



Monthly summary report

Hospital-Based Human Influenza Surveillance in Bangladesh

September 2023

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
September 2023

Hospital	District	Medicine ward			Pediatrics ward (≤12 years of age)			Coronary Care Unit (CCU)		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	50	22	44	49	14	29	2	1	50
RMCH	Rajshahi	22	6	27	37	10	27	1	0	0
CuMCH	Cumilla	20	6	30	43	16	37	3	1	33
KMCH	Khulna	16	4	25	42	4	10	0	0	0
JGH	Jashore	56	30	54	45	21	47	0	0	0
JRRMCH	Sylhet	31	13	42	50	18	36	0	0	0
SBMCH	Barishal	27	5	19	55	7	13	0	0	0
CMCH	Chattogram	56	17	30	71	13	18	0	0	0
MARMCH	Dinajpur	32	15	47	41	24	59	1	0	0
		310	118	38	433	127	29	7	2	29

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
September 2023

Hospital	District	Sample	Flu	Flu %	Flu A	Flu B	Flu A+B	Flu A/H1	Flu A/H3	Flu A/H5	Flu A/H7	Flu A/ (H1N1)pdm09	Flu B Yamagata lineage	Flu B Victoria lineage
JIMCH	Kishoregonj	101	37	37	20	16	1	0	15	0	0	5	0	16
RMCH	Rajshahi	60	16	27	12	4	0	0	8	0	0	4	0	4
CuMCH	Cumilla	66	23	35	17	6	0	0	10	0	0	7	0	6
KMCH	Khulna	58	8	14	6	2	0	0	3	0	0	3	0	2
JGH	Jashore	101	51	50	24	27	0	0	9	0	0	15	0	27
JRRMCH	Sylhet	81	31	38	19	12	0	0	8	0	0	11	0	12
SBMCH	Barishal	82	12	15	6	6	0	0	2	0	0	4	0	6
CMCH	Chattogram	127	30	24	16	14	0	0	6	0	0	10	0	14
MARMCH	Dinajpur	74	39	53	25	14	0	0	5	0	0	20	0	14
		750	247	33	145	101	1	0	66	0	0	79	0	101

‡One sample was co-infected with both Influenza A(H3) and Influenza B (Victoria lineage).

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
September 2023

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)			ILI [‡]		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	38	20	53	25	8	32	38	9	24
RMCH	Rajshahi	25	7	28	35	9	26	-	-	-
CuMCH	Cumilla	32	11	34	34	12	35	-	-	-
KMCH	Khulna	21	5	24	37	3	8	-	-	-
JGH	Jashore	36	21	58	27	9	33	38	21	55
JRRMCH	Sylhet	15	8	53	26	8	31	40	15	38
SBMCH	Barishal	37	9	24	45	3	7	-	-	-
CMCH	Chattogram	44	10	23	43	5	12	40	15	38
MARMCH	Dinajpur	33	16	48	17	12	71	24	11	46
		281	107	38	289	69	24	180	71	39

[‡]Outpatient ILI surveillance reinitiated at JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2022 and JIMCH (Kishoregonj) and JGH (Jashore) in December 2022.

**Hospital based influenza surveillance
Influenza results by different age groups
September 2023**

Age groups	September 2023									Initiation - September 2023								
	SARI (aged ≥ 5 years)			ILI [‡]			SARI (aged < 5 years)			SARI (aged ≥ 5 years)			ILI [‡]			SARI (aged < 5 years)		
	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
<1 Year	-	-	-	8	1	13	188	29	15	-	-	-	2,813	193	7	10,534	609	6
1-4 Years	-	-	-	33	9	27	101	40	40	-	-	-	4,581	651	14	4,557	654	14
5-14 Years	75	35	47	40	20	50	-	-	-	5,076	1,083	21	2,790	652	23	-	-	-
15-24 Years	59	26	44	42	16	38	-	-	-	5,153	1,202	23	2,706	535	20	-	-	-
25-39 Years	44	9	20	37	15	41	-	-	-	5,488	1,061	19	2,291	374	16	-	-	-
40-59 Years	58	21	36	13	7	54	-	-	-	6,926	1,101	16	1,487	229	15	-	-	-
≥ 60 Years	45	16	36	7	3	43	-	-	-	7,074	1,089	15	500	55	11	-	-	-
	281	107	38	180	71	39	289	69	24	29,717	5,536	19	17,168	2,689	16	15,091	1,263	8

[‡] Outpatient ILI surveillance reinitiated at JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2022 and JIMCH (Kishoregonj) and JGH (Jashore) in December 2022.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation - September 2023

Hospital	District	Initiation	Sample	Flu	Flu %	Flu A ^ψ	Flu B ^λ	Flu A+B [‡]	Flu A/H1	Flu A/H3	Flu A/H5	Flu A/H7	Flu A/ (H1N1)pdm09	Flu B Yamagata lineage	Flu B Victoria lineage
DNMCH ^γ	Dhaka	Jun 2007	2,061	312	15	201	111	0	15	84	0	0	102	13	7
CBMCH ^γ	Mymensingh	Oct 2007	2,053	302	15	206	96	0	7	107	1	0	91	16	10
JIMCH	Kishoregonj	Sep 2007	7,714	1,424	18	916	507	1	9	498	0	0	407	64	273
RMCH	Rajshahi	May 2007	5,123	589	11	395	194	0	14	233	0	0	146	39	94
SZRMCH ^γ	Bogura	Sep 2007	3,865	653	17	439	213	1	12	256	0	0	170	29	39
LAMB [†]	Dinajpur	Oct 2007	1,171	112	10	72	40	0	7	41	0	0	24	1	0
BBMH [†]	Chattogram	Aug 2007	1,440	157	11	118	39	0	13	42	0	0	63	3	0
CuMCH [‡]	Cumilla	Oct 2007	6,560	803	12	532	268	3	9	286	0	0	236	28	90
KMCH	Khulna	Jul 2007	4,375	601	14	410	190	1	16	218	0	0	172	17	112
JGH ^{γ†}	Jashore	Sep 2007	5,758	1177	20	727	447	3	10	411	0	0	306	26	283
JRRMCH	Sylhet	Jul 2007	5,711	928	16	581	345	2	16	278	0	0	286	34	168
SBMCH	Barishal	Aug 2007	7,598	1058	14	683	371	4	7	335	0	0	337	56	166
CMCH	Chattogram	Apr 2014	5,158	839	16	564	271	4	0	266	0	0	298	41	210
MARMCH ^²	Dinajpur	Apr 2014	3,389	533	16	314	219	0	0	158	0	0	153	28	170
			61,976	9,488	15	6,158	3,311	19	135	3,213	1	0	2,791	395	1,622

^λInfluenza B typing initiated in January 2016.

^ψrRT-PCR result of four samples were equivocal positive for Influenza A.

^γOne sample collected in June 2013 and another sample collected in June 2017 were co-infected with both A(H3) and A(H1N1)pdm09.

^λThree samples were co-infected with both Influenza B (Yamagata lineage) and Influenza B (Victoria lineage), another ten samples were unsubtypeable.

[‡]Three samples were co-infected with both Influenza A(H1N1)pdm09 and Influenza B (Victoria lineage).

[†]Nine samples were co-infected with both Influenza A(H3) and Influenza B (Victoria lineage).

[†]Surveillance activities ended at LAMB (Dinajpur) and BBMH (Chittagong) in May 2016.

^γSurveillance activities ended at DNMCH (Dhaka), CBMCH (Mymensingh), SZRMCH (Bogura) and JGH (Jessore) in October 2017.

[‡]Surveillance activities reinitiated at Cumilla Medical College Hospital (CuMCH), Cumilla in January 2018.

[†]Surveillance activities reinitiated at Jashore 250 bed General Hospital (JGH), Jashore in December 2018.

^²Dinajpur Medical College Hospital (DjMCH) has been renamed as M Abdur Rahim Medical College Hospital (MARMCH).

Note: Surveillance activities extended to the intensive care units (ICU) and coronary care unit (CCU) of the participating hospitals in January 2018.

^φ Intensive care units (ICU) surveillance discontinued in January 2019.

*One sample from CuMCH (Cumilla) and two samples from KMCH (Khulna) collected in November 2019 were not true positive for influenza A and were considered as inconclusive result. The result will be confirmed with further test through viral culture.

[†]Nine samples (one each from JIMCH, JRRMCH and MARMCH and two each from RMCH, KMCH and SBMCH) collected in December 2019 were not true positive for influenza A and were considered as inconclusive result. The result will be confirmed with further test through viral culture.

Outpatient ILI surveillance reinitiated at JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2022.

Outpatient ILI surveillance reinitiated at JIMCH (Kishoregonj) and JGH (Jashore) in December 2022.

Hospital based influenza surveillance

Influenza seasonality graph

May 2007 - September 2023



