



## Monthly summary report

# Hospital Based Human Influenza Surveillance in Bangladesh

**April 2023**

**Hospital based influenza surveillance**  
**Monthly enrollment by different wards (Medicine, Pediatrics and CCU)**  
**April 2023**

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	47	0	0	39	1	3	4	0	0
RMCH	Rajshahi	21	0	0	26	0	0	1	0	0
CuMCH	Cumilla	13	1	8	23	1	4	2	0	0
KMCH	Khulna	4	1	25	28	1	4	0	0	0
JGH	Jashore	31	1	3	40	2	5	1	0	0
JRRMCH	Sylhet	19	1	5	43	0	0	0	0	0
SBMCH	Barishal	29	2	7	30	1	3	0	0	0
CMCH	Chattogram	43	1	2	53	2	4	0	0	0
MARMCH	Dinajpur	31	0	0	46	0	0	0	0	0
		<b>238</b>	<b>7</b>	<b>2.9</b>	<b>328</b>	<b>8</b>	<b>2.4</b>	<b>8</b>	<b>0</b>	<b>0</b>

**Hospital based influenza surveillance**  
**Monthly hospitalwise influenza lab results**  
**April 2023**

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	90	1	1	0	1	0	0	0	0	0	0	0	1
RMCH	Rajshahi	48	0	0	0	0	0	0	0	0	0	0	0	0
CuMCH	Cumilla	38	2	5	0	2	0	0	0	0	0	0	0	2
KMCH	Khulna	32	2	6	0	2	0	0	0	0	0	0	0	2
JGH	Jashore	72	3	4	2	1	0	0	0	0	0	2	0	1
JRRMCH	Sylhet	62	1	2	0	1	0	0	0	0	0	0	0	1
SBMCH	Barishal	59	3	5	3	0	0	0	1	0	0	2	0	0
CMCH	Chattogram	96	3	3	2	1	0	0	2	0	0	0	0	1
MARMCH	Dinajpur	77	0	0	0	0	0	0	0	0	0	0	0	0
		<b>574</b>	<b>15</b>	<b>2.6</b>	<b>7</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>8</b>

**Hospital based influenza surveillance**  
**Monthly enrollment by different surveillance groups**  
**April 2023**

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)			ILI <sup>‡</sup>		
		Sample	Flu	Flu %	Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	40	0	0	15	1	7	35	0	0
RMCH	Rajshahi	23	0	0	25	0	0	-	-	-
CuMCH	Cumilla	24	1	4	14	1	7	-	-	-
KMCH	Khulna	7	1	14	25	1	4	-	-	-
JGH	Jashore	15	1	7	20	0	0	37	2	5
JRRMCH	Sylhet	12	1	8	24	0	0	26	1	4
SBMCH	Barishal	36	2	6	23	1	4	-	-	-
CMCH	Chattogram	28	1	4	32	1	3	36	0	0
MARMCH	Dinajpur	15	0	0	26	0	0	36	0	0
		<b>200</b>	<b>7</b>	<b>3.5</b>	<b>204</b>	<b>5</b>	<b>2.5</b>	<b>170</b>	<b>3</b>	<b>1.8</b>

<sup>‡</sup>Outpatient ILI surveillance reinitiated at JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2022 and JIMCH (Kishoregonj) and JGH (Jashore) in December 2022.

**Hospital based influenza surveillance  
Influenza results by different age groups  
April 2023**

Age groups	April 2023									Initiation - April 2023								
	SARI (aged ≥ 5 years)			ILI <sup>‡</sup>			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 %	Sample	Flu	Flu %
<1 Year	-	-	-	11	0	0	138	2	1	-	-	-	2,761	190	7	9,788	508	5
1-4 Years	-	-	-	31	0	0	66	3	5	-	-	-	4,426	602	14	4,089	514	13
5-14 Years	58	2	3	35	2	6	-	-	-	4,609	910	20	2,537	553	22	-	-	-
15-24 Years	28	2	7	36	0	0	-	-	-	4,834	1,073	22	2,395	417	17	-	-	-
25-39 Years	29	2	7	23	1	4	-	-	-	5,205	960	18	2,080	302	15	-	-	-
40-59 Years	43	0	0	24	0	0	-	-	-	6,639	1,016	15	1,385	201	15	-	-	-
≥ 60 Years	42	1	2	10	0	0	-	-	-	6,827	1,021	15	461	46	10	-	-	-
	<b>200</b>	<b>7</b>	<b>4</b>	<b>170</b>	<b>3</b>	<b>2</b>	<b>204</b>	<b>5</b>	<b>2</b>	<b>28,114</b>	<b>4,980</b>	<b>18</b>	<b>16,045</b>	<b>2,311</b>	<b>14</b>	<b>13,877</b>	<b>1,022</b>	<b>7</b>

<sup>‡</sup> Outpatient ILI surveillance reinitiated at JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2022 and JIMCH (Kishoregonj) and JGH (Jashore) in December 2022.

**Hospital based influenza surveillance**  
**Hospitalwise influenza lab results**  
**Surveillance initiation - April 2023**

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>Y</sup>	Dhaka	Jun 2007	2,061	312	15	201	111	0	15	84	0	0	102	13	7
CBMCH <sup>Y</sup>	Mymensingh	Oct 2007	2,053	302	15	206	96	0	7	107	1	0	91	16	10
JIMCH	Kishoregonj	Sep 2007	7,117	1,229	17	831 <sup>i</sup>	398	0	9	444	0	0	376	64	164
RMCH	Rajshahi	May 2007	4,841	540	11	362 <sup>i</sup>	178	0	14	207	0	0	139	39	78
SZRMCH <sup>Y</sup>	Bogura	Sep 2007	3,865	653	17	439	213	1	12	256	0	0	170	29	39
LAMB <sup>‡</sup>	Dinajpur	Oct 2007	1,171	112	10	72	40	0	7	41	0	0	24	1	0
BBMH <sup>‡</sup>	Chattogram	Aug 2007	1,440	157	11	118	39	0	13	42	0	0	63	3	0
CuMCH <sup>‡</sup>	Cumilla	Oct 2007	6,286	729	12	489*	237	3	9	257	0	0	222	28	59
KMCH	Khulna	Jul 2007	4,122	520	13	371 <sup>*i</sup>	149	0	16	188	0	0	163	17	71
JGH <sup>Y‡</sup>	Jashore	Sep 2007	5,220	943	18	608	334	1	10	322	0	0	276	26	170
JRRMCH	Sylhet	Jul 2007	5,221	776	15	498 <sup>i</sup>	277	1	16	254	0	0	227	34	100
SBMCH	Barishal	Aug 2007	7,201	977	14	639 <sup>i</sup>	334	4	9	313	0	0	315	56	129
CMCH	Chattogram	Apr 2014	4,485	653	15	468	182	3	0	200	0	0	268	41	121
MARMCH <sup>2</sup>	Dinajpur	Apr 2014	2,953	410	14	270 <sup>i</sup>	140	0	0	145	0	0	122	28	91
			<b>58,036</b>	<b>8,313</b>	<b>14</b>	<b>5,572</b>	<b>2,728</b>	<b>13</b>	<b>137</b>	<b>2,860</b>	<b>1</b>	<b>0</b>	<b>2,558</b>	<b>395</b>	<b>1,039</b>

<sup>λ</sup>Lineage determining for influenza B/Victoria and influenza B/Yamagata initiated in January 2016.

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

<sup>Y</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>i</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>Y</sup>Surveillance activities ended at DNMCH (Dhaka), CBMCH (Mymensingh), SZRMCH (Bogura) 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>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.

\*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>i</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.

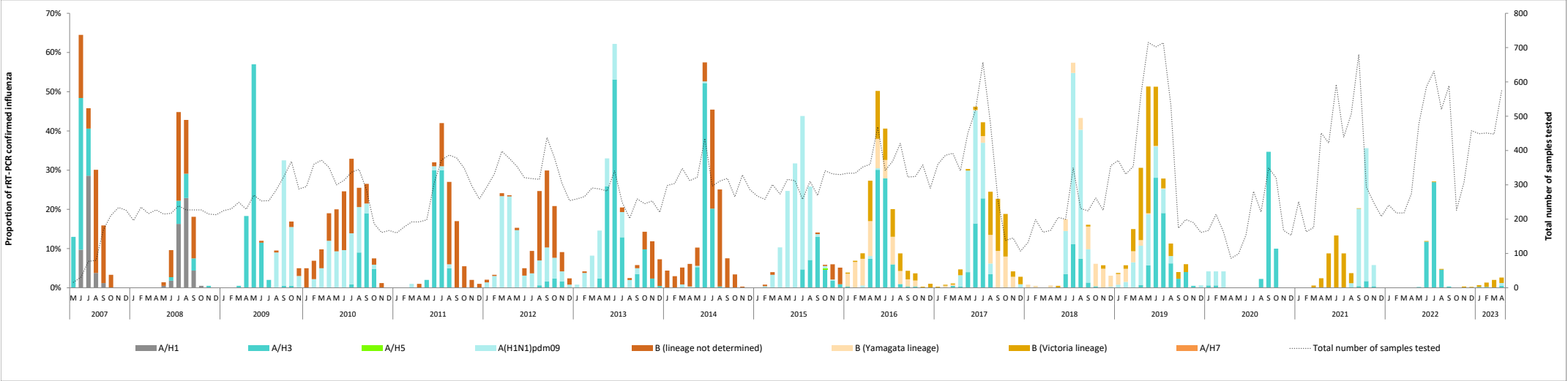
Outpatient ILI surveillance reinitiated at JRRMCH (Sylhet), CMCH (Chattogram) and MARMCH (Dinajpur) in November 2022.

Outpatient ILI surveillance reinitiated at JIMCH (Kishoregonj) and JGH (Jashore) in December 2022.

# Hospital based influenza surveillance

## Influenza seasonality graph

### May 2007 - April 2023



Note: Influenza B lineages initiated in January 2016

**Hospital based influenza surveillance**  
**Influenza seasonality graph**  
**Week 18 of 2022 to week 17 of 2023**

