



## Monthly summary report

# Hospital Based Human Influenza Surveillance in Bangladesh

**September 2020**

**Hospital based influenza surveillance**  
**Monthly enrollment by different wards (Medicine, Pediatrics and CCU)**  
**September 2020**

Hospital	District	Medicine ward			Pediatrics ward ( $\leq 12$ years of age)			Coronary Care Unit (CCU)		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	17	6	35%	19	10	53%	8	2	25%
RMCH	Rajshahi	24	4	17%	14	7	50%	1	0	0%
CuMCH	Cumilla	26	4	15%	9	3	33%	0	0	0%
KMCH	Khulna	22	5	23%	10	2	20%	0	0	0%
JGH	Jashore	23	5	22%	8	5	63%	1	0	0%
JRRMCH	Sylhet	22	9	41%	15	10	67%	3	1	33%
SBMCH	Barishal	28	12	43%	21	12	57%	1	0	0%
CMCH	Chattogram	30	10	33%	18	7	39%	0	0	0%
MARMCH	Dinajpur	9	2	22%	20	5	25%	0	0	0%
		<b>201</b>	<b>57</b>	<b>28%</b>	<b>134</b>	<b>61</b>	<b>46%</b>	<b>14</b>	<b>3</b>	<b>21%</b>

**Hospital based influenza surveillance**  
**Monthly hospitalwise influenza lab results**  
**September 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	44	18	41%	18	0	0	0	18	0	0	0	0	0
RMCH	Rajshahi	39	11	28%	11	0	0	0	11	0	0	0	0	0
CuMCH	Cumilla	35	7	20%	7	0	0	0	7	0	0	0	0	0
KMCH	Khulna	32	7	22%	7	0	0	0	7	0	0	0	0	0
JGH	Jashore	32	10	31%	10	0	0	0	10	0	0	0	0	0
JRRMCH	Sylhet	40	20	50%	20	0	0	0	20	0	0	0	0	0
SBMCH	Barishal	50	24	48%	24	0	0	0	24	0	0	0	0	0
CMCH	Chattogram	48	17	35%	17	0	0	0	17	0	0	0	0	0
MARMCH	Dinajpur	29	7	24%	7	0	0	0	7	0	0	0	0	0
		<b>349</b>	<b>121</b>	<b>35%</b>	<b>121</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>121</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Hospital based influenza surveillance**  
**Monthly enrollment by different surveillance groups**  
**September 2020**

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)		
		Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	28	9	32%	16	9	56%
RMCH	Rajshahi	26	5	19%	13	6	46%
CuMCH	Cumilla	26	4	15%	9	3	33%
KMCH	Khulna	22	5	23%	10	2	20%
JGH	Jashore	24	5	21%	8	5	63%
JRRMCH	Sylhet	30	14	47%	10	6	60%
SBMCH	Barishal	33	15	45%	17	9	53%
CMCH	Chattogram	31	10	32%	17	7	41%
MARMCH	Dinajpur	15	3	20%	14	4	29%
		<b>235</b>	<b>70</b>	<b>30%</b>	<b>114</b>	<b>51</b>	<b>45%</b>

**Hospital based influenza surveillance**  
**Influenza results by different age groups**  
**September 2020**

Age groups	September 2020						Initiation - September 2020								
	SARI (aged ≥ 5 years)			SARI (aged < 5 years)			SARI (aged ≥ 5 years)			ILI <sup>‡</sup>			SARI (aged < 5 years)		
	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
<1 Year	-	-	-	72	30	42%	-	-	-	2665	189	7%	6,940	416	6%
1-4 Years	-	-	-	42	21	50%	-	-	-	4217	601	14%	2,575	389	15%
5-14 Years	26	15	58%	-	-	-	3499	805	23%	2317	547	24%	-	-	-
15-24 Years	25	13	52%	-	-	-	4162	980	24%	2167	413	19%	-	-	-
25-39 Years	51	19	37%	-	-	-	4166	855	21%	1916	299	16%	-	-	-
40-59 Years	84	16	19%	-	-	-	4993	913	18%	1245	201	16%	-	-	-
≥ 60 Years	49	7	14%	-	-	-	5026	892	18%	400	46	12%	-	-	-
	<b>235</b>	<b>70</b>	<b>30%</b>	<b>114</b>	<b>51</b>	<b>45%</b>	<b>21,846</b>	<b>4,445</b>	<b>20%</b>	<b>14,927</b>	<b>2,296</b>	<b>15%</b>	<b>9,515</b>	<b>805</b>	<b>8%</b>

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

**Hospital based influenza surveillance**  
**Hospitalwise influenza lab results**  
**Surveillance initiation - September 2020**

Hospital	District	Initiation	Sample	Flu	Flu %	Flu A <sup>ψ</sup>	Flu B <sup>λ</sup>	Flu A+B <sup>τ</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	5556	1109	20%	762 <sup>ι</sup>	347	0	9	405	0	0	346	64	113
RMCH	Rajshahi	May 2007	3637	492	14%	326 <sup>ι</sup>	166	0	14	188	0	0	122	39	66
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 <sup>‡</sup>	Cumilla	Oct 2007	5097	647	13%	429 <sup>*</sup>	215	3	9	228	0	0	191	28	37
KMCH	Khulna	Jul 2007	3162	460	15%	323 <sup>*ι</sup>	137	0	16	160	0	0	143	17	59
JGH <sup>γ†</sup>	Jashore	Sep 2007	4011	839	21%	531	307	1	10	270	0	0	251	26	143
JRRMCH	Sylhet	Jul 2007	3977	694	17%	439 <sup>ι</sup>	254	1	16	219	0	0	203	34	77
SBMCH	Barishal	Aug 2007	5760	888	15%	568 <sup>ι</sup>	316	4	9	285	0	0	272	56	111
CMCH	Chattogram	Apr 2014	2737	518	19%	360	155	3	0	145	0	0	215	41	94
MARMCH <sup>‡</sup>	Dinajpur	Apr 2014	1761	363	21%	230 <sup>ι</sup>	133	0	0	118	0	0	109	28	84
			<b>46,288</b>	<b>7,546</b>	<b>16%</b>	<b>5,004</b>	<b>2,529</b>	<b>13</b>	<b>137</b>	<b>2,548</b>	<b>1</b>	<b>0</b>	<b>2,302</b>	<b>395</b>	<b>840</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>τ</sup>Three samples were co-infected with both Influenza A(H1N1)pdm09 and Influenza B (Victoria lineage).

<sup>ι</sup>One sample collected in May 2019 was co-infected with both Influenza A(H3) 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 Cumilla Medical College Hospital (CuMCH), Cumilla in January 2018.

<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).

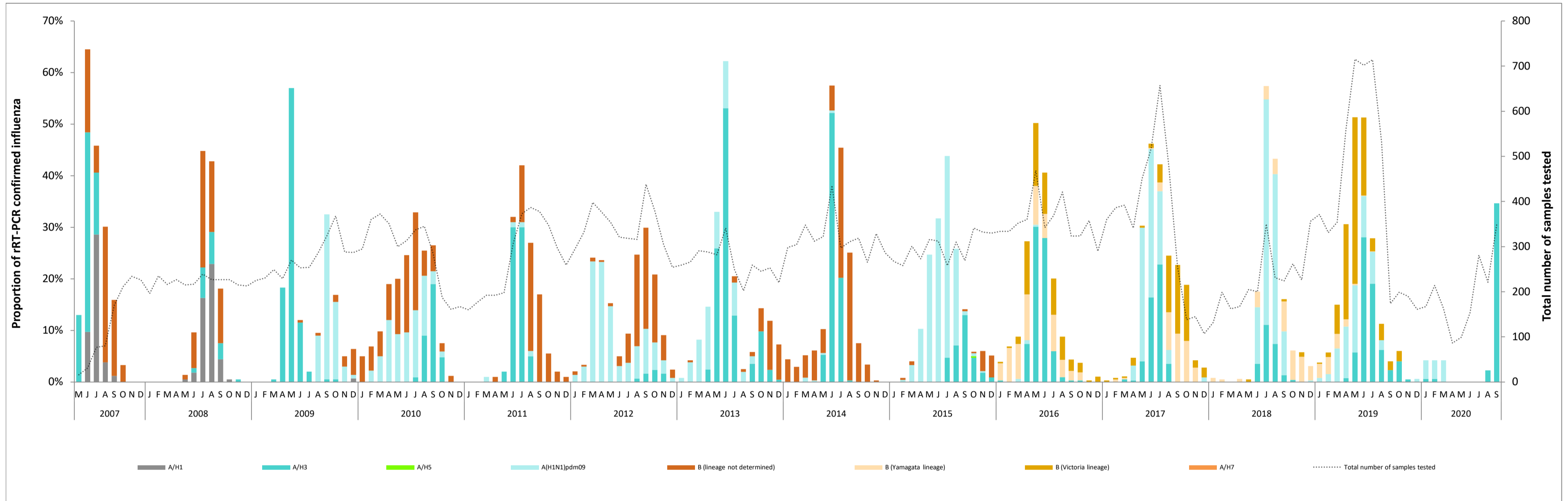
Note: Surveillance activities extended to the intensive care units (ICU) and coronary care unit (CCU) of the participating hospitals in January 2018.

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

\*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.

<sup>ι</sup>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 - September 2020**



Note: Influenza B typing initiated in January 2016

**Hospital based influenza surveillance**  
**Influenza seasonality graph**  
**Week 40 of 2019 to week 39 of 2020**

