently reported suspected cases during week 38, KP



ICT, AJK & GB

ICT: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera) and Typhoid. ILI showed a sharp declined trend in cases this week.

AJK: ILI cases were maximum followed by AD (Non-Cholera), ALRI <5 years, Malaria, SARI, B. Diarrhea, Mumps, Typhoid, AWD (S. Cholera), and dog bite. Both AD (Non-Cholera) showed an upward trend in cases this week whereas ILI cases declined.

GB: AD (Non. Cholera) cases were maximum followed by ALRI<5 years, ILI and SARI, ALRI < 5 years, AWD, Typhoid, Diarrhea Mumps. There is an upward trend in AD cases observed this week.

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

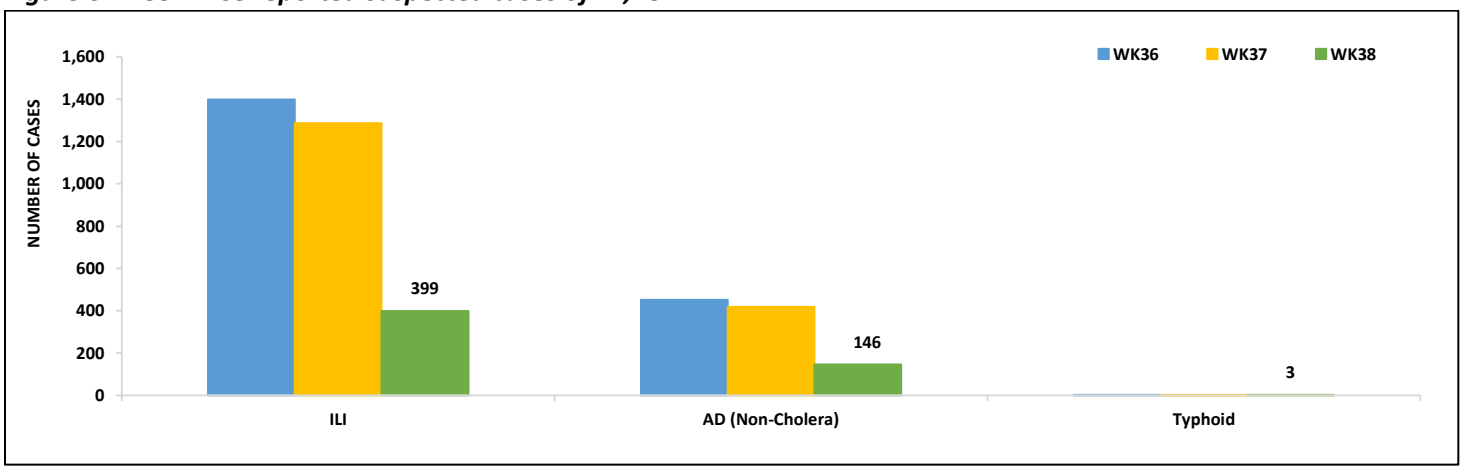


Figure 6: Week wise reported suspected cases of ILI, ICT

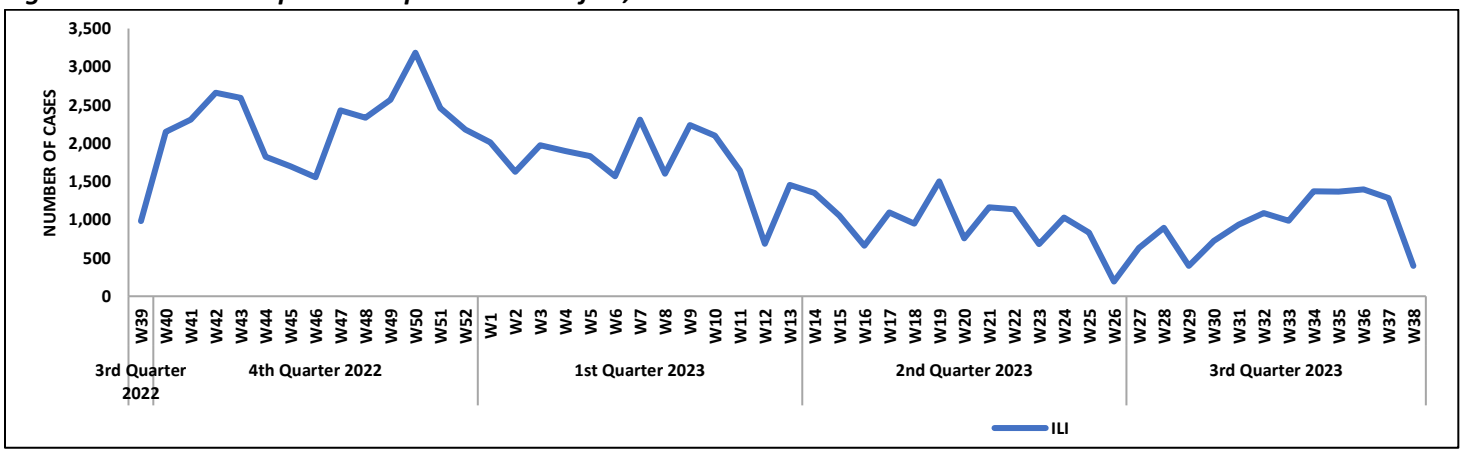


Figure 7: Most frequently reported suspected cases during week 38, AJK

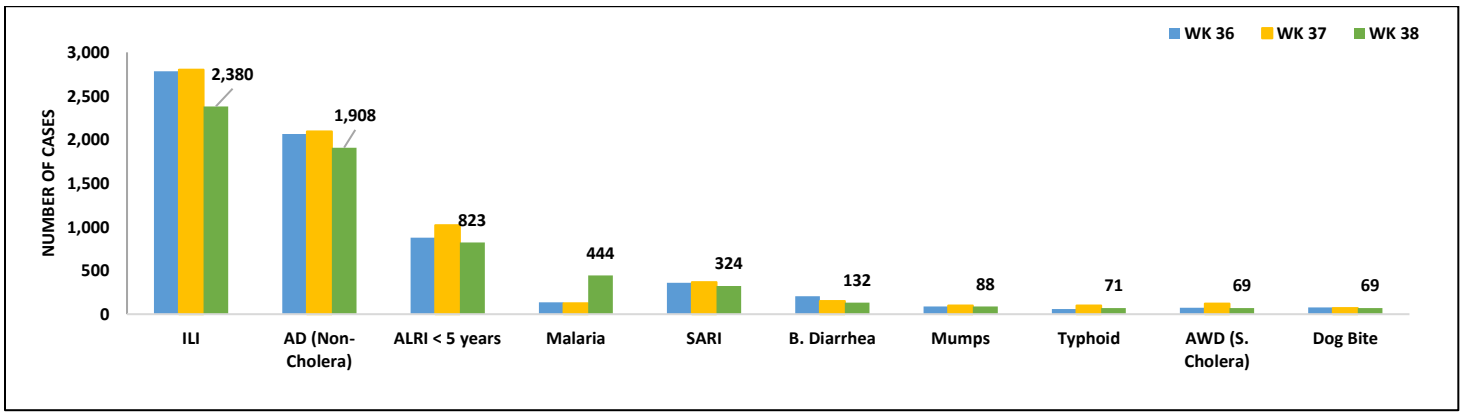


Figure 8: Week wise reported suspected cases of AD (Non-Cholera) and ILI, AJK

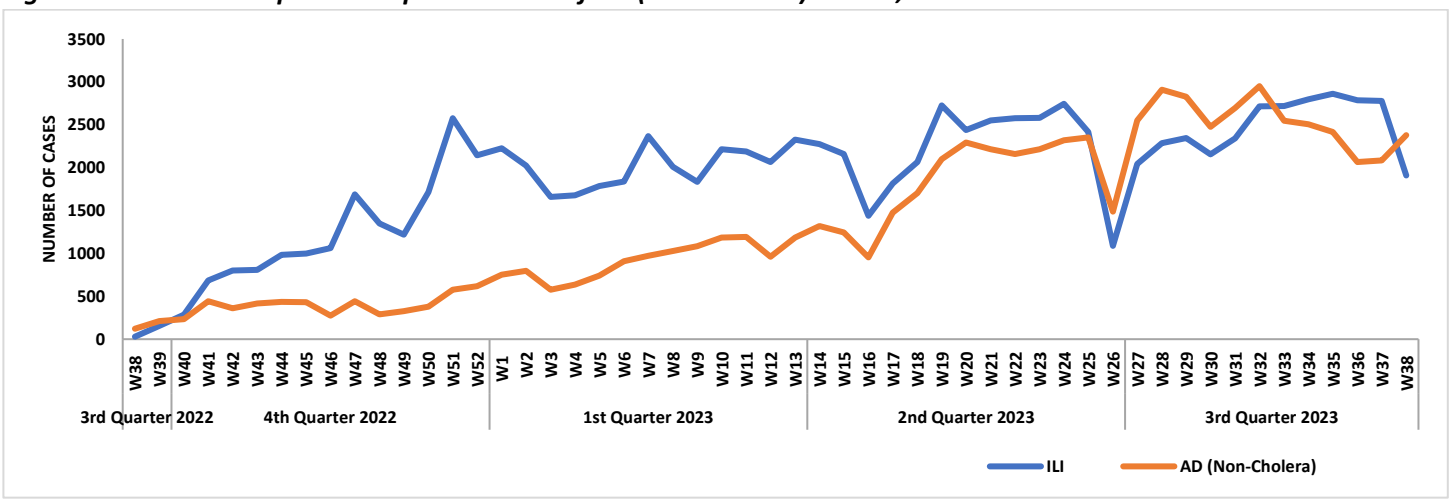


Figure 9: Most frequent cases reported during WK 38, GB

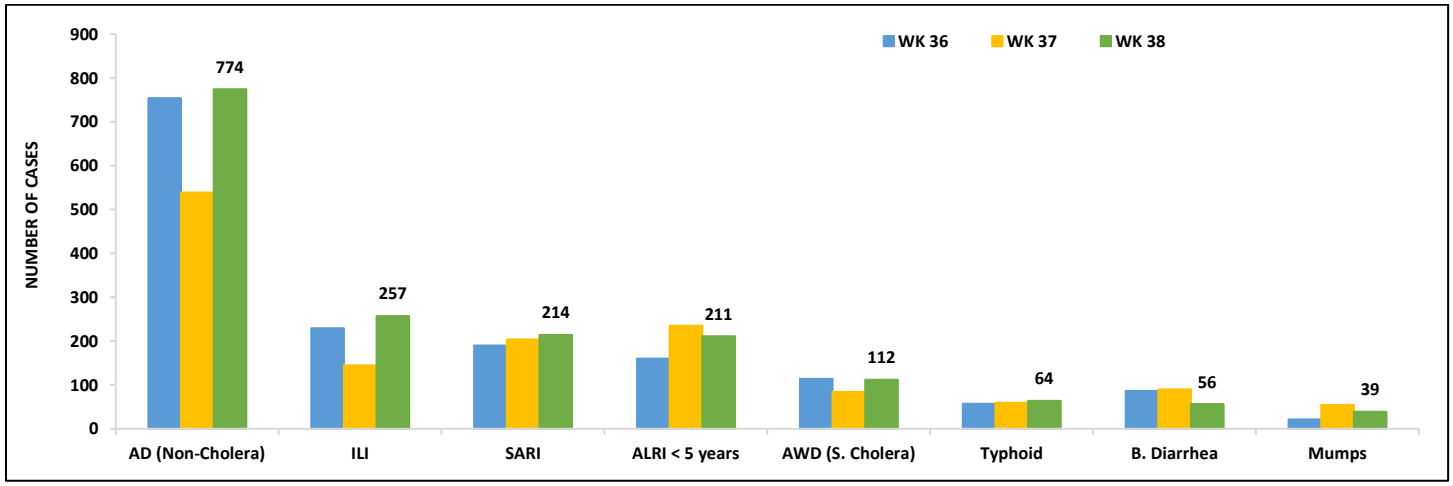
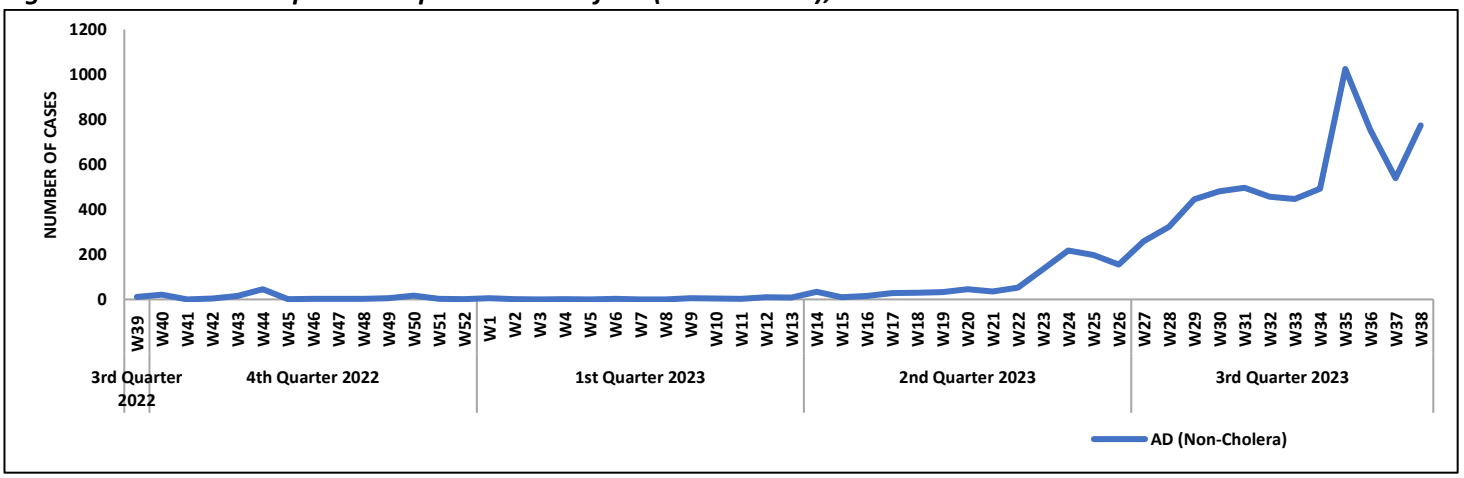


Figure 10: Week wise reported suspected cases of AD (Non-Cholera), GB



Punjab

- AD (Non. Cholera) cases were most frequent followed by Malaria and Typhoid.
- Diarrhea cases were reported in high numbers from Lahore, Faisalabad, Rawalpindi and Gujranwala. All are suspected cases and need verification.

Figure 11: District wise distribution of most frequently reported suspected cases during week 38, Punjab

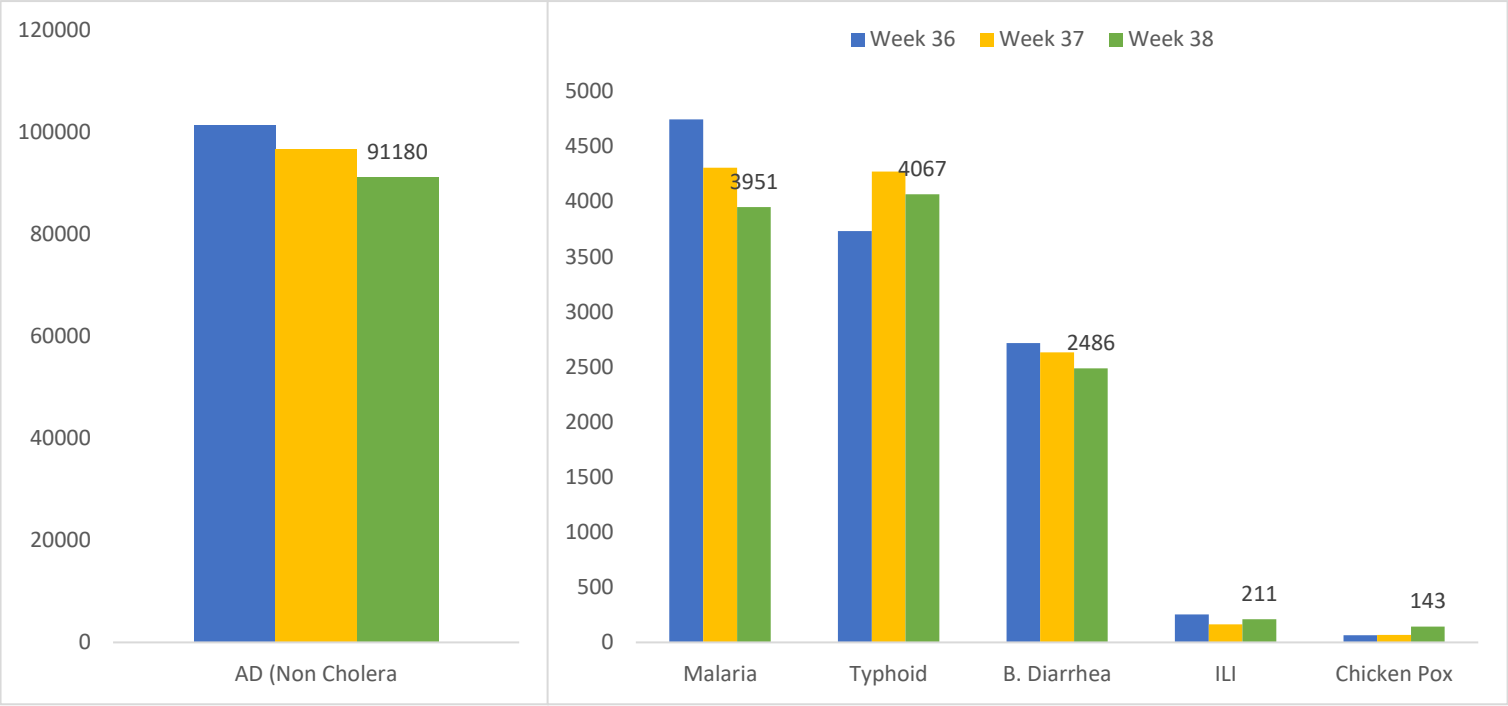


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 38

Diseases	Sindh	Balochistan	Punjab	KPK	ISL	Gilgit
Acute Watery Diarrhoea (S. Cholera)	1	-	-	0	-	-
Acute diarrhea(non-cholera)	0	-	0	-	-	-
Malaria	288	-	-	-	0	-
CCHF	-	4	-	0	-	-
Dengue	19	0	-	-	-	-
Acute Viral Hepatitis(A)	0	-	-	-	-	-
Acute Viral Hepatitis(B)	80	-	-	-	-	-
Acute Viral Hepatitis(C)	260	2	0	1	1	-
Acute Viral Hepatitis(E)	0	-	-	-	-	-
Typhoid	5	-	-	0	-	-
Covid 19	-	1	-	0	-	-

IDSR Reports Compliance

- Out OF 120 IDSR implemented districts, compliance is low from Balochistan districts. Green color showing >50% compliance while red color is <50% compliance

Table 6: IDSR reporting districts Week 38

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Agreed Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
Khyber Pakhtunkhwa	Abbottabad	110	110	98	89%
	Bannu	92	92	73	79%
	Buner	34	34	25	74%
	Bajaur	44	44	29	66%
	Charsadda	61	61	49	80%
	Chitral Upper	33	33	29	88%
	Chitral Lower	35	35	18	51%
	D.I. Khan	89	89	72	81%
	Dir Lower	75	75	72	96%
	Dir Upper	55	55	43	78%
	Hangu	22	22	22	100%
	Haripur	69	69	61	88%
	Karak	34	34	34	100%
	Kohat	59	59	59	100%
	Kohistan Lower	11	11	11	100%
	Kohistan Upper	20	20	17	85%
	Kolai Palas	10	10	10	100%
	Lakki Marwat	49	49	49	100%
	Lower & Central Kurram	40	40	9	23%
	Upper Kurram	42	42	15	36%
	Malakand	42	42	33	79%
	Mansehra	133	133	65	49%
	Mardan	84	84	37	44%
	Nowshera	52	52	51	98%
	Peshawar	101	101	101	100%
	Shangla	36	36	6	17%
	Swabi	60	60	60	100%
	Swat	77	77	68	88%
	South Waziristan	58	58	36	62%
	Tank	34	34	29	85%
	Torghar	11	11	11	100%
Azad Jammu Kashmir	Mirpur	37	37	33	100%
	Bhimber	20	20	15	75%
	Kotli	60	60	56	93%
	Muzaffarabad	43	43	43	100%
	Poonch	46	46	46	100%
	Haveli	34	34	22	65%
	Bagh	40	40	35	88%
	Neelum	39	39	1	3%
	Jhelum Vellay	29	29	29	100%
	Sudhnooti	27	27	27	100%
Islamabad Capital Territory	ICT	18	18	13	72%
	CDA	9	9	8	89%
	Gwadar	24	24	8	33%

Balochistan	Kech	78	44	27	61%
	Khuzdar	136	20	14	70%
	Killa Abdullah	50	32	0	0%
	Lasbella	85	85	55	65%
	Pishin	118	23	9	39%
	Quetta	77	22	20	91%
	Sibi	42	42	33	79%
	Zhob	37	37	28	76%
	Jaffarabad	47	47	15	32%
	Naserabad	37	37	34	92%
	Kharan	32	32	29	91%
	Sherani	32	32	4	13%
	Kohlu	75	75	29	39%
	Chagi	35	35	23	66%
	Kalat	65	65	12	18%
	Harnai	18	18	16	89%
	Kachhi (Bolan)	35	35	35	74%
	Jhal Magsi	39	39	26	64%
	Sohbat pur	25	25	25	100%
	Surab	33	33	30	91%
	Mastung	45	45	45	100%
	Loralai	26	26	26	100%
	Killa Saifullah	31	31	27	87%
	Ziarat	42	42	14	33%
	Duki	31	31	14	45%
	Nushki	32	32	30	94%
	Washuk	25	25	22	88%
	Panjgur	38	38	11	29%
	Awaran	23	23	5	22%
	Chaman	22	22	14	64%
	Hub	33	33	33	100%
	Usta Muhammad	34	34	27	79%
Gilgit Baltistan	Hunza	31	31	31	100%
	Ghizer	62	62	1	2%
	Gilgit	48	48	40	2%
	Diamer	79	79	19	24%
	Astore	53	53	2	4%
	Shigar	24	24	14	58%
	Skardu	51	51	20	39%
	Ganche	79	79	6	8%
	Hyderabad	71	71	35	49%
	Ghotki	65	65	63	97%
	Umerkot	98	43	42	98%
	Naushahro Feroze	68	68	62	91%
	Tharparkar	278	100	98	98%
	Shikarpur	60	60	60	100%
	Thatta	53	53	22	42%
	Larkana	67	67	67	100%
	Kamber Shadadkot	71	71	67	94%

Sindh	Karachi-East	14	14	13	93%
	Karachi-West	20	20	20	100%
	Karachi-Malir	37	37	20	54%
	Karachi-Kemari	17	17	10	59%
	Karachi-Central	11	11	11	100%
	Karachi-Korangi	18	18	11	61%
	Karachi-South	4	4	4	100%
	Sujawal	31	31	31	100%
	Mirpur Khas	104	104	104	100%
	Badin	124	124	99	80%
	Sukkur	64	64	64	100%
	Dadu	90	90	90	100%
	Sanghar	101	101	100	99%
	Jacobabad	43	43	43	100%
	Khairpur	168	168	164	98%
	Kashmore	59	59	59	100%
	Matiari	42	42	42	100%
	Jamshoro	70	70	68	97%
	Tando Allahyar	54	54	46	85%
	Tando Muhammad Khan	41	41	40	98%
	Shaheed Benazirabad	124	124	124	100%

A note from Field Activities.

From the desk of Minister Health

Pink Eye: A Serious Infection That Requires Medical Attention

Dr. Jamal Nasir,
Minister for Primary and Secondary Healthcare, Punjab

As the Minister for Primary and Secondary Healthcare, Punjab, I am concerned about the recent spike in pink eye, cases in our province. In just a few days, the number of cases has nearly reached 100,000, which is a significant increase.

Pink eye is a highly contagious infection that can cause redness, itching, burning, and discharge from the eyes. It is most common in children, but it can affect people of all ages. Pink eye can be caused by a virus, bacteria, or allergies. While pink eye is usually mild and goes away on its own within one to two weeks, there is a risk of serious complications in rare cases, such as permanent vision problems.

In light of the recent surge in conjunctivitis, also known as pink eye, cases in the province of Punjab, I am writing to urge the public to refrain from self-medication. Self-medication can be dangerous, especially when it comes to eye health. It is important to see a doctor for proper diagnosis and treatment of pink eye.

If you think you may have pink eye, please see a doctor immediately. Your doctor can determine the cause of your infection and prescribe the appropriate medication to help you recover quickly and prevent the infection from spreading to others.

Besides, there are a number of things you can do to help prevent pink eye, including:

- Wash your hands frequently with soap and water.
- Avoid touching your eyes.
- Clean and disinfect surfaces that are frequently touched.
- Not sharing contact lenses or eye makeup with others.

If you have any questions or concerns about pink eye, please do not hesitate to contact your doctor or local health department.

A note from Field Activities.

Next-Generation Sequencing Reveals Coxsackievirus A24 Variant as the Etiological Agent of Acute Hemorrhagic Conjunctivitis (Pink Eye) Outbreak in Pakistan.

Dr. Massab Umair
Senior Scientific Officer & In-charge
Department of Virology
PHLD, NIH

Introduction

Pakistan experienced a rapid increase in conjunctivitis cases since September 2023, affecting multiple cities and provinces (primarily Punjab and Sindh). Ocular swab samples from affected individuals were sent to the Department of Virology, National Institutes of Health (NIH), Islamabad, Pakistan, to identify the causative agent of this outbreak.

Methods

The Virology Lab at NIH used a cutting-edge next-generation sequencing (NGS) metagenomic approach, tailored for pathogen discovery. This rigorous analysis involved the following steps:

- RNA extraction: Total RNA was extracted from the ocular swab samples using a commercial RNA extraction kit.
- NGS library preparation: The extracted RNA was subjected to cDNA synthesis and library preparation using a standard NGS library preparation protocol.
- NGS sequencing: The prepared NGS libraries were sequenced using a high-throughput sequencer.
- NGS data analysis: Specialized bioinformatic tools were used to analyze the NGS sequencing data to identify and characterize any potential pathogens.

Results

The NGS metagenomic analysis revealed the presence of the Coxsackievirus A24 variant (CVA24v) in all the ocular swab samples analyzed. Phylogenetic analysis of the Pakistani CVA24v strains showed close relatedness to viral strains reported from China in June 2023, suggesting a possible epidemiological link.

Discussion

CVA24v is a highly contagious virus that has been historically associated with large-scale outbreaks and epidemics of acute hemorrhagic conjunctivitis (AHC) globally. AHC is a self-limiting viral infection of the eyes characterized by sudden onset of redness, pain, swelling, and discharge. The infection is usually mild and resolves spontaneously within 7-10 days. However, in rare cases, AHC can lead to serious complications, such as corneal scarring and vision loss.

The emergence of CVA24v outbreaks in Pakistan and neighboring countries, such as India and Vietnam, is concerning. It is important to note that the viral cause of the conjunctivitis outbreak in these regions has not yet been definitively established. However, the findings of this study suggest that CVA24v is a potential causative agent of the outbreak in Pakistan.

Recommendations

To address the AHC outbreak in Pakistan, the following recommendations are made:

- **Increase surveillance and monitoring**: Health authorities should implement enhanced surveillance and monitoring of AHC cases to identify and track the outbreak.
- **Raise public health awareness:** Public health campaigns should be launched to raise awareness about AHC, its symptoms, and preventive measures.
- **Promote personal protective measures:** The public should be advised to practice personal protective measures, such as regular handwashing, avoiding close contact with infected individuals, and wearing eye protection.
- **Conduct further research**: To better understand the epidemiology, transmission dynamics, and clinical features of CVA24v-associated AHC in Pakistan, further research is needed.

Conclusion

This study underscores the need for continuous monitoring and strict surveillance of AHC and other viral diseases. Health officials must remain vigilant and implement proactive public health measures to prevent the spread of CVA24v and other contagious pathogens. By working together, we can safeguard our communities from the threats posed by these emerging and re-emerging infectious diseases.

A note from Field Activities.

Outbreak Investigation Report of Reported Measles Cases At UC Kunda Tehsil Chota Lahore District Swabi, August 2023

Source: DHIS-2 Reports
https://dhis2.nih.org.pk/dhis-web-event-reports/

Introduction

On August 22, 2023, the Provincial Disease Surveillance and Response Unit (PDSRU) of Khyber Pakhtunkhwa (KPK) was informed of 30 laboratory-confirmed measles cases from 22 different union councils (UCs) in Swabi District. UC Kunda reported four laboratory-confirmed cases over a four-week period (epidemiologic weeks 29-33). All cases were reported from Bacha Khan Medical Complex Swabi.

Methods

A descriptive study was conducted in the affected villages of UC Kunda, Swabi District, from August 25 to 31, 2023. Active case search was conducted using the World Health Organization (WHO) standard case definition of measles to identify other suspected cases and to assess risk factors for measles in the affected villages. A working case definition was developed to identify all cases in the affected areas. Data analysis was conducted to calculate frequencies and analyze risk factors. The routine immunization status in the UC was also assessed.

Results

Active case search in the affected villages of UC Kunda identified 22 additional suspected cases. Descriptive analysis of the 22 suspected cases and four reported laboratory-confirmed cases revealed a mean age group of 43 months (range: 9-120 months). The most affected age group was 25-36 months (30.7%, n=8). Among the total 26 cases, 16 were males and 10 were females, with a male to female ratio of 1.6:1. Vaccination status was assessed for all cases. Only 5 out of 26 children had completed their vaccination. A total of 19% of children completed their vaccination, while 81% of children were defaulters for measles vaccination.

A total of 108 children were documented in a 30-household cluster for immunization. Of these, 97 were eligible for measles-rubella (MR1) vaccination. A total of 46 (47%) children were found to be vaccinated. A total of 71 children were eligible for MR2, and only 29 (40.8%) were vaccinated.

Conclusion

Low immunization status was the most probable cause of the outbreak, as evidenced by the vaccination status of children in different villages of UC Kunda. Other contributing factors included:

- Lack of knowledge about outbreak response among EPI technicians.
- Lack of knowledge about measles vaccination among the community.
- Lady Health Workers (LHWs) were on strike in the district for the last seven months, which affected their ability to facilitate vaccination services to the community.

Recommendations

- Health education of the community about vaccine-preventable diseases (VPDs) and routine immunization must be ensured.
- Capacity building of EPI technicians.
- Regular outreach sessions should be planned and ensured.
- All mop-up activities and outreach sessions must be monitored.
- Retrieval of LHWs activities and their role in health education should be ensured.

A note from Field Activities.

Outbreak Investigation Report of Reported Measles Cases at District Shangla, Khyber Pakhtunkhwa, Pakistan, August 28 2023

Source: DHIS-2 Reports
https://dhis2.nih.org.pk/dhis-web-event-reports/

Background

An outbreak of measles was reported in District Shangla, Khyber Pakhtunkhwa, Pakistan, in August 2023. The first suspected case was reported on May 5, 2023, and more cases were reported in the following weeks.

Objective

The objective of the investigation was to assess the magnitude of the outbreak, implement control measures, and prevent future outbreaks.

Methods

A descriptive study was conducted from the 18th to the 37th EPID week of 2023. Active case finding utilized specific criteria, and data collection involved a structured questionnaire. Data analysis was performed using MS Excel and Epi info.

Findings

A total of 51 confirmed measles cases were identified. The majority of cases were male (61%), and the median age was 23 months. All cases were below 180 months of age. The attack rate was 0.013%, or 13 cases per 100,000 population under 180 months of age. Routine immunization coverage in the district was below WHO standards, with a dropout rate of 17% between Penta 1 and Penta 3 vaccinations. Vaccination against measles and rubella was 70% for the first dose and 63% for the second dose, with a dropout rate of 6.3%.

Of the 44 cases with known vaccination status, 75% were not vaccinated against measles, 15% received one dose, and only 10% received two doses. The main reasons for non-vaccination were vaccine refusal (58%), lack of access to health facilities (30%), and lack of outreach activities in the area (12%).

A total of 14 cases (27%) had a history of travel, indicating an increased risk of disease spread to neighboring areas.

Conclusion

The outbreak was likely caused by a combination of factors, including low routine immunization coverage, vaccine hesitancy, and poor outreach activities.

Recommendations

Increase routine immunization coverage and conduct extensive outreach sessions: Vaccinate more children against measles, especially in remote and underserved areas.

Conduct awareness sessions in the community about vaccination: Educate people about the importance of measles vaccination and how to get their children vaccinated.

Focus on vaccinating immigrants: Immigrants may not be up-to-date on their vaccinations, so it is important to make sure they are vaccinated against measles.

Establish proper isolation centers: People with measles need to be isolated to prevent the spread of the disease.

Improve case reporting: Make it easier for healthcare workers to report cases of measles, so that public health officials can track the outbreak and take appropriate action.

Letter to the Editor:

Rawalpindi Shows the Way in Hepatitis Elimination

Dr. Anser Ishaq
Program Head
LHEAP

The recent detection of over 860 hepatitis cases in Rawalpindi is a reminder of the seriousness of this public health issue. Hepatitis is a viral infection that can cause inflammation of the liver and lead to serious health problems, including cirrhosis, liver cancer, and death.

The Local Hepatitis Elimination and Prevention Program (LHEAP) launched by the Rawalpindi District Health Authority is a welcome step in the fight against this deadly virus. The program is aimed at creating awareness among the public about hepatitis, screening people for the virus, and providing free treatment to those who are infected.

It is encouraging to note that over 16,000 people have been completely vaccinated against hepatitis B as part of the LHEAP. However, there is still a long way to go in eliminating hepatitis from Rawalpindi.

One of the biggest challenges in the fight against hepatitis is the lack of awareness among the public. Many people are unaware of the symptoms of hepatitis and how the virus can be transmitted. This can lead to delays in diagnosis and treatment, which can have serious consequences.

It is important to educate the public about hepatitis and encourage them to get tested. The LHEAP is playing an important role in this regard. However, more needs to be done to raise awareness about hepatitis and reach out to people in remote and underserved areas.

Another challenge in the fight against hepatitis is the high cost of treatment. Fortunately, the LHEAP is providing free treatment to hepatitis patients. This is a major relief for patients and their families.

The LHEAP is a commendable initiative by the Rawalpindi District Health Authority. The program is still in its early stages, but it has the potential to make a significant impact on the fight against hepatitis in Rawalpindi.

We urge the government to continue to support the LHEAP and other initiatives aimed at eliminating hepatitis from Pakistan. Hepatitis is a preventable disease, and we have the resources and the expertise to eliminate it.

Pakistan Public Health Bulletin (PHB)

Pakistan Public Health Bulletin (PHB) made significant progress in improving data reporting, surveillance information dissemination, and audience engagement. These achievements will ensure that PHB remains a valuable resource for public health professionals and stakeholders in Pakistan.

Key Achievements:

Improved data reporting: Provincial surveillance teams received technical assistance to improve data reporting from district to provincial and national levels. A monitoring dashboard was implemented to facilitate trend analysis and alert indicator establishment.

Enhanced dissemination of surveillance information: The National Institute of Health (NIH)

supported the dissemination of surveillance information to provincial health departments and other stakeholders, enhancing the epidemiological bulletin's standards, content, and format across all levels.

Strengthened public health data analysis capabilities: Provincial surveillance teams participated in regular teleconference sessions to strengthen their public health data analysis capabilities and effectively utilize PHB surveillance information at local and district levels.

Timely, accurate, and relevant content: The PHB delivered timely, accurate, and relevant content, adhering to editorial standards in support of its mission.

Comprehensive plan for audience engagement: A comprehensive plan outlining strategy for audience engagement, retention, visibility expansion, and readership growth are being developed.

Effective collaboration with stakeholders and partners: Effective collaboration with various stakeholders and partners facilitated the bulletin's broader reach and increased its impact.

Quality control and optimization of editorial processes: Senior and Associate editors diligently ensured quality control, timeliness, evaluation, and optimization of editorial processes. Bulletin development, review, and publication were executed punctually.

Management of the review process: Management of the review process for surveillance publications involved addressing feedback accordingly. Disease trends were monitored; disease alerts and outbreaks identified; health departments engaged for response conduction; report submissions acquired for inclusion in the bulletin.

Website maintenance and updates: The Pakistan Public Health Bulletin website was supervised and kept up-to-date.

Timely dissemination of the bulletin: Timely dissemination of the bulletin via email to an updated contact list ensured stakeholder engagement.

These achievements demonstrate the PHB's commitment to providing high-quality public health information to its stakeholders. The PHB is an essential resource for public health professionals and stakeholders in Pakistan, and its continued progress will help to ensure that the country has the data and information it needs to protect and promote the health.

Knowledge Hub

How to Prevent and Control Communicable Diseases: A Guide for Everyone

Communicable diseases are those that can be transmitted from one person to another, either directly or indirectly. They can be caused by a variety of microorganisms, including bacteria, viruses, parasites, and fungi. Communicable diseases can cause a wide range of illnesses, from mild to severe, and can even be fatal.

Prevention and control of communicable diseases is essential to protect public health. There are a number of different strategies that can be used, including:

- **Vaccination:** Vaccination is one of the most effective ways to prevent communicable diseases. Vaccines work by exposing the body to a weakened or inactive form of a pathogen, which helps the body to develop immunity. This immunity can then protect the person from getting sick if they are exposed to the pathogen in the future.
- **Personal hygiene:** Good personal hygiene practices, such as washing hands regularly, can help to prevent the spread of communicable diseases. This is because many communicable diseases are spread through contact with contaminated surfaces or objects.
- **Environmental sanitation:** Environmental sanitation practices, such as proper sewage disposal and water treatment, can help to prevent the spread of communicable diseases. This is because many communicable diseases can be spread through contaminated water or food.
- **Vector control**: Vector control measures, such as mosquito control programs, can help to prevent the spread of communicable diseases that are transmitted by vectors (such as insects).
- **Public education:** Public education about communicable diseases can help people to learn about the risks of these diseases and how to protect themselves and others.

In addition to these general prevention and control strategies, there are also specific measures that can be taken to prevent and control specific communicable diseases. For example, people who are traveling to areas where certain communicable diseases are common may need to take additional precautions, such as taking antimalarial medication or getting vaccinated against yellow fever.

The prevention and control of communicable diseases is a complex challenge, but it is essential to protect public health. By implementing a variety of different strategies, we can help to reduce the risk of communicable diseases and improve the health of everyone.

Here are some specific examples of how the strategies listed above can be used to prevent and control communicable diseases:

Vaccination:

- The measles, mumps, and rubella (MMR) vaccine is highly effective at preventing these diseases. Two doses of the MMR vaccine are recommended for all children, and adults who have not been vaccinated should get two doses as well.
- The polio vaccine is highly effective at preventing polio, a paralytic disease that can be fatal. Three doses of the polio vaccine are recommended for all children.
- The hepatitis A vaccine is highly effective at preventing hepatitis A, a liver disease that can be serious. Two doses of the hepatitis A vaccine are recommended for all children and adults.

Personal hygiene:

- Wash your hands often with soap and water, especially after using the toilet, before eating, and after handling raw meat.
- If soap and water are not available, use an alcohol-based hand sanitizer.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Cover your cough or sneeze with a tissue or your sleeve.
- Clean and disinfect frequently touched surfaces, such as doorknobs, light switches, and faucet handles.

Environmental sanitation:

- Ensure that your home has a safe water supply and proper sewage disposal.
- Wash fruits and vegetables thoroughly before eating them.
- Cook meat and poultry to a safe internal temperature.
- Refrigerate food promptly and avoid leaving it out at room temperature for more than two hours.

Vector control:

- Use insect repellent when spending time outdoors.
- Wear long sleeves and pants when possible.
- Eliminate mosquito breeding grounds around your home by emptying standing water.

Public education:

- Learn about the symptoms of common communicable diseases and how to protect yourself and others from getting sick.
- Stay home from work or school if you are sick to avoid spreading your illness to others.

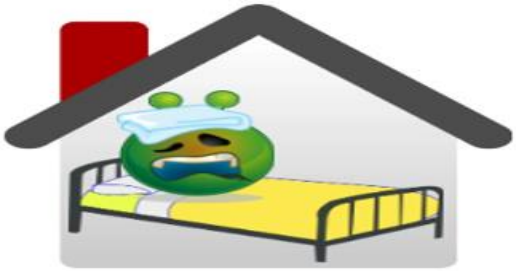
By following these prevention and control strategies, we can all help to reduce the risk of communicable diseases and improve the health of everyone.

DON'T SPREAD GERMS

REMEMBER THE 3 C'S

COVER
Always cover your coughs and sneezes

CLEAN
Wash your hands often



CONTAIN
Stay at home if you feel sick

HOW TO USE HAND SANITIZER

APPLY THE PRODUCT ON THE PALM OF ONE HAND

RUB HANDS TOGETHER

COVER ALL SURFACES UNTIL HANDS FEEL DRY (20 SEC)

SPREAD love NOT GERMS

Public Health BUlletin
Pakistan

PUBLIC HEALTH BULLETIN

	https://phb.nih.org.pk/		https://twitter.com/NIH_Pakistan
	phb@nih.org.pk		https://www.facebook.com/NIH.PK/

UK Health Security Agency

World Health Organization

USAID

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