



Monthly summary report

Hospital-Based Human Influenza Surveillance in Bangladesh

September 2024

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
September 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	140	11	8	11	0	0	0	2	0	0	9	0	0
RMCH	Rajshahi	63	3	5	3	0	0	0	0	0	0	3	0	0
CuMCH	Cumilla	63	7	11	7	0	0	0	3	0	0	4	0	0
KMCH	Khulna	50	2	4	2	0	0	0	2	0	0	0	0	0
JGH	Jashore	105	9	9	9	0	0	0	3	0	0	6	0	0
JRRMCH	Sylhet	98	1	1	1	0	0	0	1	0	0	0	0	0
SBMCH	Barishal	83	7	8	7	0	0	0	1	0	0	6	0	0
CMCH	Chattogram	145	5	3	5	0	0	0	0	0	0	5	0	0
MARMCH	Dinajpur	106	0	0	0	0	0	0	0	0	0	0	0	0
		853	45	5	45	0	0	0	12	0	0	33	0	0

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
September 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	54	7	13	86	4	5	0	0	0
RMCH	Rajshahi	22	3	14	40	0	0	1	0	0
CuMCH	Cumilla	36	5	14	27	2	7	0	0	0
KMCH	Khulna	14	2	14	36	0	0	0	0	0
JGH	Jashore	45	5	11	60	4	7	0	0	0
JRRMCH	Sylhet	39	0	0	57	1	2	2	0	0
SBMCH	Barishal	20	3	15	63	4	6	0	0	0
CMCH	Chattogram	59	3	5	86	2	2	0	0	0
MARMCH	Dinajpur	40	0	0	66	0	0	0	0	0
		329	28	9	521	17	3	3	0	0

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

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)			ILI [‡]		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	32	6	19	58	2	3	50	3	6
RMCH	Rajshahi	27	3	11	36	0	0	-	-	-
CuMCH	Cumilla	37	5	14	26	2	8	-	-	-
KMCH	Khulna	17	2	12	33	0	0	-	-	-
JGH	Jashore	22	2	9	34	1	3	49	6	12
JRRMCH	Sylhet	18	1	6	38	0	0	42	0	0
SBMCH	Barishal	30	7	23	53	0	0	-	-	-
CMCH	Chattogram	38	1	3	57	1	2	50	3	6
MARMCH	Dinajpur	18	0	0	40	0	0	48	0	0
		239	27	11	375	6	2	239	12	5

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

Age groups	September 2024									Initiation - September 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	-	-	-	18	0	0	227	4	2	-	-	-	2,926	195	7	11,765	729	6
1-4 Years	-	-	-	38	3	8	148	2	1	-	-	-	4,948	720	15	5,387	826	15
5-14 Years	59	6	10	40	3	8	-	-	-	5,642	1215	22	3,189	738	23	-	-	-
15-24 Years	52	3	6	65	3	5	-	-	-	5,665	1301	23	3,252	628	19	-	-	-
25-39 Years	42	4	10	46	1	2	-	-	-	5,910	1153	20	2,662	435	16	-	-	-
40-59 Years	49	7	14	23	2	9	-	-	-	7,520	1208	16	1,783	259	15	-	-	-
≥ 60 Years	37	7	19	9	0	0	-	-	-	7,591	1184	16	613	66	11	-	-	-
	239	27	11	239	12	5	375	6	2	32,328	6,061	19	19,373	3,041	16	17,152	1,555	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 - September 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	8,794	1,580	18	1072	507	1	9	594	0	0	467	64	273
RMCH	Rajshahi	May 2007	5,596	638	11	444	194	0	14	272	0	0	156	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	7,110	875	12	602	270	3	9	326	0	0	266	28	92
KMCH	Khulna	Jul 2007	4,762	675	14	484	190	1	16	265	0	0	198	17	112
JGH ^{γ†}	Jashore	Sep 2007	6,690	1410	21	958	449	3	10	540	0	0	408	26	285
JRRMCH	Sylhet	Jul 2007	6,554	1073	16	725	346	2	16	383	0	0	325	34	169
SBMCH	Barishal	Aug 2007	8,201	1161	14	786	371	4	7	411	0	0	364	56	166
CMCH	Chattogram	Apr 2014	6,345	1037	16	760	273	4	0	395	0	0	364	41	212
MARMCH ²	Dinajpur	Apr 2014	4,211	672	16	450	222	0	0	268	0	0	179	28	173
			68,853	10,657	15	7,317	3,321	19	135	3,984	1	0	3,177	395	1,632

^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.

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.

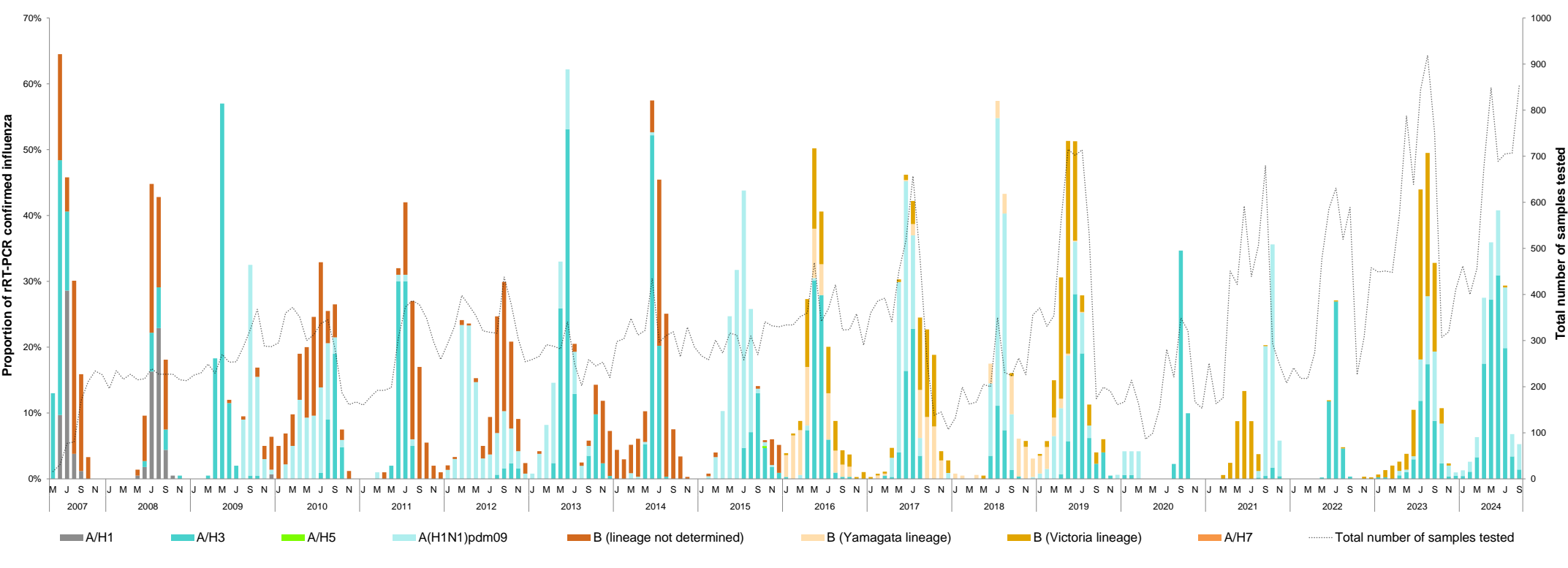
Outpatient ILI surveillance discontinued in October 2023.

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 - September 2024

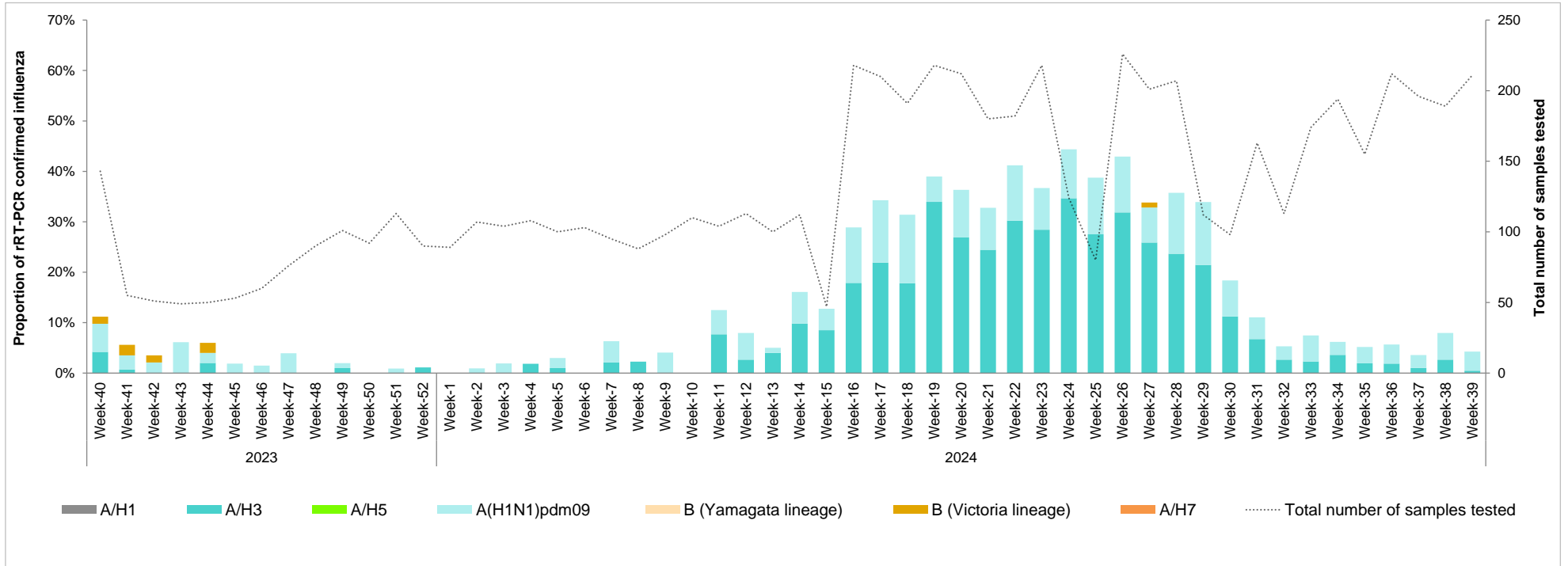


Note: Influenza B lineages initiated in January 2016

Hospital based influenza surveillance

Influenza seasonality graph

Week 40 of 2023 to week 39 of 2024



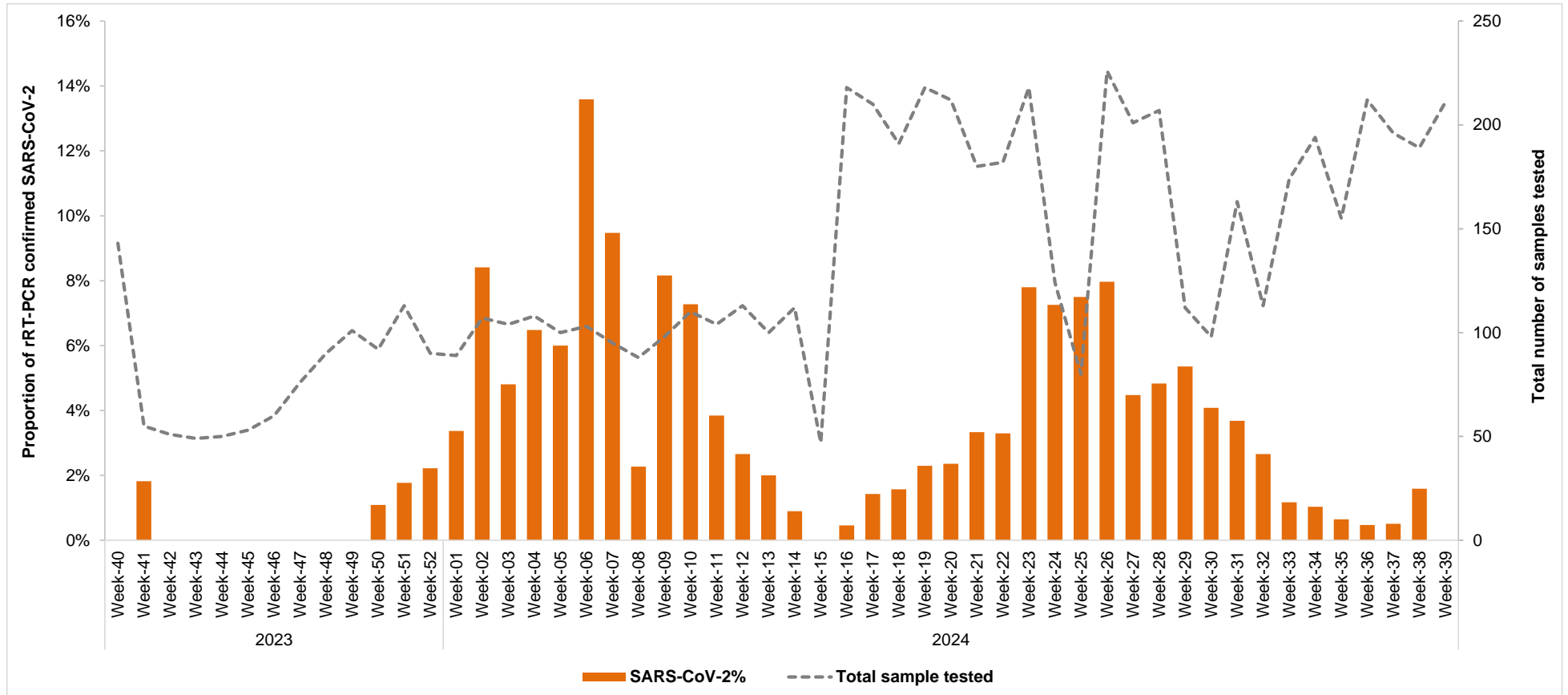
Hospital based influenza surveillance
Hospital-wise SARS-CoV-2 lab results
September 2024

Hospital	District	September 2024			March 2020 - September 2024		
		Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
JIMCH	Kishoregonj	140	0	0	3,401	168	5
RMCH	Rajshahi	63	0	0	2,129	149	7
CuMCH	Cumilla	63	0	0	2,132	136	6
KMCH	Khulna	50	0	0	1,783	218	12
JGH	Jashore	105	1	1	2,806	225	8
JRRMCH	Sylhet	98	0	0	2,721	192	7
SBMCH	Barishal	83	0	0	2,594	182	7
CMCH	Chattogram	145	3	2	3,804	281	7
MARMCH	Dinajpur	106	2	2	2,548	150	6
		853	6	1	23,918	1,701	7

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

Age groups	September 2024			March 2020 - September 2024		
	Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
<1 Year	245	1	0	5389	182	3
1-4 Years	186	0	0	3678	49	1
5-14 Years	99	0	0	3,111	69	2
15-24 Years	117	3	3	2,669	143	5
25-39 Years	88	2	2	2,674	305	11
40-59 Years	72	0	0	3,396	510	15
≥ 60 Years	46	0	0	3,001	443	15
	853	6	1	23,918	1,701	7

**Hospital based influenza surveillance
SARS-CoV-2 positivity trend by week
Week 40 of 2023 to week 39 of 2024**



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

