



Monthly summary report

Hospital-Based Human Influenza Surveillance in Bangladesh

April 2024

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
April 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	53	4	8	46	12	26	0	0	0
RMCH	Rajshahi	28	1	4	21	1	5	0	0	0
CuMCH	Cumilla	30	8	27	24	9	38	4	2	50
KMCH	Khulna	26	9	35	18	4	22	0	0	0
JGH	Jashore	47	14	30	45	17	38	1	1	100
JRRMCH	Sylhet	37	12	32	43	10	23	1	1	100
SBMCH	Barishal	32	10	31	30	5	17	0	0	0
CMCH	Chattogram	54	28	52	66	30	45	0	0	0
MARMCH	Dinajpur	24	6	25	50	4	8	0	0	0
		331	92	28	343	92	27	6	4	67

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
April 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	99	16	16	16	0	0	0	11	0	0	5	0	0
RMCH	Rajshahi	49	2	4	2	0	0	0	2	0	0	0	0	0
CuMCH	Cumilla	58	19	33	19	0	0	0	6	0	0	13	0	0
KMCH	Khulna	44	13	30	13	0	0	0	6	0	0	7	0	0
JGH	Jashore	93	32	34	32	0	0	0	10	0	0	22	0	0
JRRMCH	Sylhet	81	23	28	23	0	0	0	18	0	0	5	0	0
SBMCH	Barishal	62	15	24	15	0	0	0	11	0	0	4	0	0
CMCH	Chattogram	120	58	48	58	0	0	0	52	0	0	5	0	0
MARMCH	Dinajpur	74	10	14	10	0	0	0	3	0	0	7	0	0
		680	188	28	188	0	0	0	119	0	0	68	0	0

#One co-infection with A(H3) and A(H1N1)pdm09

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

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)			ILI [‡]		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	42	4	10	19	2	11	38	10	26
RMCH	Rajshahi	27	1	4	22	1	5	-	-	-
CuMCH	Cumilla	37	10	27	21	9	43	-	-	-
KMCH	Khulna	27	9	33	17	4	24	-	-	-
JGH	Jashore	28	10	36	21	6	29	44	16	36
JRRMCH	Sylhet	22	8	36	28	6	21	31	9	29
SBMCH	Barishal	38	12	32	24	3	13	-	-	-
CMCH	Chattogram	40	16	40	36	11	31	44	31	70
MARMCH	Dinajpur	16	5	31	28	2	7	30	3	10
		277	75	27	216	44	20	187	69	37

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

Age groups	April 2024									Initiation - April 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 %	
<1 Year	-	-	-	8	1	13	124	23	19	-	-	-	2,881	194	7	11,013	640	6
1-4 Years	-	-	-	40	19	48	92	21	23	-	-	-	4,781	673	14	4,830	686	14
5-14 Years	56	19	34	41	16	39	-	-	-	5,353	1126	21	2,984	675	23	-	-	-
15-24 Years	55	16	29	41	17	41	-	-	-	5,362	1223	23	2,933	554	19	-	-	-
25-39 Years	52	12	23	32	9	28	-	-	-	5,678	1077	19	2,460	386	16	-	-	-
40-59 Years	67	17	25	14	5	36	-	-	-	7,217	1125	16	1,642	237	14	-	-	-
≥ 60 Years	47	11	23	11	2	18	-	-	-	7,330	1113	15	560	61	11	-	-	-
	277	75	27	187	69	37	216	44	20	30,940	5,664	18	18,241	2,780	15	15,843	1,326	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) - April 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	8,192	1,456	18	948	507	1	9	518	0	0	419	64	273
RMCH	Rajshahi	May 2007	5,328	592	11	398	194	0	14	235	0	0	147	39	94
SZRMCH ^γ	Bogra	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	6,803	837	12	564	270	3	9	300	0	0	254	28	92
KMCH	Khulna	Jul 2007	4,572	622	14	431	190	1	16	224	0	0	187	17	112
JGH ^{γ†}	Jashore	Sep 2007	6,198	1222	20	770	449	3	10	421	0	0	339	26	285
JRRMCH	Sylhet	Jul 2007	6,077	968	16	620	346	2	16	303	0	0	300	34	169
SBMCH	Barishal	Aug 2007	7,846	1075	14	700	371	4	7	347	0	0	342	56	166
CMCH	Chattogram	Apr 2014	5,689	913	16	636	273	4	0	325	0	0	310	41	212
MARMCH [‡]	Dinajpur	Apr 2014	3,729	549	15	329	220	0	0	161	0	0	165	28	171
			65,024	9,770	15	6,432	3,319	19	135	3,364	1	0	2,913	395	1,630

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

^ψThree samples 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 (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.

[‡]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.

^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.

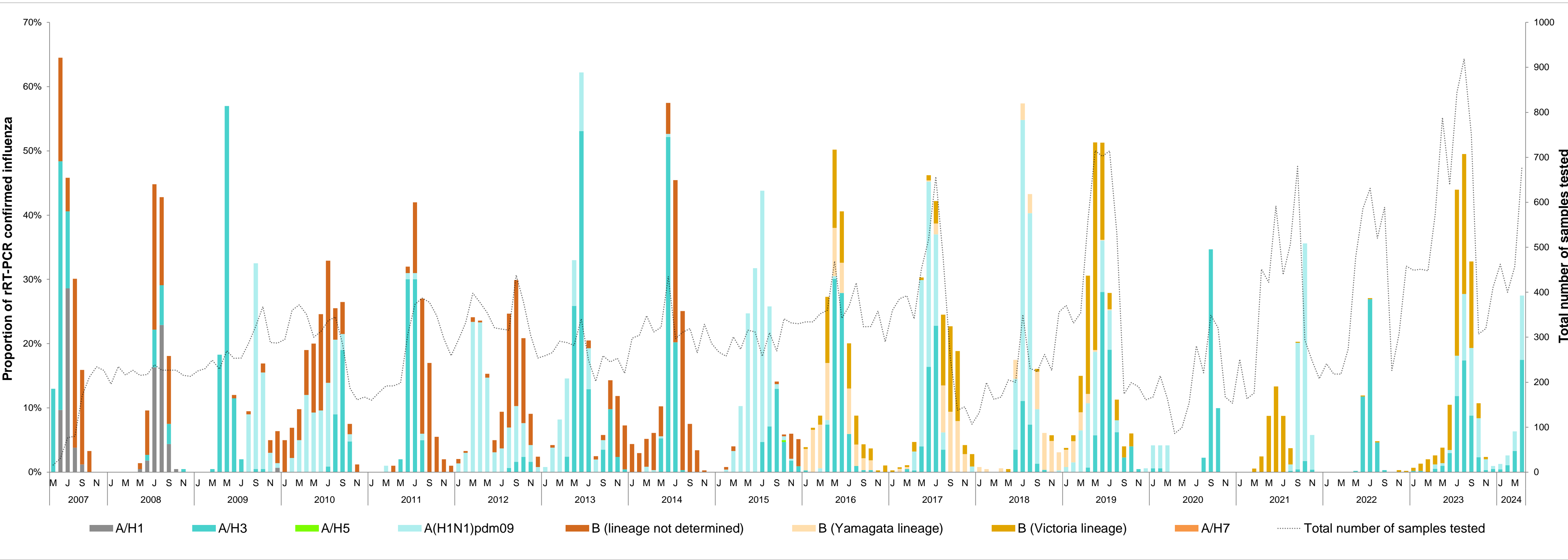
Outpatient ILI surveillance discontinued in October 2023.

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 - April 2024

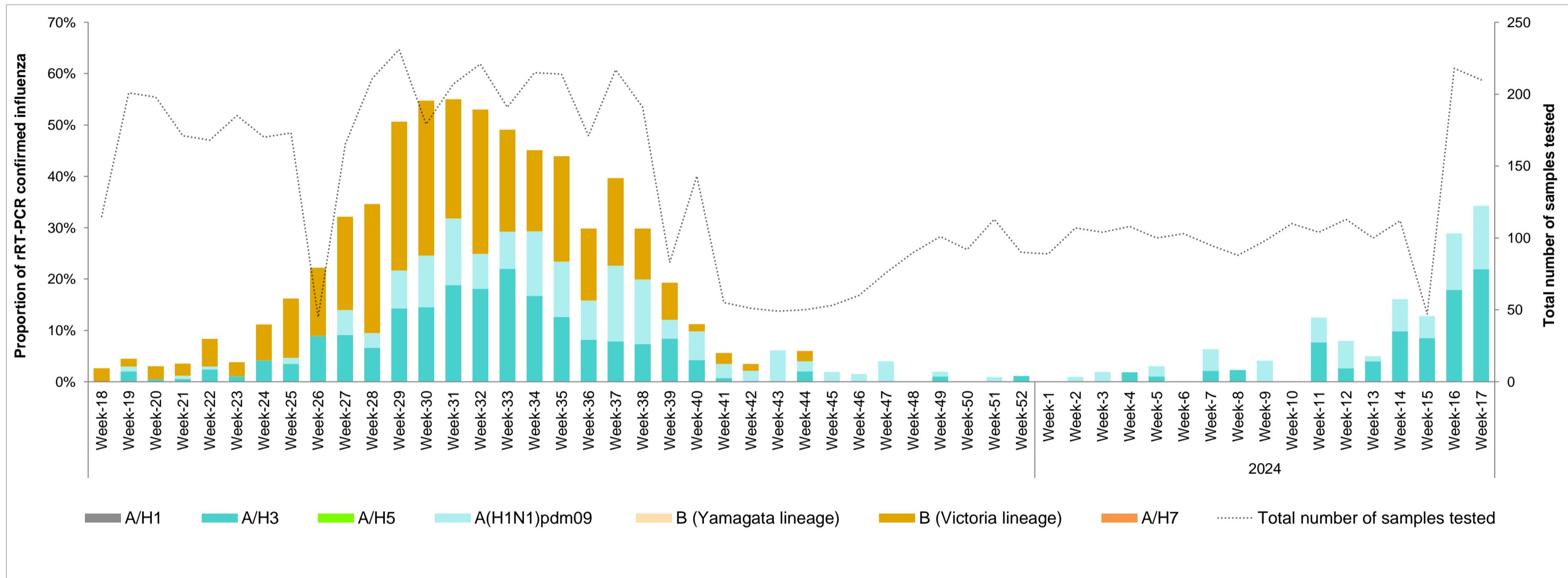


Note: Influenza B lineages initiated in January 2016

Hospital based influenza surveillance

Influenza seasonality graph

Week 18 of 2023 to week 17 of 2024



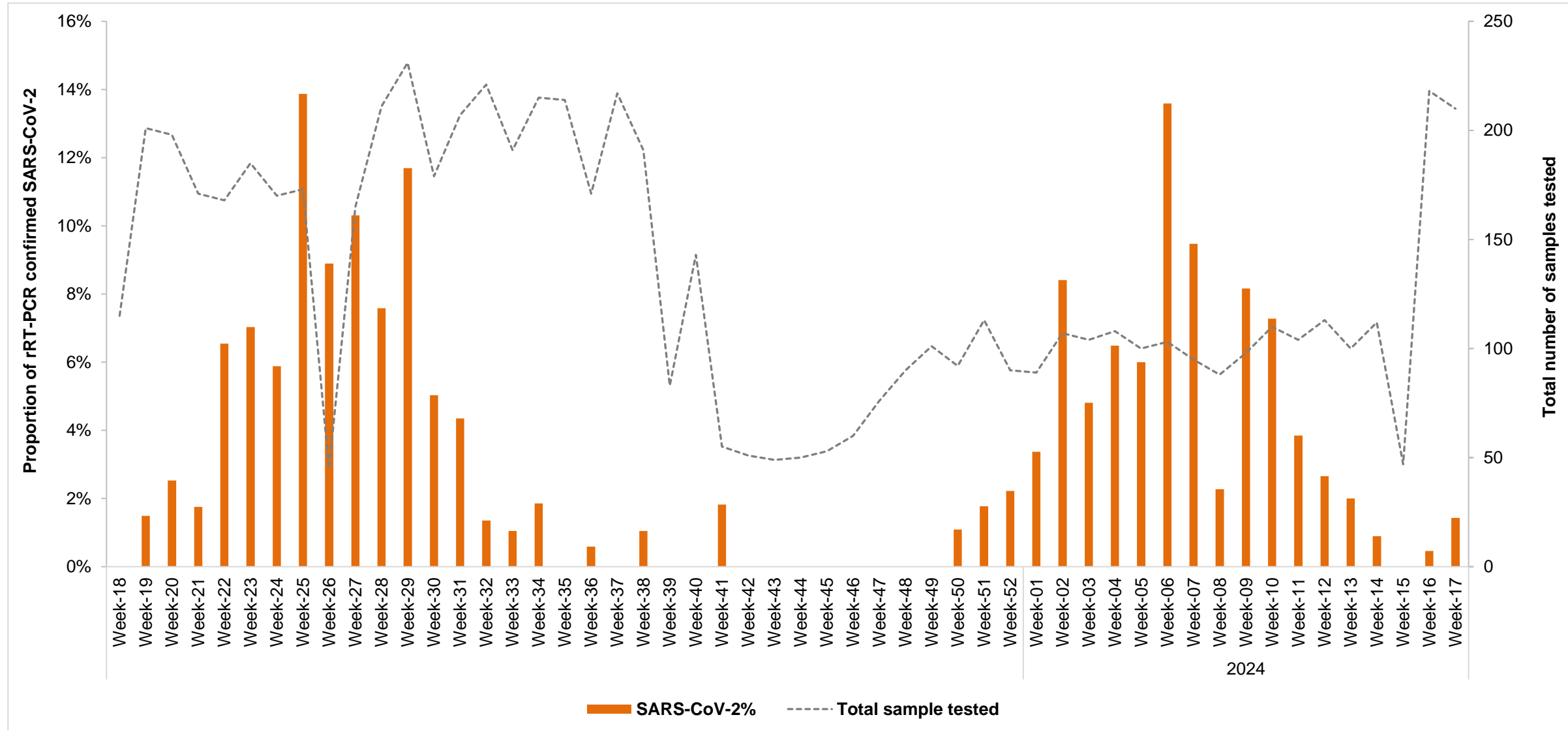
Hospital based influenza surveillance
Hospital-wise SARS-CoV-2 lab results
April 2024

Hospital	District	April 2024			March 2020 - April 2024		
		Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
JIMCH	Kishoregonj	99	0	0	2,799	141	5
RMCH	Rajshahi	49	0	0	1,861	144	8
CuMCH	Cumilla	58	0	0	1,825	129	7
KMCH	Khulna	44	0	0	1,593	207	13
JGH	Jashore	93	2	2	2,314	209	9
JRRMCH	Sylhet	81	1	1	2,244	183	8
SBMCH	Barishal	62	1	2	2,239	167	7
CMCH	Chattogram	120	0	0	3,148	264	8
MARMCH	Dinajpur	74	1	1	2,066	130	6
		680	5	1	20,089	1,574	8

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

Age groups	April 2024			March 2020 - April 2024		
	Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
<1 Year	132	0	0	4592	152	3
1-4 Years	132	2	2	2954	40	1
5-14 Years	97	0	0	2,617	60	2
15-24 Years	96	0	0	2,047	111	5
25-39 Years	84	0	0	2,240	293	13
40-59 Years	81	3	4	2,952	489	17
≥ 60 Years	58	0	0	2,687	429	16
	680	5	1	20,089	1,574	8

**Hospital based influenza surveillance
SARS-CoV-2 positivity trend by week
Week 18 of 2023 to week 17 of 2024**



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

