



Monthly summary report

Hospital-Based Human Influenza Surveillance in Bangladesh

May 2024

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
May 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	70	17	24	66	25	38	0	0	0
RMCH	Rajshahi	29	6	21	27	5	19	0	0	0
CuMCH	Cumilla	30	6	20	36	9	25	2	1	50
KMCH	Khulna	24	14	58	16	4	25	0	0	0
JGH	Jashore	64	28	44	41	17	41	1	0	0
JRRMCH	Sylhet	50	12	24	64	24	38	0	0	0
SBMCH	Barishal	47	29	62	33	16	48	0	0	0
CMCH	Chattogram	77	25	32	68	35	51	0	0	0
MARMCH	Dinajpur	50	15	30	54	17	31	0	0	0
		441	152	34	405	152	38	3	1	33

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
May 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	136	42	31	42	0	0	0	36	0	0	6	0	0
RMCH	Rajshahi	56	11	20	11	0	0	0	10	0	0	1	0	0
CuMCH	Cumilla	68	16	24	16	0	0	0	11	0	0	5	0	0
KMCH	Khulna	40	18	45	18	0	0	0	16	0	0	2	0	0
JGH	Jashore	106	45	42	45	0	0	0	22	0	0	23	0	0
JRRMCH	Sylhet	114	36	32	36	0	0	0	30	0	0	6	0	0
SBMCH	Barishal	80	45	56	45	0	0	0	38	0	0	7	0	0
CMCH	Chattogram	145	60	41	60	0	0	0	44	0	0	16	0	0
MARMCH	Dinajpur	104	32	31	32	0	0	0	24	0	0	8	0	0
		849	305	36	305	0	0	0	231	0	0	74	0	0

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

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)			ILI [‡]		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	44	17	39	42	13	31	50	12	24
RMCH	Rajshahi	34	7	21	22	4	18	-	-	-
CuMCH	Cumilla	36	9	25	32	7	22	-	-	-
KMCH	Khulna	27	15	56	13	3	23	-	-	-
JGH	Jashore	39	18	46	19	4	21	48	23	48
JRRMCH	Sylhet	32	12	38	35	14	40	47	10	21
SBMCH	Barishal	53	31	58	27	14	52	-	-	-
CMCH	Chattogram	60	17	28	37	12	32	48	31	65
MARMCH	Dinajpur	36	13	36	21	4	19	47	15	32
		361	139	39	248	75	30	240	91	38

Hospital based influenza surveillance
Influenza results by different age groups
May 2024

Age groups	May 2024									Initiation - May 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	-	-	-	4	1	25	134	29	22	-	-	-	2,885	195	7	11,147	669	6
1-4 Years	-	-	-	43	22	51	114	46	40	-	-	-	4,824	695	14	4,944	732	15
5-14 Years	75	35	47	44	21	48	-	-	-	5,428	1161	21	3,028	696	23	-	-	-
15-24 Years	80	31	39	57	18	32	-	-	-	5,442	1254	23	2,990	572	19	-	-	-
25-39 Years	62	25	40	48	16	33	-	-	-	5,740	1102	19	2,508	402	16	-	-	-
40-59 Years	80	27	34	33	11	33	-	-	-	7,297	1152	16	1,675	248	15	-	-	-
≥ 60 Years	64	21	33	11	2	18	-	-	-	7,394	1134	15	571	63	11	-	-	-
	361	139	39	240	91	38	248	75	30	31,301	5,803	19	18,481	2,871	16	16,091	1,401	9

[‡]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) - May 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	8,328	1,498	18	990	507	1	9	554	0	0	425	64	273
RMCH	Rajshahi	May 2007	5,384	603	11	409	194	0	14	245	0	0	148	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	6,871	853	12	580	270	3	9	311	0	0	259	28	92
KMCH	Khulna	Jul 2007	4,612	640	14	449	190	1	16	240	0	0	189	17	112
JGH ^{γ†}	Jashore	Sep 2007	6,304	1267	20	815	449	3	10	443	0	0	362	26	285
JRRMCH	Sylhet	Jul 2007	6,191	1004	16	656	346	2	16	333	0	0	306	34	169
SBMCH	Barishal	Aug 2007	7,926	1120	14	745	371	4	7	385	0	0	349	56	166
CMCH	Chattogram	Apr 2014	5,834	973	17	696	273	4	0	369	0	0	326	41	212
MARMCH [‡]	Dinajpur	Apr 2014	3,833	581	15	361	220	0	0	185	0	0	173	28	171
			65,873	10,075	15	6,737	3,319	19	135	3,595	1	0	2,987	395	1,630

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

^γThree 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.

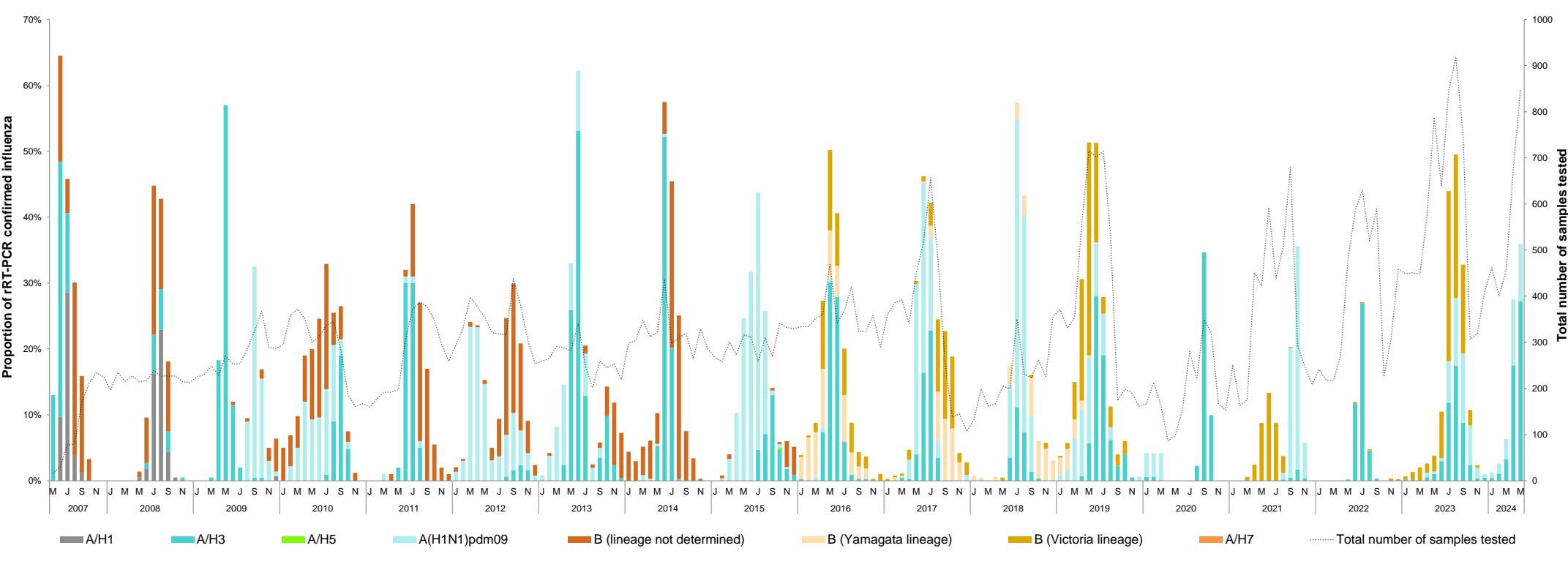
Outpatient ILI surveillance discontinued in October 2023.

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 - May 2024

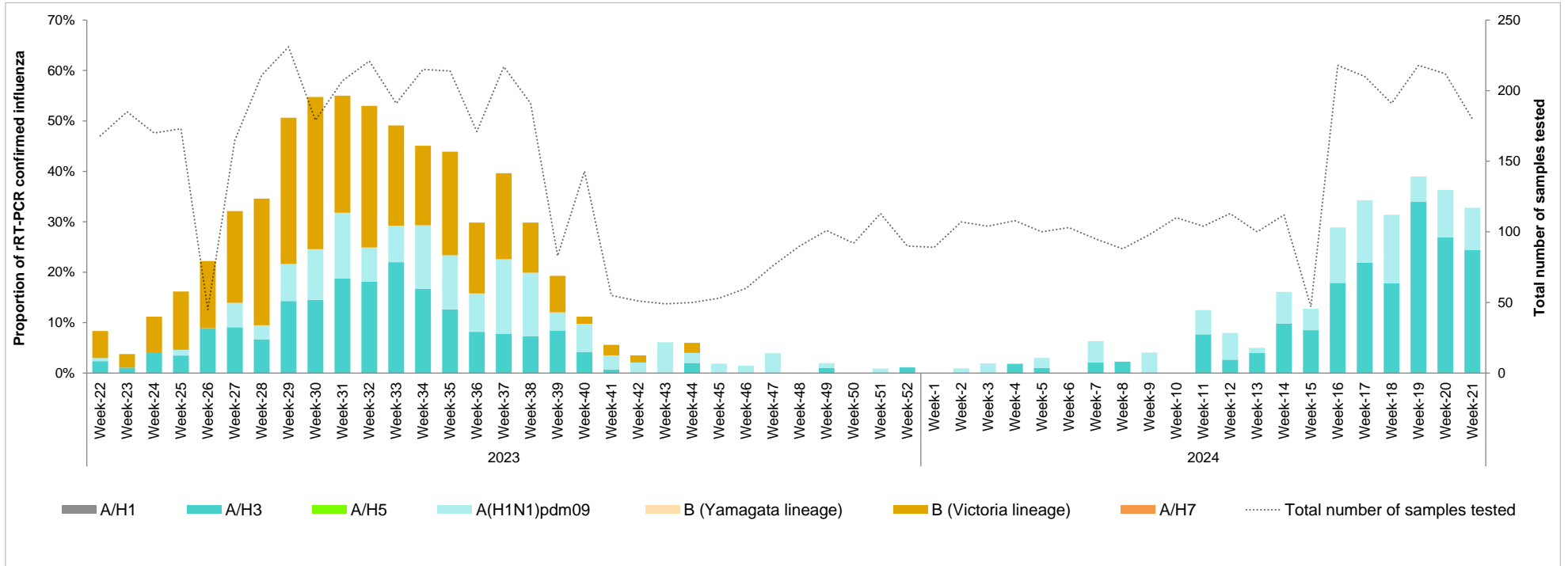


Note: Influenza B lineages initiated in January 2016

Hospital based influenza surveillance

Influenza seasonality graph

Week 22 of 2023 to week 21 of 2024



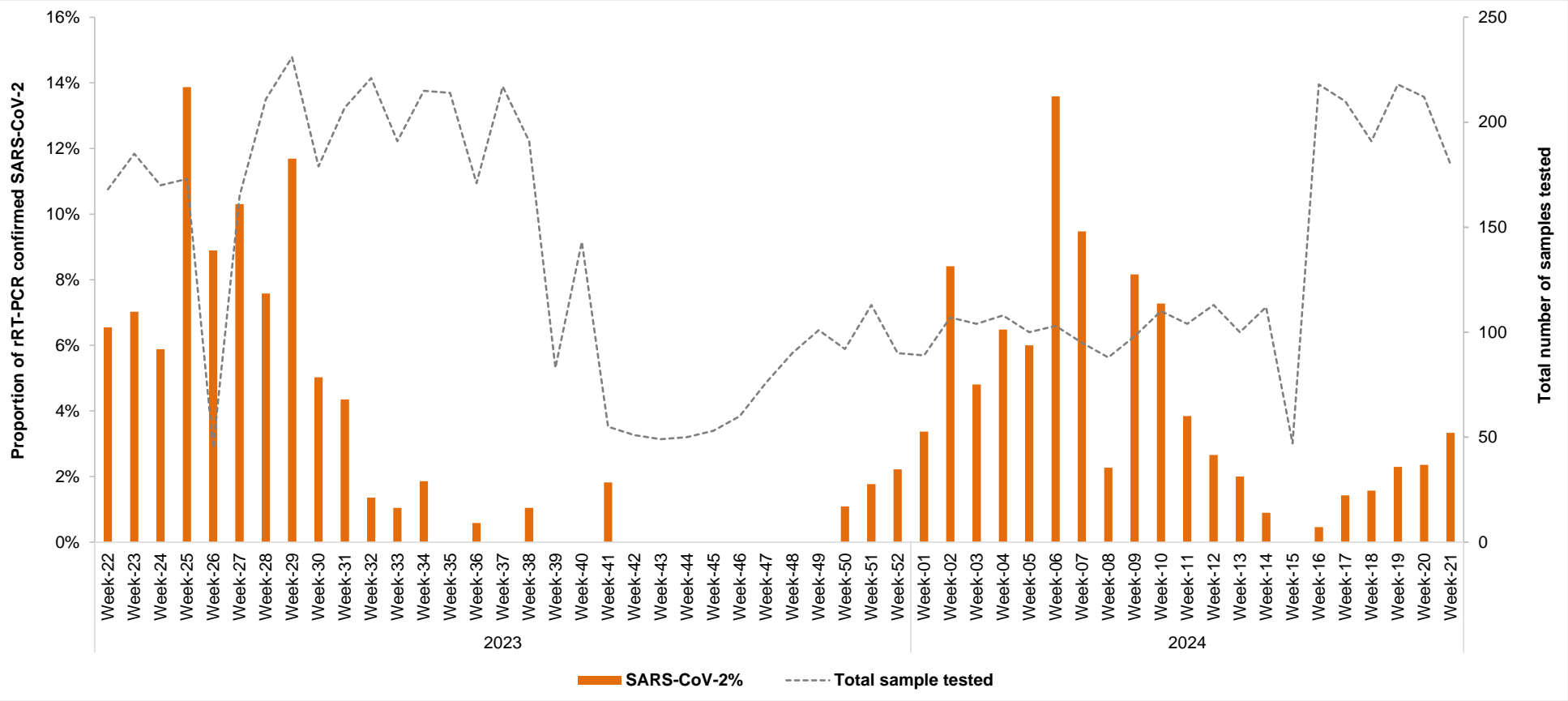
Hospital based influenza surveillance
Hospital-wise SARS-CoV-2 lab results
May 2024

Hospital	District	May 2024			March 2020 - May 2024		
		Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
JIMCH	Kishoregonj	136	3	2	2,935	144	5
RMCH	Rajshahi	56	1	2	1,917	145	8
CuMCH	Cumilla	68	1	1	1,893	130	7
KMCH	Khulna	40	3	8	1,633	210	13
JGH	Jashore	106	1	1	2,420	210	9
JRRMCH	Sylhet	114	2	2	2,358	185	8
SBMCH	Barishal	80	5	6	2,319	172	7
CMCH	Chattogram	145	7	5	3,293	271	8
MARMCH	Dinajpur	104	1	1	2,170	131	6
		849	24	3	20,938	1,598	8

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

Age groups	May 2024			March 2020 - May 2024		
	Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
<1 Year	138	6	4	4730	158	3
1-4 Years	157	1	1	3111	41	1
5-14 Years	119	1	1	2,736	61	2
15-24 Years	137	7	5	2,184	118	5
25-39 Years	110	4	4	2,350	297	13
40-59 Years	113	4	4	3,065	493	16
≥ 60 Years	75	1	1	2,762	430	16
	849	24	3	20,938	1,598	8

**Hospital based influenza surveillance
SARS-CoV-2 positivity trend by week
Week 22 of 2023 to week 21 of 2024**



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

