PUBLIC HEALTH BULLETIN-PAKISTAN

Vol. 3 | Week 33
29th Aug 2023

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. Together, let's build a safer, more resilient and healthier future for everyone.

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Preface

The Weekly Public Health Bulletin-Pakistan provides a summary of the most important public health events that occurred during week 33 of 2023. The most frequent reported cases were malaria, acute diarrhea (non-cholera), ILI, ALRI <5 years, bloody diarrhea, VH (A&E), SARI, AVH (A&E), and dog bite.

There has been an overall increase in cases of malaria and acute diarrhea (non-cholera), mostly from Sindh and KPK provinces. The recent heavy rains across the country have created ideal conditions for mosquito breeding and disrupted sewerage pipes, leading to an increase in cases. Community awareness and public health measures are essential to prevent the further spread of these diseases.

Measles and mumps cases were also reported in high numbers. All of these cases are suspected and require field verification. The health authorities are investigating the cases and taking necessary measures to control the spread of the diseases.
Field investigations are underway to verify the numbers and initiate a timely response. We must remain vigilant and continue to monitor the situation.

This issue of the bulletin also includes response reports on the measles outbreak in Kacchi, Sindh, suspected food poisoning in Gujranwala, Punjab, and an editorial note on World Breastfeeding Week. It also includes a case report on pediatric visceral leishmaniasis and a knowledge update on Kala azar disease.

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Sincerely,
The Chief Editor

- During week 33, most frequent reported cases were of Malaria followed by Acute Diarrhea (Non-Cholera) , ILI, ALRI <5 years, B. Diarrhea, VH (A&E), SARI, AVH (A&E) and dog bite.
- There is overall an increase in cases of Malaria and AD (Non Cholera) mostly from Sindh and KPK provinces. Recent heavy rains across the country have facilitated mosquito breeding sites and disruption of sewerage pipes resulting in rise in cases. Community awareness and public health measures are required to control the diseases.
- Measles and Mumps cases were reported in high numbers. All are suspected cases and need field verification.

All are suspected cases and need field verification.

IDSR compliance attributes

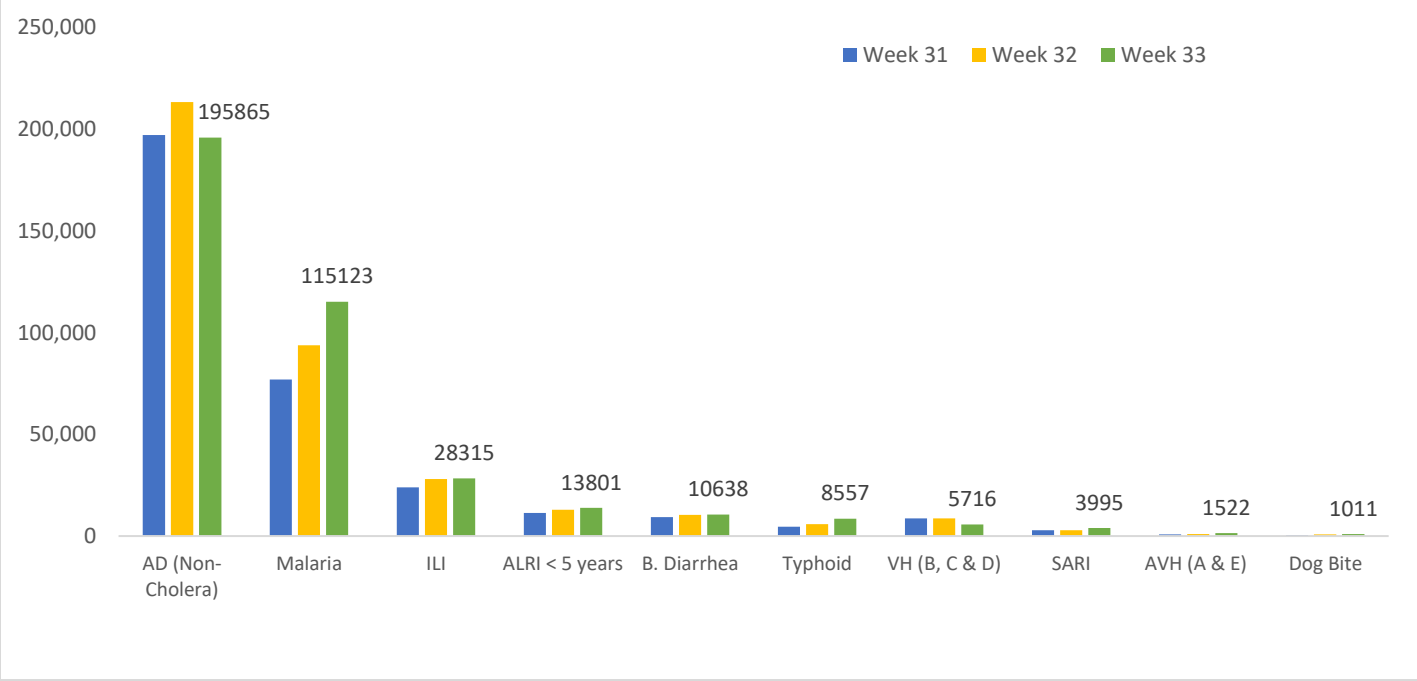
- *The national compliance rate for IDSR reporting in 113 implemented districts* is 78%
- *ICT and AJK are the top reporting region with a compliance rate of 100% and 96% followed by Sindh 92% and Khyber Pakhtunkhwa with 77%*
- *The lowest compliance rate was observed in Gilgit Baltistan.*

Region	*Expected Reports*	*Received Reports*	*Compliance (%)*
Khyber Pakhtunkhwa	1612	1247	77
Azad Jammu Kashmir	375	361	96
Islamabad Capital Territory	27	27	100
Balochistan	1075	681	63
Gilgit Baltistan	297	54	18
Sindh	1834	1696	92
National	5220	4066	78

Table 1: Province/Area wise distribution of most frequently reported cases during week 33, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
Malaria	106	8,699	2	4	8,894	3,577	93,841	115,123
AD (Non-Cholera)	2499	7,488	242	553	33,458	93,054	58,571	195,865
ILI	2,576	4,242	59	989	3,697	245	16,507	28,315
ALRI < 5 years	790	1,793	61	0	952	15	10,190	13,801
B. Diarrhea	118	1935	31	3	1169	2,989	4,393	10,638
VH (B, C & D)	23	128	0	1	280	NR	5284	5,716
Typhoid	54	755	18	2	1223	4474	2,031	8,557
SARI	313	1017	119	0	2187	NR	359	3,995
AVH (A & E)	40	25	2	7	366	0	1082	1,522
Dog Bite	73	90	0	0	202	NR	646	1,011
Mumps	104	93	9	0	128	NR	254	588
AWD (S. Cholera)	67	193	61	0	93	1	33	448
CL	0	138	0	0	255	4	0	397
Measles	12	36	3	0	151	NR	35	237
Chickenpox/ Varicella	25	5	2	1	131	125	15	304
Gonorrhea	5	100	1	0	16	NR	36	158
Dengue	1	5	0	0	29	NR	110	145
Pertussis	6	38	1	0	13	NR	2	60
AFP	23	0	0	0	20	0	15	58
HIV/AIDS	0	16	7	0	3	NR	14	40
Syphilis	2	13	0	0	7	NR	12	34
Meningitis	5	0	0	0	3	NR	15	23
Brucellosis	0	7	0	0	16	NR	0	23
VL	0	12	0	0	6	NR	0	18
Diphtheria (Probable)	0	3	0	0	7	NR	0	10
NT	0	2	0	0	4	NR	2	8
Anthrax	0	0	0	0	0	NR	0	0
Leprosy	0	1	0	0	2	NR	1	4

Figure 1: Most frequently reported suspected cases during week 33, Pakistan



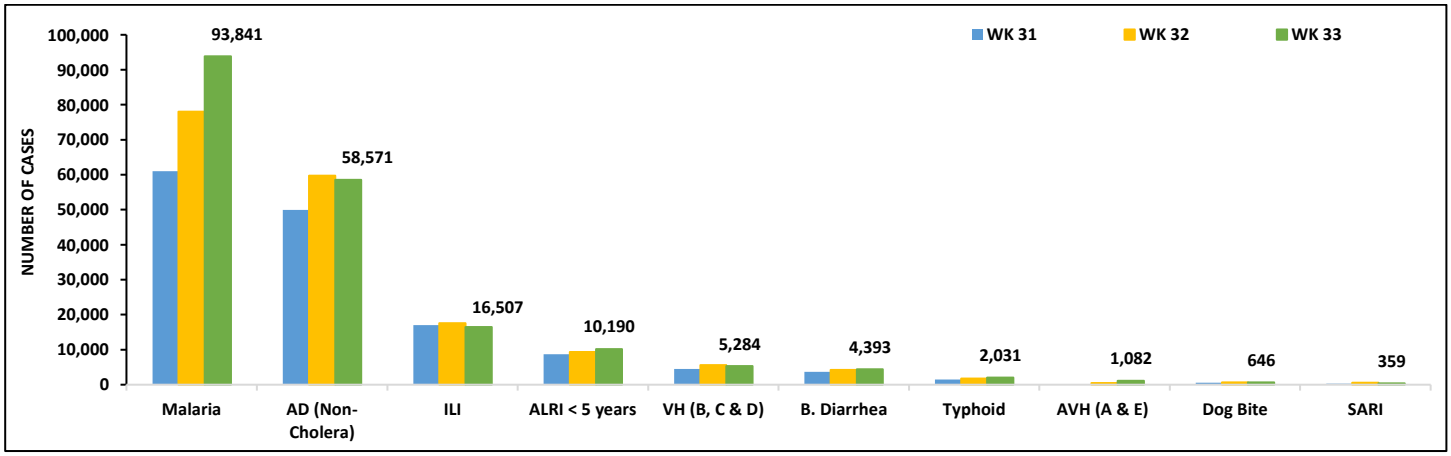
Sindh

- Malaria cases were maximum followed by AD (Non-Cholera), ILI, ALRI<5 Years, VH (B, C, D), B. Diarrhea, Typhoid, AVH (A&E), dog bite, SARI.
- Malaria cases are from Larkana, Badin, Kambar, MirpurKhas, and Thatta whereas AD cases are mostly from Badin, Dadu and Khairpur.
- Cases of AVH (A&E) reported in high numbers from Thatta, Sujawal and Larkana. Field investigation is required to identify the source to control the spread of disease.
- Trend for Malaria showed a sharp spike whereas AD and ILI cases declined this week.

Table 2: District wise distribution of most frequently reported suspected cases during week 33, Sindh

DISTRICTS	Malaria	AD (Non-Cholera)	ILI	ALRI < 5 years	VH (B, C & D)	B. Diarrhea	Typhoid	AVH (A & E)	Dog Bite	SARI
Badin	9,198	4,334	317	745	430	363	129	57	51	0
Dadu	4,576	4,651	355	1,148	7	652	455	5	0	86
Ghotki	1,453	1,464	0	352	492	139	6	1	0	0
Hyderabad	549	1,920	216	18	59	1	10	0	0	0
Jacobabad	1,639	1,822	129	1,280	143	172	16	0	51	56
Jamshoro	2,019	2,311	335	161	162	163	105	3	53	16
Kamber	5,617	2,464	0	195	59	177	31	0	0	0
Karachi Central	86	1,036	1,329	61	154	60	103	17	0	0
Karachi East	71	302	83	0	1	9	0	0	2	0
Karachi Keamari	8	587	279	29	0	2	6	1	0	0
Karachi Korangi	62	349	3	0	0	3	0	0	1	0
Karachi Malir	169	1,483	2,016	452	21	67	22	3	7	39
Karachi South	30	109	0	0	0	1	1	0	0	0
Karachi West	131	837	680	139	18	37	44	3	44	52
Kashmore	1,975	770	352	193	75	79	18	0	0	0
Khairpur	5,114	3,399	590	875	185	365	279	11	27	0
Larkana	12,480	2,546	0	231	144	362	70	193	0	0
Matiari	1,642	2,708	11	322	398	117	19	6	11	0
Mirpurkhas	6,618	2,874	3,258	540	171	92	52	4	7	0
Naushero Feroze	2,422	2,095	588	137	99	109	118	0	68	0
Sanghar	2,644	2,856	35	481	1,069	73	65	3	187	7
Shaheed Benazirabad	2,310	2,882	21	452	136	110	278	0	0	3
Shikarpur	1,648	1,644	0	143	120	174	9	0	28	14
Sujawal	6,112	1,847	0	356	200	127	0	270	22	0
Sukkur	3,565	2,122	1,647	338	546	258	13	0	0	0
Tando Allahyar	2,028	1,958	599	254	171	141	23	9	24	0
Tando Muhammad Khan	4,132	1,444	0	266	104	118	6	0	29	0
Tharparkar	3,341	1,504	1,749	434	86	124	35	20	6	61
Thatta	6,621	2,202	1,915	312	90	178	64	473	28	10
Umerkot	5,581	2,051	0	276	144	120	54	3	0	15
Total	93,841	58,571	16,507	10,190	5,284	4,393	2,031	1,082	646	359

Figure 2: Most frequently reported suspected cases during week 33, Sindh



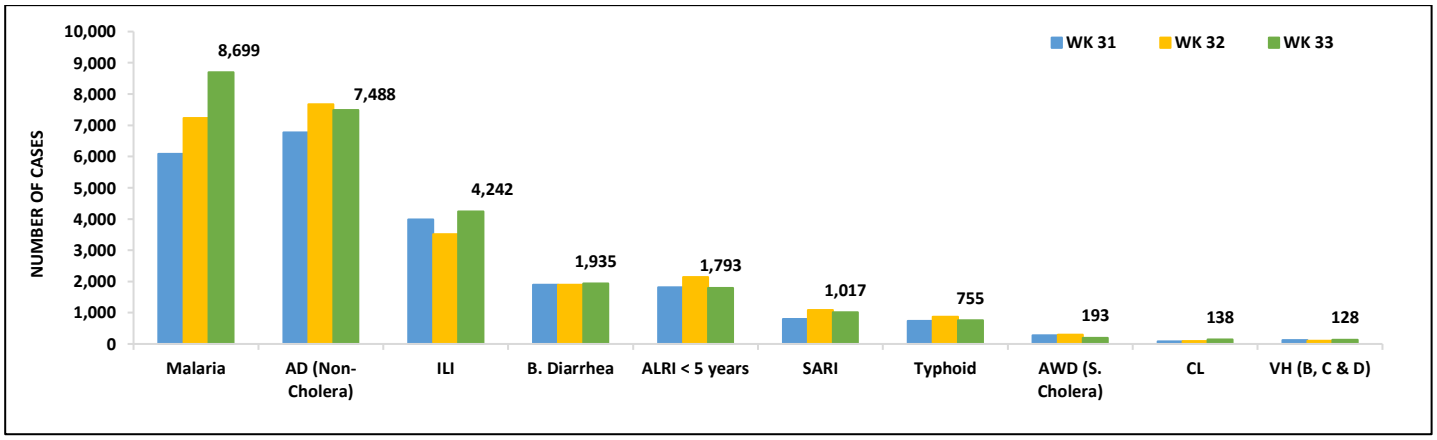
Balochistan

- Malaria, AD (Non-Cholera), ILI, B. Diarrhea, ALRI <5 years, SARI, Typhoid, AWD (S. Cholera),CL and VH (A&E) and Gonorrhea were the most frequently reported diseases from Balochistan province.
- Trend for Malaria and ILI showed an increase whereas AD cases declined this week.
- Cases of malaria and AD(Non-Cholera) reported in high numbers from Sohbatpur and Jaffarabad. All are suspected cases and need field investigation to verify the cases.

Table 3: District wise distribution of most frequently reported suspected cases during week 33, Balochistan

Districts	Malaria	AD (Non-Cholera)	ILI	B. Diarrhea	ALRI < 5 years	SARI	Typhoid	AWD (S. Cholera)	CL	VH (B, C & D)
Chagai	22	155	232	49	0	0	26	13	0	0
Dera Bugti	346	76	19	55	36	30	17	9	1	0
Duki	201	174	96	89	29	44	13	37	5	0
Gwadar	116	252	442	48	13	1	2	NR	NR	NR
Harnai	80	118	6	277	237	0	1	16	0	1
Hub	349	384	77	53	8	178	11	6	21	43
Jaffarabad	1,601	1,019	144	147	160	50	29	1	5	21
Jhal Magsi	507	383	46	21	45	2	7	0	0	0
Kachhi (Bolan)	93	96	34	10	4	11	31	1	0	0
Kalat	33	28	2	7	9	0	17	0	4	0
Kech (Turbat)	449	365	636	58	61	2	1	0	0	0
Kharan	131	120	225	68	0	0	9	11	0	0
Khuzdar	166	185	123	53	2	3	40	2	0	1
Killa Saifullah	376	314	0	121	191	134	54	11	28	0
Kohlu	250	173	355	129	24	51	58	31	4	4
Lasbella	755	595	71	45	455	41	22	0	12	3
Loralai	103	259	270	62	53	96	33	6	0	0
Mastung	339	759	132	103	65	63	146	22	17	34
Naseerabad	648	226	0	6	4	0	37	4	0	6
Nushki	174	227	0	89	0	4	0	8	0	0
Panjgur	251	63	42	25	22	21	8	0	0	0
Pishin	19	99	125	61	9	0	27	0	11	0
Quetta	23	489	746	102	30	71	34	2	7	1
Sherani	17	11	19	10	0	0	6	0	4	0
Sibi	252	140	175	29	18	26	27	9	11	1
Sohbat pur	1,018	544	3	166	110	135	59	2	8	13
SURAB	94	54	62	1	9	10	29	0	0	0
Washuk	125	57	76	10	3	0	3	0	0	0
Zhob	161	123	84	41	196	44	8	2	0	0
Total	8,699	7,488	4,242	1,935	1,793	1,017	755	193	138	128

Figure 3: Most frequently reported suspected cases during week 33, Balochistan



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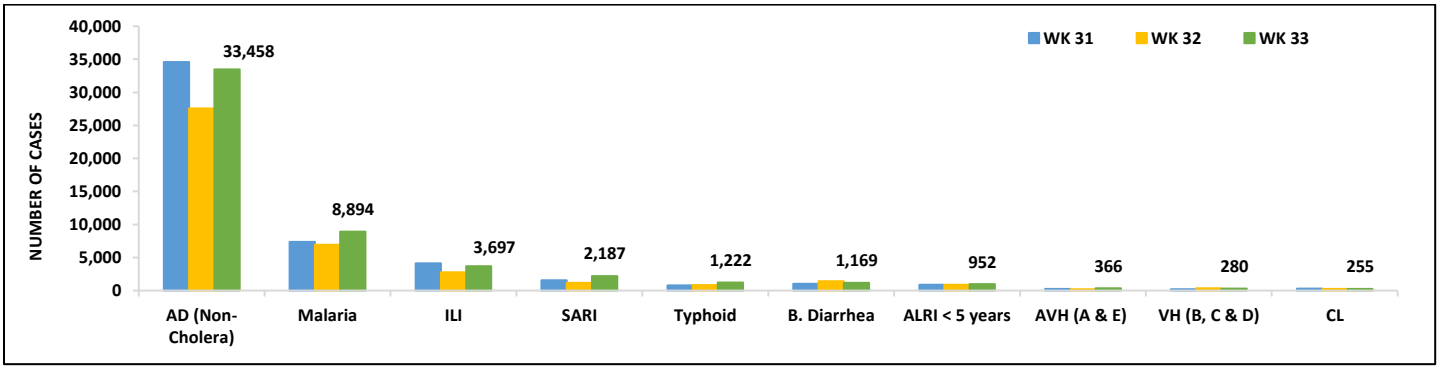
Khyber Pakhtunkhwa

- Cases of AD (Non-Cholera) were the most frequently reported cases followed by Malaria, ILI, SB. Diarrhea, ALRI<5 Years, Typhoid, CL, AVH (A&E) and AVH (B&C) cases.
- There is sharp decline trend in cases of AD (Non Cholera) this week.
- Cutaneous Leishmaniasis cases increased and mostly reported from lower Dir, Karak, Hango and Noweshera. Field investigations required to verify cases.

Table 4: District wise distribution of most frequently reported suspected cases during week 33, KP

Districts	AD (Non-Cholera)	Malaria	ILI	Sari	Typhoid	B. Diarrhea	ALRI <5 Years	AVH (A & E)	VH (B, C & D)	CL
Abbottabad	741	2	6	9	18	5	9	0	1	0
Bajaur	330	183	29	1	3	39	8	0	0	3
Bannu	683	1,239	53	8	26	4	0	0	2	0
Buner	781	840	0	0	20	1	0	0	0	0
Charsadda	1,436	114	149	18	0	0	2	0	0	0
Chitral Lower	837	30	149	591	6	0	3	14	0	9
Chitral Upper	111	18	0	168	13	0	0	1	0	0
D.I. Khan	1,116	1,010	19	39	4	18	15	0	0	2
Dir Lower	2,410	812	0	2	40	175	172	48	2	2
Dir Upper	1,600	7	6	0	2	34	24	2	0	5
Hangu	332	595	146	66	25	15	7	0	4	34
Haripur	1,276	78	287	20	85	3	95	63	21	0
Karak	367	309	35	27	13	4	4	0	0	106
Khyber	5	1	0	3	5	5	0	0	0	0
Kohat	82	44	1	2	1	0	6	0	0	5
Kohistan Lower	122	1	0	218	0	39	4	0	0	2
Kohistan Upper	509	19	42	94	37	15	6	0	0	0
Kolai Palas	138	10	0	30	8	30	11	0	0	0
L & C Kurram	41	20	111	0	4	9	2	0	0	0
Lakki Marwat	684	1,649	0	0	25	16	18	0	0	8
Malakand	1,018	30	0	20	9	135	53	28	2	18
Mansehra	1,001	6	591	28	19	45	39	10	7	1
Mardan	1,416	67	103	7	0	25	5	9	8	0
Nowshera	2,542	184	3	30	36	30	3	4	22	46
Peshawar	3,806	95	560	60	142	140	106	36	57	10
Shangla	2,179	515	0	0	34	7	9	2	95	0
Swabi	1,661	67	373	43	34	31	108	21	1	0
Swat	5,257	82	222	0	75	64	87	16	8	0
Tank	448	611	0	0	54	3	87	0	0	3
Tor Ghar	109	143	0	23	11	35	0	1	0	1
Upper Kurram	420	113	812	680	474	242	69	111	50	0
Total	33,458	8,894	3,697	2,187	1,223	1,169	952	366	280	255

Figure 4: Most frequently reported suspected cases during week 33, KP



ICT, AJK & GB

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

AJK: ILI cases were maximum followed by AD (Non-Cholera) , ALRI <5 years, SARI, B. Diarrhea, Malaria, Mumps, dog bite and typhoid . Both ILI and AD cases showed a downward trend in cases this week.

GB: AD (Non. Cholera) cases were maximum followed by SARI,ALRI<5 years, ILI and AWD (S. Cholera). AD (Non Cholera) cases show downward trend this week.

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

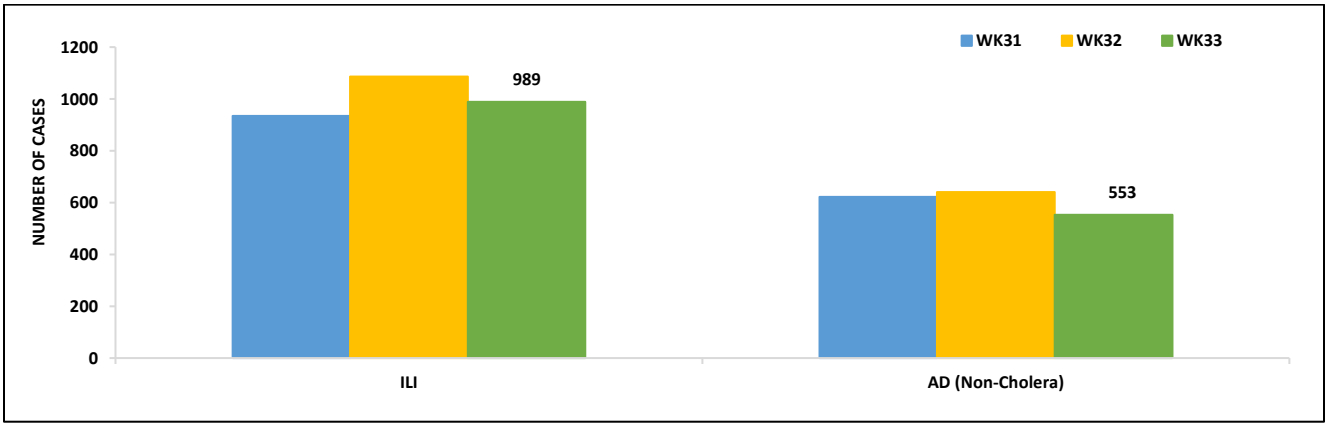


Figure 6: Week wise reported suspected cases of ILI, ICT

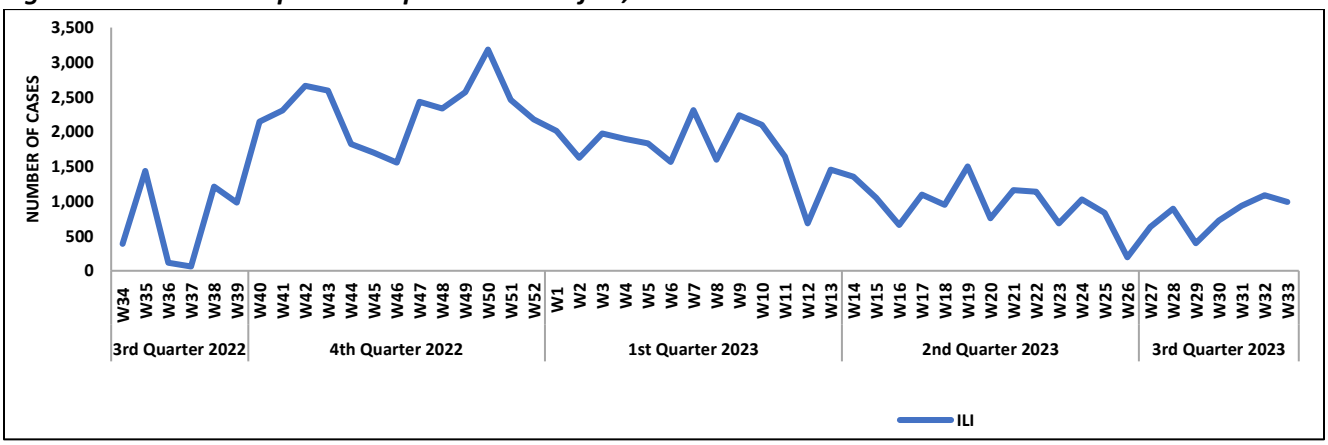


Figure 7: Most frequently reported suspected cases during week 33, AJK

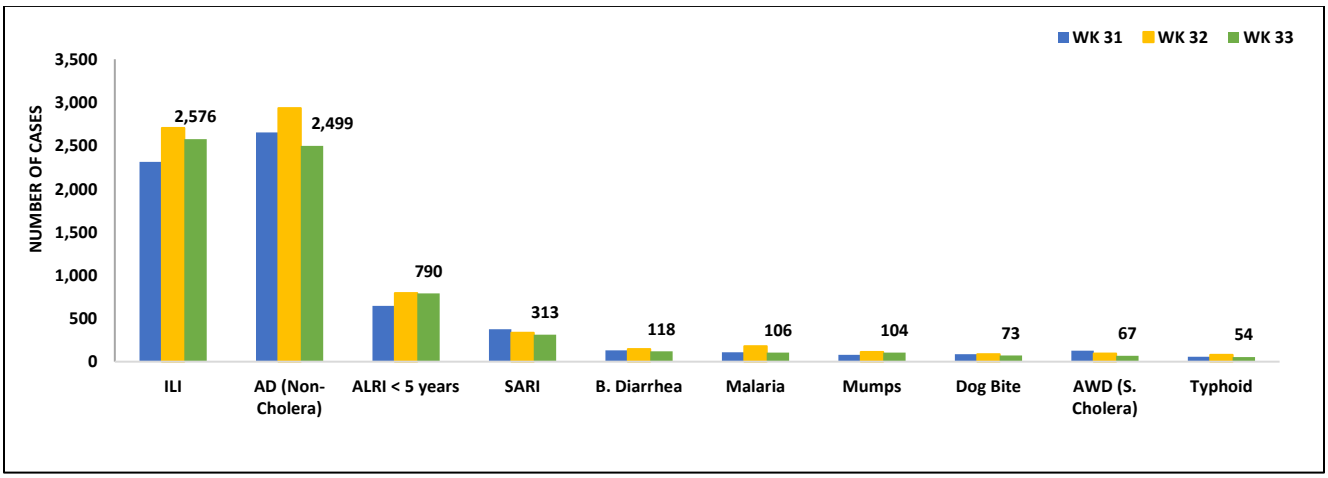


Figure 8: Week wise reported suspected cases of AD (Non-Cholera) and ILI, AJK

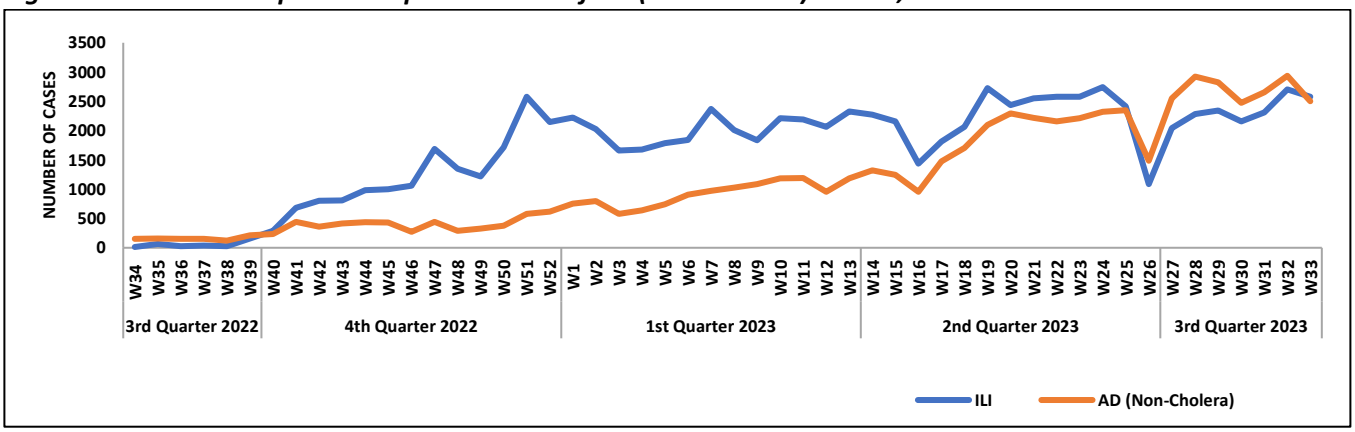


Figure 9: Most frequent cases reported during WK 33, GB

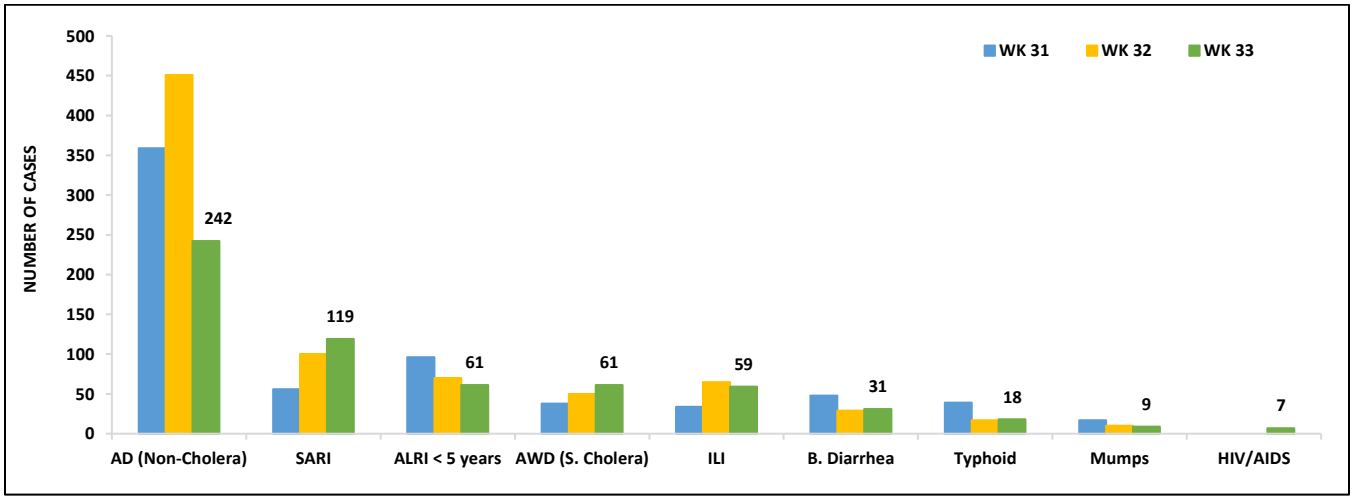
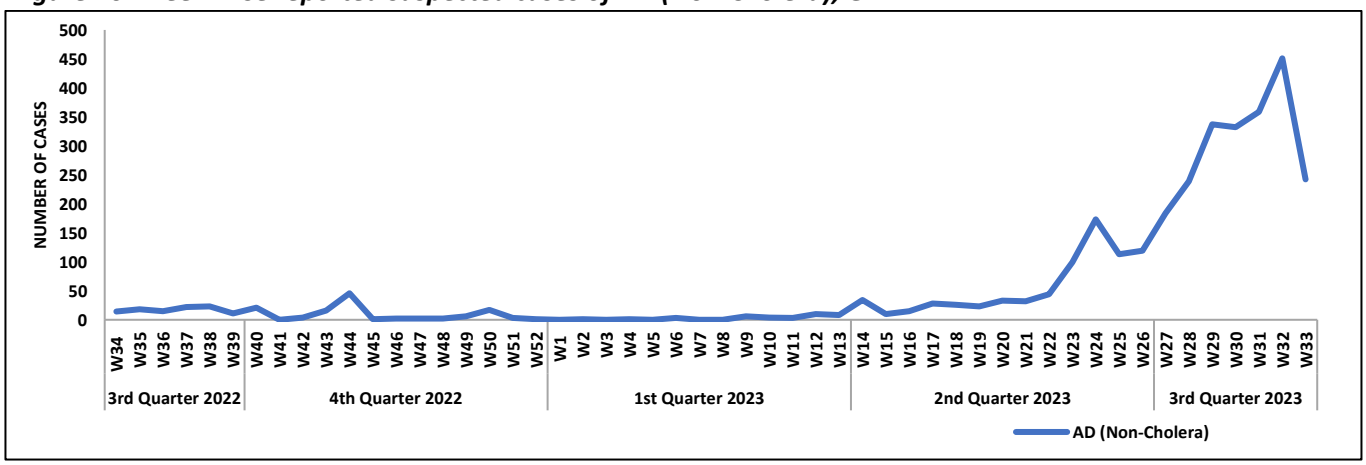


Figure 10: Week wise reported suspected cases of AD (Non-Cholera), GB



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 33, Punjab

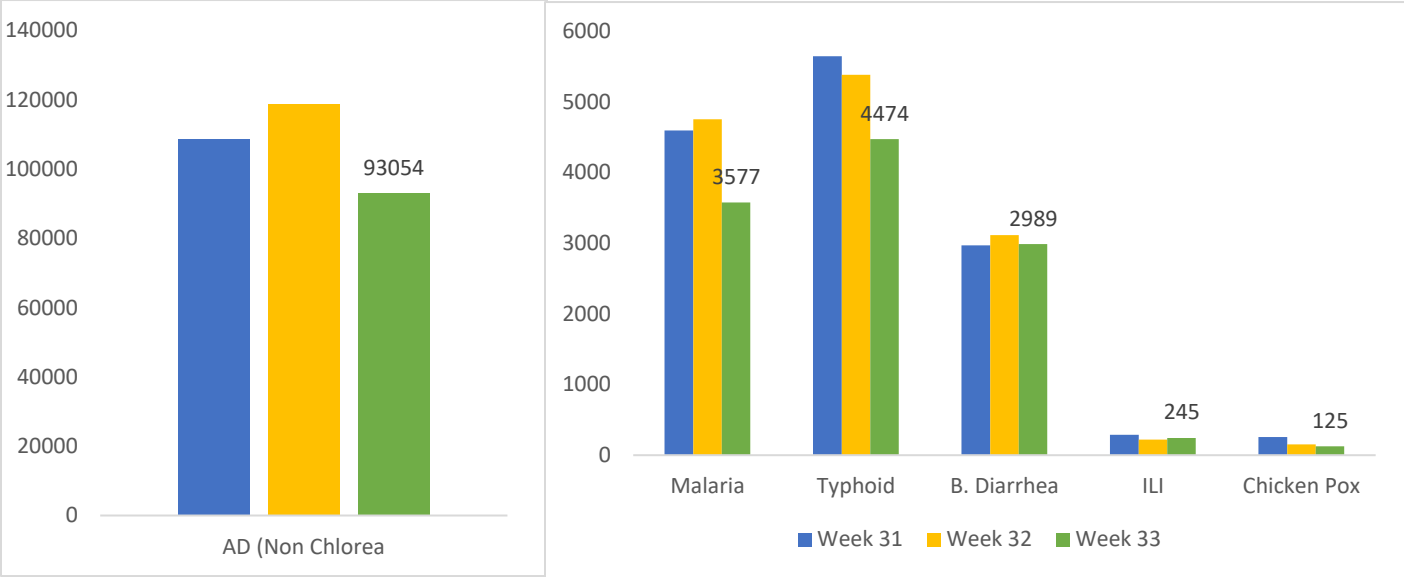


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 33

Diseases	Sindh	Balochistan	Punjab	KPK	ISL	Gilgit
Acute Watery Diarrhoea (S. Cholera)	0	-	-	0	-	-
Acute diarrhea(non-cholera)	1	-	0	-	-	-
Malaria	340	-	-	-	-	-
CCHF	-	5	-	0	-	-
Dengue	23	-	-	-	1	-
Acute Viral Hepatitis(A)	0	-	-	-	-	2
Acute Viral Hepatitis(B)	91	23	-	-	-	-
Acute Viral Hepatitis(C)	186	-	0	-	-	-
Acute Viral Hepatitis(E)	20	-	-	-	-	-
Typhoid	2	-	-	0	-	-
Covid 19	-	1	-	-	3	-

IDSR Reports Compliance

- Out OF 113 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 33

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	100	91%
	Bannu	92	92	74	80%
	Buner	34	34	27	79%
	Bajaur	44	44	30	68%
	Charsadda	61	61	54	89%
	Chitral Upper	33	33	9	27%
	Chitral Lower	35	35	33	94%
	D.I. Khan	89	89	71	80%
	Dir Lower	75	75	59	79%
	Dir Upper	55	55	28	51%
	Hangu	22	22	22	100%
	Haripur	69	69	60	87%
	Karak	34	34	34	100%
	Kohat	59	59	59	100%
	Kohistan Lower	11	11	11	100%
	Kohistan Upper	20	20	20	100%
	Kolai Palas	10	10	10	100%
	Lakki Marwat	49	49	49	100%
	Lower & Central Kurram	40	40	13	33%
	Upper Kurram	42	42	12	29%
	Malakand	42	42	34	81%
	Mansehra	133	133	69	52%
	Mardan	84	84	48	57%
	Nowshera	52	52	52	100%
	Peshawar	101	101	96	95%
	Shangla	36	36	6	17%
	Swabi	60	60	56	93%
	Swat	77	77	70	91%
	Tank	34	34	30	88%
	Torghar	11	11	11	100%
Azad Jammu Kashmir	Mirpur	37	37	36	100%
	Bhimber	20	20	19	95%
	Kotli	60	60	59	98%
	Muzaffarabad	43	43	43	100%
	Poonch	46	46	45	98%
	Haveli	34	34	33	97%
	Bagh	40	40	37	93%
	Neelum	39	39	36	92%
	Jhelum Vellay	29	29	28	97%
	Sudhnooti	27	27	25	93%
Islamabad Capital Territory	Jhelum Vellay	29	29	28	97%
	Sudhnooti	27	27	25	93%

Balochistan	Gwadar	24	24	19	79%
	Kech	78	44	18	41%
	Khuzdar	136	20	20	100%
	Lasbella	85	85	55	65%
	Pishin	118	23	9	39%
	Quetta	77	22	19	86%
	Sibi	42	42	16	38%
	Zhob	37	37	23	62%
	Jaffarabad	47	47	47	100%
	Naserabad	37	37	34	92%
	Kharan	32	32	26	81%
	Sherani	32	32	3	9%
	Kohlu	75	75	45	60%
	Chagi	35	35	21	60%
	Kalat	65	65	9	14%
	Harnai	18	18	16	89%
	Kachhi (Bolan)	35	35	11	31%
	Jhal Magsi	39	39	23	59%
	Sohbat pur	25	25	25	100%
	Surab	33	33	14	42%
	Mastung	45	45	45	100%
	Loralai	26	26	26	100%
	Killa Saifullah	31	31	27	87%
	Duki	31	31	30	97%
	Nushki	32	32	29	91%
	Dera Bugti	45	45	24	53%
	Washuk	25	25	7	28%
	Panjgur	38	38	7	18%
	Hub	33	33	33	100%
Gilgit Baltistan	Hunza	31	31	31	100%
	Ghizer	62	62	2	3%
	Gilgit	48	48	11	3%
	Diamer	79	79	3	4%
	Astore	53	53	5	9%
	Shigar	24	24	2	8%
Sindh	Hyderabad	71	71	24	34%
	Ghotki	65	65	64	98%
	Umerkot	98	43	42	98%
	Naushahro Feroze	68	68	61	90%
	Tharparkar	278	100	97	97%
	Shikarpur	60	60	60	100%
	Thatta	53	53	50	94%
	Larkana	67	67	66	99%
	Kamber Shadadkot	71	71	71	100%
	Karachi-East	14	14	14	100%
	Karachi-West	20	20	20	100%
	Karachi-Malir	37	37	25	68%
	Karachi-Kemari	17	17	13	76%
	Karachi-Central	11	11	11	100%

	Karachi-Korangi	18	18	14	78%
	Karachi-South	4	4	4	100%
	Sujawal	31	31	31	100%
	Mirpur Khas	104	104	84	81%
	Badin	124	124	105	85%
	Sukkur	64	64	64	100%
	Dadu	90	90	90	100%
	Sanghar	101	101	100	99%
	Jacobabad	43	43	42	98%
	Khairpur	168	168	166	99%
	Kashmore	59	59	59	100%
	Matiari	42	42	41	98%
	Jamshoro	70	70	65	93%
	Tando Allahyar	54	54	35	65%
	Tando Muhammad Khan	41	41	54	100%
	Shaheed Benazirabad	124	124	124	100%

Public Health bulletin Pakistan.

The Pakistan Public Health Bulletin made significant strides during the quarter in improving data reporting, dissemination of surveillance information, and audience engagement. These accomplishments will help to guarantee that the PHB remains a valuable resource for public health professionals and stakeholders in Pakistan.

Key Achievements

During the quarter, provincial surveillance teams received technical assistance to improve data reporting from district to provincial and national levels. A monitoring dashboard was implemented, utilizing historical data for trend analysis and alert indicators establishment. 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.

Provincial surveillance teams participated in regular teleconference sessions to strengthen their public health data analysis capabilities and effectively utilize Pakistan Public Health Bulletin (PHB) surveillance information at local and district levels. The PHB delivered timely, accurate, and relevant content, adhering to editorial standards in support of its mission. A comprehensive plan outlining strategy for audience engagement, retention, visibility expansion, and readership growth are being developed.

Effective collaboration with various stakeholders and partners facilitated the bulletin's broader reach and increased its impact. 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 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. The Pakistan Public Health Bulletin website was supervised and kept up-to-date.

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

Outbreak Investigation Report:

Outbreak Investigation Of Suspected Food Poisoning August,2023 Ali Pur Chatta Tehsil And Dist Gujranwala

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

Dr. Muhammad Mohsan Watto
Provincial Epidemiologist, Punjab
Dr. Aman
FETP- 15th cohort, Punjab

Introduction

An outbreak of suspected food poisoning occurred in Ali Pur Chatta Tehsil and District Gujranwala, Pakistan, in August 2023. The outbreak was reported on August 8, 2023, from a local manufacturing factory, and was highlighted over the local media. An investigation was initiated immediately. The objective of the investigation was to identify the source and cause of the outbreak, as well as to implement control measures to prevent further cases.

Methods

The investigation was conducted using the standard operating procedures for outbreak investigations. The following steps were taken:

1. Case identification: Cases were identified through reports from healthcare facilities and by contacting factory workers who ate breakfast at the factory mess on the given data. Out of 100 worker, A total of 70 cases were identified, with symptoms including vomiting, dizziness, nausea, and diarrhea.
2. Data collection: Information was collected from each case using a standardized questionnaire. The questionnaire included questions on demographics, symptoms, food history, and exposure to potential sources of infection.
3. Food history: A food history was taken from each case, focusing on foods consumed preceding the onset of symptoms. All cases reported consuming food from a factory mess located within the premises.

4. Environmental investigation: An environmental investigation was conducted at the factory to identify potential sources of contamination. The investigation found that the mess did not have proper food handling and storage practices, and the kitchen was not properly cleaned and maintained.
5. Laboratory testing: Food samples were collected from the factory mess and sent to a laboratory for testing. The results showed that the food samples were positive for E. coli and Salmonella.
6. Control measures: Based on the findings of the investigation, the following control measures were implemented:
    - The factory mess was closed temporarily for proper cleaning and disinfection.
    - Food handlers were trained on proper food handling and storage practices.
    - The factory was advised to improve their waste disposal practices.
    - Awareness campaigns were conducted in the community to educate residents on proper food handling and storage practices.

Results

The investigation found that the outbreak was caused by consumption of contaminated food from the factory mess. The food samples collected from the kitchen were positive for E. coli and Salmonella. The poor food handling and storage practices at the factory were identified as the likely source of contamination.

Conclusion

The outbreak of suspected food poisoning in Ali Pur Chatta Tehsil and District Gujranwala was caused by the consumption of contaminated food from the factory mess. The investigation highlighted the importance of proper food handling and storage practices in preventing foodborne illnesses. The control measures implemented were effective in containing the outbreak and preventing further cases. It is recommended that similar awareness campaigns be conducted in the future to educate food handlers and the community on proper food handling and storage practices.

Recommendations

- The following recommendations are made to prevent future outbreaks of foodborne illness:
- Food establishments should ensure proper food handling and storage practices.
- Regular inspections of food establishments should be conducted to ensure compliance with food safety regulations.
- Awareness campaigns should be conducted regularly to educate the community on proper food handling and storage practices.
- Food handlers should receive regular training on proper food handling and storage practices.

A note from Field Activities.

Measles Outbreak Investigation Report Uc Goor Tehsil Dhadhar District Kacchi, July 2023

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

Background

An outbreak of measles was reported in the village of Aeri UC Goor, Tehsil Dhadhar District Bolan, on July 1, 2023. The outbreak was first notified to the DHQ Hospital Sibi on June 29, 2023, when four suspected cases were reported. The Director General of Health Services (DGHS) and the Public Health Department of Sindh (PDSRU) immediately responded and formed a team of experts to investigate the situation.
The team included the following officers:

- Dr. Mudassir Ali Abro, FELTP Fellow, PDSRU
- Dr. Liaqat Ali Rind, District Health Officer (DHO), Kacchi
- Dr. Zahid Hussain, Deputy District Health Officer (DDHO), Kacchi
- Mr. Fazal Mohammad Barozai, District Surveillance Officer (DSV), Kacchi
- Mr. Bakshal Khan Soomro, Assistant Surveillance Officer (ASV), Kacchi

Objective

The objectives of the investigation were to identify and confirm cases of measles, determine the source of the outbreak, assess the magnitude of the outbreak, identify risk factors and the population at risk, monitor and evaluate the response, and make recommendations for prevention and control.

Methods

The team used the following methods to investigate the outbreak:

- Active case search: The team visited all households in the affected area and interviewed residents to identify suspected cases of measles.
- Laboratory testing: Blood samples were collected from suspected cases and sent to a laboratory for testing.
- Contact tracing: The team traced the contacts of all confirmed cases to identify other individuals who may have been exposed to the virus.
- Health education: The team conducted health education sessions in the affected community to raise awareness about measles and the importance of vaccination.

Findings

The investigation found that there were 13 clinically confirmed cases of measles in the affected area. The majority of the cases were children under the age of 5 years. The investigation also found that the following factors may have contributed to the outbreak:

- Low vaccination coverage: The vaccination coverage in the affected area was low, which made the community more vulnerable to the outbreak.
- Frequent travel: Many people in the affected community travel to and from Sibi and Jacobabad, which may have facilitated the spread of the virus.
- Poor hygiene: The investigation found that the sanitation conditions in the affected area were poor, which may have contributed to the spread of the virus.
- High temperature: The high temperature in the area may have also contributed to the spread of the virus.

Conclusion

The investigation team concluded that the measles outbreak in the village of Aeri UC Goor was likely caused by a combination of factors, including low vaccination coverage, frequent travel, poor hygiene, and high temperature.

Recommendation:

The team recommended the following measures to control the outbreak and prevent its further spread:

- Vaccination campaign: A vaccination campaign should be conducted in the affected area to ensure that all individuals receive the measles vaccine.
- Isolation of suspected cases: Suspected cases should be isolated immediately to prevent the spread of the virus.
- Contact tracing: Contact tracing should be conducted to identify all individuals who have been in close contact with the confirmed cases. These individuals should be monitored for symptoms and should receive the measles vaccine.
- Health education: Health education campaigns should be conducted to raise awareness about the importance of vaccination and the signs and symptoms of measles.

Note to editor.

Breastfeeding Week to Address Rising Cancer Cases in Mothers

Dr. Naveed Akhter Malik
Director, IRMNCH,
Rawalpindi

The Rawalpindi District Health Authority (DHA) is all set to hold a week-long campaign to raise awareness about the benefits of breastfeeding. The campaign, which will start on Monday, aims to address the 40% rise in cancer cases among women who do not breastfeed their children.

"Breastfeeding is not just good for babies, it's also good for mothers," said Dr. Naveed Akhter Malik, the coordinator of the maternal & child health program at the DHA. "Breastfeeding helps to protect mothers from diseases like breast cancer, ovarian cancer, and type 2 diabetes."

The campaign will be held at basic health units (BHUs), rural health centers, and teaching hospitals in all seven sub-districts of Rawalpindi. Mothers will be given brief sessions on the benefits of breastfeeding and how to do it properly. The DHA is also working with the government and the private sector to establish daycare centers for working mothers. These centers will provide mothers with a safe and convenient place to breastfeed their children.

"We want to make it as easy as possible for mothers to breastfeed their children," said Dr. Malik.

"We believe that breastfeeding is the best way to start a child's life."

The campaign is part of the DHA's efforts to improve the health of mothers and children in Rawalpindi. The DHA is also working to reduce infant mortality rates and improve access to quality healthcare.

The campaign is supported by the Punjab Caretaker Health Minister Dr. Jamal Nasir. He will inaugurate the campaign at a ceremony at the DHA office on Monday.

"I am proud to support this campaign," said Dr. Nasir. "Breastfeeding is a natural and healthy way to feed a baby. It is also good for the mother's health. I urge all mothers to breastfeed their children."

The campaign is a valuable initiative that will help to improve the health of mothers and children in Rawalpindi. I commend the DHA for their efforts and I urge all mothers to participate in the campaign.

Case- Report

Childhood Visceral Leishmaniasis: A Case Report

Dr. Rai Muhammad Asghar: Dean, Department of Pediatrics, Rawalpindi Medical University, Rawalpindi

Dr. Khalid Saeed Akhter:
Consultant Pediatrician
Dr. Muhammad Haris Rafiq
Surveillance Coordinator, Communicable diseases, DHA, Rawalpindi
Dr. Taiba Syed
Registrar Pediatrics, Holy Family Hospital, Rawalpindi

Introduction

Visceral Leishmaniasis, the most severe form of Leishmaniasis also known as kala-azar, is a life-threatening disease caused by a protozoan parasite of the genus Leishmania which are transmitted by female sandflies. Visceral Leishmaniasis causes fever, weight loss, spleen and liver enlargement, and, if not treated, death. It is endemic in various regions worldwide, including South Asia, Africa, and the Middle East. The disease is transmitted through the bite of an infected sand fly.

This report documents the case of a 4-year-old female child who was diagnosed with visceral Leishmaniasis at Rai Children Hospital Rawalpindi. She is resident of Village Chirala, Dir Kot, Azad Kashmir, but is currently in Gori Town, Islamabad for treatment.

Clinical Presentation

The child presented with a combination of symptoms, included fever, lethargy, pallor, and abdominal pain. She was underweight for her age, and her BMI and MUAC were also below the 3rd percentile. She also had other signs of malnutrition, such as fatigue, weakness, pale skin, diarrhea, and a distended abdomen. Her physical examination revealed pallor and hepatosplenomegaly. Her laboratory findings showed pancytopenia, hypochromia, micocytosis.

A bone marrow aspirate biopsy was performed, which confirmed the presence of both intracellular and extracellular amastigotes of Leishmania species. Amastigotes are the non-infectious form of the parasite that lives inside the cells of the host. The biopsy sample also revealed the presence of iron and haemophagocytes.

Family History

The child's father has been exposed to both subcutaneous and visceral Leishmaniasis in the neighborhood and family. A case of visceral Leishmaniasis was also reported in the family four years ago. However, there are no records of any cases within the child's own household.

Current Management

She is currently undergoing outpatient management and continues to reside at home. She is receiving a tailored treatment regimen to address the visceral Leishmaniasis infection, which consist of anti-parasitic medications, pentavalent antimonial and Liposomal amphotericin B. Regular follow-up appointments are essential to monitor her progress.

Discussion

The factors contributing to the dynamics of VL transmission within familial and community settings are complex and not fully understood. However, some of the factors that may play a role include:

The presence of infected sand flies: The sand fly is the vector for VL, and the presence of infected sand flies is a necessary condition for transmission of the disease.

The proximity of people to sand fly breeding sites: Sand flies breed in moist, shady areas, such as around water bodies, vegetation, and garbage dumps. People who live or work in close proximity to these areas are at increased risk of exposure to infected sand flies.

The lack of access to adequate sanitation: Poor sanitation can increase the risk of VL transmission by providing breeding sites for sand flies.

The lack of access to healthcare: People who do not have access to healthcare may not be diagnosed or treated for VL, which can lead to the spread of the disease.

The social and economic conditions: Poverty, malnutrition, and poor housing conditions can increase the risk of VL transmission.

Conclusion

This case report highlights the importance of understanding the factors that contribute to the dynamics of VL transmission within familial and community settings. Further research in this area is essential to develop effective strategies for prevention and control of the disease.

Knowledge Hub

Visceral leishmaniasis

Visceral leishmaniasis (VL) is a parasitic disease caused by the protozoan parasite Leishmania. It is also known as kala-azar, black fever, and dumdum fever. VL is endemic in various parts of the world, including South Asia, Africa, and the Middle East. The disease is transmitted through the bite of an infected sand fly.

The sand fly is a small, biting insect that is found in tropical and subtropical regions. The sand fly becomes infected with Leishmania when it bites an infected animal or person. When the sand fly bites a healthy person, it can transmit the parasite to the person.

The sand fly is most active at dusk and dawn, so people are at increased risk of being bitten during these times. The sand fly also bites indoors, so people who live in areas where VL is endemic should take precautions to avoid being bitten, such as using bed nets treated with insecticide, wearing protective clothing, and using insect repellent.

Life cycle of sand Fly: https://bioprocessintl.com/

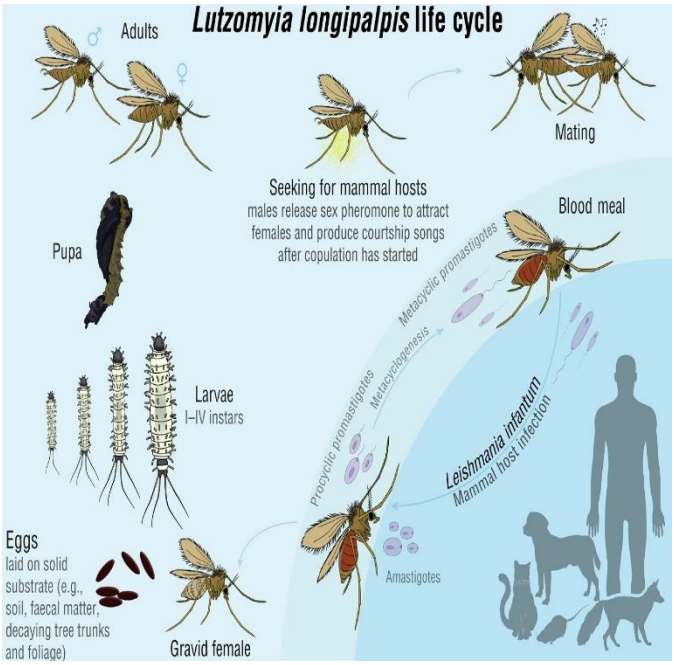
Symptoms

The symptoms of VL typically develop over a period of weeks or months. The most common symptoms include:

Fever: The fever is often irregular and may last for weeks or months.

Weight loss: People with VL often lose a significant amount of weight.

Enlarged spleen and liver: The spleen and liver are important organs that help to filter the blood and remove toxins. In VL, the spleen and liver can become



enlarged due to the presence of the parasite.

Anemia: Anemia is a condition in which the body does not have enough red blood cells. Red blood cells carry oxygen to the tissues, so anemia can cause fatigue, shortness of breath, and pale skin.

Fatigue: People with VL often feel tired and weak.

Weakness: People with VL may also experience weakness and muscle wasting.

Night sweats: Night sweats are a common symptom of VL. They occur when the body temperature rises during sleep.

Pale skin: The skin may become pale due to anemia.

Cough: A cough may develop due to fluid accumulation in the lungs.

Indigestion: Indigestion may occur due to damage to the liver.

If left untreated, VL can be fatal. However, with early diagnosis and treatment, the prognosis is good.

- *VL is more common in children and people with weakened immune systems.*
- *VL can be a chronic disease, meaning that it can last for months or years.*
- *VL can be fatal if left untreated.*
- *There is no vaccine for VL.*
- *VL is a neglected tropical disease, meaning that it receives less attention and funding than other diseases.*

Despite the challenges, there is hope for the future of VL. Continued research is ongoing, and new treatments and prevention strategies are being developed

Diagonosis:

The diagnosis of VL is made through a blood test or a biopsy of the bone, spleen or liver. The blood test looks for antibodies to the parasite. The biopsy is a more invasive procedure, but it can provide more definitive diagnosis.

Treatment

The treatment for VL depends on the severity of the disease. Mild cases can be treated with oral medications, such as miltefosine or liposomal amphotericin B. More severe cases may require hospitalization and intravenous treatment, such as amphotericin B or pentamidine.

Prevention.

There are a number of preventive measures that can be taken to reduce the risk of VL, including:

Avoiding contact with sand flies: This can be done by sleeping under a bed net treated with insecticide, wearing protective clothing, and using insect repellent.

Vector control: This involves reducing the number of sand flies in the environment. This can be done by spraying insecticides, removing breeding sites, and improving sanitation.

Community engagement: Active involvement of communities in planning and implementing prevention strategies is essential. Engaging communities helps in raising awareness, promoting behavior change, and ensuring sustainable preventive practices.

Research: Continued research is needed to develop new and imroved diagnostic tests, treatments, and vaccines for VL.

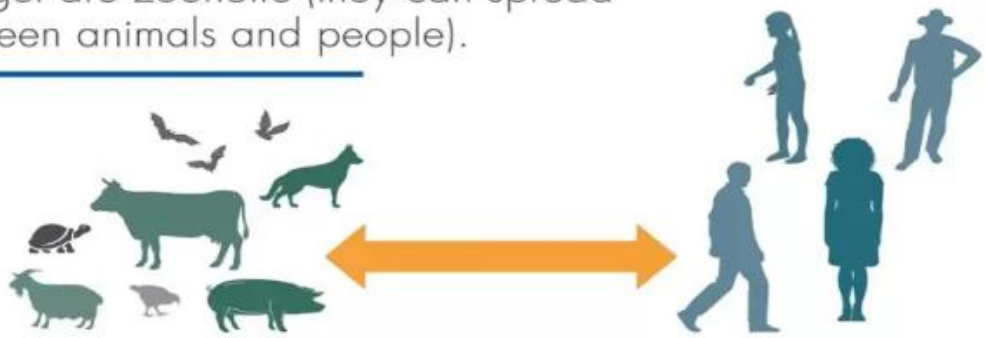
By working together, we can help to reduce the burden of VL and improve the lives of those affected by this disease.

PUBLIC HEALTH BULLETIN
PAKISTAN

ZOONOSES

INFECTIOUS DISEASES OF ANIMALS TRANSMISSIBLE TO HUMANS

More than half of all infections that people can get are zoonotic (they can spread between animals and people).



These factors make it easier for disease to spread between animals and people

These factors help in prevention and control of zoonotic diseases

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