



Monthly summary report

Hospital Based Human Influenza Surveillance in Bangladesh

November 2017

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
November 2017

| 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 | 25 | 1 | 4% | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| RMCH | Rajshahi | 24 | 1 | 4% | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| KMCH | Khulna | 15 | 3 | 20% | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 1 |
| JRRMCH | Sylhet | 20 | 1 | 5% | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| SBMCH | Barisal | 20 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CMCH | Chittagong | 22 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DjMCH | Dinajpur | 19 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 145 | 6 | 4% | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 4 | 2 |

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
November 2017

| Hospital | District | SARI (aged ≥ 5 years) [‡] | | | SARI (aged < 5 years) [‡] | | |
|----------|-------------|---|----------|-----------|--------------------------------------|----------|-----------|
| | | Sample | Flu | Flu % | Sample | Flu | Flu % |
| JIMCH | Kishoregonj | 20 | 1 | 5% | 5 | 0 | 0% |
| RMCH | Rajshahi | 15 | 1 | 7% | 9 | 0 | 0% |
| KMCH | Khulna | 10 | 3 | 30% | 5 | 0 | 0% |
| JRRMCH | Sylhet | 15 | 1 | 7% | 5 | 0 | 0% |
| SBMCH | Barisal | 15 | 0 | 0% | 5 | 0 | 0% |
| CMCH | Chittagong | 17 | 0 | 0% | 5 | 0 | 0% |
| DjMCH | Dinajpur | 14 | 0 | 0% | 5 | 0 | 0% |
| | | 106 | 6 | 6% | 39 | 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
November 2017

| Age groups | November 2017 | | | | | | Initiation - November 2017 | | | | | | | | |
|-------------|------------------------------------|----------|-----------|------------------------------------|----------|-----------|------------------------------------|--------------|------------|------------------|--------------|------------|------------------------------------|------------|-----------|
| | 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 | - | - | - | 30 | 0 | 0% | - | - | - | 2665 | 189 | 7% | 5028 | 226 | 4% |
| 1-4 Years | - | - | - | 9 | 0 | 0% | - | - | - | 4217 | 601 | 14% | 1656 | 179 | 11% |
| 5-14 Years | 20 | 2 | 10% | - | - | - | 2502 | 502 | 20% | 2317 | 547 | 24% | - | - | - |
| 15-24 Years | 19 | 1 | 5% | - | - | - | 3060 | 663 | 22% | 2167 | 413 | 19% | - | - | - |
| 25-39 Years | 20 | 0 | 0% | - | - | - | 2946 | 583 | 20% | 1916 | 299 | 16% | - | - | - |
| 40-59 Years | 23 | 1 | 4% | - | - | - | 3277 | 617 | 19% | 1245 | 201 | 16% | - | - | - |
| ≥ 60 Years | 24 | 2 | 8% | - | - | - | 3336 | 615 | 18% | 400 | 46 | 12% | - | - | - |
| | 106 | 6 | 6% | 39 | 0 | 0% | 15,121 | 2,980 | 20% | 14,927 | 2,296 | 15% | 6,684 | 405 | 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 - November 2017

| 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 | 4169 | 825 | 20% | 557 | 268 | 0 | 9 | 309 | 0 | 238 | 44 | 54 |
| RMCH | Rajshahi | May 2007 | 2533 | 284 | 11% | 191 | 93 | 0 | 14 | 105 | 0 | 72 | 15 | 17 |
| 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 ^γ | Comilla | Oct 2007 | 4235 | 544 | 13% | 355 | 187 | 2 | 9 | 182 | 0 | 164 | 24 | 13 |
| KMCH | Khulna | Jul 2007 | 2200 | 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 | 3056 | 514 | 17% | 326 | 187 | 1 | 16 | 150 | 0 | 160 | 15 | 29 |
| SBMCH | Barisal | Aug 2007 | 4542 | 648 | 14% | 409 | 236 | 3 | 9 | 200 | 0 | 200 | 44 | 43 |
| CMCH | Chittagong | Apr 2014 | 1215 | 223 | 18% | 145 | 76 | 2 | 0 | 61 | 0 | 84 | 22 | 34 |
| DjMCH | Dinajpur | Apr 2014 | 882 | 190 | 22% | 131 | 59 | 0 | 0 | 76 | 0 | 53 | 22 | 16 |
| | | | 36,732 | 5,681 | 15% | 3,771 | 1,900 | 10 | 137 | 1,929 | 1 | 1,700 | 278 | 328 |

^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.

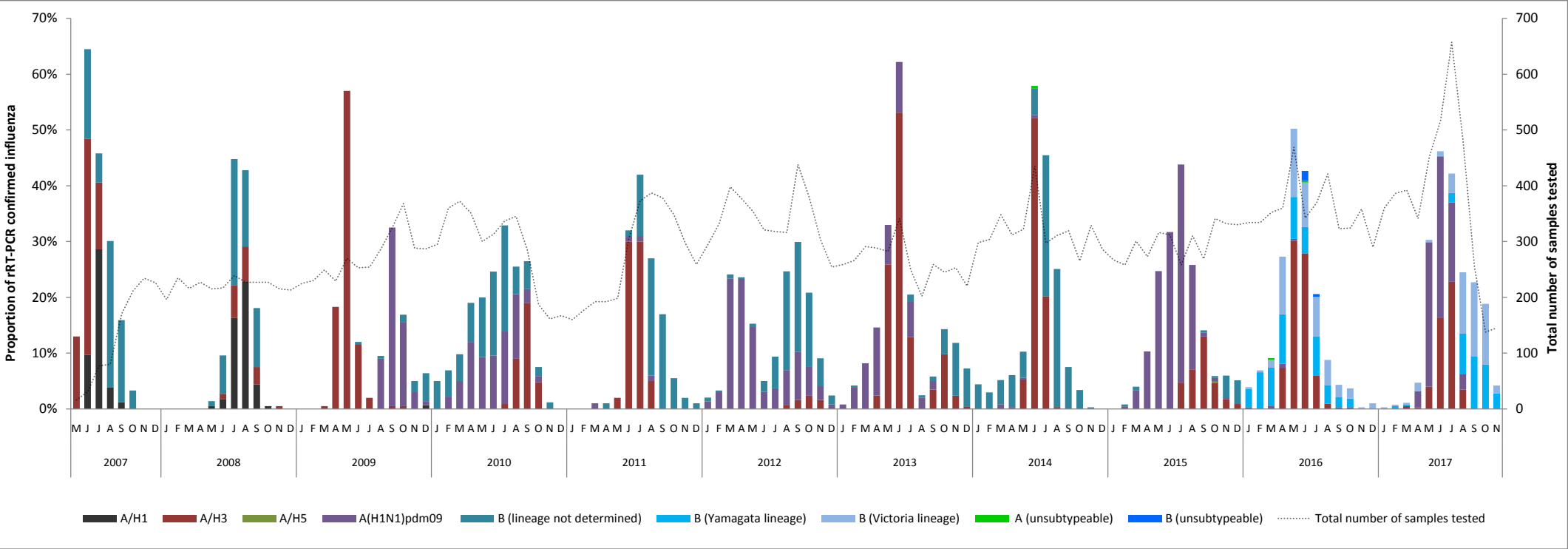
^λThree samples were co-infected with both Influenza B (Yamagata lineage) and Influenza B (Victoria lineage), another ten samples were unsubtypeable.

[⌘]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), CoMCH (Comilla) and JGH (Jessore) in October 2017.

Hospital based influenza surveillance
Influenza seasonality graph
May 2007 - November 2017



Note: Influenza B typing initiated in January 2016