



Monthly summary report

Hospital-Based Human Influenza Surveillance in Bangladesh

March 2024

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
March 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	49	4	8	30	4	13	2	0	0
RMCH	Rajshahi	15	0	0	8	0	0	0	0	0
CuMCH	Cumilla	12	4	33	16	4	25	3	0	0
KMCH	Khulna	18	0	0	8	0	0	0	0	0
JGH	Jashore	40	0	0	28	2	7	0	0	0
JRRMCH	Sylhet	27	1	4	26	4	15	1	0	0
SBMCH	Barishal	21	0	0	11	0	0	0	0	0
CMCH	Chattogram	50	4	8	29	2	7	0	0	0
MARMCH	Dinajpur	36	0	0	27	0	0	0	0	0
		268	13	5	183	16	9	6	0	0

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
March 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	81	8	10	8	0	0	0	5	0	0	3	0	0
RMCH	Rajshahi	23	0	0	0	0	0	0	0	0	0	0	0	0
CuMCH	Cumilla	31	8	26	8	0	0	0	5	0	0	3	0	0
KMCH	Khulna	26	0	0	0	0	0	0	0	0	0	0	0	0
JGH	Jashore	68	2	3	2	0	0	0	0	0	0	2	0	0
JRRMCH	Sylhet	54	5	9	5	0	0	0	2	0	0	3	0	0
SBMCH	Barishal	32	0	0	0	0	0	0	0	0	0	0	0	0
CMCH	Chattogram	79	6	8	6	0	0	0	3	0	0	3	0	0
MARMCH	Dinajpur	63	0	0	0	0	0	0	0	0	0	0	0	0
		457	29	6	29	0	0	0	15	0	0	14	0	0

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

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)			ILI [‡]		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	22	5	23	9	1	11	50	2	4
RMCH	Rajshahi	15	0	0	8	0	0	-	-	-
CuMCH	Cumilla	23	6	26	8	2	25	-	-	-
KMCH	Khulna	18	0	0	8	0	0	-	-	-
JGH	Jashore	14	1	7	8	0	0	46	1	2
JRRMCH	Sylhet	17	2	12	9	2	22	28	1	4
SBMCH	Barishal	24	0	0	8	0	0	-	-	-
CMCH	Chattogram	25	1	4	8	0	0	46	5	11
MARMCH	Dinajpur	12	0	0	8	0	0	43	0	0
		170	15	9	74	5	7	213	9	4

[‡]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
March 2024

Age groups	March 2024									Initiation - March 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	-	-	-	10	0	0	48	0	0	-	-	-	2,873	193	7	10,889	617	6
1-4 Years	-	-	-	37	2	5	26	5	19	-	-	-	4,741	654	14	4,738	665	14
5-14 Years	35	9	26	40	2	5	-	-	-	5,297	1107	21	2,943	659	22	-	-	-
15-24 Years	24	3	13	44	1	2	-	-	-	5,307	1207	23	2,892	537	19	-	-	-
25-39 Years	22	0	0	27	0	0	-	-	-	5,626	1065	19	2,428	377	16	-	-	-
40-59 Years	40	0	0	33	1	3	-	-	-	7,150	1108	15	1,628	232	14	-	-	-
≥ 60 Years	49	3	6	22	3	14	-	-	-	7,283	1102	15	549	59	11	-	-	-
	170	15	9	213	9	4	74	5	7	30,663	5,589	18	18,054	2,711	15	15,627	1,282	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) - March 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	8,093	1,440	18	932	507	1	9	507	0	0	414	64	273
RMCH	Rajshahi	May 2007	5,279	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	6,745	818	12	545	270	3	9	294	0	0	241	28	92
KMCH	Khulna	Jul 2007	4,528	609	13	418	190	1	16	218	0	0	180	17	112
JGH ^{γ†}	Jashore	Sep 2007	6,105	1190	19	738	449	3	10	411	0	0	317	26	285
JRRMCH	Sylhet	Jul 2007	5,996	945	16	597	346	2	16	285	0	0	295	34	169
SBMCH	Barishal	Aug 2007	7,784	1060	14	685	371	4	7	336	0	0	338	56	166
CMCH	Chattogram	Apr 2014	5,569	855	15	578	273	4	0	273	0	0	305	41	212
MARMCH ²	Dinajpur	Apr 2014	3,655	539	15	319	220	0	0	158	0	0	158	28	171
			64,344	9,582	15	6,244	3,319	19	135	3,245	1	0	2,845	395	1,630

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

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

^λ Three 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.

^γ Surveillance activities ended at DNMCH (Dhaka), CBMCH (Mymensingh), SZRMCH (Bogra) 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.

² 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.

⁹ 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.

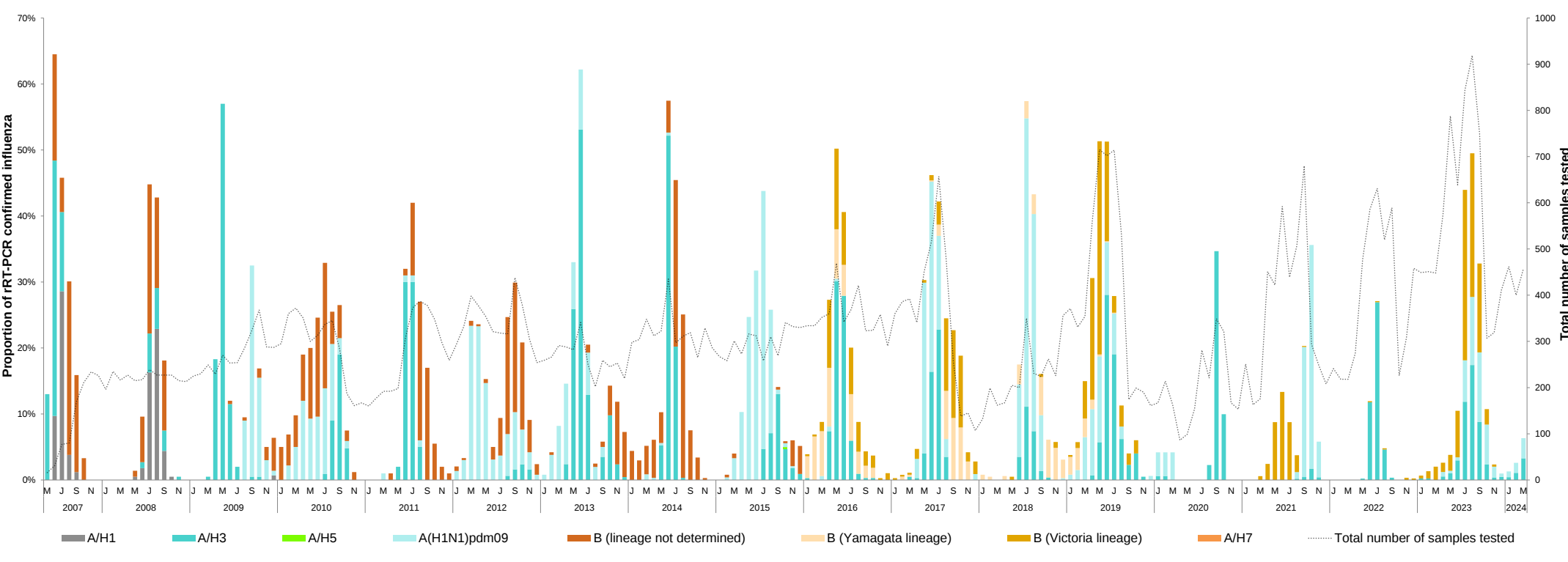
Outpatient ILI surveillance discontinued in October 2023.

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

Hospital based influenza surveillance

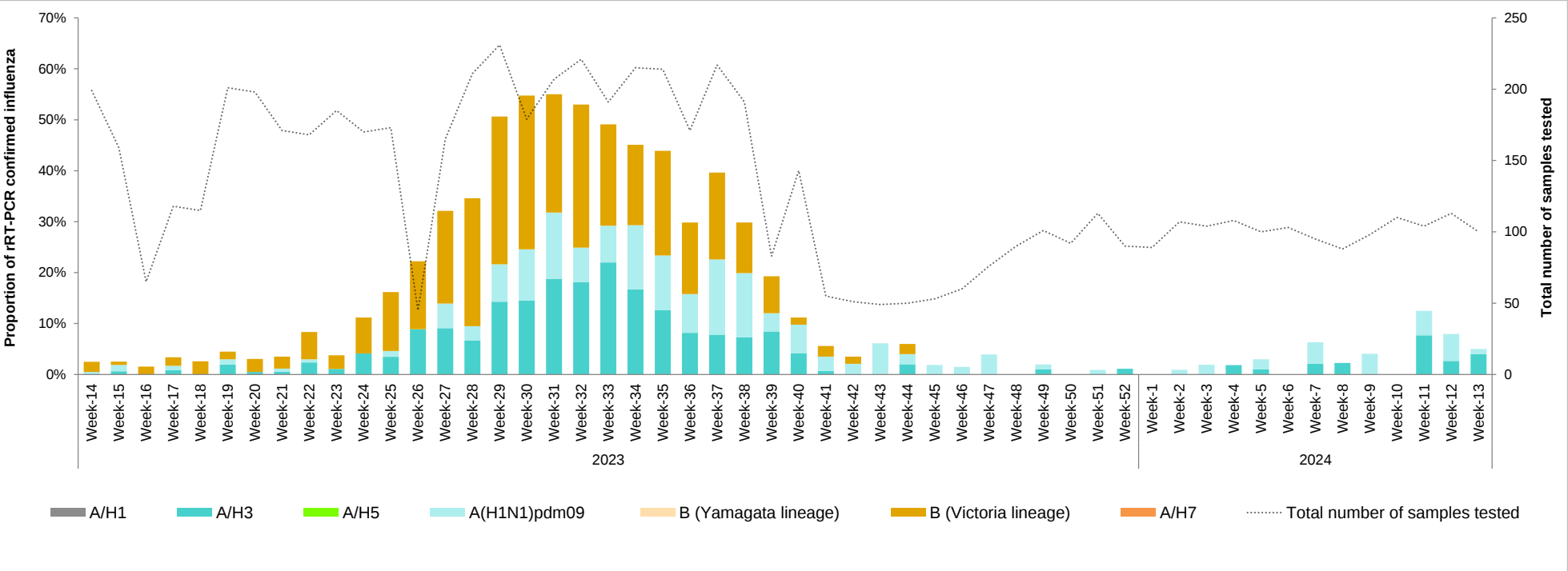
Influenza seasonality graph

May 2007 - March 24



Note: Determination of Influenza B lineages initiated in January 2016

Hospital based influenza surveillance
Influenza seasonality graph
Week 14 of 2023 to week 13 of 2024



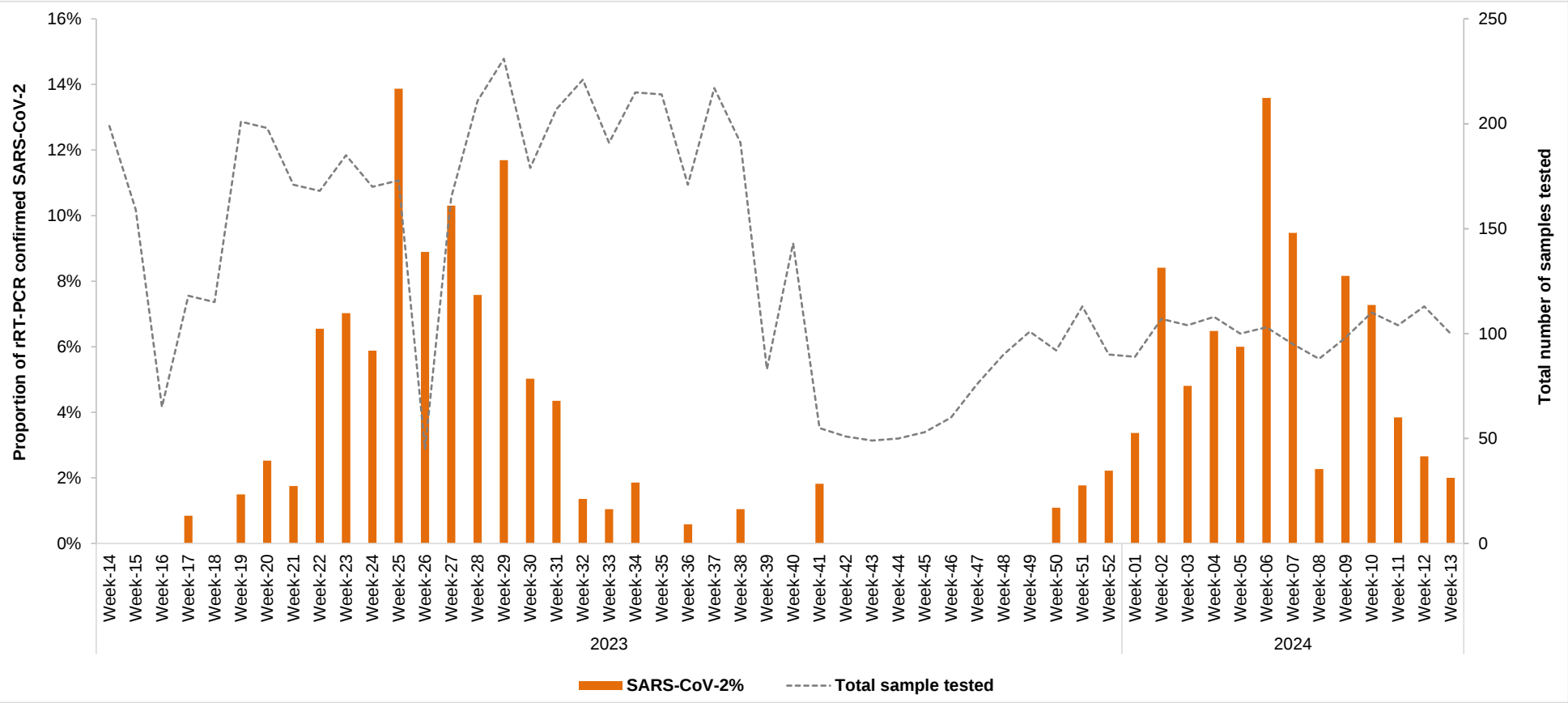
Hospital based influenza surveillance
Hospital-wise SARS-CoV-2 lab results
March 2024

Hospital	District	March 2024			March 2020 - March 2024		
		Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
JIMCH	Kishoregonj	81	3	4	2,700	141	5
RMCH	Rajshahi	23	1	4	1,812	144	8
CuMCH	Cumilla	31	0	0	1,767	129	7
KMCH	Khulna	26	2	8	1,549	207	13
JGH	Jashore	68	5	7	2,221	207	9
JRRMCH	Sylhet	54	2	4	2,163	182	8
SBMCH	Barishal	32	0	0	2,177	166	8
CMCH	Chattogram	79	1	1	3,028	264	9
MARMCH	Dinajpur	63	3	5	1,992	129	6
		457	17	4	19,409	1,569	8

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

Age groups	March 2024			March 2020 - March 2024		
	Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
<1 Year	58	4	7	4460	152	3
1-4 Years	63	0	0	2822	38	1
5-14 Years	75	2	3	2,520	60	2
15-24 Years	68	4	6	1,951	111	6
25-39 Years	49	1	2	2,156	293	14
40-59 Years	73	4	5	2,871	486	17
≥ 60 Years	71	2	3	2,629	429	16
	457	17	4	19,409	1,569	8

Hospital based influenza surveillance
SARS-CoV-2 positivity trend by week
Week 14 of 2023 to week 13 of 2024



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

