



Monthly summary report

Hospital Based Human Influenza Surveillance in Bangladesh

April 2021

Hospital based influenza surveillance
Monthly enrollment by different wards (Medicine, Pediatrics and CCU)
April 2021

| 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 | 26 | 2 | 8% | 25 | 1 | 4% | 4 | 0 | 0% |
| RMCH | Rajshahi | 19 | 0 | 0% | 24 | 1 | 4% | 0 | 0 | 0% |
| CuMCH | Cumilla | 33 | 2 | 6% | 17 | 1 | 6% | 1 | 0 | 0% |
| KMCH | Khulna | 30 | 0 | 0% | 15 | 0 | 0% | 0 | 0 | 0% |
| JGH | Jashore | 24 | 0 | 0% | 18 | 1 | 6% | 0 | 0 | 0% |
| JRRMCH | Sylhet | 14 | 1 | 7% | 27 | 1 | 4% | 1 | 0 | 0% |
| SBMCH | Barishal | 26 | 0 | 0% | 34 | 0 | 0% | 0 | 0 | 0% |
| CMCH | Chattogram | 63 | 1 | 2% | 10 | 0 | 0% | 0 | 0 | 0% |
| MARMCH | Dinajpur | 21 | 0 | 0% | 19 | 0 | 0% | 0 | 0 | 0% |
| | | 256 | 6 | 2% | 189 | 5 | 3% | 6 | 0 | 0% |

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
April 2021

| Hospital | District | SARI (aged ≥ 5 years) | | | SARI (aged < 5 years) | | |
|----------|-------------|-----------------------|----------|-----------|-----------------------|----------|-----------|
| | | Sample | Flu | Flu % | Sample | Flu | Flu % |
| JIMCH | Kishoregonj | 31 | 2 | 6% | 24 | 1 | 4% |
| RMCH | Rajshahi | 19 | 0 | 0% | 24 | 1 | 4% |
| CuMCH | Cumilla | 40 | 3 | 8% | 11 | 0 | 0% |
| KMCH | Khulna | 30 | 0 | 0% | 15 | 0 | 0% |
| JGH | Jashore | 25 | 1 | 4% | 17 | 0 | 0% |
| JRRMCH | Sylhet | 17 | 1 | 6% | 25 | 1 | 4% |
| SBMCH | Barishal | 29 | 0 | 0% | 31 | 0 | 0% |
| CMCH | Chattogram | 63 | 1 | 2% | 10 | 0 | 0% |
| MARMCH | Dinajpur | 26 | 0 | 0% | 14 | 0 | 0% |
| | | 280 | 8 | 3% | 171 | 3 | 2% |

Hospital based influenza surveillance
Influenza results by different age groups
April 2021

| Age groups | April 2021 | | | | | | Initiation - April 2021 | | | | | | | | |
|-------------|-----------------------|----------|-----------|-----------------------|----------|-----------|-------------------------|--------------|------------|------------------|--------------|------------|-----------------------|------------|-----------|
| | 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 | - | - | - | 124 | 1 | 1% | - | - | - | 2665 | 189 | 7% | 7,345 | 425 | 6% |
| 1-4 Years | - | - | - | 47 | 2 | 4% | - | - | - | 4217 | 601 | 14% | 2,784 | 398 | 14% |
| 5-14 Years | 21 | 2 | 10% | - | - | - | 3638 | 812 | 22% | 2317 | 547 | 24% | - | - | - |
| 15-24 Years | 15 | 3 | 20% | - | - | - | 4244 | 985 | 23% | 2167 | 413 | 19% | - | - | - |
| 25-39 Years | 55 | 3 | 5% | - | - | - | 4339 | 862 | 20% | 1916 | 299 | 16% | - | - | - |
| 40-59 Years | 97 | 0 | 0% | - | - | - | 5317 | 917 | 17% | 1245 | 201 | 16% | - | - | - |
| ≥ 60 Years | 92 | 0 | 0% | - | - | - | 5371 | 895 | 17% | 400 | 46 | 12% | - | - | - |
| | 280 | 8 | 3% | 171 | 3 | 2% | 22,909 | 4,471 | 20% | 14,927 | 2,296 | 15% | 10,129 | 823 | 8% |

[‡]Outpatient ILI surveillance discontinued in October 2017.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation - April 2021

| Hospital | District | Initiation | Sample | Flu | Flu % | Flu A ^ψ | Flu B ^λ | Flu A+B ^τ | 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 | 5757 | 1115 | 19% | 765 ⁱ | 350 | 0 | 9 | 408 | 0 | 0 | 346 | 64 | 116 |
| RMCH | Rajshahi | May 2007 | 3853 | 498 | 13% | 331 ⁱ | 167 | 0 | 14 | 193 | 0 | 0 | 122 | 39 | 67 |
| 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 [‡] | Cumilla | Oct 2007 | 5257 | 651 | 12% | 429 [*] | 219 | 3 | 9 | 228 | 0 | 0 | 191 | 28 | 41 |
| KMCH | Khulna | Jul 2007 | 3324 | 462 | 14% | 325 ^{*i} | 137 | 0 | 16 | 162 | 0 | 0 | 143 | 17 | 59 |
| JGH ^{Y†} | Jashore | Sep 2007 | 4161 | 844 | 20% | 535 | 308 | 1 | 10 | 274 | 0 | 0 | 251 | 26 | 144 |
| JRRMCH | Sylhet | Jul 2007 | 4138 | 699 | 17% | 442 ⁱ | 256 | 1 | 16 | 222 | 0 | 0 | 203 | 34 | 79 |
| SBMCH | Barishal | Aug 2007 | 5996 | 896 | 15% | 576 ⁱ | 316 | 4 | 9 | 293 | 0 | 0 | 272 | 56 | 111 |
| CMCH | Chattogram | Apr 2014 | 2975 | 522 | 18% | 363 | 156 | 3 | 0 | 148 | 0 | 0 | 215 | 41 | 95 |
| MARMCH ² | Dinajpur | Apr 2014 | 1914 | 367 | 19% | 234 ⁱ | 133 | 0 | 0 | 122 | 0 | 0 | 109 | 28 | 84 |
| | | | 47,965 | 7,590 | 16% | 5,036 | 2,541 | 13 | 137 | 2,580 | 1 | 0 | 2,302 | 395 | 852 |

^λInfluenza B typing initiated in January 2016.

^ψrRT-PCR result of four samples were equivocal positive for Influenza A.

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

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

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

ⁱOne 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.

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

[‡]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.

²Dinajpur Medical College Hospital (DjMCH) has been renamed as M Abdur Rahim Medical College Hospital (MARMCH).

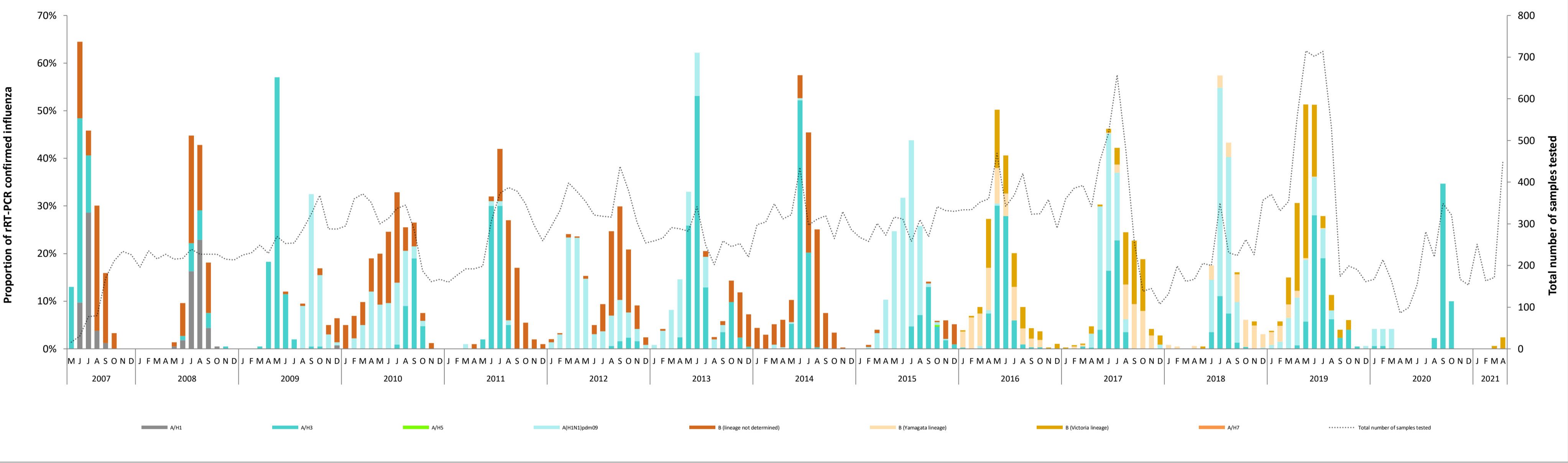
Note: Surveillance activities extended to the intensive care units (ICU) and coronary care unit (CCU) of the participating hospitals in January 2018.

^φ 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.

ⁱNine 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 - April 2021



Note: Influenza B typing initiated in January 2016

Hospital based influenza surveillance
Influenza seasonality graph
Week 18 of 2020 to week 17 of 2021

