



## Monthly summary report

# Hospital Based Human Influenza Surveillance in Bangladesh

**June 2019**

**Hospital based influenza surveillance**  
**Monthly enrollment by different wards (Medicine, Pediatrics and CCU)**  
**June 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	58	30	52%	55	23	42%	6	2	33%
RMCH	Rajshahi	37	19	51%	29	10	34%	1	0	0%
CuMCH	Cumilla	15	4	27%	32	9	28%	7	3	43%
KMCH	Khulna	37	19	51%	15	11	73%	2	2	100%
JGH	Jashore	55	42	76%	25	16	64%	5	2	40%
JRRMCH	Sylhet	28	17	61%	32	17	53%	4	1	25%
SBMCH	Barishal	51	29	57%	40	21	53%	4	2	50%
CMCH	Chattogram	44	18	41%	46	20	43%	14	10	71%
MARMCH	Dinajpur	23	15	65%	32	18	56%	5	1	20%
		<b>348</b>	<b>193</b>	<b>55%</b>	<b>306</b>	<b>145</b>	<b>47%</b>	<b>48</b>	<b>23</b>	<b>48%</b>

**Hospital based influenza surveillance**  
**Monthly hospitalwise influenza lab results**  
**June 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	119	55	46%	50	5	0	0	43	0	0	7	0	5
RMCH	Rajshahi	67	29	43%	22	7	0	0	14	0	0	8	1	6
CuMCH	Cumilla	54	16	30%	14	2	0	0	14	0	0	0	0	2
KMCH	Khulna	54	32	59%	20	12	0	0	11	0	0	9	0	12
JGH	Jashore	85	60	71%	31	29	0	0	19	0	0	12	0	29
JRRMCH	Sylhet	64	35	55%	25	10	0	0	24	0	0	1	0	10
SBMCH	Barishal	95	52	55%	44	8	0	0	35	0	0	9	0	8
CMCH	Chattogram <sup>‡</sup>	104	48	46%	37	10	1	0	30	0	0	7	0	10
MARMCH	Dinajpur	60	34	57%	10	24	0	0	7	0	0	3	0	24
		<b>702</b>	<b>361</b>	<b>51%</b>	<b>253</b>	<b>107</b>	<b>1</b>	<b>0</b>	<b>197</b>	<b>0</b>	<b>0</b>	<b>56</b>	<b>1</b>	<b>106</b>

<sup>‡</sup>One sample collected in June 2019 was co-infected with both Influenza A(H1N1)pdm09 and Influenza B (Victoria lineage).

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

Hospital	District	SARI (aged $\geq$ 5 years)			SARI (aged < 5 years)		
		Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	77	41	53%	42	14	33%
RMCH	Rajshahi	44	22	50%	23	7	30%
CuMCH	Cumilla	28	9	32%	26	7	27%
KMCH	Khulna	41	23	56%	13	9	69%
JGH	Jashore	67	50	75%	18	10	56%
JRRMCH	Sylhet	44	23	52%	20	12	60%
SBMCH	Barishal	61	35	57%	34	17	50%
CMCH	Chattogram	67	33	49%	37	15	41%
MARMCH	Dinajpur	44	28	64%	16	6	38%
		<b>473</b>	<b>264</b>	<b>56%</b>	<b>229</b>	<b>97</b>	<b>42%</b>

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

Age groups	June 2019						Initiation - June 2019								
	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	-	-	-	134	46	34%	-	-	-	2665	189	7%	6,070	348	6%
1-4 Years	-	-	-	95	51	54%	-	-	-	4217	601	14%	2,165	322	15%
5-14 Years	90	56	62%	-	-	-	3156	741	23%	2317	547	24%	-	-	-
15-24 Years	88	53	60%	-	-	-	3780	919	24%	2167	413	19%	-	-	-
25-39 Years	93	54	58%	-	-	-	3691	793	21%	1916	299	16%	-	-	-
40-59 Years	94	47	50%	-	-	-	4318	831	19%	1245	201	16%	-	-	-
≥ 60 Years	108	54	50%	-	-	-	4478	837	19%	400	46	12%	-	-	-
	<b>473</b>	<b>264</b>	<b>56%</b>	<b>229</b>	<b>97</b>	<b>42%</b>	<b>19,423</b>	<b>4,121</b>	<b>21%</b>	<b>14,927</b>	<b>2,296</b>	<b>15%</b>	<b>8,235</b>	<b>670</b>	<b>8%</b>

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

**Hospital based influenza surveillance**  
**Hospitalwise influenza lab results**  
**Surveillance initiation - June 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	5102	1063	21%	721	342	0	9	375	0	0	336	64	108
RMCH	Rajshahi	May 2007	3169	407	13%	250	157	0	14	125	0	0	111	38	58
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	4734	616	13%	401	212	3	9	208	0	0	184	28	34
KMCH	Khulna	Jul 2007	2748	427	16%	294	133	0	16	138	0	0	140	17	55
JGH <sup>γ†</sup>	Jashore	Sep 2007	3668	760	21%	461	298	1	10	221	0	0	230	26	134
JRRMCH	Sylhet	Jul 2007	3611	645	18%	394	250	1	16	182	0	0	196	34	73
SBMCH	Barishal	Aug 2007	5296	838	16%	519	315	4	9	246	0	0	264	56	110
CMCH	Chattogram	Apr 2014	2227	484	22%	328	153	3	0	123	0	0	205	41	92
MARMCH <sup>2</sup>	Dinajpur	Apr 2014	1440	311	22%	184	127	0	0	90	0	0	92	28	78
			<b>42,585</b>	<b>7,087</b>	<b>17%</b>	<b>4,588</b>	<b>2,486</b>	<b>13</b>	<b>137</b>	<b>2,238</b>	<b>1</b>	<b>0</b>	<b>2,208</b>	<b>394</b>	<b>798</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>Three samples were co-infected with both Influenza A(H1N1)pdm09 and Influenza B (Victoria lineage).

<sup>γ</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.

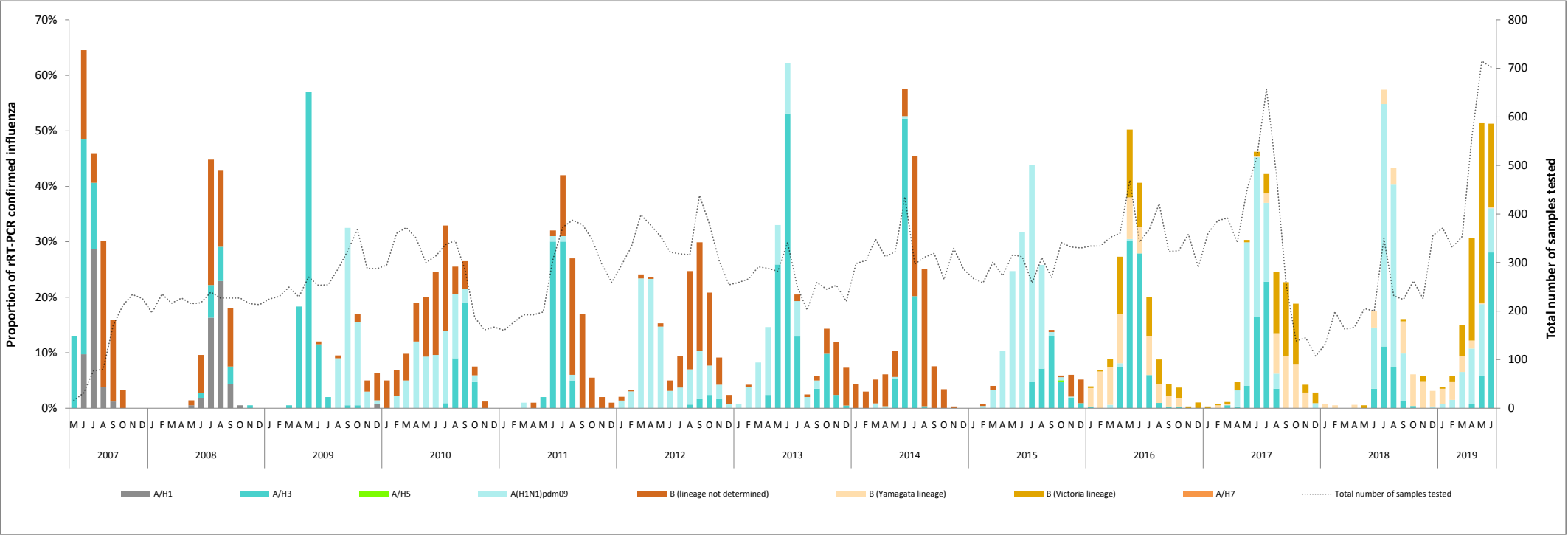
<sup>†</sup>Surveillance activities reinitiated at Jashore 250 bed General Hospital (JGH), Jashore in December 2018.

<sup>2</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 - June 2019



Hospital based influenza surveillance  
Influenza seasonality graph  
Week 27 of 2018 to week 26 of 2019

