



Monthly summary report

Hospital Based Human Influenza Surveillance in Bangladesh

November 2019

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
November 2019

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	6	0	0%	11	0	0%	8	0	0%
RMCH	Rajshahi	11	0	0%	9	0	0%	1	0	0%
CuMCH	Cumilla	8	1	13%	8	0	0%	5	0	0%
KMCH	Khulna	12	2	17%	6	0	0%	2	0	0%
JGH	Jashore	7	0	0%	7	0	0%	3	0	0%
JRRMCH	Sylhet	8	0	0%	8	0	0%	9	0	0%
SBMCH	Barishal	12	1	8%	5	0	0%	5	0	0%
CMCH	Chattogram	9	0	0%	8	0	0%	6	0	0%
MARMCH	Dinajpur	4	0	0%	8	0	0%	4	0	0%
		77	4	5%	70	0	0%	43	0	0%

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
November 2019

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	25	0	0%	0	0	0	0	0	0	0	0	0	0
RMCH	Rajshahi	21	0	0%	0	0	0	0	0	0	0	0	0	0
CuMCH	Cumilla	21	1	5%	1*	0	0	0	0	0	0	0	0	0
KMCH	Khulna	20	2	10%	2*	0	0	0	0	0	0	0	0	0
JGH	Jashore	17	0	0%	0	0	0	0	0	0	0	0	0	0
JRRMCH	Sylhet	25	0	0%	0	0	0	0	0	0	0	0	0	0
SBMCH	Barishal	22	1	5%	1	0	0	0	1	0	0	0	0	0
CMCH	Chattogram	23	0	0%	0	0	0	0	0	0	0	0	0	0
MARMCH	Dinajpur	16	0	0%	0	0	0	0	0	0	0	0	0	0
		190	4	2%	4	0	0	0	1	0	0	0	0	0

*One sample from CuMCH (Cumilla) and two samples from KMCH (Khulna) 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
Monthly enrollment by different surveillance groups
November 2019

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)		
		Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	20	0	0%	5	0	0%
RMCH	Rajshahi	13	0	0%	8	0	0%
CuMCH	Cumilla	16	1	6%	5	0	0%
KMCH	Khulna	15	2	13%	5	0	0%
JGH	Jashore	12	0	0%	5	0	0%
JRRMCH	Sylhet	20	0	0%	5	0	0%
SBMCH	Barishal	17	1	6%	5	0	0%
CMCH	Chattogram	18	0	0%	5	0	0%
MARMCH	Dinajpur	11	0	0%	5	0	0%
		142	4	3%	48	0	0%

**Hospital based influenza surveillance
Influenza results by different age groups
November 2019**

Age groups	November 2019						Initiation - November 2019								
	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	-	-	-	30	0	0%	-	-	-	2665	189	7%	6,551	382	6%
1-4 Years	-	-	-	18	0	0%	-	-	-	4217	601	14%	2,384	361	15%
5-14 Years	26	0	0%	-	-	-	3340	786	24%	2317	547	24%	-	-	-
15-24 Years	25	1	4%	-	-	-	4028	964	24%	2167	413	19%	-	-	-
25-39 Years	18	0	0%	-	-	-	3913	828	21%	1916	299	16%	-	-	-
40-59 Years	37	2	5%	-	-	-	4566	881	19%	1245	201	16%	-	-	-
≥ 60 Years	36	1	3%	-	-	-	4684	871	19%	400	46	12%	-	-	-
	142	4	3%	48	0	0%	20,531	4,330	21%	14,927	2,296	15%	8,935	743	8%

[‡]Outpatient ILI surveillance discontinued in October 2017.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation - November 2019

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	2061	312	15%	201	111	0	15	84	0	0	102	13	7
CBMCH ^γ	Mymensingh	Oct 2007	2053	302	15%	206	96	0	7	107	1	0	91	16	10
JIMCH	Kishoregonj	Sep 2007	5336	1083	20%	736	347	0	9	386	0	0	340	64	113
RMCH	Rajshahi	May 2007	3406	479	14%	313	166	0	14	177	0	0	122	39	66
SZRMCH ^γ	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	4915	632	13%	414*	215	3	9	220	0	0	184	28	37
KMCH	Khulna	Jul 2007	2913	450	15%	313*	137	0	16	153	0	0	142	17	59
JGH ^{γ†}	Jashore	Sep 2007	3839	820	21%	512	307	1	10	257	0	0	245	26	143
JRRMCH	Sylhet	Jul 2007	3775	668	18%	413	254	1	16	199	0	0	198	34	77
SBMCH	Barishal	Aug 2007	5531	856	15%	536	316	4	9	258	0	0	268	56	111
CMCH	Chattogram	Apr 2014	2471	491	20%	333	155	3	0	128	0	0	205	41	94
MARMCH [‡]	Dinajpur	Apr 2014	1617	354	22%	221	133	0	0	111	0	0	108	28	84
			44,393	7,369	17%	4,827	2,529	13	137	2,419	1	0	2,262	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.

[‡]Three samples were co-infected with both Influenza A(H1N1)pdm09 and Influenza B (Victoria lineage).

[†]One 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.

^γSurveillance activities ended at DNMCH (Dhaka), CBMCH (Mymensingh), SZRMCH (Bogura), CuMCH (Cumilla) 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.

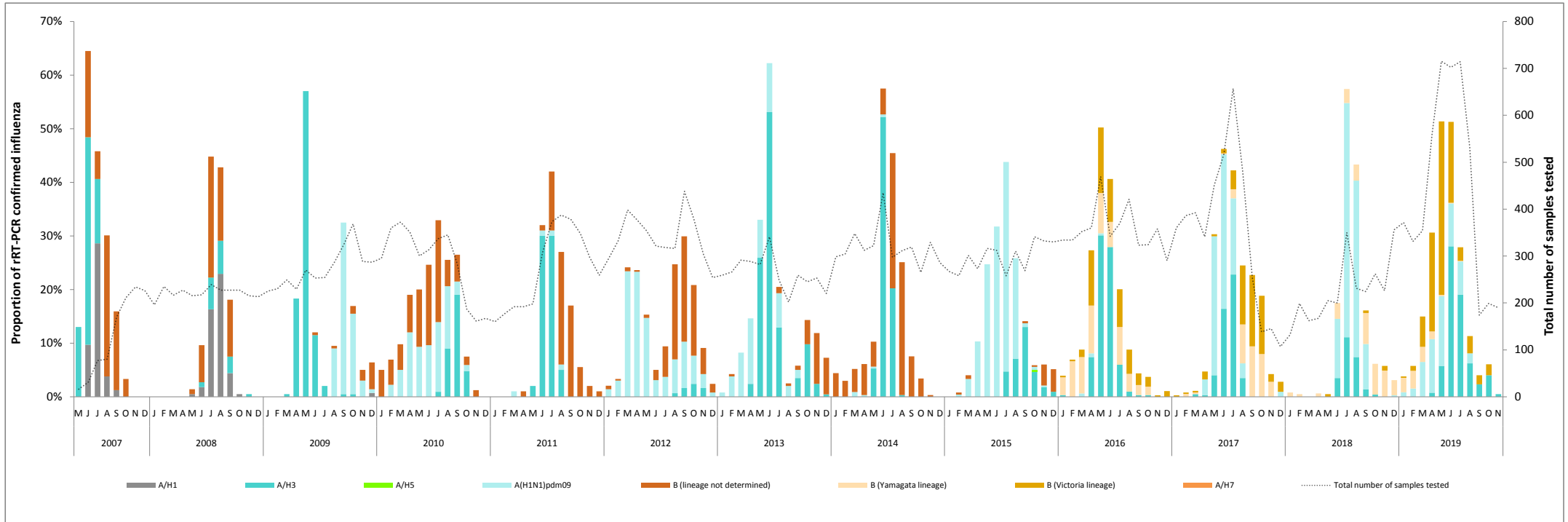
[‡]Dinajpur Medical College Hospital (DjMCH) has been renamed as M Abdur Rahim Medical College Hospital (MARMCH).

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) 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 - November 2019



Note: Influenza B typing initiated in January 2016

