



Monthly summary report

Hospital Based Human Influenza Surveillance in Bangladesh

February 2018

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
February 2018

| Hospital | District | Sample | Flu | Flu % | Flu A | Flu B | Flu A+B | Flu A/H1 | Flu A/H3 | Flu A/H5 | Flu A/ (H1N1)pdm09 | Flu B Yamagata lineage | Flu B Victoria lineage |
|----------|-------------|--------|-----|-------|-------|-------|---------|----------|----------|----------|-----------------------|------------------------------|------------------------------|
| JIMCH | Kishoregonj | 31 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RMCH | Rajshahi | 27 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CoMCH | Comilla | 17 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| KMCH | Khulna | 23 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| JRRMCH | Sylhet | 22 | 1 | 5% | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| SBMCH | Barisal | 27 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CMCH | Chittagong | 33 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| MARMCH | Dinajpur | 19 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 199 | 1 | 0.5% | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
February 2018

| Hospital | District | SARI (aged ≥ 5 years) [‡] | | | SARI (aged < 5 years) [‡] | | |
|----------|-------------|------------------------------------|----------|-------------|------------------------------------|----------|-----------|
| | | Sample | Flu | Flu % | Sample | Flu | Flu % |
| JIMCH | Kishoregonj | 26 | 0 | 0% | 5 | 0 | 0% |
| RMCH | Rajshahi | 22 | 0 | 0% | 5 | 0 | 0% |
| CoMCH | Comilla | 12 | 0 | 0% | 5 | 0 | 0% |
| KMCH | Khulna | 18 | 0 | 0% | 5 | 0 | 0% |
| JRRMCH | Sylhet | 15 | 1 | 7% | 7 | 0 | 0% |
| SBMCH | Barisal | 22 | 0 | 0% | 5 | 0 | 0% |
| CMCH | Chittagong | 28 | 0 | 0% | 5 | 0 | 0% |
| MARMCH | Dinajpur | 14 | 0 | 0% | 5 | 0 | 0% |
| | | 157 | 1 | 0.6% | 42 | 0 | 0% |

[‡] All SARI samples (aged ≥ 5 years) collected throughout the month from medicine and pediatrics inpatients.

[‡] First five SARI (aged <5 years) collected from pediatrics inpatients. More than five SARI (aged <5 years) cases belong to the cluster.

Hospital based influenza surveillance
Influenza results by different age groups
February 2018

| Age groups | February 2018 | | | | | | Initiation - February 2018 | | | | | | | | |
|-------------|------------------------------------|----------|-------------|------------------------------------|----------|-----------|------------------------------------|--------------|------------|------------------|--------------|------------|------------------------------------|------------|-----------|
| | 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 | - | - | - | 26 | 0 | 0% | - | - | - | 2665 | 189 | 7% | 5115 | 226 | 4% |
| 1-4 Years | - | - | - | 16 | 0 | 0% | - | - | - | 4217 | 601 | 14% | 1689 | 180 | 11% |
| 5-14 Years | 15 | 1 | 7% | - | - | - | 2540 | 505 | 20% | 2317 | 547 | 24% | - | - | - |
| 15-24 Years | 18 | 0 | 0% | - | - | - | 3107 | 663 | 21% | 2167 | 413 | 19% | - | - | - |
| 25-39 Years | 21 | 0 | 0% | - | - | - | 3001 | 583 | 19% | 1916 | 299 | 16% | - | - | - |
| 40-59 Years | 36 | 0 | 0% | - | - | - | 3352 | 617 | 18% | 1245 | 201 | 16% | - | - | - |
| ≥ 60 Years | 67 | 0 | 0.0% | - | - | - | 3439 | 616 | 18% | 400 | 46 | 12% | - | - | - |
| | 157 | 1 | 0.6% | 42 | 0 | 0% | 15,439 | 2,984 | 19% | 14,927 | 2,296 | 15% | 6,804 | 406 | 6% |

[‡] All SARI samples (aged ≥ 5 years) collected throughout the month from medicine and pediatrics inpatients.

[‡] First five SARI (aged <5 years) collected from pediatrics inpatients. More than five SARI (aged <5 years) cases belong to the cluster.

[‡] Outpatient ILI surveillance discontinued in October 2017.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation - February 2018

| Hospital | District | Initiation | Sample | Flu | Flu % | Flu A ^ψ | Flu B ^λ | Flu A+B [⚭] | Flu A/H1 | Flu A/H3 | Flu A/H5 | Flu A/ (H1N1)pdm09 | Flu B Yamagata lineage | Flu B Victoria lineage |
|---------------------|-------------|------------|---------------|--------------|------------|--------------------|--------------------|----------------------|------------|--------------|----------|-----------------------|------------------------------|------------------------------|
| DNMCH ^γ | Dhaka | Jun 2007 | 2061 | 312 | 15% | 201 | 111 | 0 | 15 | 84 | 0 | 102 | 13 | 7 |
| CBMCH ^γ | Mymensingh | Oct 2007 | 2053 | 302 | 15% | 206 | 96 | 0 | 7 | 107 | 1 | 91 | 16 | 10 |
| JIMCH | Kishoregonj | Sep 2007 | 4234 | 826 | 20% | 558 | 268 | 0 | 9 | 309 | 0 | 239 | 44 | 54 |
| RMCH | Rajshahi | May 2007 | 2604 | 286 | 11% | 191 | 95 | 0 | 14 | 105 | 0 | 72 | 15 | 19 |
| SZRMCH ^γ | Bogra | Sep 2007 | 3865 | 653 | 17% | 439 | 213 | 1 | 12 | 256 | 0 | 170 | 29 | 39 |
| LAMB [†] | Dinajpur | Oct 2007 | 1171 | 112 | 10% | 72 | 40 | 0 | 7 | 41 | 0 | 24 | 1 | 0 |
| BBMH [†] | Chittagong | Aug 2007 | 1440 | 157 | 11% | 118 | 39 | 0 | 13 | 42 | 0 | 63 | 3 | 0 |
| CoMCH | Comilla | Oct 2007 | 4268 | 544 | 13% | 355 | 187 | 2 | 9 | 182 | 0 | 164 | 24 | 13 |
| KMCH | Khulna | Jul 2007 | 2250 | 309 | 14% | 218 | 91 | 0 | 16 | 114 | 0 | 88 | 13 | 17 |
| JGH ^γ | Jessore | Sep 2007 | 3310 | 608 | 18% | 403 | 204 | 1 | 10 | 202 | 0 | 191 | 17 | 49 |
| JRRMCH | Sylhet | Jul 2007 | 3104 | 515 | 17% | 326 | 188 | 1 | 16 | 150 | 0 | 160 | 16 | 29 |
| SBMCH | Barisal | Aug 2007 | 4602 | 648 | 14% | 409 | 236 | 3 | 9 | 200 | 0 | 200 | 44 | 43 |
| CMCH | Chittagong | Apr 2014 | 1280 | 223 | 17% | 145 | 76 | 2 | 0 | 61 | 0 | 84 | 22 | 34 |
| MARMCH ^² | Dinajpur | Apr 2014 | 928 | 191 | 21% | 131 | 60 | 0 | 0 | 76 | 0 | 53 | 23 | 16 |
| | | | 37,170 | 5,686 | 15% | 3,772 | 1,904 | 10 | 137 | 1,929 | 1 | 1,701 | 280 | 330 |

^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.

[⚭]One sample collected in June 2017 was co-infected with both Influenza A(H1N1)pdm09 and Influenza B (Victoria lineage).

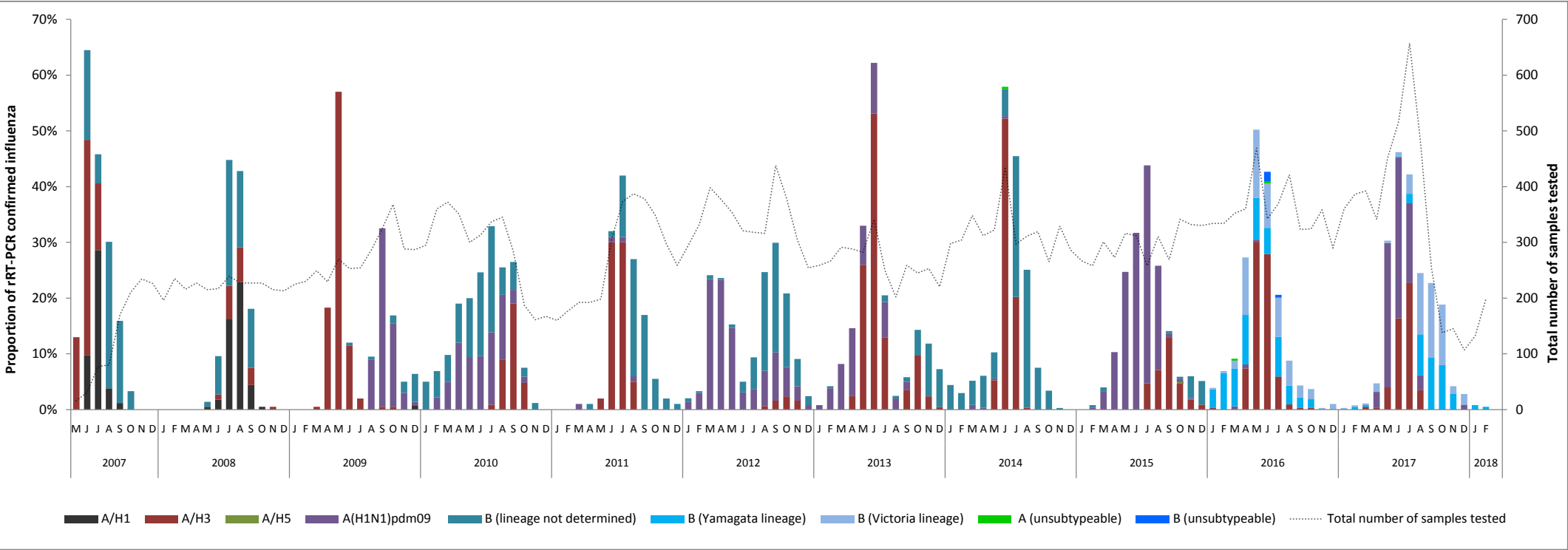
[†]Surveillance activities ended at LAMB (Dinajpur) and BBMH (Chittagong) in May 2016.

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

^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

Hospital based influenza surveillance
Influenza seasonality graph
May 2007 - February 2018



Note: Influenza B typing initiated in January 2016