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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.

Preface

Weekly Public Health Bulletin - Pakistan, Week 39, 2023

This bulletin provides a summary of the most significant public health events that occurred in Pakistan during Week 39 of 2023. The most frequently reported cases during this week were Malaria, Acute Diarrhea (Non-Cholera), Influenza-Like Illness (ILI), Acute Lower Respiratory Infection (ALRI) in children under 5 years of age, Bloody Diarrhea, Viral Hepatitis (B and C), Typhoid, Severe Acute Respiratory Infection (SARI), Dog Bite, and Acute Watery Diarrhea (AWD) (Suspected Cholera). While there was an overall decrease in the number of disease cases reported this week, Vaccine-Preventable Diseases (VPDs) continued to be reported from all parts of the country. It is important to note that all reported cases are suspected and require field investigation for verification.

Public health interventions and a multi-sectoral approach are essential to address this ongoing epidemic. VPDs are also on the rise in Pakistan, and field investigations are needed to verify these cases as well.

The Public Health Bulletin (PHB) team would like to express its sincere gratitude to all of the healthcare workers who have contributed to the reporting of these cases. Their work is essential in protecting 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 the diseases listed above.

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

Sincerely,
The Chief Editor

- *During week 39, 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 AWD (S. Cholera).*
- *There is an overall decrease in all disease cases reported this week however, Vaccine Preventable Diseases (VPDs) continued to be reported from all parts of the country. All are suspected cases and need field investigation for verification of cases.*

IDSR compliance attributes

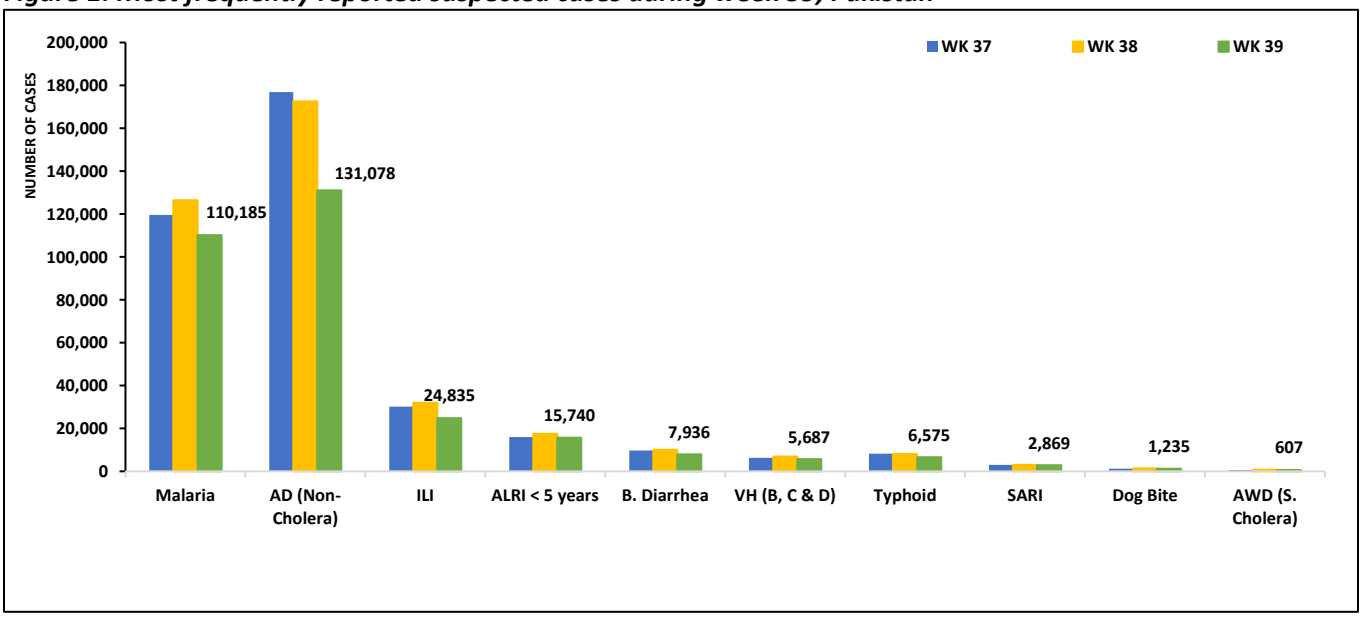
- *The national compliance rate for IDSR reporting in 121 implemented districts* is 75%
- *Sindh and AJK are the top reporting region with a compliance rate of 93% and 79% followed Khyber Pakhtunkhwa with 75%*
- *The lowest compliance rate was observed in ICT and Gilgit Baltistan.*

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	1776	1335	75
Azad Jammu Kashmir	375	295	79
Islamabad Capital Territory	27	4	15
Balochistan	1255	772	62
Gilgit Baltistan	479	165	34
Sindh	1857	1727	93
National	5769	4298	75

Table 1: Province/Area wise distribution of most frequently reported cases during week 39, Pakistan.

Diseases	AJK	Balochistan	GB	ICT	KP	Punjab	Sindh	Total
Malaria	110	9,765	1	8	6,221	3,069	91,001	110,175
AD (Non-Cholera)	1422	6,644	359	107	19,060	62,717	40,701	131,010
ILI	2,460	5,978	214	282	3,502	114	12,285	24,835
ALRI < 5 years	754	2353	156	0	1,297	NR	11180	15,740
B. Diarrhea	78	1667	38	1	1248	1,689	3215	7,936
VH (B, C & D)	10	34	0	0	157	NR	5,486	5,687
Typhoid	37	861	16	0	1,353	2,794	1514	6,575
SARI	309	842	134	0	1102	NR	482	2,869
Dog Bite	59	95	0	0	307	NR	774	1,235
AWD (S. Cholera)	63	245	34	0	153	NR	38	533
Mumps	81	65	24	0	129	NR	286	585
CL	0	154	0	0	294	32	10	490
AVH (A & E)	28	31	6	0	261	NR	116	442
Measles	7	29	1	0	168	NR	136	341
Dengue	12	3	0	2	157	NR	114	288
Gonorrhea	2	120	8	0	43	NR	22	195
Chickenpox/ Varicella	1	0	3	0	116	93	11	224
Meningitis	2	17	0	0	9	NR	87	115
Pertussis	10	58	1	0	8	NR	5	82
Syphilis	22	8	1	0	0	5	16	52
AFP	1	5	0	0	17	NR	15	38
HIV/AIDS	7	0	8	0	0	NR	18	33
NT	0	2	0	0	9	NR	13	24
Brucellosis	0	18	0	0	3	NR	0	21
VL	0	2	0	0	0	NR	0	2
Leprosy	0	2	0	0	0	NR	8	10
CCHF	0	0	0	0	0	NR	0	0
Chikungunya	0	0	0	0	0	NR	8	8
Diphtheria (Probable)	0	2	0	0	4	NR	0	6
Rubella (CRS)	2	0	0	0	0	NR	0	2
Anthrax	0	0	0	0	0	NR	0	0

Figure 1: Most frequently reported suspected cases during week 39, Pakistan



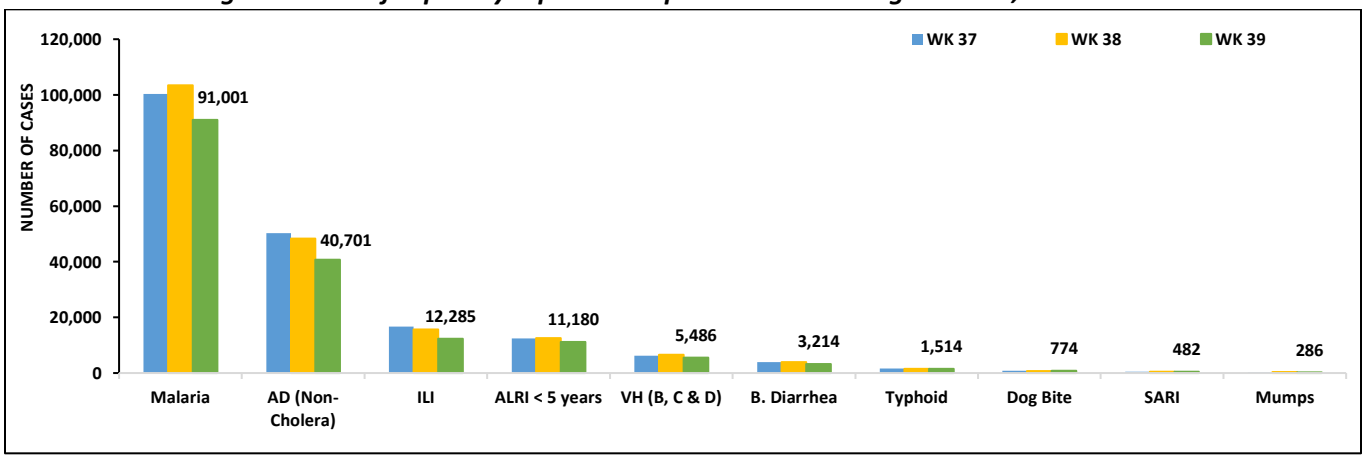
Sindh

- Malaria cases were most frequently reported followed by AD (Non-Cholera), ILI, ALRI<5 Years, VH (B, C, D), B. Diarrhea, Typhoid, dog bite, SARI and Mumps.
- There is an overall decline trend in cases for Malaria, ILI and AD this week.
- VH (B&C) cases reported in high numbers mostly from Sanghar, Khairpur and Mitiari. Field investigation is required to identify the source to control the spread of disease.
- Eighty-nine cases of Mumps reported from Tharparkar. Urgent investigation is required to verify the numbers to initiate response activities in the area.

Table 2: District wise distribution of most frequently reported suspected cases during week 39, Sindh

DISTRICTS	Malaria	AD (Non-Cholera)	ILI	ALRI < 5 years	VH (B, C & D)	B. Diarrhea	Typhoid	Dog Bite	SARI	Mumps
Badin	5,103	2,792	430	779	434	262	86	69	1	24
Dadu	6,447	2,831	162	1,289	7	418	181	0	50	12
Ghotki	1,917	798	0	448	424	85	0	0	0	0
Hyderabad	528	1,421	406	74	62	27	15	0	0	11
Jacobabad	3,626	1,229	138	1,300	214	120	6	58	27	9
Jamshoro	2,372	1,900	71	241	107	132	120	28	10	10
Kamber	9,484	2,632	2	459	342	198	36	0	16	0
Karachi Central	168	1,176	1,333	200	197	84	126	0	0	1
Karachi East	147	522	52	1	1	18	2	1	0	7
Karachi Keamari	7	313	213	43	0	0	1	0	0	0
Karachi Korangi	43	266	0	4	0	3	0	1	0	1
Karachi Malir	90	632	1,121	204	16	29	12	7	5	1
Karachi South	8	123	0	0	0	1	0	0	0	1
Karachi West	139	845	545	122	18	50	32	23	43	0
Kashmore	2,808	596	501	273	85	84	12	0	0	7
Khairpur	6,889	3,386	1,144	1,127	548	304	316	92	81	9
Larkana	15,264	2,327	2	437	84	438	14	0	0	2
Matiari	1,612	1,388	3	226	436	53	10	40	1	16
Mirpurkhas	4,186	2,020	2,161	411	136	74	35	22	0	8
Naushero Feroze	1,348	1,246	497	151	92	37	66	81	0	0
Sanghar	3,073	1,798	75	552	1,126	88	106	150	187	20
Shaheed Benazirabad	2,255	1,693	4	419	148	83	189	3	3	12
Shikarpur	4,508	1,451	1	174	105	163	3	147	1	6
Sujawal	3,700	1,127	0	415	235	10	37	25	42	0
Sukkur	4,583	1,428	1,545	403	247	151	6	0	0	8
Tando Allahyar	1,321	921	603	200	142	77	8	19	0	9
Tando Muhammad Khan	1,703	1,170	10	230	27	64	48	0	0	1
Tharparkar	2,603	1,048	1,266	538	55	83	33	2	13	89
Thatta	2,260	267	0	159	0	35	1	6	0	8
Umerkot	2,809	1,355	0	301	198	44	13	0	2	14
Total	91,001	40,701	12,285	11,180	5,486	3,215	1,514	774	482	286

Figure 2: Most frequently reported suspected cases during week 39, Sindh



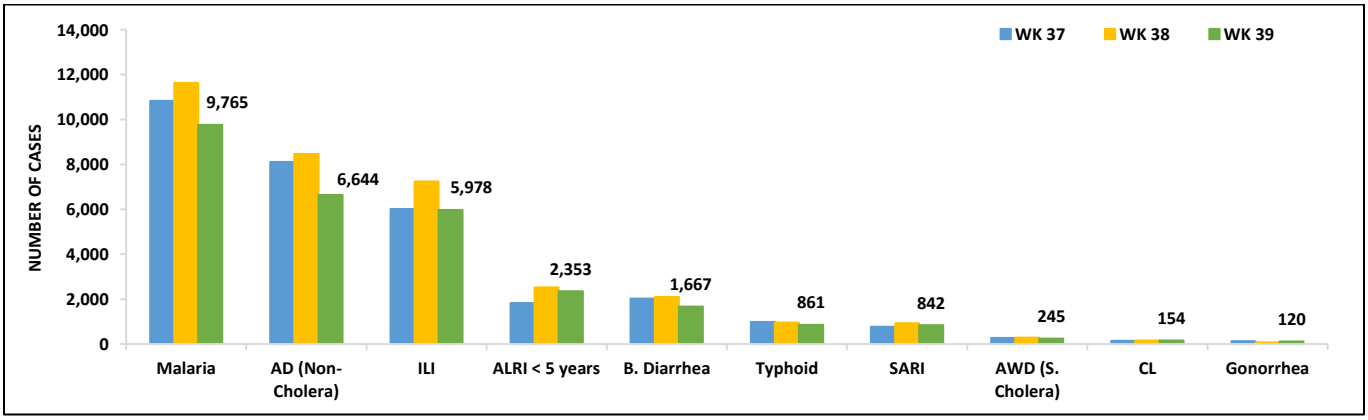
Balochistan

- Malaria, AD (Non-Cholera), ILI, ALRI <5 years, B. Diarrhea, Typhoid, SARI, AWD (S. Cholera), CL and Gonorrhea were the most frequently reported diseases from Balochistan province.
- Trend for all three diseases of ILI, AD and Malaria cases declined this week.
- Sibi and Chagai districts reported cases of AWD in increased numbers. All are suspected cases and need field investigation to verify the cases.
- SARI cases are reported from Kalat and Loralai. In lieu with recent surge in COVID-19 cases, an urgent field investigation is required

Table 3: District wise distribution of most frequently reported suspected cases during week 39, Balochistan

Districts	Malaria	AD (Non-Cholera)	ILI	ALRI < 5 years	B. Diarrhea	Typhoid	SARI	AWD (S. Cholera)	CL	Gonorrhea
Awaran	55	13	2	6	13	0	9	8	0	0
Barkhan	65	57	48	16	2	37	22	0	0	0
Chagai	0	148	270	0	45	8	0	23	0	0
Dera Bugti	326	54	20	31	37	13	25	2	0	0
Duki	105	104	99	18	113	19	33	39	4	0
Gwadar	282	234	456	26	44	40	NR	NR	NR	NR
Harnai	105	102	22	187	173	8	0	14	0	0
Hub	311	202	110	35	36	4	16	0	11	0
Jaffarabad	1,712	512	80	50	54	5	31	0	42	9
Jhal Magsi	487	367	121	54	7	0	0	2	1	0
Kachhi (Bolan)	1,019	768	735	116	15	92	144	42	3	0
Kalat	26	37	12	2	16	20	0	0	0	8
Kech (Turbat)	200	55	52	120	3	0	0	0	0	0
Kharan	45	159	294	4	66	6	0	3	0	5
Khuzdar	102	83	184	6	32	13	7	0	9	15
Killa Abdullah	0	12	1	7	2	3	2	5	0	0
Killa Saifullah	255	174	0	111	69	36	28	14	7	0
Kohlu	88	47	159	25	58	21	33	3	0	1
Lasbella	795	474	60	560	20	16	26	0	0	0
Loralai	105	249	390	69	88	34	119	3	0	3
Mastung	264	260	109	53	70	84	55	5	5	32
Naseerabad	397	183	0	24	15	42	0	0	1	0
Nushki	58	185	0	0	92	0	14	1	0	2
Panjgur	269	110	24	30	36	22	3	10	0	6
Pishin	8	65	207	21	74	14	0	0	18	0
Quetta	39	536	1,068	42	131	45	66	2	11	1
Sherani	12	21	35	0	12	2	1	0	4	2
Sibi	285	98	628	31	53	69	27	44	18	3
Sohbat pur	1,281	415	30	136	115	83	73	3	19	0
SURAB	103	34	144	0	6	77	8	0	0	17
Usta Muhammad	563	557	119	193	39	13	15	0	1	2
Washuk	88	82	190	0	49	1	27	0	0	14
Zhob	228	157	138	361	56	16	53	5	0	0
Ziarat	87	90	171	19	26	18	5	17	0	0
Total	9,765	6,644	5,978	2,353	1,667	861	842	245	154	120

Figure 3: Most frequently reported suspected cases during week 39, Balochistan



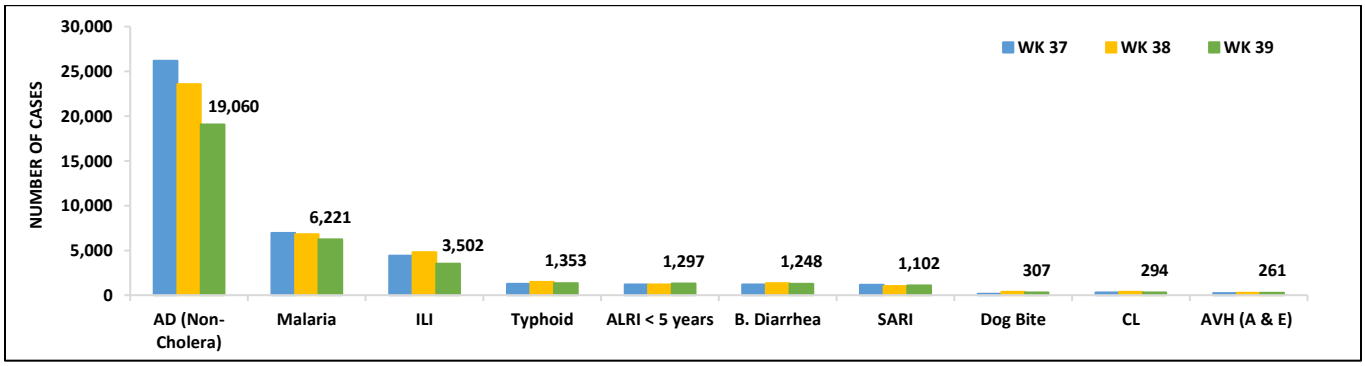
Khyber Pakhtunkhwa

- Cases of AD (Non-Cholera) were maximum followed by Malaria, ILI, Typhoid, ALRI<5 Years, B. Diarrhea, SARI, dog bite, CL and AVH (A&E).
- Malaria and ILI cases showed a decline trend this week.
- Upper Kurram, Mansehra and Peshawar districts reported SARI cases in high numbers. These are suspected cases and a field investigation is required to verify cases..

Table 4: District wise distribution of most frequently reported suspected cases during week 39, KP

Districts	AD (Non-Cholera)	Malaria	ILI	Typhoid	ALRI <5 Years	B. Diarrhea	SARI	Dog Bite	CL	AVH (A & E)
Abbottabad	478	4	17	11	11	2	16	2	0	0
Bajaur	177	115	12	0	12	22	3	0	2	0
Bannu	618	971	54	38	2	3	4	1	6	6
Battagram	239	154	521	0	0	0	0	4	0	5
Buner	342	325	0	10	48	0	0	0	0	0
Chitral Lower	301	25	73	9	16	30	39	12	5	6
Chitral Upper	119	8	8	20	8	5	9	0	1	7
D.I. Khan	994	582	10	1	10	15	41	4	3	0
Dir Lower	1,546	696	31	66	224	143	0	5	15	32
Dir Upper	662	19	12	14	26	27	0	0	4	6
Hangu	188	598	91	36	5	20	70	6	55	7
Haripur	1,023	66	429	39	302	7	4	0	0	23
Karak	278	281	2	1	11	0	0	22	50	0
Khyber	4	0	0	4	0	3	1	0	0	0
Kohat	53	39	0	0	1	0	1	3	8	0
Kohistan Lower	136	0	0	0	7	2	0	0	0	0
Kohistan Upper	300	9	75	53	1	37	45	0	0	0
Kolai Palas	58	3	0	0	0	6	0	0	0	0
L & C Kurram	9	11	73	3	0	5	0	0	0	0
Lakki Marwat	444	301	0	11	62	9	0	0	7	0
Malakand	736	76	0	30	41	81	0	0	3	40
Mansehra	209	14	134	27	25	8	151	111	0	4
Mardan	575	271	0	0	131	13	0	0	6	6
Mohmand	99	117	24	28	13	25	75	0	42	9
Nowshera	1,602	138	3	17	1	17	29	15	29	0
Peshawar	2,959	104	862	201	94	282	113	3	23	37
Shangla	96	133	0	12	6	0	0	7	0	3
SWA	189	129	133	124	55	214	88	17	17	25
Swabi	1,081	100	231	34	94	18	12	0	0	14
Swat	2,456	67	309	11	34	48	0	59	0	17
Tank	664	716	0	318	34	6	0	0	10	0
Tor Ghar	96	117	0	22	1	30	8	15	8	0
Upper Kurram	329	32	398	213	22	170	393	21	0	14
Total	19,060	6,221	3,502	1,353	1,297	1,248	1,102	307	294	261

Figure 4: Most frequently reported suspected cases during week 39, KP



ICT, AJK & GB

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

AJK: ILI cases were maximum followed by AD (Non-Cholera), ALRI <5 years, SARI, Malaria, Mumps. B. Diarrhea, AWD (S. Cholera), dog bite and Typhoid. Trend for ILI cases remained same whereas AD showed a downward trend in cases this week.

GB: AD (Non. Cholera) cases were the most frequently reported diseases followed by ILI, ALRI<5 years, SARI, B. Diarrhea, AWD, Mumps and Typhoid. There is a sharp decline trend in Ad cases this week.

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

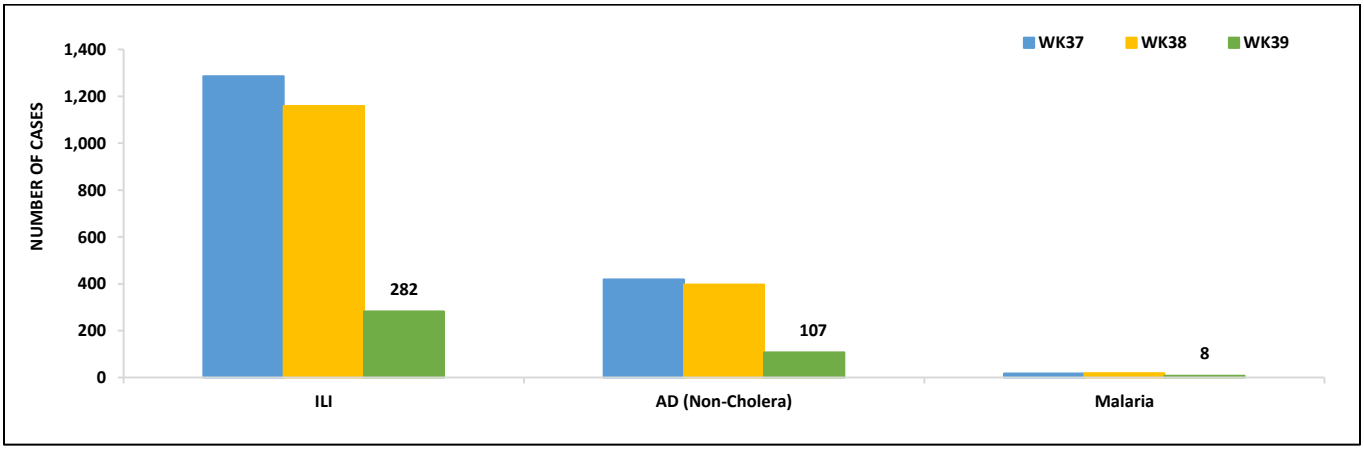


Figure 6: Week wise reported suspected cases of ILI, ICT

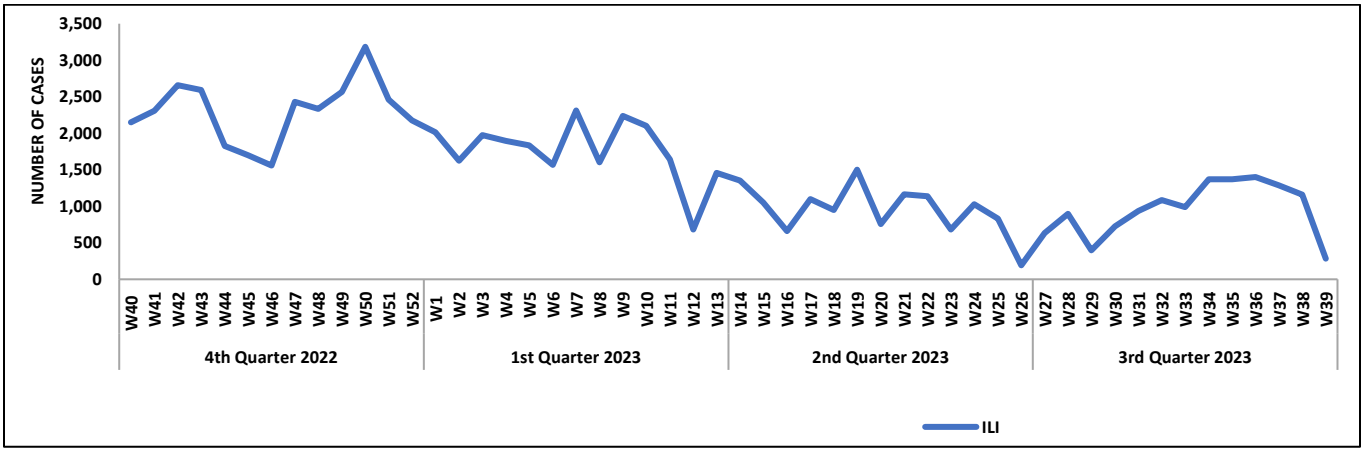


Figure 7: Most frequently reported suspected cases during week 39, AJK

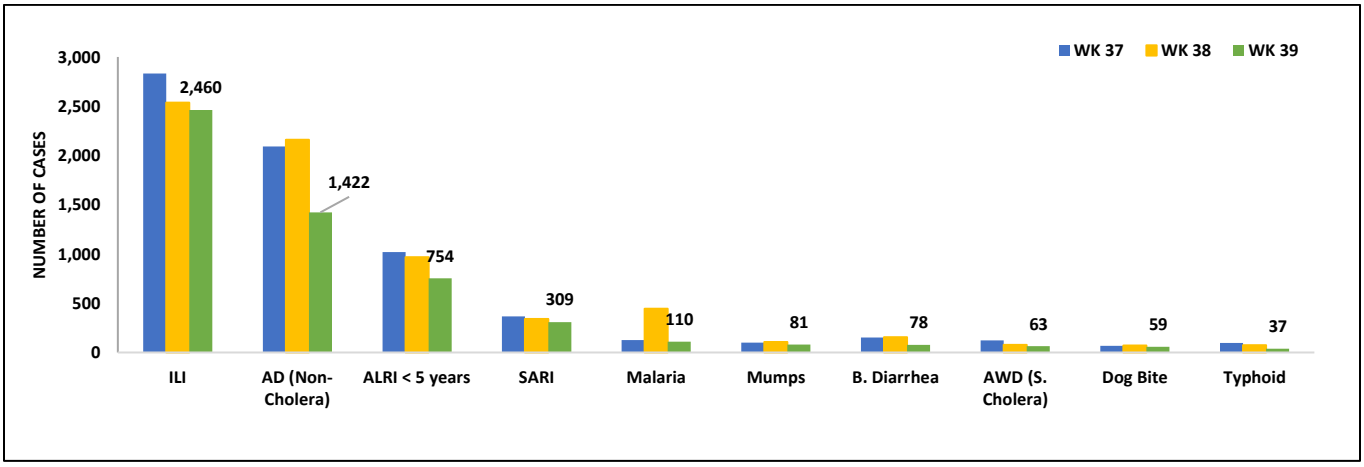


Figure 8: Week wise reported suspected cases of AD (Non-Cholera) and ILI, AJK

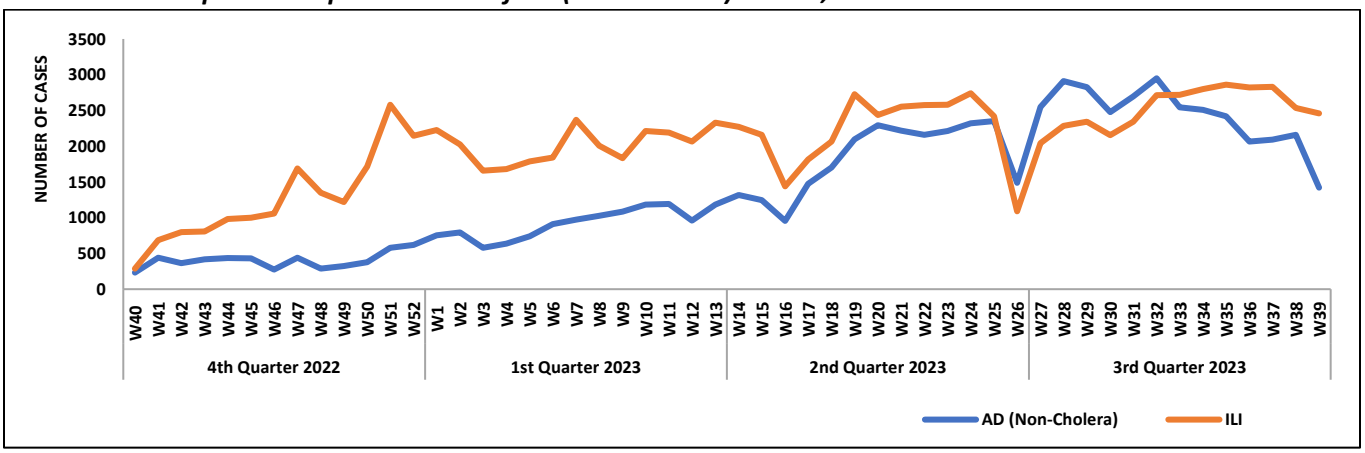


Figure 9: Most frequent cases reported during WK 39, GB

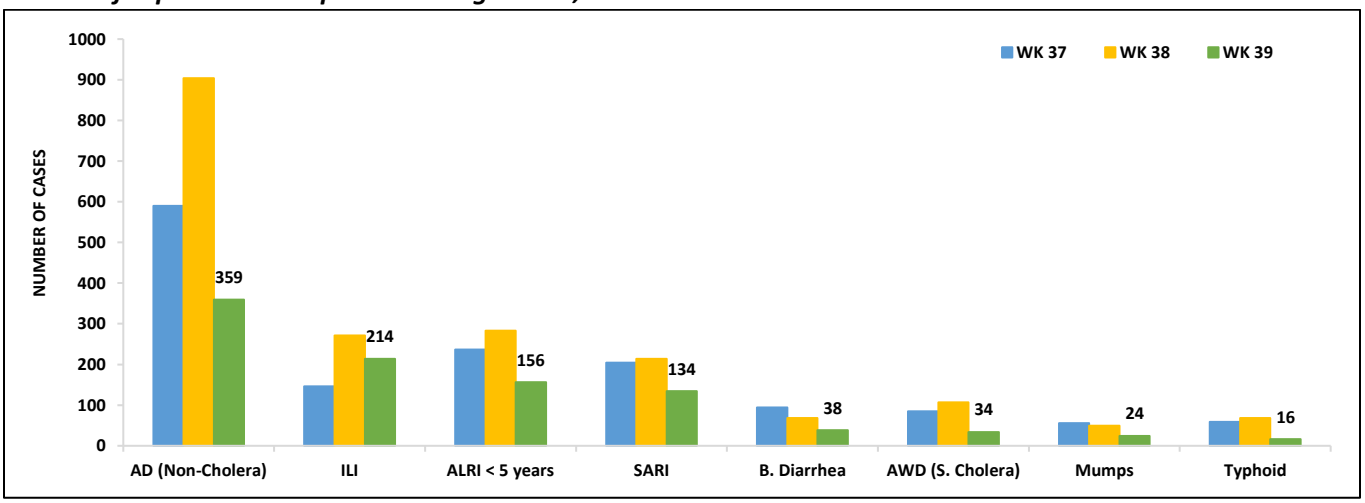
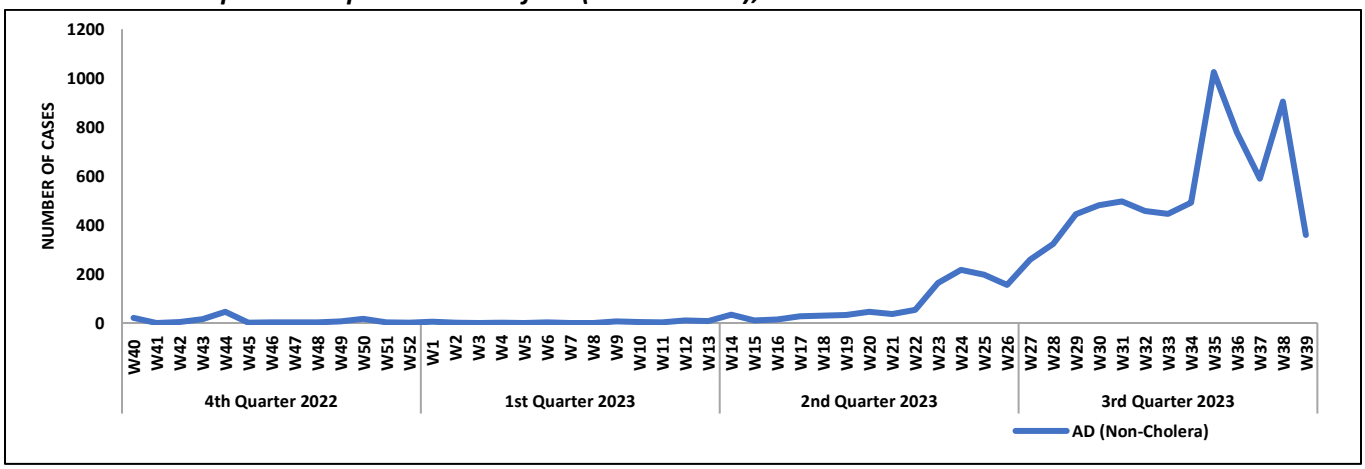


Figure 10: Week wise reported suspected cases of AD (Non-Cholera), GB



Punjab

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

Figure 11: District wise distribution of most frequently reported suspected cases during week 39, Punjab

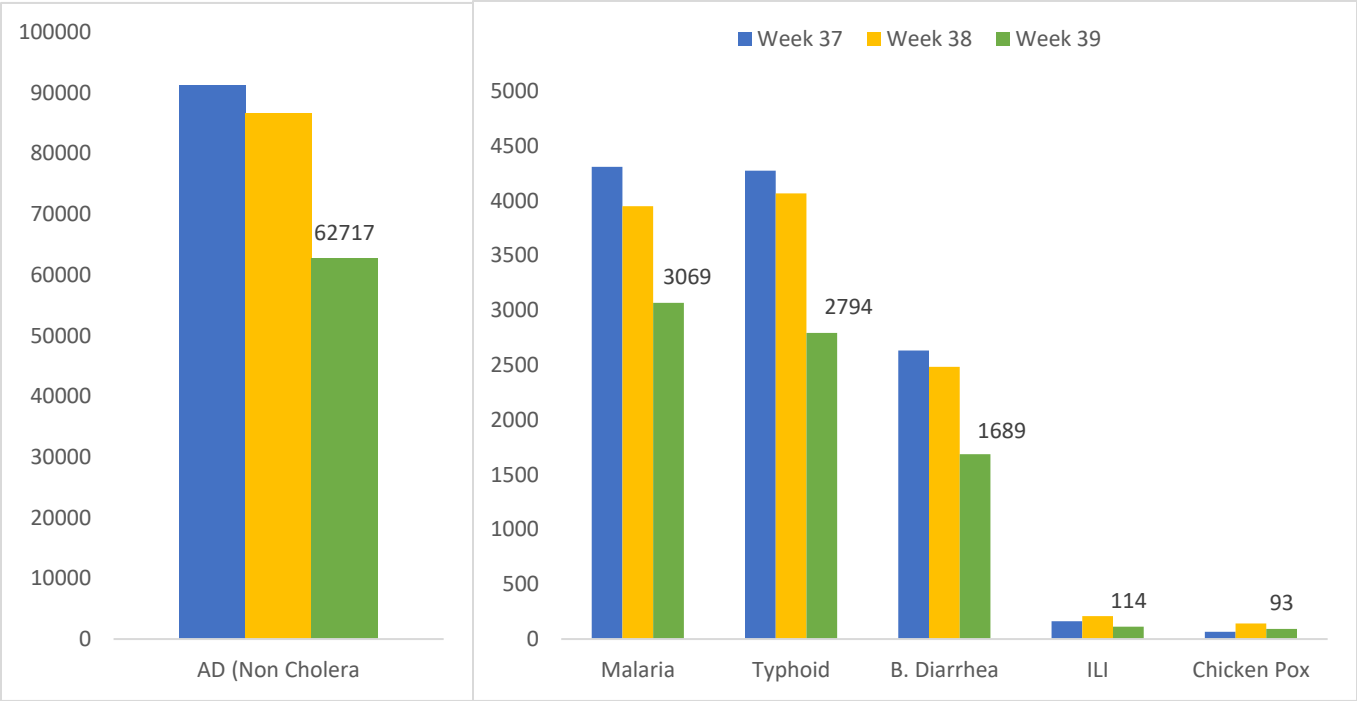


Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 39

Diseases	Sindh	Balochistan	Punjab	KPK	ISL	Gilgit
Acute Watery Diarrhoea (S. Cholera)	0	-	-	0	-	-
Acute diarrhea(non-cholera)	0	-	0	-	-	-
Malaria	242	-	-	2	0	-
CCHF	-	5	-	0	-	-
Dengue	16	0	-	5	-	46
MPOX	0	-	-	1	-	-
Acute Viral Hepatitis(B)	81	11	-	-	1	-
Acute Viral Hepatitis(C)	238	16	0	0	-	-
Acute Viral Hepatitis(E)	0	-	-	-	-	-
Typhoid	8	-	-	0	-	-
Covid 19	0	0	-	17	-	2
Tb	-	-	36	-	-	-

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 39

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%
	Battagram	43	43	24	0%
	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%
	Khyber	40	40	0	0%
	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%
	North Waziristan	21	21	0	0%
	Peshawar	101	101	120	119%
	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	36	97%
	Bhimber	20	20	15	75%
	Kotli	60	60	60	100%
	Muzaffarabad	43	43	43	100%
	Poonch	46	46	46	100%
	Haveli	34	34	0	0%
	Bagh	40	40	28	70%
	Neelum	39	39	39	100%
	Jhelum Vellay	29	29	1	3%
	Sudhnooti	27	27	27	100%

Islamabad Capital Territory	ICT	18	18	4	22%
	CDA	9	9	0	0%
Balochistan	Gwadar	24	24	19	79%
	Kech	78	44	6	14%
	Khuzdar	136	20	17	85%
	Killa Abdullah	50	32	0	0%
	Lasbella	85	85	55	65%
	Pishin	118	23	8	35%
	Quetta	77	22	19	86%
	Sibi	42	42	29	69%
	Zhob	37	37	29	78%
	Jaffarabad	47	47	15	57%
	Naserabad	37	37	27	81%
	Kharan	32	32	30	94%
	Sherani	32	32	4	13%
	Kohlu	75	75	20	27%
	Chagi	35	35	27	77%
	Kalat	65	65	17	26%
	Harnai	18	18	17	94%
	Kachhi (Bolan)	35	35	35	100%
	Jhal Magsi	39	39	23	59%
	Sohbat pur	25	25	25	100%
	Surab	33	33	21	64%
	Mastung	45	45	45	100%
	Loralai	33	33	30	91%
	Killa Saifullah	31	31	25	81%
	Ziarat	42	42	18	43%
	Duki	31	31	30	97%
	Nushki	32	32	30	94%
	Dera Bugti	45	45	22	49%
	Washuk	25	25	15	60%
	Panjgur	38	38	13	34%
	Awaran	23	23	3	13%
	Chaman	22	22	19	86%
	Barkhan	19	19	16	84%
	Hub	33	33	33	100%
	Usta Muhammad	34	34	30	88%
Gilgit Baltistan	Hunza	31	31	31	100%
	Nagar	6	6	0	0%
	Ghizer	62	62	3	5%
	Gilgit	48	48	40	83%
	Diamer	79	79	21	27%
	Astore	53	53	2	4%
	Shigar	24	24	17	71%
	Skardu	51	51	23	45%
	Ganche	79	79	12	15%
	Kharmang	46	46	16	34%
	Hyderabad	71	71	30	42%

Sindh	Ghotki	65	65	65	100%
	Umerkot	98	43	38	88%
	Naushahro Feroze	68	68	62	91%
	Tharparkar	278	100	100	100%
	Shikarpur	60	60	60	100%
	Thatta	53	53	51	96%
	Larkana	67	67	67	100%
	Kamber Shadadkot	71	71	71	100%
	Karachi-East	14	14	12	86%
	Karachi-West	20	20	20	100%
	Karachi-Malir	37	37	19	51%
	Karachi-Kemari	17	17	12	71%
	Karachi-Central	11	11	11	100%
	Karachi-Korangi	18	18	12	67%
	Karachi-South	4	4	4	100%
	Sujawal	54	54	49	91%
	Mirpur Khas	104	104	102	98%
	Badin	124	124	101	81%
	Sukkur	64	64	64	100%
	Dadu	90	90	89	99%
	Sanghar	101	101	94	93%
	Jacobabad	43	43	41	95%
	Khairpur	168	168	167	99%
	Kashmore	59	59	59	100%
	Matiari	42	42	42	100%
	Jamshoro	70	70	70	100%
	Tando Allahyar	54	54	50	93%
	Tando Muhammad Khan	41	41	41	100%
	Shaheed Benazirabad	124	124	124	100%

A note from Field Activities.

From the desk of Chief, CDC, NIH, Islamabad

Nipah Virus Outbreak in Region: Pakistan Must Remain Vigilant

Dr. Mumtaz Ali Khan
Chief, Center for Disease Control (CDC), Pakistan, National Institute of Health.

The National Institute of Health (NIH) of Pakistan is closely monitoring the recent outbreak of Nipah virus (NiV) in bordering country, where as of October 7, 2023, six cases and two deaths have been reported.

NiV is a highly contagious viral infection that can be transmitted to humans from animals (such as pigs and bats) or contaminated food, and can also be transmitted directly from human-to-human. There is no specific treatment or vaccine available for NiV.

While the overall risk of NiV occurrence in Pakistan is low, there are a number of factors that could allow NiV emergence, including:

- Evidence of the presence of the Pteropus giganteus species of fruit bats in Pakistan
- International travel
- Long border with India, where NiV outbreak has been documented

The NIH is urging authorities at entry points across the country to remain vigilant and is advising the public to take the following precautionary measures:

Be aware of the risk factors and mitigation measures for NiV

- Wash fruits thoroughly before consumption
- Avoid ingesting partly consumed fruits that may be contaminated with secretions from fruit bats
- Seek medical attention immediately if you experience any of the following symptoms: fever, headache, muscle pain, fatigue, nausea, vomiting, respiratory issues, confusion, seizures, or coma

Healthcare professionals are also advised to be aware of the signs and symptoms of NiV, obtain travel history when assessing patients, practice standard infection control precautions, and share suspected NiV case samples with the NIH.

The NIH is working closely with federal and provincial/regional health departments, points of entries (especially the airports under the Border Health Services), hospitals, clinicians, laboratory personals (public and private), and livestock and dairy departments to stay vigilant and notify the health authorities about any suspected case/event of NiV as per WHO case definition.

The NIH is committed to protecting the health of the Pakistani people and will continue to monitor the NiV situation closely and provide updates as needed.

The National Institute of Health (NIH) of Pakistan has issued a low-risk advisory as a precaution against the Nipah virus. The advisory can be accessed at the following link:

https://www.nih.org.pk/wp-content/uploads/2023/10/Nipah-Virus-Advisory-NIH.pdf

The advisory provides information on the Nipah virus, including its symptoms, transmission routes, and prevention measures. It also emphasizes that the risk of Nipah virus occurrence in Pakistan is low.

A note from Field Activities.

Measles Outbreak Investigation Report, District Peshawar, August 2023

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

Introduction

Measles is a highly contagious viral illness that can cause serious complications, including pneumonia and encephalitis. It is primarily transmitted through respiratory droplets produced when an infected person coughs or sneezes.

In August 2023, an outbreak of measles was identified in District Peshawar, Pakistan. This report summarizes the findings of the outbreak investigation and provides recommendations for prevention and control.

Methods

A cross-sectional study of cases registered on the line list from the Union Councils of District Peshawar was conducted to evaluate the frequency and distribution of the outbreak. Structured questionnaires were used to collect information on risk factors, including vaccination status, travel history, and contact with other cases. Laboratory reports and active interviews of cases were also used to collect data.

Community surveillance, including active case search and analysis of health-seeking behavior, was conducted at different health facilities. Interviews were also conducted of healthcare providers at community and public/private health facilities. Vaccination coverage surveys were conducted, and records were reviewed to verify the status of measles vaccine coverage in the community and among cases.

Findings

A total of 610 measles cases were reported in 74 Union Councils of District Peshawar from January to August 2023, with two deaths. Of the 610 cases, 322 (52%) were laboratory confirmed, 250 (41%) had classical clinical symptoms but were negative for measles virus, and 38 (6%) were epidemiologically linked to a laboratory-confirmed case.

The most affected age group was 0-59 months (89% of cases). Of the 610 cases, 150 (24.5%) were not eligible for measles vaccine, 280 (46%) were not vaccinated with any dose of measles vaccine, 101 (16.5%) received a single dose of measles vaccine, and 79 (13%) were fully vaccinated.

Conclusion

The measles outbreak in District Peshawar was caused by a combination of factors, including low vaccination coverage, lack of awareness about the disease, and poor record keeping.

Recommendations

To prevent and control future measles outbreaks, the following recommendations are made:

- Strengthen essential immunization to achieve the benchmark coverage of measles vaccine needed for elimination.
- Implement public health initiatives once an outbreak is confirmed in an area, such as explaining the mode of transmission, quarantine protocols, and the use of vitamin A to minimize complications.
- Notify District and UC level Risk Communication Committees for extensive awareness.
- Improve data maintenance and sharing from sentinel sites.
- Conduct quality SIAs/outbreak responses immediately after the confirmation of cases as per directed protocol.
- Validate and supervise monitoring of vaccinators during the immunization drive.

In addition to the above recommendations, it is also important to address the specific reasons why parents are reluctant to vaccinate their children. Once the reasons are identified, targeted interventions can be developed to address them. It is also important to improve the cold chain maintenance of measles vaccine samples to ensure that they are not damaged during transport and storage. Finally, vaccinators should be provided with training on outbreak response protocols and how to identify and report suspected cases of measles.

Letter to the Editor:

Successful Completion of the National Immunization Day (NID) October 2023 Anti-Polio Campaign in District Rawalpindi

Mr. Muhammad Nadeem
District Superintendent Vaccination
DHA, Rawalpindi

Dr. Ehsan Ghani
District health Officer (Preventive Services)
DHA, Rawalpindi

The National Immunization Day (NID) October 2023 anti-polio campaign in District Rawalpindi was a resounding success, with 1,044,279 doses of polio vaccine administered to children under

the age of five. This represents a 103% coverage of the total target where as many as 776,778 (98.2%) children were covered at the household level.

The campaign was conducted on October 2023, and involved over 3000 vaccinators and support staff. The vaccinators went door-to-door to ensure that all eligible children were vaccinated. In addition, fixed vaccination booths were set up at major public places, such as bus terminals, railway stations, and markets.

The success of the campaign is a testament to the hard work and dedication of the vaccinators and support staff, as well as the cooperation of the community. The high coverage rate achieved reflects the commitment of the Government of Pakistan and the people of Rawalpindi to eradicating polio.

The success of the campaign is especially noteworthy in light of the recent detection of poliovirus in environmental samples in Rawalpindi, as it is important to remember that the fight against polio is not yet over. The recent detection of poliovirus in environmental samples in Rawalpindi serves as a reminder that the virus is still circulating in the environment and that children are at risk of infection.

The success of the NID October 2023 anti-polio campaign in District Rawalpindi is a step in the right direction. However, it is important to remain vigilant and continue to vaccinate all eligible children against polio. This is essential to ensuring that all children are protected from this preventable disease.

In addition to the above, I would like to add that the NID October 2023 anti-polio campaign in District Rawalpindi was also successful due to the following factors:

- Strong leadership and coordination from the government: The Government of Punjab played a critical role in planning and executing the NID October 2023 anti-polio campaign. The government provided the necessary resources and support to ensure that the campaign was a success.
- Effective public awareness and mobilization: The government and its partners conducted a comprehensive public awareness and mobilization campaign to encourage parents to bring their children for vaccination. This campaign resulted in high community acceptance of the polio vaccine.
- Strong collaboration with partners: The Government of Pakistan worked closely with a variety of partners, including the World Health Organization (WHO), the United Nations Children's Fund (UNICEF), and non-governmental organizations (NGOs), to implement the NID October 2023 anti-polio campaign. This collaboration helped to ensure that the campaign reached all eligible children.

Pakistan Public Health Bulletin (PHB)

Pakistan Public Health Bulletin (PHB) Achieves Significant Progress

The Pakistan Public Health Bulletin (PHB) has 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.

The PHB is a monthly publication that provides timely and relevant information on public health trends, emerging risks, and best practices. It is a critical tool for public health professionals, policymakers, and other stakeholders who are working to improve the health of the Pakistani people.

In recent months, the PHB has taken a number of steps to improve its quality and impact. These steps include:

- Strengthening data reporting and analysis: The PHB has worked with key stakeholders to develop and implement new data reporting and analysis tools. This has resulted in more timely and comprehensive data on public health trends and risks.
- Improving surveillance information dissemination: The PHB has developed new and innovative ways to disseminate surveillance information to a wider audience. This includes the development of interactive dashboards, infographics, and social media campaigns.

- Engaging with stakeholders: The PHB has increased its engagement with stakeholders by conducting regular surveys and focus groups. This feedback has been used to improve the content and format of the PHB.

The PHB's achievements in these areas are significant. By improving data reporting, surveillance information dissemination, and audience engagement, the PHB is better positioned to support public health professionals and stakeholders in their efforts to improve the health of the Pakistani people.

Knowledge Hub

Nipah Virus Infection: A Zoonotic Disease on the Rise

Introduction

Nipah virus NiV is a highly contagious zoonotic virus that can cause severe respiratory and neurological illness in both animals and humans. The virus was first identified in 1999 during an outbreak of encephalitis among pig farmers in Malaysia. NiV is a member of the genus Henipavirus within the family Paramyxoviridae, which also includes Hendra virus and Cedar virus.

Etiology

NiV is a single-stranded RNA virus. The virus is thought to have originated in bats, and fruit bats of the genus Pteropus are the natural reservoir hosts. NiV can be transmitted to humans from bats through contact with their urine, saliva, or birthing fluids. The virus can also be transmitted to humans from infected animals, such as pigs and horses. Human-to-human transmission of NiV is also possible, but it is less common.

Reservoir

The natural reservoir host of NiV is fruit bats of the genus Pteropus. These bats are found in many parts of Asia, including Bangladesh, India, Malaysia, and the Philippines. NiV can also be found in pigs and horses, but these animals are considered to be intermediate hosts.

Mode of infection

NiV can be transmitted to humans through a number of different routes, including:

- Contact with bat urine, saliva, or birthing fluids
- Contact with infected animals, such as pigs and horses
- Consumption of contaminated food or water
- Human-to-human transmission (less common)

Clinical manifestations

The incubation period for NiV infection is typically 4-14 days. The clinical manifestations of NiV infection can vary in severity, but they typically include the following:

- Fever
- Headache
- Muscle pain
- Fatigue
- Nausea and vomiting
- Respiratory problems
- Confusion
- Seizures
- Coma

In severe cases, NiV infection can be fatal.

Management

There is no specific treatment for NiV infection. Treatment is supportive and includes measures such as intravenous fluids, respiratory support, and medication to control fever and seizures.

Mortality

The mortality rate for NiV infection is estimated to be between 40% and 70%. However, the mortality rate can vary depending on the outbreak and the population affected.

Prevention and control

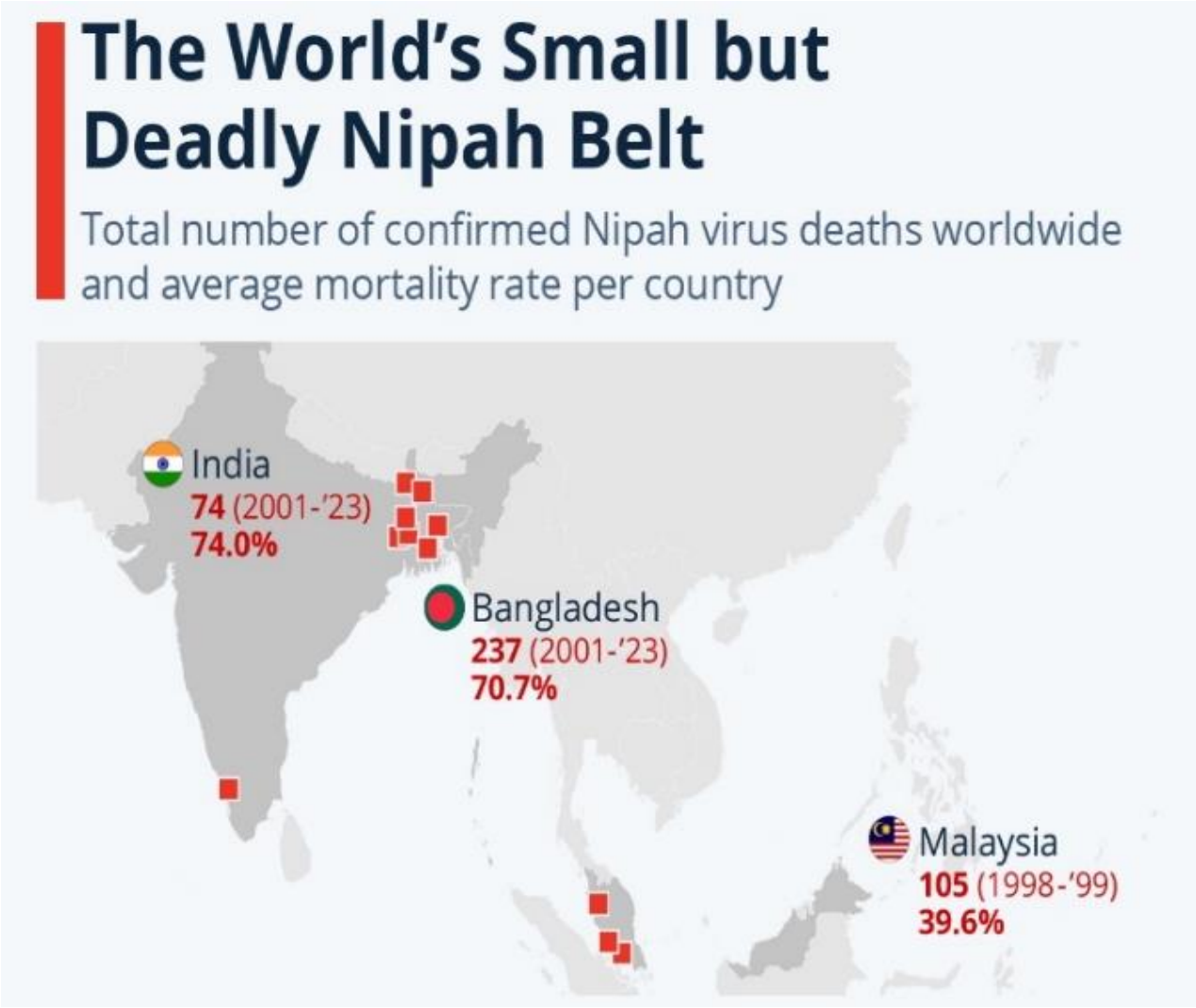
The best way to prevent NiV infection is to avoid contact with bats and infected animals. Other preventive measures include:

- Washing fruits thoroughly before consumption
- Avoiding ingesting partly consumed fruits that may be contaminated with bat secretions
- Cooking meat thoroughly
- Practicing good hygiene, such as washing hands frequently

In areas where NiV outbreaks have occurred, public health measures such as contact tracing and quarantine may be implemented to help control the spread of the virus.

Conclusion

Nipah virus infection is a serious public health threat. The virus is highly contagious and can cause severe illness in both animals and humans. There is no specific treatment for NiV infection, and the best way to prevent infection is to avoid contact with bats and infected animals.



https://www.statista.com/chart/30873/nipah-virus-deaths-worldwide

Know the deadly NIPAH VIRUS

Nipah virus infection is an emerging bat-borne zoonotic disease transmitted to humans through infected animals (such as bats and pigs) or food contaminated with saliva, urine, and excreta of infected animals

Nipah virus infection in humans causes a range of clinical presentations, from asymptomatic infection (subclinical) to acute respiratory infection and fatal encephalitis

The virus has not yet been reported in Pakistan
Please remain calm and take precautions.
These preventive steps will protect you against the fatal Nipah virus.

Public Health Bulletin-Pakistan

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