



Monthly summary report

Hospital Based Human Influenza Surveillance in Bangladesh

March 2020

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
March 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	6	0	0%	13	1	8%	1	1	100%
RMCH	Rajshahi	9	0	0%	6	0	0%	4	0	0%
CuMCH	Cumilla	8	3	38%	5	0	0%	4	0	0%
KMCH	Khulna	8	0	0%	9	0	0%	1	0	0%
JGH	Jashore	7	2	29%	6	0	0%	2	1	50%
JRRMCH	Sylhet	6	1	17%	10	1	10%	2	1	50%
SBMCH	Barishal	8	1	13%	8	1	13%	2	0	0%
CMCH	Chattogram	8	2	25%	10	0	0%	9	1	11%
MARMCH	Dinajpur	2	0	0%	7	1	14%	2	0	0%
		62	9	15%	74	4	5%	27	4	15%

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
March 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	20	2	10%	2	0	0	0	0	0	0	2	0	0
RMCH	Rajshahi	19	0	0%	0	0	0	0	0	0	0	0	0	0
CuMCH	Cumilla	17	3	18%	3	0	0	0	0	0	0	3	0	0
KMCH	Khulna	18	0	0%	0	0	0	0	0	0	0	0	0	0
JGH	Jashore	15	3	20%	3	0	0	0	0	0	0	3	0	0
JRRMCH	Sylhet	18	3	17%	3	0	0	0	0	0	0	3	0	0
SBMCH	Barishal	18	2	11%	2	0	0	0	0	0	0	2	0	0
CMCH	Chattogram	27	3	11%	3	0	0	0	0	0	0	3	0	0
MARMCH	Dinajpur	11	1	9%	1	0	0	0	0	0	0	1	0	0
		163	17	10%	17	0	0	0	0	0	0	17	0	0

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

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)		
		Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	13	2	15%	7	0	0%
RMCH	Rajshahi	13	0	0%	6	0	0%
CuMCH	Cumilla	12	3	25%	5	0	0%
KMCH	Khulna	11	0	0%	7	0	0%
JGH	Jashore	9	3	33%	6	0	0%
JRRMCH	Sylhet	11	2	18%	7	1	14%
SBMCH	Barishal	11	1	9%	7	1	14%
CMCH	Chattogram	22	3	14%	5	0	0%
MARMCH	Dinajpur	6	0	0%	5	1	20%
		108	14	13%	55	3	5%

Hospital based influenza surveillance
Influenza results by different age groups
March 2020

Age groups	March 2020						Initiation - March 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	-	-	-	34	0	0%	-	-	-	2665	189	7%	6,671	384	6%
1-4 Years	-	-	-	21	3	14%	-	-	-	4217	601	14%	2,461	367	15%
5-14 Years	23	1	4%	-	-	-	3426	790	23%	2317	547	24%	-	-	-
15-24 Years	12	1	8%	-	-	-	4093	967	24%	2167	413	19%	-	-	-
25-39 Years	24	3	13%	-	-	-	4006	835	21%	1916	299	16%	-	-	-
40-59 Years	28	5	18%	-	-	-	4690	897	19%	1245	201	16%	-	-	-
≥ 60 Years	21	4	19%	-	-	-	4824	884	18%	400	46	12%	-	-	-
	108	14	13%	55	3	5%	21,039	4,373	21%	14,927	2,296	15%	9,132	751	8%

[‡]Outpatient ILI surveillance discontinued in October 2017.

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

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 ^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	5413	1091	20%	744 [†]	347	0	9	387	0	0	346	64	113
RMCH	Rajshahi	May 2007	3486	481	14%	315 [†]	166	0	14	177	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	4995	639	13%	421 [*]	215	3	9	220	0	0	191	28	37
KMCH	Khulna	Jul 2007	2997	453	15%	316 ^{*†}	137	0	16	153	0	0	143	17	59
JGH ^{Y†}	Jashore	Sep 2007	3899	826	21%	518	307	1	10	257	0	0	251	26	143
JRRMCH	Sylhet	Jul 2007	3851	674	18%	419 [†]	254	1	16	199	0	0	203	34	77
SBMCH	Barishal	Aug 2007	5625	863	15%	543 [†]	316	4	9	260	0	0	272	56	111
CMCH	Chattogram	Apr 2014	2568	501	20%	343	155	3	0	128	0	0	215	41	94
MARMCH ²	Dinajpur	Apr 2014	1674	356	21%	223 [†]	133	0	0	111	0	0	109	28	84
			45,098	7,420	16%	4,878	2,529	13	137	2,422	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.

[‡]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.

^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).

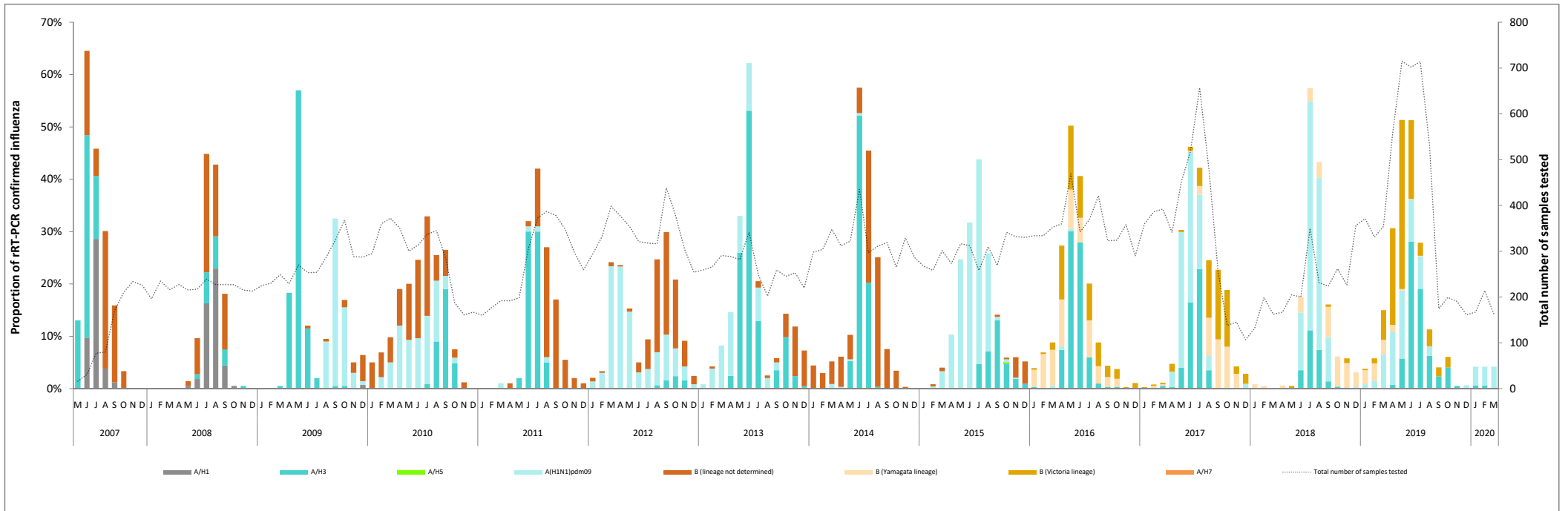
Note: Surveillance activities extended to the intensive care units (ICU) and coronary care unit (CCU) of the participating hospitals in January 2018.

^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.

[†]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.

Hospital based influenza surveillance
Influenza seasonality graph
May 2007 - March 2020



Note: Influenza B typing initiated in January 2016

Hospital based influenza surveillance
Influenza seasonality graph
Week 14 of 2019 to week 13 of 2020

