



Hospital Based Rotavirus Surveillance in Children < 5 years of age and
Intussusception Surveillance in Children < 2 years of age (HBRIS) in Bangladesh

Monthly Report, February 2024



◆ Name, location and starting month of HBRIS hospitals

| Sl. No. | Name of the Hospitals | Location | Surveillance start | Current status |
|---------|--|-------------|--------------------|-----------------------|
| 01. | Rajshahi Medical College Hospital (RMCH) | Rajshahi | July'12 | Ongoing |
| 02. | Jahurul Islam Medical College Hospital (JIMCH) | Kishoregonj | July'12 | Ongoing |
| 03. | Jalalabad Ragib-Rabeya Medical College Hospital (JRRMCH) | Sylhet | July'12 | Ongoing |
| 04. | World Mission Prayer League (LAMB) | Dinajpur | February'13 | Closed in June'15 |
| 05. | Bangabandhu Memorial Hospital (BBMH) | Chattogram | February'13 | Closed in Septemer'19 |
| 06. | Jashore General Hospital (Jashore) | Jashore | August'13 | Ongoing |
| 07. | Sher-e- Bangla Medical College Hospital (SBMCH) | Barishal | August'13 | Ongoing |
| 08. | Rangpur Medical College Hospital (RpMCH) | Rangpur | January'16 | Ongoing |
| 09. | Chattogram Medical College Hospital (CMCH) | Chattogram | Septemer'19 | Ongoing |

◆ Proportion of children aged <5 years hospitalized with acute gastroenteritis (AGE) with evidence of rotavirus infection during February 2024 by hospital

| Hospital Name | Rotavirus | | |
|-------------------------|------------|------------|-------------------|
| | AGE* | Sampled | Positive (%) |
| RMCH | 93 | 29 | 23(79.31) |
| JIMCH | 62 | 18 | 16(88.89) |
| JRRMCH | 31 | 8 | 4(50.00) |
| JGH | 88 | 25 | 19(76.00) |
| SBMCH | 116 | 34 | 23(67.65) |
| RpMCH | 128 | 37 | 33(89.19) |
| CMCH | 108 | 31 | 24(77.42) |
| Cumulative Total | 626 | 182 | 142(78.02) |

◆ Number of intussusception cases aged <2 years during February 2024 by hospital

| Hospital Name | Intussusception confirmed*** |
|-------------------------|------------------------------|
| RMCH | 0 |
| JIMCH | 1 |
| JRRMCH | 0 |
| JGH | 0 |
| SBMCH | 1 |
| RpMCH | 0 |
| CMCH | 5 |
| Cumulative Total | 7 |

◆ Distribution of acute gastroenteritis (AGE) & rotavirus cases by age group during February 2024

| Age group (in months) | Rotavirus | | |
|-------------------------|-------------|-----------------|----------------------|
| | AGE (N=626) | Sampled (N=182) | Positive (%) (N=142) |
| 0-5 | 41 | 17 | 9 (52.94) |
| 6-11 | 236 | 88 | 68(77.27) |
| 12-17 | 194 | 52 | 42(80.77) |
| 18-23 | 71 | 18 | 17(94.44) |
| 24-59 | 84 | 7 | 6(85.71) |
| Cumulative Total | 626 | 182 | 142(78.02) |

*Acute Gastroenteritis (AGE)- ≥ 3 watery or looser than normal or ≥ 1 episode of forceful vomiting within a 24-hour period, with symptoms lasting ≤ 7 days. **Every 4th suspected case (in case of LAMB hospital every case). ***Child under 2 years who is admitted in selected hospitals & meet the level 1 or 2 or 3, Brighton Collaboration diagnostic criteria (either by clinical/ surgical/ and/or radiological and/or autopsy criteria).

◆ Distribution of intussusception cases by age group during February 2024

| Age group (in months) | Intussusception confirmed |
|-------------------------|---------------------------|
| 0-5 | 0 |
| 6-11 | 4 |
| 12-17 | 2 |
| 18-23 | 1 |
| 24-59 | 0 |
| Cumulative Total | 7 |

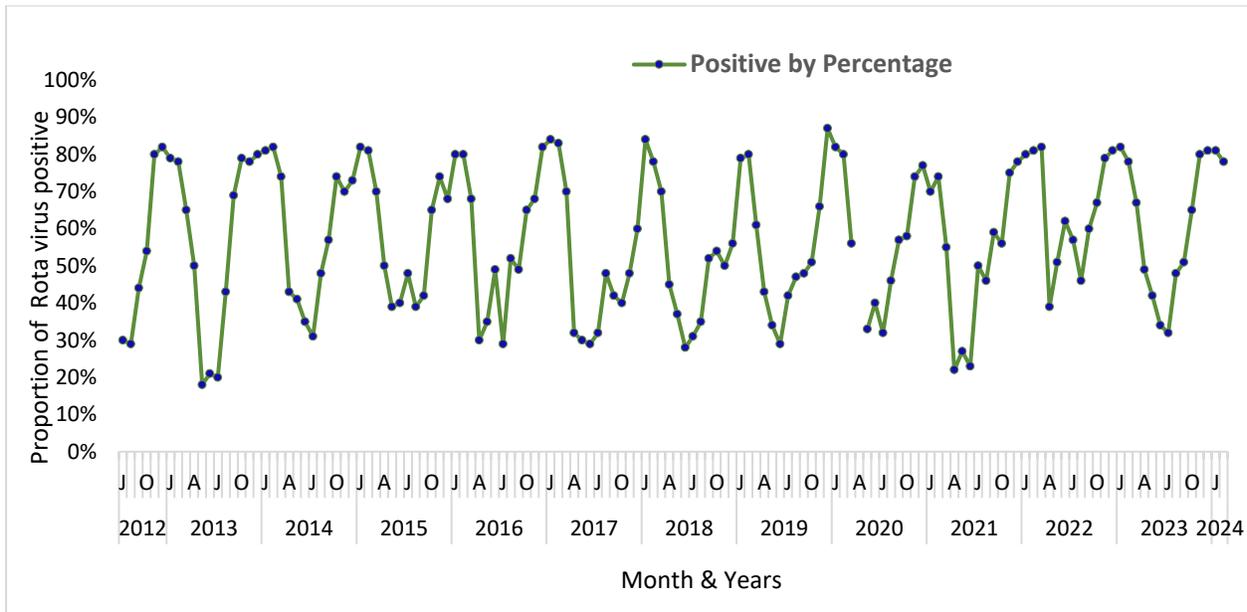
◆ Distribution of acute gastroenteritis (AGE) and rotavirus cases by sex during February 2024

| Sex | AGE | Sampled | Positive (%) |
|--------|-----|---------|--------------|
| Male | 364 | 107 | 87(81.31) |
| Female | 262 | 75 | 55(73.33) |

◆ Distribution of intussusception cases by sex during February 2024

| Sex | Intussusception confirmed |
|--------|---------------------------|
| Male | 4 |
| Female | 3 |

◆ Proportion of hospitalized acute gastroenteritis cases with evidence of rotavirus infection, by months and years



HBRIS activities has been postponed during the period of 1st April 2020 to 15th May 2020 due to Pandemic COVID-19

◆ Number of children aged < 5 years with acute gastroenteritis (AGE) with evidence of rotavirus positivity by hospital (January '24 to February'24)

| Hospital | RMCH | | JIMCH | | JRRMCH | | JGH | | SBMCH | | RpMCH | | CMCH | | Total Cases | | |
|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|-------------|----------|-------|
| | Sampled | Positive | Sampled | Positive | % |
| Jan'24 | 26 | 21 | 21 | 17 | 12 | 10 | 23 | 20 | 34 | 27 | 36 | 28 | 35 | 29 | 187 | 152 | 81.28 |
| Feb'24 | 29 | 23 | 18 | 16 | 8 | 4 | 25 | 19 | 34 | 23 | 37 | 33 | 31 | 24 | 182 | 142 | 78.02 |
| Total | 45 | 44 | 39 | 33 | 20 | 14 | 48 | 39 | 68 | 50 | 73 | 61 | 66 | 53 | 369 | 294 | 79.67 |

◆ Proportion of children aged < 5 years with acute gastroenteritis (AGE) with evidence of rotavirus infection including number of deaths by hospital July'12 to February'24

| Hospital Name | Rotavirus | | | |
|------------------|-----------|---------|--------------|-----------------------------|
| | AGE | Sampled | Positive (%) | Rotavirus associated deaths |
| RMCH | 17629 | 4313 | 2636(61%) | 3 |
| JIMCH | 10357 | 2587 | 1680(65%) | 1 |
| JRRMCH | 8787 | 2179 | 1433(66%) | - |
| LAMB | 178 | 142 | 95(63%) | 1 |
| BBMH | 2155 | 532 | 335(63%) | - |
| JGH | 6728 | 1691 | 1014(60%) | - |
| SBMCH | 14326 | 3592 | 2310(64%) | - |
| RpMCH | 5777 | 1443 | 895(62%) | - |
| CMCH | 4556 | 1137 | 697(61%) | |
| Cumulative Total | 70493 | 17610 | 10703 (61%) | 5** |

** Last Rota associated death case was reported in 2015.

◆ Number of intussusception cases aged < 2 years by hospital July'12 to February '24

| Hospital Name | Intussusception confirmed |
|------------------|---------------------------|
| RMCH | 282 |
| JIMCH | 30 |
| JRRMCH | 68 |
| LAMB | - |
| BBMH | 10 |
| JGH | 10 |
| SBMCH | 58 |
| RpMCH | 92 |
| CMCH | 229 |
| Cumulative Total | 818 |