



## Monthly summary report

# Hospital Based Human Influenza Surveillance in Bangladesh

**April 2019**

**Hospital based influenza surveillance**  
**Monthly enrollment by different wards (Medicine, Pediatrics and CCU)**  
**April 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	51	21	41%	41	9	22%	7	0	0%
RMCH	Rajshahi	18	5	28%	23	3	13%	5	1	20%
CuMCH	Cumilla	14	0	0%	18	4	22%	4	2	50%
KMCH	Khulna	26	5	19%	24	4	17%	1	0	0%
JGH	Jashore	32	20	63%	16	1	6%	7	2	29%
JRRMCH	Sylhet	21	4	19%	28	3	11%	3	0	0%
SBMCH	Barishal	27	10	37%	39	21	54%	5	2	40%
CMCH	Chattogram	59	27	46%	26	7	27%	15	5	33%
MARMCH	Dinajpur	16	5	31%	26	9	35%	7	1	14%
		<b>264</b>	<b>97</b>	<b>37%</b>	<b>241</b>	<b>61</b>	<b>25%</b>	<b>54</b>	<b>13</b>	<b>24%</b>

**Hospital based influenza surveillance**  
**Monthly hospitalwise influenza lab results**  
**April 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	99	30	30%	8	22	0	0	3	0	0	5	0	22
RMCH	Rajshahi	46	9	20%	0	9	0	0	0	0	0	0	4	5
CuMCH	Cumilla	36	6	17%	1	5	0	0	0	0	0	1	0	5
KMCH	Khulna	51	9	18%	6	3	0	0	0	0	0	6	0	3
JGH	Jashore	55	23	42%	13	10	0	0	0	0	0	13	3	7
JRRMCH	Sylhet	52	7	13%	0	7	0	0	0	0	0	0	0	7
SBMCH	Barishal	71	33	46%	7	26	0	0	1	0	0	6	0	26
CMCH	Chattogram	100	39	39%	23	16	0	0	0	0	0	23	0	16
MARMCH	Dinajpur	49	15	31%	2	13	0	0	0	0	0	2	1	12
		<b>559</b>	<b>171</b>	<b>31%</b>	<b>60</b>	<b>111</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>8</b>	<b>103</b>

**Hospital based influenza surveillance**  
**Monthly enrollment by different surveillance groups**  
**April 2019**

Hospital	District	SARI (aged ≥ 5 years) <sup>‡</sup>			SARI (aged < 5 years) <sup>*</sup>		
		Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	71	27	38%	28	3	11%
RMCH	Rajshahi	28	7	25%	18	2	11%
CuMCH	Cumilla	20	3	15%	16	3	19%
KMCH	Khulna	33	8	24%	18	1	6%
JGH	Jashore	41	22	54%	14	1	7%
JRRMCH	Sylhet	33	6	18%	19	1	5%
SBMCH	Barishal	44	21	48%	27	12	44%
CMCH	Chattogram	75	33	44%	25	6	24%
MARMCH	Dinajpur	34	11	32%	15	4	27%
		<b>379</b>	<b>138</b>	<b>36%</b>	<b>180</b>	<b>33</b>	<b>18%</b>

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

Age groups	April 2019						Initiation - April 2019								
	SARI (aged ≥ 5 years) <sup>‡</sup>			SARI (aged < 5 years) <sup>‡</sup>			SARI (aged ≥ 5 years) <sup>‡</sup>			ILI <sup>‡</sup>			SARI (aged < 5 years) <sup>‡</sup>		
	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
<1 Year	-	-	-	113	13	12%	-	-	-	2665	189	7%	5,806	261	4%
1-4 Years	-	-	-	67	20	30%	-	-	-	4217	601	14%	2,003	230	11%
5-14 Years	80	38	48%	-	-	-	2979	633	21%	2317	547	24%	-	-	-
15-24 Years	69	31	45%	-	-	-	3563	776	22%	2167	413	19%	-	-	-
25-39 Years	76	26	34%	-	-	-	3495	686	20%	1916	299	16%	-	-	-
40-59 Years	84	26	31%	-	-	-	4115	736	18%	1245	201	16%	-	-	-
≥ 60 Years	70	17	24%	-	-	-	4280	739	17%	400	46	12%	-	-	-
	<b>379</b>	<b>138</b>	<b>36%</b>	<b>180</b>	<b>33</b>	<b>18%</b>	<b>18,432</b>	<b>3,570</b>	<b>19%</b>	<b>14,927</b>	<b>2,296</b>	<b>15%</b>	<b>7,809</b>	<b>491</b>	<b>6%</b>

<sup>‡</sup>Outpatient ILI surveillance discontinued in October 2017.

**Hospital based influenza surveillance**  
**Hospitalwise influenza lab results**  
**Surveillance initiation - April 2019**

Hospital	District	Initiation	Sample	Flu	Flu %	Flu A <sup>ψ</sup>	Flu B <sup>λ</sup>	Flu A+B <sup>‡</sup>	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 <sup>γ</sup>	Dhaka	Jun 2007	2061	312	15%	201	111	0	15	84	0	0	102	13	7
CBMCH <sup>γ</sup>	Mymensingh	Oct 2007	2053	302	15%	206	96	0	7	107	1	0	91	16	10
JIMCH	Kishoregonj	Sep 2007	4890	970	20%	650	320	0	9	319	0	0	321	64	86
RMCH	Rajshahi	May 2007	3015	345	11%	224	121	0	14	108	0	0	102	36	24
SZRMCH <sup>γ</sup>	Bogura	Sep 2007	3865	653	17%	439	213	1	12	256	0	0	170	29	39
LAMB <sup>†</sup>	Dinajpur	Oct 2007	1171	112	10%	72	40	0	7	41	0	0	24	1	0
BBMH <sup>†</sup>	Chattogram	Aug 2007	1440	157	11%	118	39	0	13	42	0	0	63	3	0
CuMCH	Cumilla	Oct 2007	4634	576	12%	376	198	2	9	187	0	0	180	28	20
KMCH	Khulna	Jul 2007	2629	361	14%	261	100	0	16	126	0	0	119	17	22
JGH <sup>γ†</sup>	Jashore	Sep 2007	3503	646	18%	423	222	1	10	202	0	0	211	26	58
JRRMCH	Sylhet	Jul 2007	3477	577	17%	361	215	1	16	152	0	0	193	34	38
SBMCH	Barishal	Aug 2007	5109	730	14%	452	275	3	9	208	0	0	235	55	71
CMCH	Chattogram	Apr 2014	2008	364	18%	248	114	2	0	85	0	0	163	41	53
MARMCH <sup>‡</sup>	Dinajpur	Apr 2014	1313	252	19%	170	82	0	0	83	0	0	85	28	33
			<b>41,168</b>	<b>6,357</b>	<b>15%</b>	<b>4,201</b>	<b>2,146</b>	<b>10</b>	<b>137</b>	<b>2,000</b>	<b>1</b>	<b>0</b>	<b>2,059</b>	<b>391</b>	<b>461</b>

<sup>λ</sup>Influenza B typing initiated in January 2016.

<sup>ψ</sup>rRT-PCR result of four samples were equivocal positive for Influenza A.

<sup>ψ</sup>One sample collected in June 2013 and another sample collected in June 2017 were co-infected with both A(H3) and A(H1N1)pdm09.

<sup>λ</sup>Three samples were co-infected with both Influenza B (Yamagata lineage) and Influenza B (Victoria lineage), another ten samples were unsubtypeable.

<sup>‡</sup>One sample collected in June 2017 was co-infected with both Influenza A(H1N1)pdm09 and Influenza B (Victoria lineage).

<sup>†</sup>Surveillance activities ended at LAMB (Dinajpur) and BBMH (Chittagong) in May 2016.

<sup>γ</sup>Surveillance activities ended at DNMCH (Dhaka), CBMCH (Mymensingh), SZRMCH (Bogra) and JGH (Jessore) in October 2017.

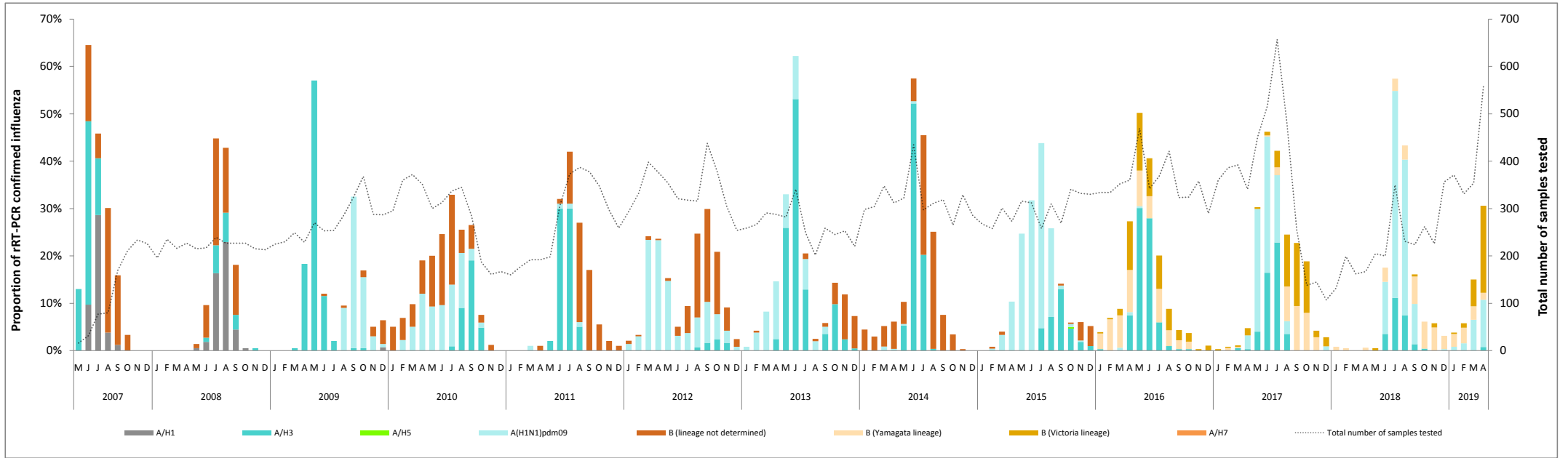
<sup>†</sup>Surveillance activities reinitiated at Jashore 250 bed General Hospital (JGH), Jashore in December 2018.

<sup>‡</sup>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.

<sup>φ</sup>Intensive care units (ICU) surveillance discontinued in January 2019.

**Hospital based influenza surveillance**  
**Influenza seasonality graph**  
**May 2007 - April 2019**



Note: Influenza B typing initiated in January 2016

# Hospital based influenza surveillance

## Influenza seasonality graph

### Week 18 of 2018 to week 17 of 2019

