



Monthly summary report

Hospital-Based Human Influenza Surveillance in Bangladesh

November 2023

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
November 2023

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	24	0	0	25	1	4	2	0	0
RMCH	Rajshahi	10	0	0	14	0	0	1	0	0
CuMCH	Cumilla	15	0	0	13	0	0	1	0	0
KMCH	Khulna	13	0	0	10	1	10	0	0	0
JGH	Jashore	21	2	10	20	1	5	0	0	0
JRRMCH	Sylhet	17	0	0	25	0	0	0	0	0
SBMCH	Barishal	8	0	0	22	0	0	0	0	0
CMCH	Chattogram	19	1	5	16	1	6	1	0	0
MARMCH	Dinajpur	6	0	0	14	0	0	0	0	0
		133	3	2	159	4	3	5	0	0

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
November 2023

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	51	1	2	1	0	0	0	0	0	0	1	0	0
RMCH	Rajshahi	25	0	0	0	0	0	0	0	0	0	0	0	0
CuMCH	Cumilla	29	0	0	0	0	0	0	0	0	0	0	0	0
KMCH	Khulna	23	1	4	1	0	0	0	0	0	0	1	0	0
JGH	Jashore	41	3	7	3	0	0	0	0	0	0	3	0	0
JRRMCH	Sylhet	42	0	0	0	0	0	0	0	0	0	0	0	0
SBMCH	Barishal	30	0	0	0	0	0	0	0	0	0	0	0	0
CMCH	Chattogram	36	2	6	1	1	0	0	1	0	0	0	0	1
MARMCH	Dinajpur	20	0	0	0	0	0	0	0	0	0	0	0	0
		297	7	2	6	1	0	0	1	0	0	5	0	1

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
November 2023

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)			ILI [‡]		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	21	1	5	10	0	0	20	0	0
RMCH	Rajshahi	13	0	0	12	0	0	-	-	-
CuMCH	Cumilla	19	0	0	10	0	0	-	-	-
KMCH	Khulna	15	1	7	8	0	0	-	-	-
JGH	Jashore	9	1	11	10	0	0	22	2	9
JRRMCH	Sylhet	12	0	0	10	0	0	20	0	0
SBMCH	Barishal	19	0	0	11	0	0	-	-	-
CMCH	Chattogram	24	1	4	10	1	10	2	0	0
MARMCH	Dinajpur	8	0	0	10	0	0	2	0	0
		140	4	3	91	1	1	66	2	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
November 2023**

Age groups	November 2023									Initiation - November 2023								
	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	-	-	-	9	0	0	63	0	0	-	-	-	2,822	193	7	10,703	616	6
1-4 Years	-	-	-	16	0	0	28	1	4	-	-	-	4,597	651	14	4,615	658	14
5-14 Years	42	2	5	8	1	13	-	-	-	5,162	1091	21	2,798	653	23	-	-	-
15-24 Years	31	0	0	9	0	0	-	-	-	5,207	1204	23	2,715	535	20	-	-	-
25-39 Years	21	0	0	13	1	8	-	-	-	5,537	1063	19	2,304	375	16	-	-	-
40-59 Years	28	1	4	10	0	0	-	-	-	6,989	1106	16	1,497	229	15	-	-	-
≥ 60 Years	18	1	6	1	0	0	-	-	-	7,124	1098	15	501	55	11	-	-	-
	140	4	3	66	2	3	91	1	1	30,019	5,562	19	17,234	2,691	16	15,318	1,274	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) - November 2023

Hospital	District	Initiation	Sample	Flu	Flu %	Flu A ^ψ	Flu B ^λ	Flu A+B ^τ	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	7,806	1,428	18	920	507	1	9	500	0	0	409	64	273
RMCH	Rajshahi	May 2007	5,175	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	6,618	806	12	533	270	3	9	286	0	0	237	28	92
KMCH	Khulna	Jul 2007	4,424	607	14	416	190	1	16	218	0	0	178	17	112
JGH ^{γ†}	Jashore	Sep 2007	5,831	1185	20	733	449	3	10	411	0	0	312	26	285
JRRMCH	Sylhet	Jul 2007	5,779	932	16	584	346	2	16	281	0	0	286	34	169
SBMCH	Barishal	Aug 2007	7,668	1060	14	685	371	4	7	336	0	0	338	56	166
CMCH	Chattogram	Apr 2014	5,238	844	16	567	273	4	0	268	0	0	299	41	212
MARMCH ²	Dinajpur	Apr 2014	3,442	539	16	319	220	0	0	158	0	0	158	28	171
			62,571	9,527	15	6,189	3,319	19	135	3,221	1	0	2,814	395	1,630

^λDetermination of influenza B lineage initiated in January 2016.

^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.

^τThree 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.

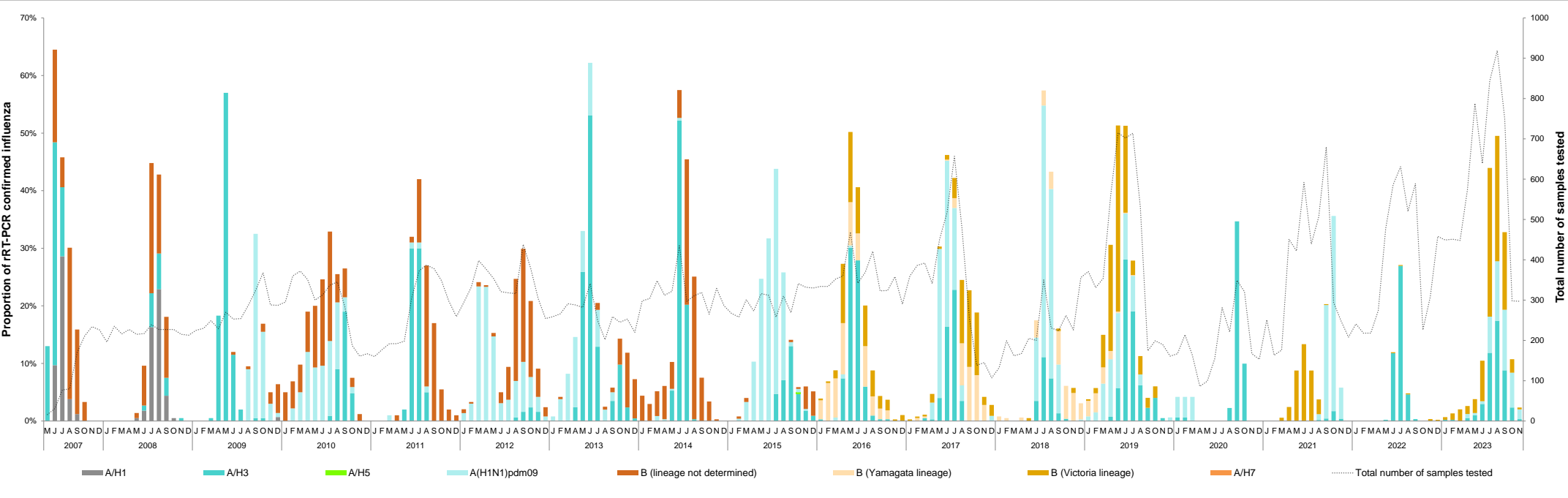
Outpatient ILI surveillance reinitiated at JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2022.

Outpatient ILI surveillance reinitiated at JIMCH (Kishoregonj) and JGH (Jashore) in December 2022.

Outpatient ILI surveillance discontinued in October 2023.

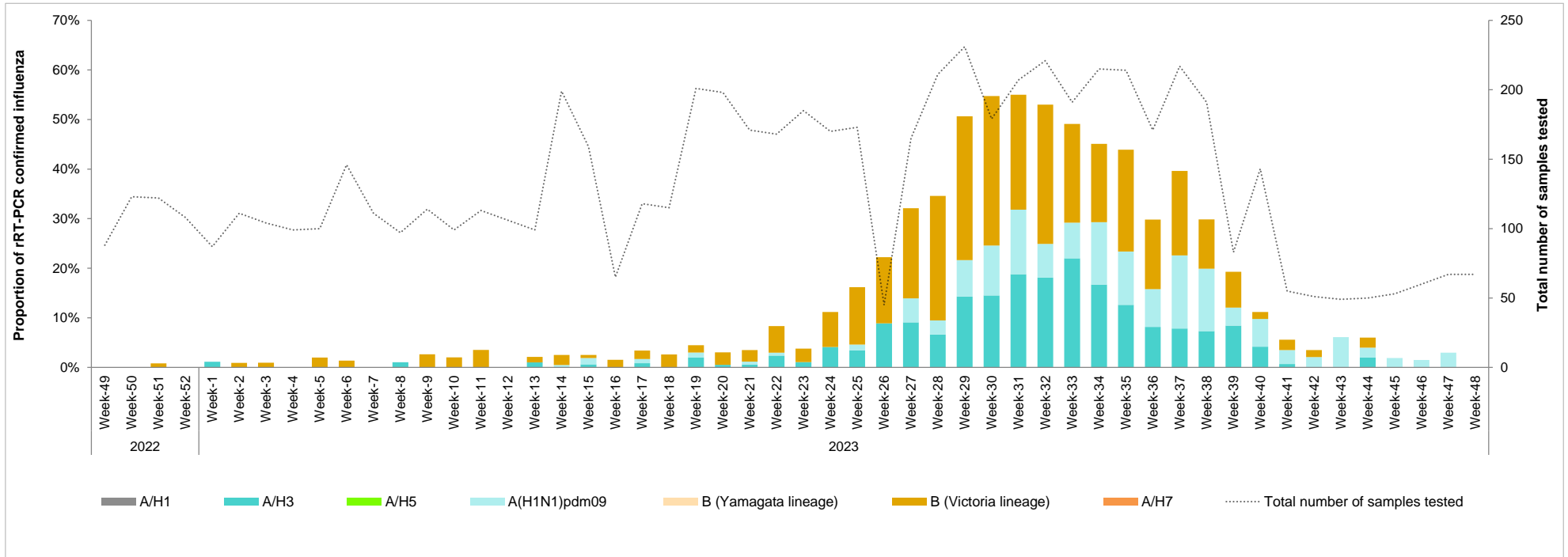
Outpatient ILI surveillance reinitiated at JIMCH (Kishoregonj), JGH (Jashore), JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2023.

**Hospital based influenza surveillance
Influenza seasonality graph
May 2007 - November 2023**



Note: Influenza B lineages initiated in January 2016

Hospital based influenza surveillance
Influenza seasonality graph
Week 49 of 2022 to week 48 of 2023



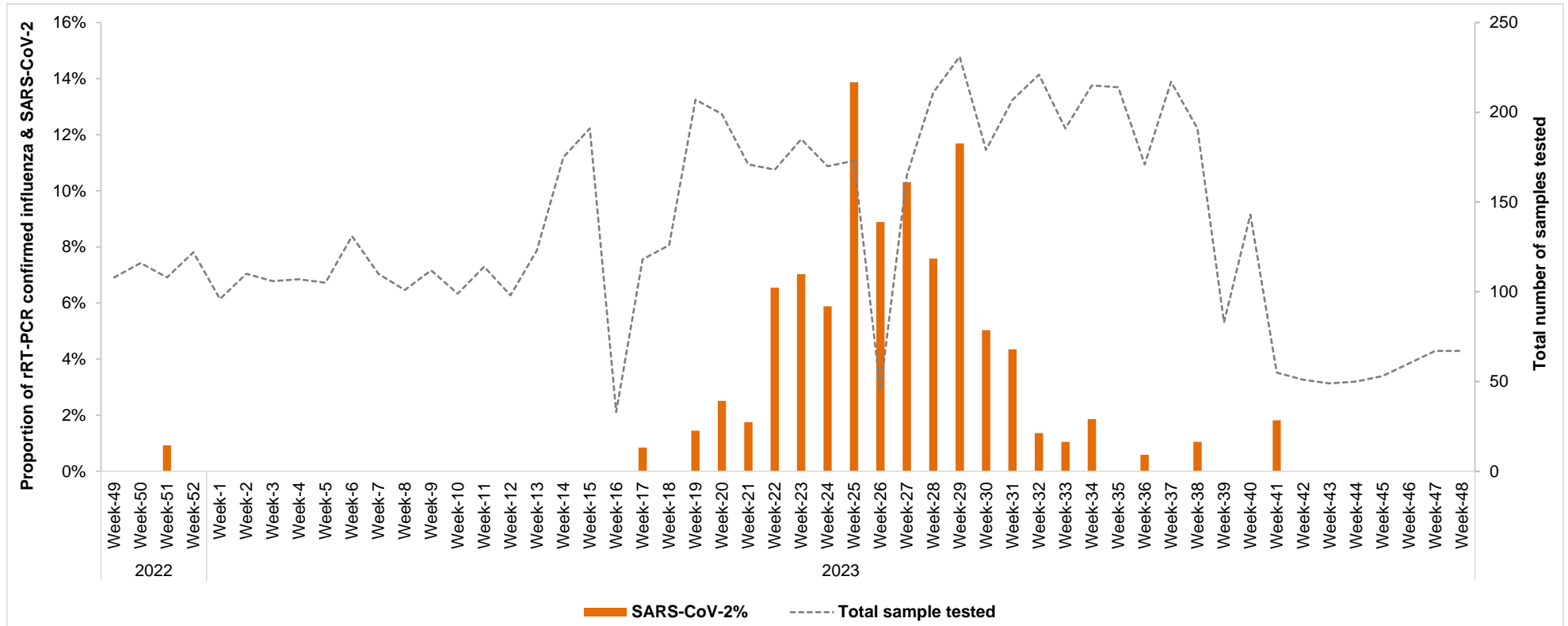
**Hospital based influenza surveillance
Hospitalwise SARS-CoV-2 lab results
November 2023**

Hospital	District	November 2023			March 2020 - November 2023		
		Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
JIMCH	Kishoregonj	51	0	0	2,413	130	5
RMCH	Rajshahi	25	0	0	1,708	141	8
CuMCH	Cumilla	29	0	0	1,640	123	8
KMCH	Khulna	23	0	0	1,445	202	14
JGH	Jashore	41	0	0	1,947	190	10
JRRMCH	Sylhet	42	0	0	1,946	172	9
SBMCH	Barishal	30	0	0	2,061	164	8
CMCH	Chattogram	36	0	0	2,697	241	9
MARMCH	Dinajpur	20	0	0	1,779	121	7
		297	0	0	17,636	1,484	8

**Hospital based influenza surveillance
SARS-CoV-2 results by different age groups
November 2023**

Age groups	November 2023			March 2020 - November 2023		
	Sample	SARS-CoV-2	SARS-CoV-2 %	Sample	SARS-CoV-2	SARS-CoV-2 %
<1 Year	72	0	0	4223	139	3
1-4 Years	44	0	0	2555	33	1
5-14 Years	50	0	0	2,240	47	2
15-24 Years	40	0	0	1,674	96	6
25-39 Years	34	0	0	1,943	284	15
40-59 Years	38	0	0	2,579	465	18
≥ 60 Years	19	0	0	2,422	420	17
	297	0	0	17,636	1,484	8

**Hospital based influenza surveillance
SARS-CoV-2 positivity trend by week
Week 49 of 2022 to week 48 of 2023**



**Hospital based influenza surveillance
 Influenza and SARS-CoV-2 positivity graph
 March 2020 - November 2023**

