



Monthly summary report

Hospital Based Human Influenza Surveillance in Bangladesh

July 2019

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
July 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	32	9	28%	52	4	8%	5	2	40%
RMCH	Rajshahi	52	38	73%	40	19	48%	6	1	17%
CuMCH	Cumilla	18	2	11%	46	6	13%	4	0	0%
KMCH	Khulna	38	9	24%	16	2	13%	2	0	0%
JGH	Jashore	36	26	72%	23	11	48%	6	3	50%
JRRMCH	Sylhet	19	8	42%	41	11	27%	4	1	25%
SBMCH	Barishal	43	6	14%	52	5	10%	2	0	0%
CMCH	Chattogram	43	3	7%	54	1	2%	6	2	33%
MARMCH	Dinajpur	31	10	32%	40	18	45%	3	2	67%
		312	111	36%	364	77	21%	38	11	29%

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
July 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	89	15	17%	15	0	0	0	11	0	0	4	0	0
RMCH	Rajshahi	98	58	59%	54	4	0	0	44	0	0	10	1	3
CuMCH	Cumilla	68	8	12%	8	0	0	0	8	0	0	0	0	0
KMCH	Khulna	56	11	20%	10	1	0	0	8	0	0	2	0	1
JGH	Jashore	65	40	62%	34	6	0	0	20	0	0	14	0	6
JRRMCH	Sylhet	64	20	31%	17	3	0	0	16	0	0	1	0	3
SBMCH	Barishal	97	11	11%	10	1	0	0	8	0	0	2	0	1
CMCH	Chattogram [†]	103	6	6%	5	1	0	0	5	0	0	0	0	1
MARMCH	Dinajpur	74	30	41%	27	3	0	0	16	0	0	11	0	3
		714	199	28%	180	19	0	0	136	0	0	44	1	18

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
July 2019

Hospital	District	SARI (aged \geq 5 years)			SARI (aged < 5 years)		
		Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	43	12	28%	46	3	7%
RMCH	Rajshahi	60	41	68%	38	17	45%
CuMCH	Cumilla	26	4	15%	42	4	10%
KMCH	Khulna	41	10	24%	15	1	7%
JGH	Jashore	47	32	68%	18	8	44%
JRRMCH	Sylhet	34	12	35%	30	8	27%
SBMCH	Barishal	49	8	16%	48	3	6%
CMCH	Chattogram	52	5	10%	51	1	2%
MARMCH	Dinajpur	51	21	41%	23	9	39%
		403	145	36%	311	54	17%

Hospital based influenza surveillance
Influenza results by different age groups
July 2019

Age groups	July 2019						Initiation - July 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	-	-	-	210	24	11%	-	-	-	2665	189	7%	6,280	372	6%
1-4 Years	-	-	-	101	30	30%	-	-	-	4217	601	14%	2,266	352	16%
5-14 Years	68	33	49%	-	-	-	3224	774	24%	2317	547	24%	-	-	-
15-24 Years	91	31	34%	-	-	-	3871	950	25%	2167	413	19%	-	-	-
25-39 Years	75	21	28%	-	-	-	3766	814	22%	1916	299	16%	-	-	-
40-59 Years	87	33	38%	-	-	-	4405	864	20%	1245	201	16%	-	-	-
≥ 60 Years	82	27	33%	-	-	-	4560	864	19%	400	46	12%	-	-	-
	403	145	36%	311	54	17%	19,826	4,266	22%	14,927	2,296	15%	8,546	724	8%

[‡]Outpatient ILI surveillance discontinued in October 2017.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation - July 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	5191	1078	21%	736	342	0	9	386	0	0	340	64	108
RMCH	Rajshahi	May 2007	3267	465	14%	304	161	0	14	169	0	0	121	39	61
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	4802	624	13%	409	212	3	9	216	0	0	184	28	34
KMCH	Khulna	Jul 2007	2804	438	16%	304	134	0	16	146	0	0	142	17	56
JGH ^{γ†}	Jashore	Sep 2007	3733	800	21%	495	304	1	10	241	0	0	244	26	140
JRRMCH	Sylhet	Jul 2007	3675	665	18%	411	253	1	16	198	0	0	197	34	76
SBMCH	Barishal	Aug 2007	5393	849	16%	529	316	4	9	254	0	0	266	56	111
CMCH	Chattogram	Apr 2014	2330	490	21%	333	154	3	0	128	0	0	205	41	93
MARMCH ²	Dinajpur	Apr 2014	1514	341	23%	211	130	0	0	106	0	0	103	28	81
			43,299	7,286	17%	4,768	2,505	13	137	2,374	1	0	2,252	395	816

^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).

^γOne 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 (Bogra) and JGH (Jessore) in October 2017.

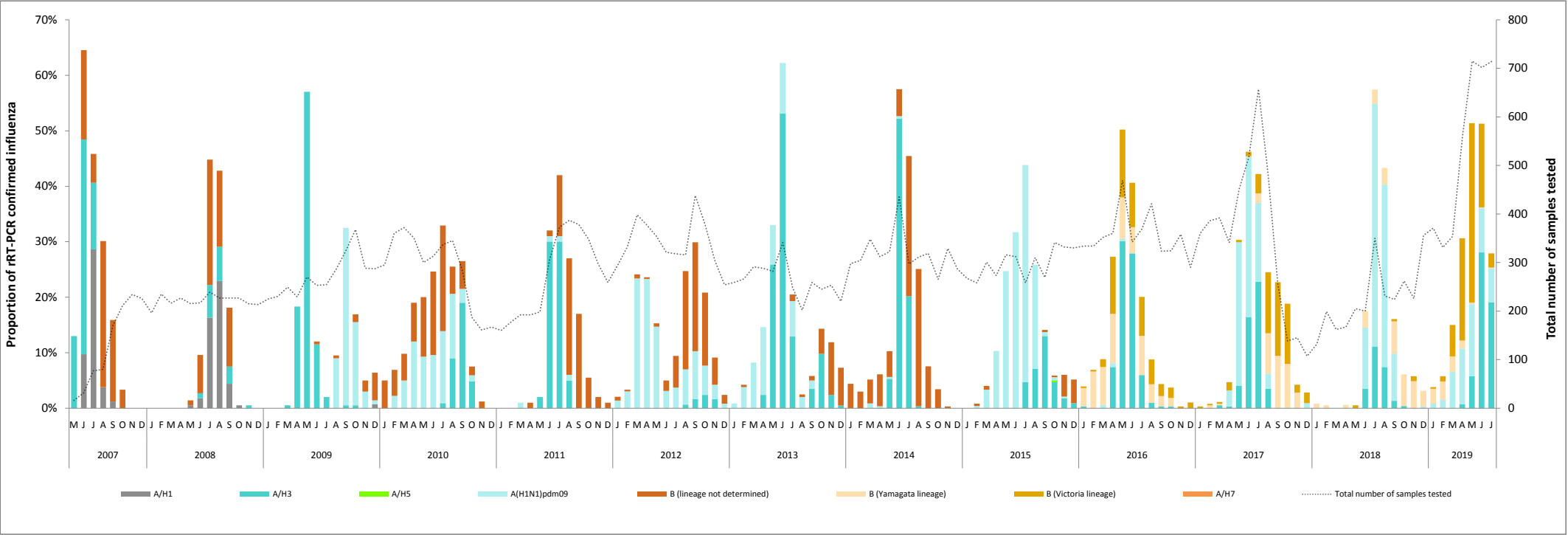
[†]Surveillance activities reinitiated at Jashore 250 bed General Hospital (JGH), Jashore in December 2018.

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.

Hospital based influenza surveillance
Influenza seasonality graph
May 2007 - July 2019



Note: Influenza B typing initiated in January 2016

Hospital based influenza surveillance
Influenza seasonality graph
Week 31 of 2018 to week 30 of 2019

