Monthly summary report

Hospital Based Human Influenza Surveillance in Bangladesh

July 2022

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
July 2022

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	43	20	47	32	8	25	5	2	40
RMCH	Rajshahi	36	11	31	16	0	0	0	0	0
CuMCH	Cumilla	37	6	16	25	13	52	5	1	20
KMCH	Khulna	35	13	37	24	1	4	0	0	0
JGH	Jashore	45	26	58	24	4	17	2	0	0
JRRMCH	Sylhet	46	13	28	22	11	50	8	0	0
SBMCH	Barishal	23	2	9	56	6	11	1	1	100
CMCH	Chattogram	47	9	19	36	2	6	2	1	50
MARMCH	Dinajpur	23	8	35	38	13	34	0	0	0
		335	**108**	**32**	**273**	**58**	**21**	**23**	**5**	**22**

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
July 2022

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	80	30	38	29	1	0	0	29	0	0	0	0	1
RMCH	Rajshahi	52	11	21	11	0	0	0	11	0	0	0	0	0
CuMCH	Cumilla	67	20	30	20	0	0	0	20	0	0	0	0	0
KMCH	Khulna	59	14	24	14	0	0	0	14	0	0	0	0	0
JGH	Jashore	71	30	42	30	0	0	0	30	0	0	0	0	0
JRRMCH	Sylhet	76	24	32	24	0	0	0	24	0	0	0	0	0
SBMCH	Barishal	80	9	11	9	0	0	0	9	0	0	0	0	0
CMCH	Chattogram	85	12	14	12	0	0	0	12	0	0	0	0	0
MARMCH	Dinajpur	61	21	34	21	0	0	0	21	0	0	0	0	0
		631	**171**	**27**	**170**	**1**	**0**	**0**	**170**	**0**	**0**	**0**	**0**	**1**

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
July 2022

Hospital	District	SARI (aged ≥ 5 years)			SARI (aged < 5 years)		
		Sample	Flu	Flu %	Sample	Flu	Flu %
JIMCH	Kishoregonj	61	26	43	19	4	21
RMCH	Rajshahi	38	11	29	14	0	0
CuMCH	Cumilla	52	12	23	15	8	53
KMCH	Khulna	36	13	36	23	1	4
JGH	Jashore	52	27	52	19	3	16
JRRMCH	Sylhet	63	17	27	13	7	54
SBMCH	Barishal	40	4	10	40	5	13
CMCH	Chattogram	52	10	19	33	2	6
MARMCH	Dinajpur	31	12	39	30	9	30
		425	**132**	**31**	**206**	**39**	**19**

Hospital based influenza surveillance
Influenza results by different age groups
July 2022

Age groups	July 2022						Initiation - July 2022								
	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	-	-	-	116	13	11	-	-	-	2665	189	7	8,960	500	6
1-4 Years	-	-	-	90	26	29	-	-	-	4217	601	14	3,606	501	14
5-14 Years	71	19	27	-	-	-	4177	905	22	2317	547	24	-	-	-
15-24 Years	61	27	44	-	-	-	4606	1069	23	2167	413	19	-	-	-
25-39 Years	59	21	36	-	-	-	4978	956	19	1916	299	16	-	-	-
40-59 Years	85	25	29	-	-	-	6297	1011	16	1245	201	16	-	-	-
≥ 60 Years	149	40	27	-	-	-	6455	1013	16	400	46	12	-	-	-
	425	**132**	**31**	**206**	**39**	**19**	**26,513**	**4,954**	**19**	**14,927**	**2,296**	**15**	**12,566**	**1001**	**8**

‡Outpatient ILI surveillance discontinued in October 2017.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation - July 2022

Hospital	District	Initiation	Sample	Flu	Flu %	Flu A$^\Psi$	Flu B$^\Lambda$	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^Y	Dhaka	Jun 2007	2061	312	15	201	111	0	15	84	0	0	102	13	7
CBMCH^Y	Mymensingh	Oct 2007	2053	302	15	206	96	0	7	107	1	0	91	16	10
JIMCH	Kishoregonj	Sep 2007	6526	1224	19	830^i	394	0	9	443	0	0	376	64	160
RMCH	Rajshahi	May 2007	4526	539	12	361^i	178	0	14	206	0	0	139	39	78
SZRMCH^Y	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^T	Cumilla	Oct 2007	5927	722	12	489*	230	3	9	257	0	0	222	28	52
KMCH	Khulna	Jul 2007	3880	512	13	365*^{i}	147	0	16	182	0	0	163	17	69
JGH$^{Y I}$	Jashore	Sep 2007	4724	926	20	594	331	1	10	311	0	0	273	26	167
JRRMCH	Sylhet	Jul 2007	4743	765	16	494^i	270	1	16	250	0	0	227	34	93
SBMCH	Barishal	Aug 2007	6778	972	14	634^i	334	4	9	310	0	0	313	56	129
CMCH	Chattogram	Apr 2014	3864	647	17	464	180	3	0	196	0	0	268	41	119
MARMCH$^\jmath$	Dinajpur	Apr 2014	2448	408	17	270^i	138	0	0	145	0	0	122	28	89
			54,006	8,251	15	5,537	2,701	13	137	2,830	1	0	2,553	395	1,012

$^\Lambda$Influenza B typing initiated in January 2016.

$^\Psi$rRT-PCR result of four samples were equivocal positive for Influenza A.

$^\Psi$One sample collected in June 2013 and another sample collected in June 2017 were co-infected with both A(H3) and A(H1N1)pdm09.

$^\Lambda$Three samples were co-infected with both Influenza B (Yamagata lineage) and Influenza B (Victoria lineage), another ten samples were unsubtypeable.

‡Three samples were co-infected with both Influenza A(H1N1)pdm09 and Influenza B (Victoria lineage).

^{i}One sample collected in May 2019 was co-infected with both Influenza A(H3) and Influenza B (Victoria lineage).

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

^{Y}Surveillance activities ended at DNMCH (Dhaka), CBMCH (Mymensingh), SZRMCH (Bogra) and JGH (Jessore) in October 2017.

^{T}Surveillance activities reinitiated at Cumilla Medical College Hospital (CuMCH), Cumilla in January 2018.

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

$^\jmath$Dinajpur Medical College Hospital (DjMCH) has been renamed as M Abdur Rahim Medical College Hospital (MARMCH).
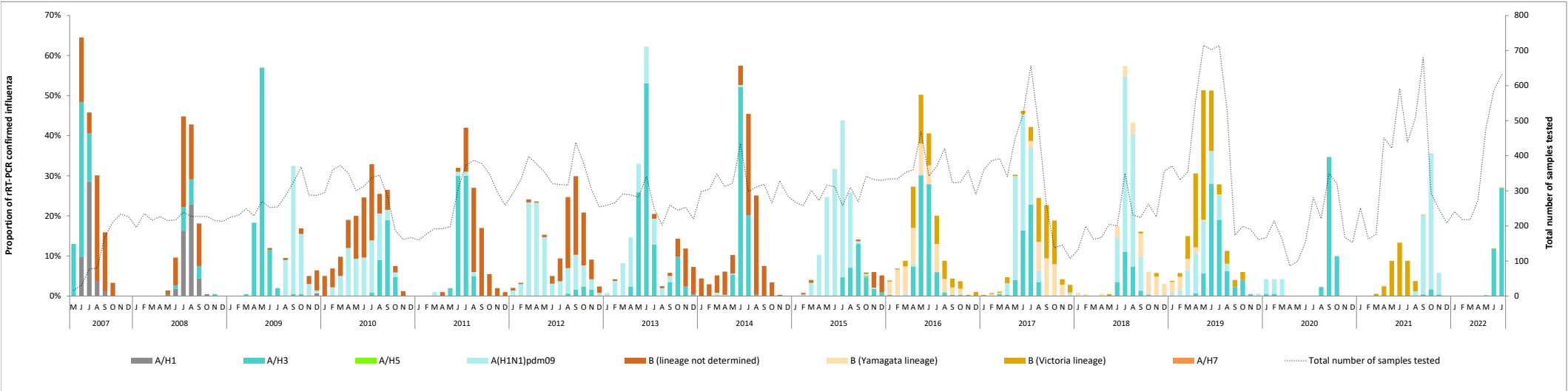
Note: Surveillance activities extended to the intensive care units (ICU) and coronary care unit (CCU) of the participating hospitals in January 2018.

$^\varphi$ 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.

^{i}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 - July 2022

Note: Influenza B typing initiated in January 2016

Hospital based influenza surveillance
Influenza seasonality graph
Week 31 of 2021 to week 30 of 2022

Legend: A/H1, A/H3, A/H5, A(H1N1)pdm09, B (Yamagata lineage), B (Victoria lineage), A/H7, Total number of samples tested