



Monthly summary report

Hospital Based Human Influenza Surveillance in Bangladesh

March 2019

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
March 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	30	6	20%	20	6	30%	4	0	0%
RMCH	Rajshahi	15	3	20%	11	0	0%	2	0	0%
CuMCH	Cumilla	8	1	13%	15	2	13%	4	0	0%
KMCH	Khulna	18	4	22%	12	2	17%	3	0	0%
JGH	Jashore	17	6	35%	12	2	17%	5	1	20%
JRRMCH	Sylhet	11	0	0%	20	3	15%	9	0	0%
SBMCH	Barishal	26	1	4%	17	0	0%	5	0	0%
CMCH	Chattogram	31	7	23%	19	2	11%	8	3	38%
MARMCH	Dinajpur	12	0	0%	15	4	27%	5	0	0%
		168	28	17%	141	21	15%	45	4	9%

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
March 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	54	12	22%	1	11	0	0	0	0	0	1	4	7
RMCH	Rajshahi	28	3	11%	0	3	0	0	0	0	0	0	3	0
CuMCH	Cumilla	27	3	11%	0	3	0	0	0	0	0	0	1	2
KMCH	Khulna	33	6	18%	6	0	0	0	0	0	0	6	0	0
JGH	Jashore	34	9	26%	5	4	0	0	0	0	0	5	2	2
JRRMCH	Sylhet	40	3	8%	1	2	0	0	0	0	0	1	0	2
SBMCH	Barishal	48	1	2%	0	1	0	0	0	0	0	0	0	1
CMCH	Chattogram	58	12	21%	10	2	0	0	0	0	0	10	0	2
MARMCH	Dinajpur	32	4	13%	0	4	0	0	0	0	0	0	0	4
		354	53	15%	23	30	0	0	0	0	0	23	10	20

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

Hospital	District	SARI (aged ≥ 5 years) [‡]			SARI (aged < 5 years) [‡]		
		Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	42	11	26%	12	1	8%
RMCH	Rajshahi	18	3	17%	10	0	0%
CuMCH	Cumilla	17	3	18%	10	0	0%
KMCH	Khulna	23	5	22%	10	1	10%
JGH	Jashore	24	8	33%	10	1	10%
JRRMCH	Sylhet	28	2	7%	12	1	8%
SBMCH	Barishal	37	1	3%	11	0	0%
CMCH	Chattogram	48	11	23%	10	1	10%
MARMCH	Dinajpur	22	2	9%	10	2	20%
		259	46	18%	95	7	7%

[‡]All SARI samples (aged ≥ 5 years) collected throughout the month from medicine and pediatrics inpatients.

[‡]First ten SARI (aged <5 years) collected from pediatrics inpatients. More than ten SARI (aged <5 years) cases belong to the cluster.

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

Age groups	March 2019						Initiation - March 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	-	-	-	64	3	5%	-	-	-	2665	189	7%	5,693	248	4%
1-4 Years	-	-	-	31	4	13%	-	-	-	4217	601	14%	1,936	210	11%
5-14 Years	52	15	29%	-	-	-	2899	595	21%	2317	547	24%	-	-	-
15-24 Years	34	6	18%	-	-	-	3494	745	21%	2167	413	19%	-	-	-
25-39 Years	36	8	22%	-	-	-	3419	660	19%	1916	299	16%	-	-	-
40-59 Years	56	7	13%	-	-	-	4031	710	18%	1245	201	16%	-	-	-
≥ 60 Years	81	10	12%	-	-	-	4210	722	17%	400	46	12%	-	-	-
	259	46	18%	95	7	7%	18,053	3,432	19%	14,927	2,296	15%	7,629	458	6%

[‡]All SARI samples (aged ≥ 5 years) collected throughout the month from medicine and pediatrics inpatients.

[‡]First ten SARI (aged <5 years) collected from pediatrics inpatients.

[‡]Outpatient ILI surveillance discontinued in October 2017.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation - March 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	4791	940	20%	642	298	0	9	316	0	0	316	64	64
RMCH	Rajshahi	May 2007	2969	336	11%	224	112	0	14	108	0	0	102	32	19
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	4598	570	12%	375	193	2	9	187	0	0	179	28	15
KMCH	Khulna	Jul 2007	2578	352	14%	255	97	0	16	126	0	0	113	17	19
JGH ^{γ†}	Jashore	Sep 2007	3448	623	18%	410	212	1	10	202	0	0	198	23	51
JRRMCH	Sylhet	Jul 2007	3425	570	17%	361	208	1	16	152	0	0	193	34	31
SBMCH	Barishal	Aug 2007	5038	697	14%	445	249	3	9	207	0	0	229	55	45
CMCH	Chattogram	Apr 2014	1908	325	17%	225	98	2	0	85	0	0	140	41	37
MARMCH [‡]	Dinajpur	Apr 2014	1264	237	19%	168	69	0	0	83	0	0	83	27	21
			40,609	6,186	15%	4,141	2,035	10	137	1,996	1	0	2,003	383	358

^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.

[‡]One sample collected in June 2017 was co-infected with both Influenza A(H1N1)pdm09 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.

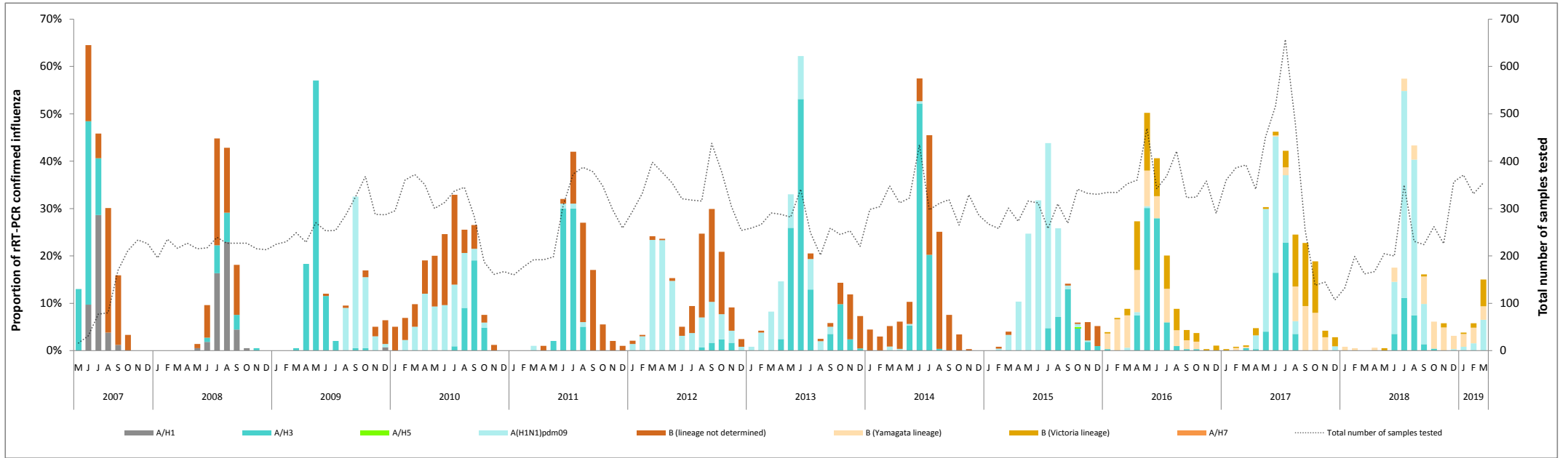
[†]Surveillance activities reinitiated at Jashore 250 bed General Hospital (JGH), Jashore in December 2018.

[‡]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.

^φIntensive care units (ICU) surveillance discontinued in January 2019.

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



Note: Influenza B typing initiated in January 2016

Hospital based influenza surveillance

Influenza seasonality graph

Week 14 of 2018 to week 13 of 2019

