



Monthly summary report

Hospital Based Human Influenza Surveillance in Bangladesh

October 2020

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
October 2020

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	13	1	8%	19	1	5%	6	1	17%
RMCH	Rajshahi	20	2	10%	21	3	14%	0	0	0%
CuMCH	Cumilla	14	0	0%	14	0	0%	0	0	0%
KMCH	Khulna	15	1	7%	9	1	11%	3	0	0%
JGH	Jashore	15	4	27%	10	0	0%	0	0	0%
JRRMCH	Sylhet	17	0	0%	16	3	19%	3	0	0%
SBMCH	Barishal	15	1	7%	24	7	29%	4	0	0%
CMCH	Chattogram	24	0	0%	24	3	13%	0	0	0%
MARMCH	Dinajpur	13	1	8%	19	2	11%	3	1	0%
		146	10	7%	156	20	13%	19	2	11%

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
October 2020

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	38	3	8%	3	0	0	0	3	0	0	0	0	0
RMCH	Rajshahi	41	5	12%	5	0	0	0	5	0	0	0	0	0
CuMCH	Cumilla	28	0	0%	0	0	0	0	0	0	0	0	0	0
KMCH	Khulna	27	2	7%	2	0	0	0	2	0	0	0	0	0
JGH	Jashore	25	4	16%	4	0	0	0	4	0	0	0	0	0
JRRMCH	Sylhet	36	3	8%	3	0	0	0	3	0	0	0	0	0
SBMCH	Barishal	43	8	19%	8	0	0	0	8	0	0	0	0	0
CMCH	Chattogram	48	3	6%	3	0	0	0	3	0	0	0	0	0
MARMCH	Dinajpur	35	4	11%	4	0	0	0	4	0	0	0	0	0
		321	32	10%	32	0	0	0	32	0	0	0	0	0

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
October 2020

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)		
		Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	22	2	9%	16	1	6%
RMCH	Rajshahi	25	3	12%	16	2	13%
CuMCH	Cumilla	15	0	0%	13	0	0%
KMCH	Khulna	19	1	5%	8	1	13%
JGH	Jashore	17	4	24%	8	0	0%
JRRMCH	Sylhet	22	0	0%	14	3	21%
SBMCH	Barishal	28	4	14%	15	4	27%
CMCH	Chattogram	28	1	4%	20	2	10%
MARMCH	Dinajpur	23	2	9%	12	2	17%
		199	17	9%	122	15	12%

**Hospital based influenza surveillance
Influenza results by different age groups
October 2020**

Age groups	October 2020						Initiation - October 2020								
	SARI (aged ≥ 5 years)			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	-	-	-	79	8	10%	-	-	-	2665	189	7%	7,019	424	6%
1-4 Years	-	-	-	43	7	16%	-	-	-	4217	601	14%	2,618	396	15%
5-14 Years	38	5	13%	-	-	-	3537	810	23%	2317	547	24%	-	-	-
15-24 Years	20	2	10%	-	-	-	4182	982	23%	2167	413	19%	-	-	-
25-39 Years	34	3	9%	-	-	-	4200	858	20%	1916	299	16%	-	-	-
40-59 Years	55	4	7%	-	-	-	5048	917	18%	1245	201	16%	-	-	-
≥ 60 Years	52	3	6%	-	-	-	5078	895	18%	400	46	12%	-	-	-
	199	17	9%	122	15	12%	22,045	4,462	20%	14,927	2,296	15%	9,637	820	9%

[‡]Outpatient ILI surveillance discontinued in October 2017.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation - October 2020

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 ^Y	Dhaka	Jun 2007	2061	312	15%	201	111	0	15	84	0	0	102	13	7
CBMCH ^Y	Mymensingh	Oct 2007	2053	302	15%	206	96	0	7	107	1	0	91	16	10
JIMCH	Kishoregonj	Sep 2007	5594	1112	20%	765 ⁱ	347	0	9	408	0	0	346	64	113
RMCH	Rajshahi	May 2007	3678	497	14%	331 ⁱ	166	0	14	193	0	0	122	39	66
SZRMCH ^Y	Bogura	Sep 2007	3865	653	17%	439	213	1	12	256	0	0	170	29	39
LAMB [†]	Dinajpur	Oct 2007	1171	112	10%	72	40	0	7	41	0	0	24	1	0
BBMH [†]	Chattogram	Aug 2007	1440	157	11%	118	39	0	13	42	0	0	63	3	0
CuMCH [†]	Cumilla	Oct 2007	5125	647	13%	429 [*]	215	3	9	228	0	0	191	28	37
KMCH	Khulna	Jul 2007	3189	462	14%	325 ^{*i}	137	0	16	162	0	0	143	17	59
JGH ^{Y†}	Jashore	Sep 2007	4036	843	21%	535	307	1	10	274	0	0	251	26	143
JRRMCH	Sylhet	Jul 2007	4013	697	17%	442 ⁱ	254	1	16	222	0	0	203	34	77
SBMCH	Barishal	Aug 2007	5803	896	15%	576 ⁱ	316	4	9	293	0	0	272	56	111
CMCH	Chattogram	Apr 2014	2785	521	19%	363	155	3	0	148	0	0	215	41	94
MARMCH ²	Dinajpur	Apr 2014	1796	367	20%	234 ⁱ	133	0	0	122	0	0	109	28	84
			46,609	7,578	16%	5,036	2,529	13	137	2,580	1	0	2,302	395	840

^λInfluenza B typing initiated in January 2016.

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

^ψOne 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).

ⁱOne sample collected in May 2019 was co-infected with both Influenza A(H3) and Influenza B (Victoria lineage).

[†]Surveillance activities ended at LAMB (Dinajpur) and BBMH (Chittagong) in May 2016.

^YSurveillance 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).

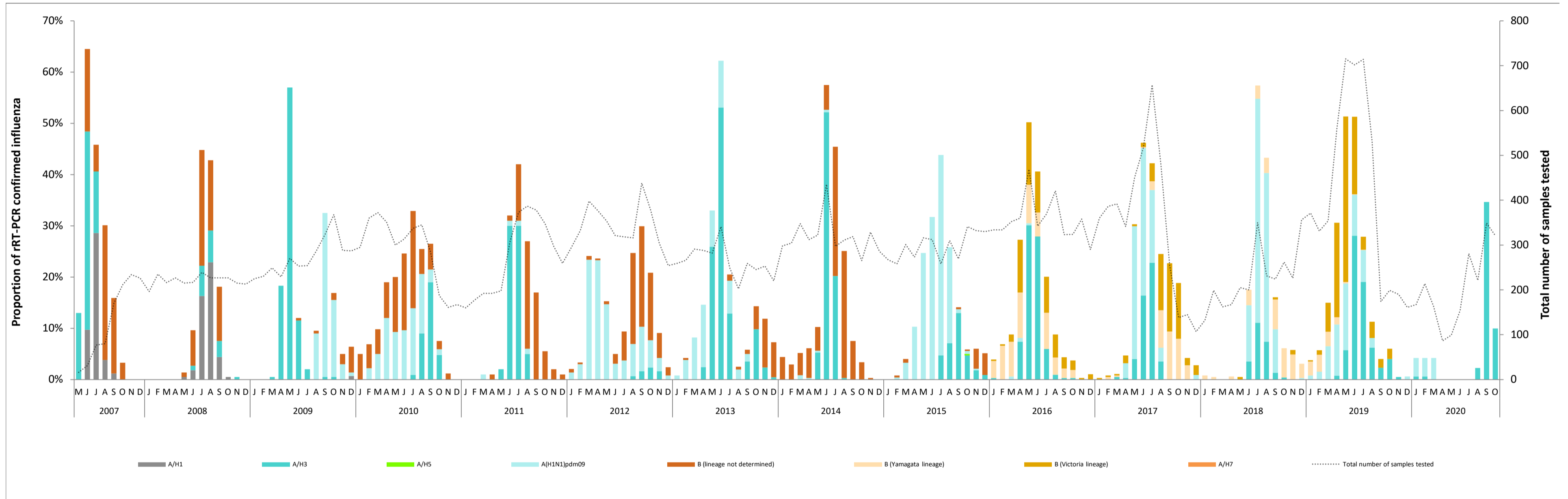
Note: Surveillance activities extended to the intensive care units (ICU) and coronary care unit (CCU) of the participating hospitals in January 2018.

^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.

ⁱNine 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.

**Hospital based influenza surveillance
Influenza seasonality graph
May 2007 - October 2020**



Note: Influenza B typing initiated in January 2016

Hospital based influenza surveillance
Influenza seasonality graph
Week 45 of 2019 to week 44 of 2020

