



Monthly summary report

Hospital-Based Human Influenza Surveillance in Bangladesh

February 2024

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
February 2024

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	30	1	3	31	0	0	1	0	0
RMCH	Rajshahi	18	0	0	9	0	0	0	0	0
CuMCH	Cumilla	16	2	13	10	1	10	3	0	0
KMCH	Khulna	19	0	0	6	0	0	0	0	0
JGH	Jashore	38	1	3	26	1	4	0	0	0
JRRMCH	Sylhet	21	3	14	18	1	6	0	0	0
SBMCH	Barishal	15	0	0	13	0	0	0	0	0
CMCH	Chattogram	52	0	0	25	2	8	1	0	0
MARMCH	Dinajpur	24	0	0	24	0	0	0	0	0
		233	7	3	162	5	3	5	0	0

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
February 2024

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	62	1	2	1	0	0	0	1	0	0	0	0	0
RMCH	Rajshahi	27	0	0	0	0	0	0	0	0	0	0	0	0
CuMCH	Cumilla	29	3	10	3	0	0	0	2	0	0	1	0	0
KMCH	Khulna	25	0	0	0	0	0	0	0	0	0	0	0	0
JGH	Jashore	64	2	3	2	0	0	0	0	0	0	2	0	0
JRRMCH	Sylhet	39	4	10	4	0	0	0	1	0	0	3	0	0
SBMCH	Barishal	28	0	0	0	0	0	0	0	0	0	0	0	0
CMCH	Chattogram	78	2	3	2	0	0	0	1	0	0	1	0	0
MARMCH	Dinajpur	48	0	0	0	0	0	0	0	0	0	0	0	0
		400	12	3	12	0	0	0	5	0	0	7	0	0

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
February 2024

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)			ILI [‡]		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	15	0	0	8	0	0	39	1	3
RMCH	Rajshahi	18	0	0	9	0	0	-	-	-
CuMCH	Cumilla	21	3	14	8	0	0	-	-	-
KMCH	Khulna	19	0	0	6	0	0	-	-	-
JGH	Jashore	13	0	0	10	0	0	41	2	5
JRRMCH	Sylhet	9	3	33	7	0	0	23	1	4
SBMCH	Barishal	20	0	0	8	0	0	-	-	-
CMCH	Chattogram	29	0	0	9	1	11	40	1	3
MARMCH	Dinajpur	10	0	0	9	0	0	29	0	0
		154	6	4	74	1	1	172	5	3

[‡]Outpatient ILI surveillance reinitiated at JIMCH (Kishoregonj), JGH (Jashore), JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2023.

**Hospital based influenza surveillance
Influenza results by different age groups
February 2024**

Age groups	February 2024									Initiation - February 2024								
	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	-	-	-	7	0	0	41	0	0	-	-	-	2,863	193	7	10,837	616	6
1-4 Years	-	-	-	33	0	0	33	1	3	-	-	-	4,704	652	14	4,711	660	14
5-14 Years	19	2	11	34	2	6	-	-	-	5,262	1098	21	2,903	657	23	-	-	-
15-24 Years	20	0	0	41	1	2	-	-	-	5,283	1204	23	2,848	536	19	-	-	-
25-39 Years	19	2	11	25	1	4	-	-	-	5,604	1065	19	2,401	377	16	-	-	-
40-59 Years	48	1	2	19	1	5	-	-	-	7,108	1108	16	1,595	231	14	-	-	-
≥ 60 Years	48	1	2	13	0	0	-	-	-	7,229	1099	15	527	56	11	-	-	-
	154	6	4	172	5	3	74	1	1	30,486	5,574	18	17,841	2,702	15	15,548	1,276	8

[‡]Outpatient ILI surveillance reinitiated at JIMCH (Kishoregonj), JGH (Jashore), JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2023.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation (May 2007) - February 2024

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	8,011	1,432	18	924	507	1	9	502	0	0	411	64	273
RMCH	Rajshahi	May 2007	5,254	590	11	396	194	0	14	233	0	0	147	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	6,713	810	12	537	270	3	9	289	0	0	238	28	92
KMCH	Khulna	Jul 2007	4,499	608	14	417	190	1	16	218	0	0	179	17	112
JGH ^{γ†}	Jashore	Sep 2007	6,036	1188	20	736	449	3	10	411	0	0	315	26	285
JRRMCH	Sylhet	Jul 2007	5,942	940	16	592	346	2	16	283	0	0	292	34	169
SBMCH	Barishal	Aug 2007	7,752	1060	14	685	371	4	7	336	0	0	338	56	166
CMCH	Chattogram	Apr 2014	5,486	849	15	572	273	4	0	270	0	0	302	41	212
MARMCH [‡]	Dinajpur	Apr 2014	3,592	539	15	319	220	0	0	158	0	0	158	28	171
			63,875	9,552	15	6,214	3,319	19	135	3,230	1	0	2,830	395	1,630

^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.

Outpatient ILI surveillance discontinued in October 2017.

^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.

[‡]Dinajpur 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.

^γ 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.

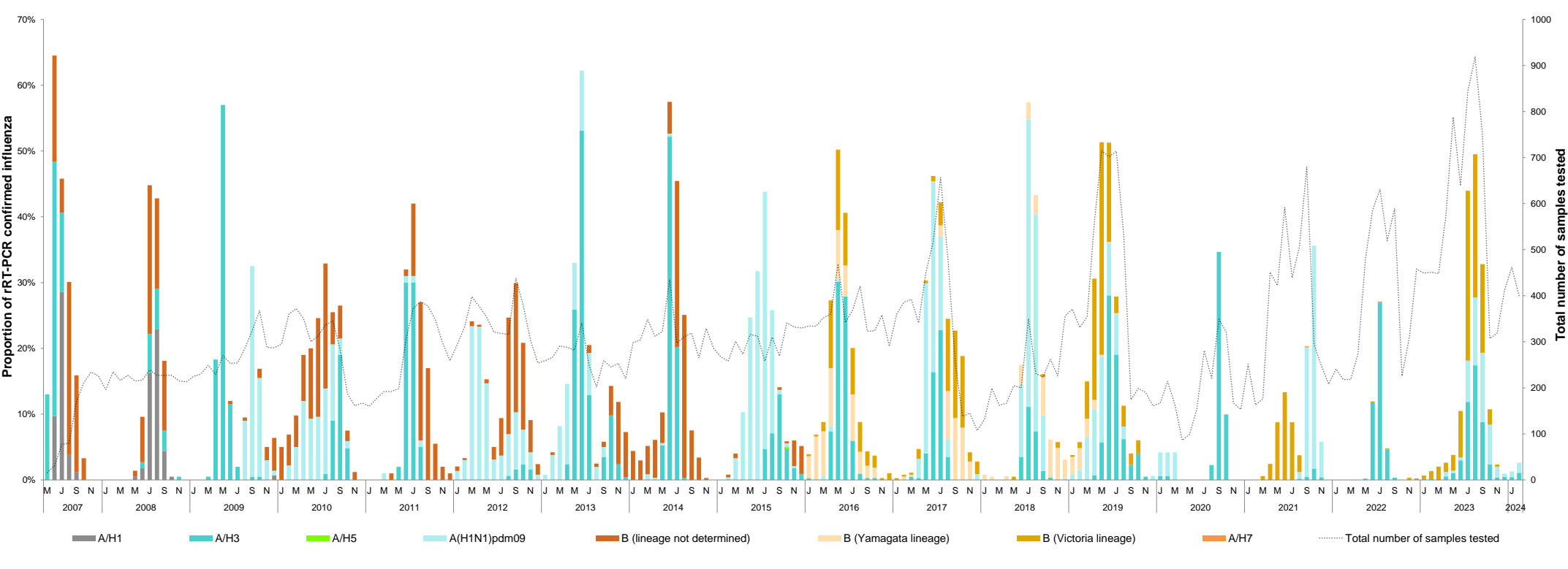
Outpatient ILI surveillance discontinued in October 2023.

Outpatient ILI surveillance reinitiated at JIMCH (Kishoregonj), JGH (Jashore), JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2023.

Hospital based influenza surveillance

Influenza seasonality graph

May 2007 - February 2024



Note: Determination of Influenza B lineages initiated in January 2016

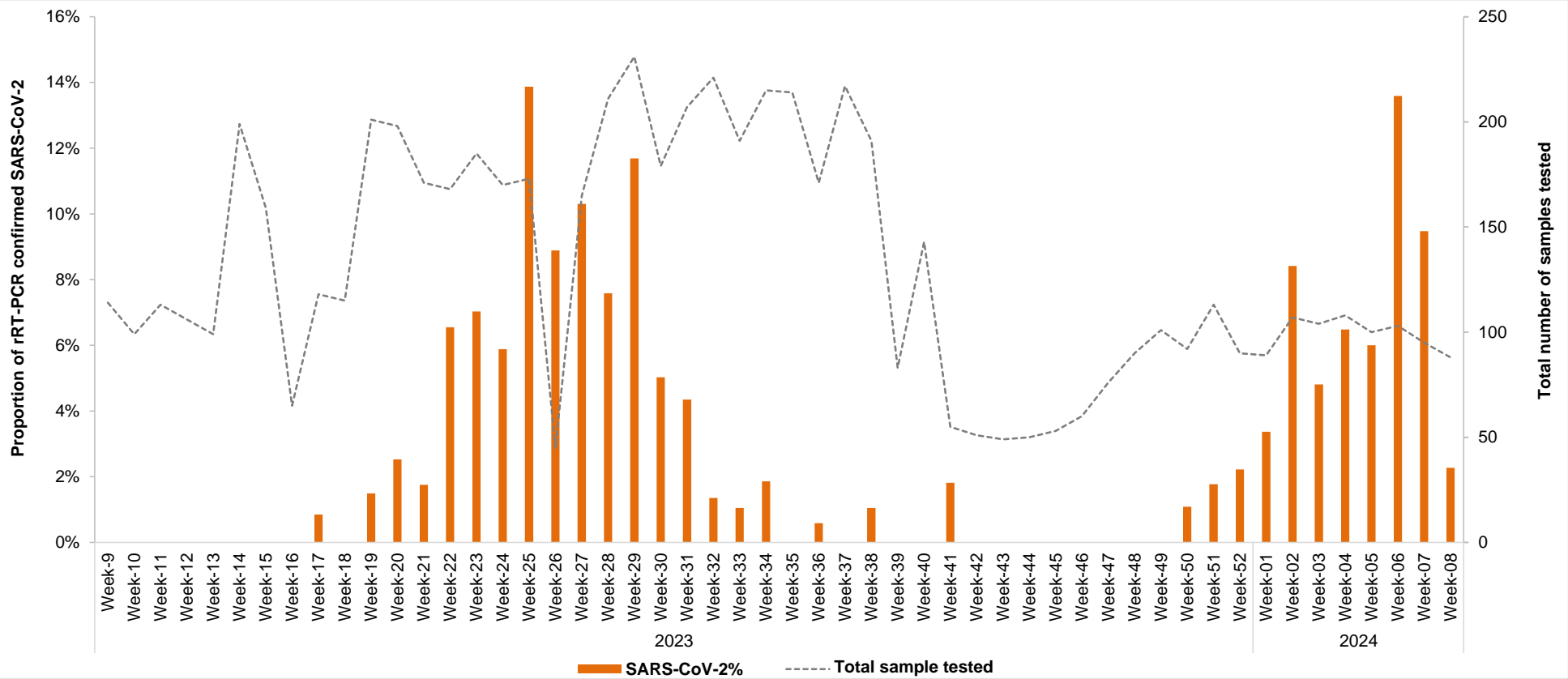
Hospital based influenza surveillance
Hospital-wise SARS-CoV-2 lab results
February 2024

Hospital	District	February 2024			March 2020 - February 2024		
		Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
JIMCH	Kishoregonj	62	3	5	2,618	138	5
RMCH	Rajshahi	27	2	7	1,787	143	8
CuMCH	Cumilla	29	4	14	1,735	129	7
KMCH	Khulna	25	2	8	1,520	205	13
JGH	Jashore	64	9	14	2,152	202	9
JRRMCH	Sylhet	39	1	3	2,109	180	9
SBMCH	Barishal	28	1	4	2,145	166	8
CMCH	Chattogram	78	8	10	2,945	263	9
MARMCH	Dinajpur	48	4	8	1,929	126	7
		400	34	9	18,940	1,552	8

**Hospital based influenza surveillance
SARS-CoV-2 results by different age groups
February 2024**

Age groups	February 2024			March 2020 - February 2024		
	Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
<1 Year	48	4	8	4,398	148	3
1-4 Years	66	2	3	2,758	38	1
5-14 Years	53	5	9	2,445	58	2
15-24 Years	61	6	10	1,883	107	6
25-39 Years	44	4	9	2,107	292	14
40-59 Years	67	8	12	2,796	482	17
≥ 60 Years	61	5	8	2,553	427	17
	400	34	9	18,940	1,552	8

**Hospital based influenza surveillance
SARS-CoV-2 positivity trend by week
Week 09 of 2023 to week 08 of 2024**



Hospital based influenza surveillance
Influenza and SARS-CoV-2 positivity graph
March 2020 - February 2024

