PUBLIC HEALTH BULLETIN-PAKISTAN

# Vol. 4 27th 34 Week 42 Oct 2024 94 **Integrated Disease Surveillance** & Response (IDSR) Report

**Center of Disease Control** National Institute of Health, Islamabad A KISTAN

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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.





Overview	
IDSR Reports	Public Health Bulletin - Pakistan, Week 42, 2024
Ongoing Events	Evolving from a basic disease registry, Pakistan's Public Health Bulletin has become an indispensable tool for safeguarding public
Field Reports	health. By meticulously tracking disease trends, the Bulletin serves as an early warning system, enabling timely interventions to prevent outbreaks.
	– Beyond data compilation, this week's bulletin also includes information on NIH hosted a National Co-ordination Meeting for AMR Surveillance System, Outbreak Investigation of Acute Viral Hepatitis, , and a knowledge review on SARIs.

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Sincerely, The Chief Editor







### Overview

- During week 42, the most frequently reported cases were of Acute Diarrhea (Non-Cholera) followed by Malaria, ILI, TB, ALRI <5 years, dog bite, B. Diarrhea, VH (B, C & D), Typhoid and SARI. Respective DHOs should promote WASH practices, implement vector control measures, conduct awareness campaigns and continue robust surveillance to monitor disease trends and identify outbreaks promptly.
- Twenty-five cases of AFP reported from KP, twelve from Punjab, nine from Sindh and five from AJK. Six suspected cases of HIV/ AIDS reported from Punjab and Sindh each and five from KP. Two suspected cases of Brucellosis reported from KP.
- Provincial Disease Surveillance and Response Unit (PDSRUs) should coordinate with respective DHOs to conduct thorough field investigations to verify suspected cases and collect epidemiological data. Ensure timely laboratory testing to confirm diagnoses. Identify and monitor contacts of confirmed cases to prevent further transmission.

### **IDSR compliance attributes**

- The national compliance rate for IDSR reporting in 158 implemented districts is 82%
- Gilgit Baltistan and AJK are the top reporting regions with a compliance rate of 100% and 96%, followed by Sindh 95% and ICT 77%
- The lowest compliance rate was observed in Balochistan i.e. 70%.

Region	Expected Reports	Received Reports	Compliance (%)
Khyber Pakhtunkhwa	2330	1690	73
Azad Jammu Kashmir	382	364	96
Islamabad Capital Territory	36	28	77
Balochistan	1291	879	70
Gilgit Baltistan	374	374	100
Sindh	2086	1972	95
National	6499	5304	82









Diseases	AJK	Balochistan	GB	ICT	КР	Punjab	Sindh	Total
AD (Non-Cholera)	1,389	5,919	1,221	308	20,630	79,111	44,716	153,294
Malaria	6	6,499	0	1	7,968	3,732	82,761	100,967
ILI	2,307	6,012	409	1,688	4,743	0	31,456	46,615
TB	63	174	60	4	501	10,111	12,910	23,823
ALRI < 5 years	1,049	1,763	858	5	1,380	1,183	11,702	17,940
Dog Bite	138	222	8	0	541	3,929	2,252	7,090
B.Diarrhea	52	1,335	59	1	1,172	908	3,467	6,994
VH (B, C & D)	21	198	6	0	637	0	6,024	6,886
Typhoid	13	635	58	3	726	2,525	1,274	5,234
Dengue	17	11	71	19	389	2,261	314	3,082
SARI	266	588	271	1	1,458	0	177	2,761
AWD (S. Cholera)	54	202	36	0	63	1,345	8	1,708
AVH (A&E)	22	13	0	0	297	0	528	860
Chikungunya	0	3	0	0	0	1	531	535
Measles	13	8	3	3	175	235	40	477
CL	0	143	0	0	159	2	0	304
Mumps	6	64	4	0	91	0	111	276
Chickenpox/Varicella	13	5	14	3	54	3	11	103
Meningitis	11	0	0	0	10	69	13	103
Gonorrhea	0	66	0	0	5	0	14	85
Pertussis	0	55	1	0	4	0	0	60
AFP	5	0	0	0	25	12	9	51
Diphtheria (Probable)	0	10	0	0	6	6	6	28
Syphilis	0	9	0	0	0	0	11	20
HIV/AIDS	0	0	0	0	5	6	6	17
NT	0	0	0	0	16	0	0	16
Leprosy	0	10	0	0	0	0	6	16
VL	0	3	0	0	0	0	8	11
Brucellosis	0	0	0	0	2	0	0	2

### Table 1: Province/Area wise distribution of most frequently reported suspected cases during Week 42, Pakistan.

### Figure 1: Most frequently reported suspected cases during Week 42, Pakistan.











### Sindh

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

Districts	Malaria	AD (Non- Cholera)	ILI	тв	ALRI < 5 years	VH (B, C & D)	B. Diarrhea	Dog Bite	Typhoid	AVH (A&E)
Badin	4,382	2,506	653	877	642	381	236	86	88	0
Dadu	5,151	2,446	166	668	1,024	53	449	255	128	0
Ghotki	3,283	1,225	132	323	513	382	81	202	0	0
Hyderabad	889	1,699	2,250	128	135	54	0	0	15	0
Jacobabad	1,316	900	715	144	419	277	173	136	40	0
Jamshoro	3,235	1,915	149	528	381	188	87	46	57	0
Kamber	6,573	2,145	0	865	269	189	153	102	19	0
Karachi Central	105	1,404	2,562	275	41	43	12	1	175	449
Karachi East	112	377	402	6	26	1	6	13	1	8
Karachi Keamari	31	347	249	14	109	0	2	0	9	0
Karachi Korangi	49	335	0	17	5	0	1	0	1	16
Karachi Malir	682	1,668	3,932	182	364	67	62	47	40	52
Karachi South	52	64	6	0	0	0	0	0	0	6
Karachi West	240	916	1,371	123	308	129	35	49	33	0
Kashmore	2,136	568	743	362	216	29	91	151	13	0
Khairpur	7,235	2,798	6,251	1,130	1,255	255	375	159	206	0
Larkana	9,558	2,001	5	1,046	487	104	368	35	20	0
Matiari	2,391	1,484	1	550	375	380	73	47	11	0
Mirpurkhas	4,857	2,336	4,479	649	676	125	94	32	14	0
Naushero Feroze	2,748	1,497	1,206	570	434	38	130	180	114	0
Sanghar	4,494	2,070	59	1,170	473	1,417	84	189	39	0
Shaheed Benazirabad	2,405	1,827	10	377	236	109	75	83	98	0
Shikarpur	3,581	1,327	6	363	227	1,024	189	168	5	0
Sujawal	1,333	2,076	0	196	274	52	81	36	6	0
Sukkur	3,650	1,248	1,759	619	622	69	166	87	31	0
Tando Allahyar	3,361	1,213	987	502	229	325	136	40	20	0
Tando Muhammad Khan	1,301	963	0	468	165	59	73	0	2	0
Tharparkar	3,601	2,031	1,371	381	783	149	101	0	43	0
Thatta	1,597	1,699	1,992	31	540	96	75	108	17	0
Umerkot	2,413	1,631	0	346	474	29	59	0	29	0
Total	82,761	44,716	31,456	12,910	11,702	6,024	3,467	2,252	1,274	531

#### Table 2: District wise distribution of most frequently reported suspected cases during Week 42, Sindh

Figure 2: Most frequently reported suspected cases during Week 42 Sindh











## Balochistan

- Malaria, ILI, AD (Non-Cholera), ALRI <5 years, B. Diarrhea, Typhoid, SARI, dog bite, AWD (S. Cholera) and VH (B, C & D) cases were the most frequently reported diseases from Balochistan province.
- Malaria cases are mostly reported from Jaffarabad, Jhal Magsi and Lesbella while ILI cases are mostly reported from Quetta, Jhal Magsi and Kharan.
- Malaria, ILI, AD (Non-Cholera), ALRI <5 years, B. Diarrhea, Typhoid, SARI, dog bite and AWD (S. Cholera) cases showed a decreasing trend this week.

### Table 3: District wise distribution of most frequently reported suspected cases during Week 42, Balochistan

	AD (Non-			В.	ALRI < 5			AWD		~
Districts	Cholera)	Malaria	ILI	Diarrhea	years	Typhoid	SARI	(S.Cholera)	ТВ	CL
Barkhan	112	51	70	32	12	28	2	10	0	0
Chagai	112	366	204	0	70	20	0	2	13	0
Chaman	6	113	79	75	25	4	29	0	7	0
Dera Bugti	189	55	90	48	28	8	9	0	0	0
Duki	37	72	111	10	33	7	19	7	0	0
Gwadar	15	8	14	13	12	3	0	0	0	1
Harnai	84	31	81	170	64	1	0	4	8	1
Hub	173	69	88	3	18	2	0	0	0	0
Jaffarabad	1,062	122	414	25	59	21	15	25	0	42
Jhal Magsi	760	599	258	133	4	37	0	21	0	0
Kalat	47	2	31	4	15	30	3	0	0	0
Kharan	103	457	153	0	64	1	0	0	3	0
Khuzdar	268	449	339	3	142	42	37	5	11	0
Killa Abdullah	15	106	73	4	24	51	27	8	4	0
Killa Saifullah	102	0	147	85	37	5	0	0	0	0
Kohlu	189	410	179	16	102	48	68	2	4	4
Lasbella	719	79	409	87	38	20	0	21	0	2
Loralai	25	243	103	29	18	4	56	0	0	0
Mastung	285	140	181	80	42	50	64	15	4	38
Musakhel	219	49	53	23	17	16	14	4	18	6
Naseerabad	453	59	325	36	20	74	1	72	13	91
Nushki	17	29	188	0	39	0	0	0	0	0
Panjgur	231	139	257	103	72	13	17	0	23	0
Pishin	53	336	238	64	106	24	23	13	65	0
Quetta	60	929	555	120	57	53	58	0	6	7
Sherani	9	72	17	0	7	7	30	0	6	0
Sibi	60	151	59	1	2	14	16	0	6	0
Sohbat pur	435	35	288	130	57	23	18	7	0	6
Surab	39	153	71	20	0	0	3	0	0	0
Usta Muhammad	312	151	542	192	50	12	2	5	11	0
Washuk	191	326	196	1	74	9	12	1	0	0
Zhob	117	211	106	256	27	8	65	0	0	0
Total	6,499	6,012	5,919	1,763	1,335	635	588	222	202	198













KPK<sup>•</sup> Cases of AD (Non-Cholera) were highest followed by Malaria, ILI, SARI, ALRI<5 Years, B. Diarrhea, Typhoid, VH (B, C & D), dog bite and TB. AD (Non-Cholera), ILI, SARI, ALRI<5 Years, B. Diarrhea, VH (B, C & D), dog bite and TB cases showed an increasing trend this week.

- Twenty-five cases of AFP, Five suspected cases of HIV/ AIDS, Two suspected cases of Brucellosis reported from KP. All are suspected cases and need field verification.
- Provincial or District Health Department should conduct Case Investigation for confirmation of suspected cases. Enhance surveillance for additional cases in the region to detect any possible outbreaks moreover, identify close contacts exposed to the same risk factors.
- Local health Authorities should coordinate with Livestock Departments to investigate possible animal sources of Brucellosis, especially in livestock populations (e.g., cattle, goats, and sheep). Implement measures to control the spread of Brucellosis in animals, conduct training and awareness programs for farmers on safe handling practices.

Districts	AD (Non- Cholera)	Malaria	ш	B.Diarrhea	SARI	ALRI <5 Years	Typhoid	Dog Bite	ТВ	AVH (A&E)
Abbottabad	449	2	85	0	27	6	57	3	4	7
Bajaur	1,215	377	78	67	419	123	8	13	48	17
Bannu	729	1,775	3	38	23	44	113	1	1	27
Battagram	19	NR	63	NR	NR	NR	NR	NR	NR	NR
Buner	182	287	0	0	8	1	7	0	11	28
Charsadda	753	362	625	0	70	31	25	1	2	1
Chitral Lower	249	22	79	29	10	27	10	3	14	8
Chitral Upper	135	2	13	7	5	4	10	0	4	0
D.I. Khan	1,247	707	0	0	9	11	0	0	13	56
Dir Lower	1,267	273	6	0	93	139	45	0	20	13
Dir Upper	894	21	99	0	34	0	2	0	0	17
Hangu	79	138	0	0	25	5	0	0	0	2
Haripur	755	40	192	6	8	8	9	4	2	15
Karak	273	272	134	446	17	25	10	1	5	5
Khyber	343	347	42	29	30	106	36	4	24	11
Kohat	432	255	99	48	13	33	14	0	1	6
Kohistan Lower	120	6	0	0	1	12	0	0	0	0
Kohistan Upper	368	73	0	0	5	19	0	0	5	0
Kolai Palas	68	4	12	3	0	1	0	0	0	1
L & C Kurram	20	29	86	1	0	21	5	0	0	0
Lakki Marwat	687	566	0	1	4	26	11	0	59	6
Malakand	750	34	6	9	47	53	19	0	0	2
Mansehra	407	4	317	65	14	4	4	1	0	0
Mardan	501	26	0	0	82	9	0	1	5	6
Mohmand	121	282	155	179	7	41	6	1	14	1
North Waziristan	30	6	0	39	7	13	7	0	0	0
Nowshera	1,353	370	48	49	11	31	23	6	11	9
Orakzai	74	22	24	0	0	2	0	0	0	0
Peshawar	2,851	76	957	106	102	125	102	14	4	20
SD Peshawar	5	0	0	0	0	0	0	0	0	0
SD Tank	18	53	2	0	0	2	1	0	0	0
Shangla	926	419	1	14	26	10	43	16	53	110
SWA	85	85	208	92	21	13	17	0	6	2
Swabi	1,240	107	863	61	138	9	42	4	121	97
Swat	1,336	140	73	7	101	147	40	4	87	14
Tank	462	655	231	0	3	3	49	560	1	13
Tor Ghar	39	107	1	7	3	22	0	0	8	1
Upper Kurram	148	24	241	155	17	46	11	0	18	6
Total	20,630	7,968	4,743	1,458	1,380	1,172	726	637	541	501

#### Table 4: District wise distribution of most frequently reported suspected cases during Week 42, KP

Figure 4: Most frequently reported suspected cases during Week 42, KP





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*ICT*: The most frequently reported cases from Islamabad were ILI followed by AD (Non-Cholera) and ALRI < 5 years. ILI and AD (Non-Cholera) cases showed a decreasing trend this week.

GB

ICT, AJK &

*AJK:* ILI cases were maximum followed by AD (Non-Cholera), ALRI <5 years, SARI, dog bite, TB, AWD (S. Cholera), B. Diarrhea, AVH (A & E) and VH (B, C & D) cases. An increasing trend observed for ILI, by AD (Non-Cholera), ALRI <5 years, SARI, dog bite, TB, AWD (S. Cholera), B. Diarrhea, AVH (A & E) and VH (B, C & D) cases this week.

Five suspected cases of AFP reported from AJK. Field investigation required to verify the cases.

*GB:* AD (Non-Cholera) cases were the most frequently reported diseases followed by ALRI <5 Years, ILI, SARI, TB, B. Diarrhea and Typhoid cases. A decreasing trend observed for AD (Non-Cholera), TB, B. Diarrhea and Typhoid cases while an increasing trend observed for ALRI <5 Years, ILI and SARI cases this week.



### Figure 5: Most frequently reported suspected cases during Week 42, ICT

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

















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

















### Punjab

- AD (Non-Cholera) cases were maximum followed by TB, dog bite, Malaria, Typhoid, AWD (S. Cholera), ALRI<5 Years, B. Diarrhea and Measles cases.
- AD (Non-Cholera), TB, dog bite, Malaria, Typhoid, AWD (S. Cholera), ALRI<5 Years, B. Diarrhea and Measles cases showed a decreasing trend this week.
- Twelve cases of AFP, Six suspected cases of HIV/ AIDS reported from Punjab. All are suspected cases and need field verification.



Figure 11: Most frequently reported suspected cases during Week 42, Punjab.

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











	Siı	ndh	Baloc	histan	K	РК	19	SL .	G	в	Pur	njab	A.	JK
Diseases	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total	Total
	Test	Pos	Test	Pos	Test	Pos	Test	Pos	Test	Pos	Test	Pos	Test	Pos
AWD (S. Cholera)	15	3	-	-	2	0	0	0	-	-	-	-	35	0
AD (Non- Cholera)	85	1	-	-	-	-	-	-	-	-	-	-	0	0
Malaria	1,435	128	-	-	-	-	-	-	-	-	-	-	286	3
CCHF	-	-	-	-	1	0	1	0	-	-	-	-	0	0
Dengue	1,414	51	-	-	4	0	41	13	-	-	-	-	268	14
VH (B)	2.874	82	-	-	-	-	-	-	146	0	-	-	1,625	14
VH (C)	2,868	209	-	-	-	-	-	-	146	0	-	-	1,625	28
VH (A&E)	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Covid-19	-	-	-	-	10	2	1	0	-	-	-	-	27	0
HIV	-	-	-	-	-	-	-	-	-	-	-	-	0	0
ТВ	-	-	-	-	-	-	-	-	-	-	-	-	36	4
Syphilis	-	-	-	-	-	-	-	-	-	-	-	-	12	0
Typhoid	605	8	-	-	-	-	7	1	-	-	-	-	73	8
Diptheria (Probabale)	-	-	-	-	1	0	-	-	-	-	-	-	0	0
Pertussis	-	-	-	-	-	-	0	0	-	-	-	-	0	0
M-POX	-	-	-	-	-	-	0	0	-	-	-	-	0	0
Measles	84	40	20	5	248	117	5	3	3	1	200	69	12	4
Rubella	84	0	20	0	248	8	5	1	3	0	200	4	12	0
B.Diarrhea	-	-	-	-	-	-	-	-	-	-	-	-	7	0
SARI-Covid-19	3	0	0	0	38	0	5	0	0	0	86	4	-	-
SARI-Influenza A	3	0	0	0	38	1	5	0	0	0	86	3	-	-
SARI-Influenza B	3	0	0	0	38	0	5	0	0	0	86	1	-	-
SARI-RSV	3	0	0	0	38	0	5	0	0	0	86	0	-	-
ILI-Covid-19	0	0	0	0	15	0	30	0	0	0	62	4	-	-
ILI-Influenza A	0	0	0	0	15	2	30	3	0	0	62	5	-	-
ILI-Influenza B	0	0	0	0	15	1	30	0	0	0	62	1	-	-
ILI-RSV	0	0	0	0	15	0	30	0	0	0	62	0	-	-

### Table 5: Public Health Laboratories confirmed cases of IDSR Priority Diseases during Epid Week 42









### IDSR Reports Compliance

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

Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
	Abbottabad	111	102	92%
	Bannu	238	139	58%
	Battagram	63	7	11%
	Buner	34	34	100%
	Bajaur	44	40	91%
	Charsadda	59	54	92%
	Chitral Upper	34	28	82%
	Chitral Lower	35	34	97%
	D.I. Khan	114	113	99%
	Dir Lower	74	72	97%
	Dir Upper	37	32	86%
	Hangu	22	13	59%
	Haripur	72	66	92%
	Karak	35	35	100%
	Khyber	52	18	35%
	Kohat	61	61	100%
	Kohistan Lower	11	11	100%
	Kohistan Upper	20	20	100%
	Kolai Palas	10	10	100%
	Lakki Marwat	70	69	99%
	Lower & Central Kurram	42	15	36%
Khyber	Upper Kurram	41	27	66%
Pakhtunkhwa	Malakand	42	30	71%
	Mansehra	136	92	68%
	Mardan	80	74	93%
	Nowshera	55	53	96%
	North Waziristan	12	3	25%
	Peshawar	151	123	81%
	Shangla	37	36	97%
	Swabi	63	63	100%
	Swat	77	73	95%
	South Waziristan	135	53	39%
	Tank	34	31	91%
	Torghar	14	14	100%
	Mohmand	68	64	94%
	SD Peshawar	5	1	20%
	SD Tank	58	7	12%
	Orakzai	69	10	14%
	Mirpur	37	37	100%
	Bhimber	42	20	48%
	Kotli	60	60	100%

### Table 6: IDSR reporting districts Week 42, 2024









	Muzaffarabad	45	45	100%
	Poonch	46	46	100%
	Haveli	40	39	98%
	Bagh	40	40	100%
Azad Jammu	Neelum	39	39	100%
Kashmir	Jhelum Vellay	29	29	100%
	Sudhnooti	27	27	100%
Islamabad Capital	ICT	21	21	100%
Territory	CDA	15	8	53%
	Gwadar	25	0	0%
	Kech	44	0	0%
	Khuzdar	74	65	88%
	Killa Abdullah	26	16	62%
	Lasbella	55	55	100%
	Pishin	69	25	36%
	Quetta	56	34	61%
	Sibi	36	20	56%
	Zhob	39	20	72%
	Jaffarabad	16	16	100%
	Naserabad	32	32	100%
	Kharan	30	30	100%
	Sherani	15	15	
	Kohlu	75	50	100% 67%
	Chagi	35	28	
	Kalat			80%
	Harnai	41	40	98%
	Kachhi (Bolan)	35	17 0	100%
Balochistan	Jhal Magsi	28		0%
	Sohbat pur	25	27 25	96%
	Surab	32	25	100%
	Mastung	45	45	78%
	Loralai			100%
	Killa Saifullah	33	28	85%
	Ziarat	28 29	27	96%
	Duki		0	0%
	Nushki	31	26	84%
	Dera Bugti	32	29	91%
	Washuk	45	34	76%
	Panjgur	46	30	65%
		38	27	71%
	Awaran Chaman	23	0	0%
		25	24	96%
	Barkhan	20	18	90%
	Hub	33	21	64%
	Musakhel	41	15	37%
	Usta Muhammad	34	33	97%
	Hunza	32	32	100%
	Nagar	25	20	80%
Gilgit Baltistan	Ghizer	40	40	100%
	Gilgit	40	40	100%









	Diamer	62	61	98%
	Astore	54	54	100%
	Shigar	27	27	100%
	Skardu	52	52	100%
	Ganche	29	28	97%
	Kharmang	46	18	39%
	Hyderabad	74	57	77%
	Ghotki	64	64	100%
	Umerkot	43	43	100%
	Naushahro Feroze	107	93	87%
	Tharparkar	276	231	84%
	Shikarpur	60	58	97%
	Thatta	52	49	94%
	Larkana	67	67	100%
	Kamber Shadadkot	71	71	100%
	Karachi-East	23	20	87%
	Karachi-West	20	20	100%
	Karachi-Malir	37	32	86%
	Karachi-Kemari	18	15	83%
	Karachi-Central	11	10	91%
	Karachi-Korangi	18	18	100%
	Karachi-South	4	4	100%
	Sujawal	55	50	91%
	Mirpur Khas	106	105	99%
	Badin	125	123	98%
Sindh	Sukkur	64	63	98%
	Dadu	90	88	98%
	Sanghar	100	99	99%
	Jacobabad	44	44	100%
	Khairpur	169	166	98%
	Kashmore	59	59	100%
	Matiari	42	42	100%
	Jamshoro	75	74	99%
	Tando Allahyar	54	54	100%
	Tando Muhammad Khan	41	40	98%
	Shaheed Benazirabad	125	121	97%









Table 7: Complia	nce Table for Tertiary Care Hos	pitals for Week 42		
Provinces/Regions	Districts	Total Number of Reporting Sites	Number of Reported Sites for current week	Compliance Rate (%)
	Mirpur	2	2	100%
	Bhimber	1	1	100%
	Kotli	1	1	100%
	Muzaffarabad	2	2	100%
	Poonch	2	2	100%
AJK	Haveli	1	1	100%
	Bagh	1	1	100%
	Neelum	1	1	100%
	Jhelum Vellay	1	1	100%
	Sudhnooti	1	1	100%
	Karachi-South	1	0	0%
	Sukkur	1	1	100%
Sindh	Shaheed Benazirabad	1	1	100%
	Karachi-East	1	1	100%
	Karachi-Central	1	0	0%

### Table 7: IDSR reporting Tertiary care hospital Week 42, 2024

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### NIH hosted a National Coordination Meeting for AMR Surveillance System

The National Institute of Health (NIH), in collaboration with the World Health Organization (WHO), successfully convened a crucial coordination meeting for the National Antimicrobial Resistance (AMR) Surveillance System. The meeting brought together key stakeholders, including representatives from AMR sentinel sites and provincial health departments.



### **Key Objectives of the Meeting:**

- Overview of the AMR Surveillance System: The meeting provided a comprehensive overview of the existing AMR surveillance system in the country, highlighting its importance in tracking the emergence and spread of antimicrobial resistance.
- Analysis of 2023 AMR Surveillance Data: Participants delved into a detailed analysis of the AMR surveillance data collected in 2023. The analysis aimed to identify trends, patterns, and emerging threats posed by antimicrobial resistance.
- Standardization of AMR Data: The meeting focused on the critical need for standardizing AMR data collection and reporting practices across different sentinel sites and provinces. This standardization will ensure data comparability and facilitate accurate analysis.
- Addressing Challenges Related to Data Quality: Participants discussed the challenges associated

with maintaining data quality, such as incomplete data, inconsistencies, and delays in reporting. Strategies to improve data quality and timeliness were explored.

• Enhancing AMR Surveillance: The meeting explored innovative approaches and strategies to strengthen AMR surveillance in the country. This included discussions on expanding the surveillance network, improving laboratory capacity, and leveraging advanced technologies for data analysis.

By bringing together experts from diverse fields, the meeting fostered collaboration and knowledge sharing. The discussions held during the meeting will contribute to the development of a robust and effective AMR surveillance system, ultimately helping to combat antimicrobial resistance and safeguard public health.



### Notes from the field: Outbreak Investigation of Suspected Hepatitis in Tehsil Kamalia, District Toba Tek Singh from 17<sup>th</sup>-20<sup>th</sup> September

### Introduction

Hepatitis, a viral infection causing liver inflammation, remains a critical public health issue worldwide, with particularly high prevalence rates of hepatitis B and C in Pakistan contributing to significant morbidity and mortality. The transmission of viral hepatitis is often associated with unsafe healthcare practices, inadequate sanitation, and









various social determinants of health. During epidemiological week 40 (September 29 - October 5, 2024), surveillance activities identified a concerning cluster of suspected hepatitis cases in Tehsil Kamalia, District Toba-Tek Singh. Preliminary data indicated that hepatitis C was the predominant infection among these cases, prompting the initiation of a multidisciplinary field investigation. This investigation aimed to assess the outbreak's extent, confirm cases, identify potential risk factors, and provide recommendations for controlling transmission. Through active case-finding and structured data collection, the investigation sought to expose the dynamics of the outbreak and inform public health interventions to mitigate its impact.

#### Methodology

A multidisciplinary field investigation was conducted by a team comprising epidemiologists and laboratory technicians to assess the hepatitis C outbreak in Tehsil Kamalia. A cross-sectional descriptive outbreak investigation was carried out to characterize the outbreak and identify risk factors associated with the transmission of hepatitis C in the affected population. Active case-finding was done to identify individuals fitting the suspected case criteria. The suspected cases were defined as "Any person with an acute illness consistent with sign and symptoms of acute viral hepatitis, where as a confirmed case was any person with acute illness consistent with signs and symptoms of acute viral hepatitis lab confirmed (PCR positive) reported from THQ Kamalia in epid week 40 dated 29<sup>th</sup> Sept to 5<sup>th</sup> Oct, 2024. Data were gathered using structured questionnaires, which captured demographic details, clinical histories, and potential exposure sources, including healthcare settings and sanitation practices.

Blood samples were collected from all suspected cases and subsequently tested in a laboratory to confirm hepatitis C infection. To identify possible transmission sources, the investigation focused on healthcare-associated exposures, with particular attention to unsafe injection practices, inadequate sterilization of medical equipment, and poor hygiene practices.

Descriptive analysis was

#### Results

Out of 304 suspected cases, 56 were confirmed as hepatitis C-positive, the mean age was

47 years with male to female ratio 1:1, where the age group 35-44 years was most affected (39%), with both genders represented. Cases were noted among both males and females, with slightly higher rates observed among males. The overall attack rate for the outbreak was 1.8/1000 population. Gender-specific attack rates were calculated at 2.2% for females and 1.4% for males.

Risk factor analysis revealed that the most common exposure was recent medical treatments at local clinics where sterilization and injection practices may have been suboptimal. Limited access to sanitation facilities and hand washing amenities was common in the area. Improper handling of medical equipment in healthcare settings emerged as a potential risk factor.

### Discussion

The hepatitis C outbreak in Tehsil Kamalia underscores the persistent challenge of hepatitis transmission due to inadequate infection control, particularly in low-resource healthcare settings. The most affected age group, aligns with findings in other studies that indicate adults in this demographic are at heightened risk due to increased healthcare interactions and potentially unsafe medical practices [1-3].

Unsafe injection practices and inadequate sterilization of medical equipment have been identified as major risk factors for hepatitis C transmission globally, and these risks are magnified in settings with limited infection control resources [4]. Studies across Pakistan have similarly documented healthcare-associated hepatitis transmission, attributing the spread largely to unsafe injections, lack of sterilization, and insufficient hygiene practices in medical facilities [5,6]. In this investigation, a significant number of cases reported recent exposure to local clinics with observed lapses in infection prevention measures, further supporting the link between healthcare-associated exposures and hepatitis C spread.

This investigation emphasizes the need for targeted interventions, including improved infection control training for healthcare providers, enhanced surveillance systems, and public awareness campaigns. Implementing safe injection practices and rigorous sterilization protocols in healthcare settings could substantially reduce the incidence of hepatitis C, while WASH improvements would address broader









community transmission risks. Given the morbidity and mortality associated with hepatitis C, these measures are critical in mitigating transmission and reducing the public health burden in Tehsil Kamalia and similar high-risk areas.

#### Conclusion

This hepatitis C outbreak investigation in Tehsil Kamalia reveals significant infection control challenges in local healthcare settings, particularly with unsafe injection practices and inadequate sterilization. Limited sanitation and hygiene access further contribute to transmission risks. Key recommendations include strengthening infection prevention in healthcare, enhancing sanitation infrastructure, and conducting public education. These targeted interventions, alongside improved surveillance, are essential to preventing future outbreaks and reducing hepatitis C's public health impact in the region.

#### **Recommendations**

To control the outbreak and prevent future cases, the following measures are recommended:

**Enhanced Surveillance:** Implement stronger hepatitis surveillance to allow early detection and identification of outbreak clusters.

**Infection Prevention and Control:** Enforce safe injection practices, proper sterilization of medical instruments, and strict hand hygiene in healthcare settings.

**Community Education:** Launch awareness campaigns to educate the public on hepatitis transmission, particularly the risks associated with unsafe injections and poor hygiene practices.

Laboratory Capacity: Increase laboratory resources to ensure timely and accurate diagnosis of hepatitis cases.

**Treatment Access:** Facilitate access to appropriate treatment for confirmed hepatitis B and C cases to prevent further transmission.

**Vaccination:** Promote hepatitis B vaccination, especially among high-risk populations.

By implementing these recommendations, it is possible to control hepatitis transmission and reduce future outbreak risks in Tehsil Kamalia. Comprehensive public health interventions targeting identified risk factors will help mitigate the impact of hepatitis and protect the health of the population.

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### Knowledge hub

### Understanding SARIs: Transmission, Symptoms, and Prevention What are SARIs?

Severe Acute Respiratory Infections (SARIs) are a group of illnesses that cause inflammation in the lungs. They are characterized by symptoms such as:

#### Symptoms:

- Fever
- Cough
- Difficulty breathing
- Chest pain
- Sore throat
- Runny nose
- Muscle aches
- Fatigue

SARIs can be caused by various viruses and bacteria, including influenza, pneumonia, and COVID-19.

### How are SARIs Spread?

SARIs are typically spread through respiratory droplets, meaning they can be transmitted when an infected person coughs, sneezes, or talks.

### **How to Prevent SARIs**

Here are some essential steps to prevent SARIs:

- Get Vaccinated: Stay up-to-date on flu and COVID-19 vaccines.
- Practice Good Hygiene: Wash your hands frequently with soap and water, especially after touching surfaces or being in public











places. Use hand sanitizer when soap and water are not available.

- Wear a Mask: Wear a well-fitting mask in crowded indoor settings, especially if you are at high risk or live with someone who is.
- Avoid Close Contact: Maintain a safe distance from people who are sick.
- Clean and Disinfect: Regularly clean and disinfect frequently touched surfaces.
- Stay Home When Sick: If you are sick, stay home to avoid spreading illness to others.

### When to Seek Medical Attention

Seek immediate medical attention if you experience any of the following:

- Difficulty breathing
- Chest pain
- Confusion
- Bluish lips or face

### Additional Resources

For more information on SARIs and how to protect yourself, please visit the following resources:

- Centers for Disease Control and Prevention (CDC): <u>https://www.cdc.gov/</u>
- World Health Organization (WHO): <u>https://www.who.int/</u>
- European Centre for Disease Prevention and Control (ECDC): <u>https://www.ecdc.europa.eu/en</u>
- National Institutes of Health (NIH): <u>https://www.nih.gov/</u>
- Your Local Health Department: https://www.cdc.gov/











شکار( کینسر، زیابطیس ، دل یا سانس کی شدید بیماریوں میں مبتلا مریض وغیرہ ) کواس بیماری سے جلد متاثر ہونے کا خطرہ ہے۔اس بیماری کا دائر سکھلی فضامیں کھانے نیا چینکنے کی وجہ سے ادر مریض کے ہاتھوں کے کے ذریعے اردگرد کی جگہوں پر چیل جاتا ہے ادر جب کوئی صحت مند شخص وہاں سانس لیتا ہے یا متاثرہ چیز وں کو چھوتا ہے تو بیدوائرس اس تک منتقل ہوجا تا ہے۔

كهانسته باحصنكته وقت منهر استعال کے فور أبعد ٹشو اورناك كورومال بالشو يبير كومحفوظ طريقے سے ٹھانے لگائیں پير سے ڈھانڀ ليں اين باته صاف ياني اورصابن فلوكي صورت ميں ماسك كااستعال كرس کے ساتھ اچھی طرح دھوئیں فلوكي صورت ميں گھر پیچیدگی کی صورت میں فوراً یرآ رام کریں اورلوگوں سے متندمعالج سے دابطہ کریں ميل جول ميں احتياط كريں اس بپاری سے بیجاؤ کیلئے معمول کی ویکسینیشن ( Flu\_Vaccination) کردائی جاسکتی ہے۔خاص طور پرقوت مدافعت کی کی کاشکار، حاملہ خوا تین اور دائمی بپاری ( ذیابطیس ، دمہ، دل کے امراض) میں مبتلا مریض میسینیشن ضرور کروائیں۔







