



Monthly summary report

Hospital Based Human Influenza Surveillance in Bangladesh

January 2016

Hospital based influenza surveillance
Monthly hospitalwise influenza lab results
January 2016

| 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 |
|----------|-------------|------------|-----------|-----------|----------|-----------|----------|----------|----------|----------|-----------------------|------------------------------|------------------------------|
| DNMCH | Dhaka | 17 | 1 | 6% | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| CBMCH | Mymensingh | 16 | 2 | 13% | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| JIMCH | Kishoregonj | 40 | 4 | 10% | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 |
| RMCH | Rajshahi | 19 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SZRMCH | Bogra | 30 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LAMB | Dinajpur | 8 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BBMH | Chittagong | 13 | 1 | 8% | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| CoMCH | Comilla | 36 | 4 | 11% | 1 | 3 | 0 | 0 | 1 | 0 | 0 | 3 | 0 |
| KMCH | Khulna | 16 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| JGH | Jessore | 31 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| JRRMCH | Sylhet | 21 | 1 | 5% | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| SBMCH | Barisal | 46 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CMCH | Chittagong | 25 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| DjMCH | Dinajpur | 16 | 0 | 0% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | 334 | 13 | 4% | 1 | 12 | 0 | 0 | 1 | 0 | 0 | 11 | 1 |

Hospital based influenza surveillance
Monthly enrollment by different surveillance groups
January 2016

| Hospital | District | SARI [†] | | | ILI [‡] | | | Severe Pneumonia [¥] | | |
|----------|-------------|-------------------|-----------|-----------|------------------|----------|-----------|-------------------------------|----------|-----------|
| | | Sample | Flu | Flu % | Sample | Flu | Flu % | Sample | Flu | Flu % |
| DNMCH | Dhaka | 12 | 1 | 8% | - | - | - | 5 | 0 | 0% |
| CBMCH | Mymensingh | 11 | 2 | 18% | - | - | - | 5 | 0 | 0% |
| JIMCH | Kishoregonj | 22 | 3 | 14% | 13 | 1 | 8% | 5 | 0 | 0% |
| RMCH | Rajshahi | 11 | 0 | 0% | - | - | - | 8 | 0 | 0% |
| SZRMCH | Bogra | 10 | 0 | 0% | 15 | 0 | 0% | 5 | 0 | 0% |
| LAMB | Dinajpur | 3 | 0 | 0% | - | - | - | 5 | 0 | 0% |
| BBMH | Chittagong | 8 | 1 | 13% | - | - | - | 5 | 0 | 0% |
| CoMCH | Comilla | 16 | 2 | 13% | 15 | 2 | 13% | 5 | 0 | 0% |
| KMCH | Khulna | 11 | 0 | 0% | - | - | - | 5 | 0 | 0% |
| JGH | Jessore | 13 | 0 | 0% | 13 | 0 | 0% | 5 | 0 | 0% |
| JRRMCH | Sylhet | 4 | 1 | 25% | 12 | 0 | 0% | 5 | 0 | 0% |
| SBMCH | Barisal | 16 | 0 | 0% | 23 | 0 | 0% | 7 | 0 | 0% |
| CMCH | Chittagong | 20 | 0 | 0% | - | - | - | 5 | 0 | 0% |
| DJMCH | Dinajpur | 11 | 0 | 0% | - | - | - | 5 | 0 | 0% |
| | | 168 | 10 | 6% | 91 | 3 | 3% | 75 | 0 | 0% |

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

[‡] All ILI samples (all age groups) collected during 4 days in each month from both medicine and pediatrics OPD of selected six hospitals.

[¥] First five Severe Pneumonia samples (aged < 5 years) collected from pediatrics inpatients. More than five severe pneumonia cases belong to the cluster.

Hospital based influenza surveillance
Influenza results by different age groups
January 2016

| Age groups | January 2016 | | | | | | | | | Initiation - January 2016 | | | | | | | | |
|-------------|-------------------|-----------|-----------|------------------|----------|-----------|-------------------------------|----------|-----------|---------------------------|--------------|------------|------------------|--------------|------------|-------------------------------|------------|-----------|
| | SARI [†] | | | ILI [‡] | | | Severe Pneumonia [¥] | | | SARI [†] | | | ILI [‡] | | | Severe Pneumonia [¥] | | |
| | Sample | Flu | Flu % | Sample | Flu | Flu % | Sample | Flu | Flu % | Sample | Flu | Flu % | Sample | Flu | Flu % | Sample | Flu | Flu % |
| <1 Year | - | - | - | 17 | 0 | 0% | 63 | 0 | 0% | - | - | - | 2303 | 157 | 7% | 4115 | 160 | 4% |
| 1-4 Years | - | - | - | 35 | 1 | 3% | 12 | 0 | 0% | - | - | - | 3656 | 503 | 14% | 1215 | 109 | 9% |
| 5-14 Years | 24 | 4 | 17% | 10 | 1 | 10% | - | - | - | 1565 | 296 | 19% | 2005 | 447 | 22% | - | - | - |
| 15-24 Years | 24 | 1 | 4% | 7 | 0 | 0% | - | - | - | 1998 | 414 | 21% | 1923 | 361 | 19% | - | - | - |
| 25-39 Years | 24 | 0 | 0% | 11 | 1 | 9% | - | - | - | 2066 | 406 | 20% | 1702 | 266 | 16% | - | - | - |
| 40-59 Years | 41 | 1 | 2% | 5 | 0 | 0% | - | - | - | 2304 | 402 | 17% | 1084 | 166 | 15% | - | - | - |
| ≥ 60 Years | 55 | 4 | 7% | 6 | 0 | 0% | - | - | - | 2378 | 399 | 17% | 354 | 37 | 10% | - | - | - |
| | 168 | 10 | 6% | 91 | 3 | 3% | 75 | 0 | 0% | 10,311 | 1,917 | 19% | 13,027 | 1,937 | 15% | 5,330 | 269 | 5% |

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

[‡] All ILI samples (all age groups) collected during 4 days in each month from both medicine and pediatrics OPD of selected six hospitals.

[¥] First five Severe Pneumonia samples (aged < 5 years) collected from pediatrics inpatients. More than five severe pneumonia cases belong to the cluster.

Hospital based influenza surveillance
Hospitalwise influenza lab results
Surveillance initiation - January 2016

| Hospital | District | Initiation | 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 |
|----------|---------------------------|------------|---------------|--------------|------------|--------------|--------------------|----------|------------|--------------|----------|-----------------------|------------------------------|------------------------------|
| DNMCH | Dhaka | Jun 2007 | 1663 | 245 | 15% | 153 | 92 | 0 | 15 | 58 | 0 | 80 | 1 | 0 |
| CBMCH | Mymensingh [ⓧ] | Oct 2007 | 1657 | 243 | 15% | 171 | 72 | 0 | 7 | 83 | 1 | 79 | 2 | 0 |
| JIMCH | Kishoregonj ^{‡ⓧ} | Sep 2007 | 3023 | 554 | 18% | 380 | 174 | 0 | 9 | 192 | 0 | 177 | 4 | 0 |
| RMCH | Rajshahi | May 2007 | 1988 | 188 | 9% | 128 | 60 | 0 | 14 | 64 | 0 | 50 | 0 | 0 |
| SZRMCH | Bogra [ⓧ] | Sep 2007 | 3024 | 454 | 15% | 310 | 144 | 0 | 12 | 159 | 0 | 138 | 0 | 0 |
| LAMB | Dinajpur | Oct 2007 | 1150 | 111 | 10% | 72 | 39 | 0 | 7 | 41 | 0 | 24 | 0 | 0 |
| BBMH | Chittagong | Aug 2007 | 1409 | 150 | 11% | 113 | 37 | 0 | 13 | 39 | 0 | 61 | 1 | 0 |
| CoMCH | Comilla | Oct 2007 | 3581 | 467 | 13% | 312 | 153 | 2 | 9 | 157 | 0 | 148 | 3 | 0 |
| KMCH | Khulna | Jul 2007 | 1786 | 230 | 13% | 169 | 61 | 0 | 16 | 92 | 0 | 61 | 0 | 0 |
| JGH | Jessore | Sep 2007 | 2644 | 449 | 17% | 312 | 137 | 0 | 10 | 160 | 0 | 142 | 0 | 0 |
| JRRMCH | Sylhet | Jul 2007 | 2485 | 409 | 16% | 266 | 143 | 0 | 16 | 113 | 0 | 137 | 0 | 1 |
| SBMCH | Barisal [ⓧ] | Aug 2007 | 3443 | 475 | 14% | 324 | 148 | 3 | 9 | 152 | 0 | 165 | 0 | 0 |
| CMCH | Chittagong | Apr 2014 | 443 | 74 | 17% | 57 | 17 | 0 | 0 | 27 | 0 | 30 | 0 | 0 |
| DJMCH | Dinajpur ^{ⓧⓧ} | Apr 2014 | 372 | 74 | 20% | 54 | 20 | 0 | 0 | 31 | 0 | 21 | 0 | 0 |
| | | | 28,668 | 4,123 | 14% | 2,821 | 1,297 | 5 | 137 | 1,368 | 1 | 1,313 | 11 | 1 |

[ⓧ]rRT-PCR result of one sample was equivocal positive for Influenza A

^{ⓧⓧ}rRT-PCR result of two samples were equivocal positive for Influenza A

[‡]One sample collected in May 2013 was co-infected with both A(H3) and A(H1N1)pdm09

* Influenza B typing initiated in January 2016

Hospital based influenza surveillance
Influenza seasonality graph
May 2007 - January 2016

