

Quarter-1 consolidated report of VRDLNs (Jan 1, 2015-March 31, 2015)

NIE, Chennai

This is a consolidated quarterly news report (Q1) based on the quarterly reports received from 13 self-reporting VRDLN labs. The report comprises of the outbreaks reported from the labs which have processed the samples. The report also includes the number of positive cases for each virus by each lab, based on the monthly reports received.

❖ Bhubaneswar VRDL

- **Suspected AES outbreak in Mathurapur village, Jajpur in January.** 5/ 16 tested samples were positive for JE by IgM ELISA. 4 patients were symptomatic and 12 asymptomatic. One positive case was a 9-year old whereas remaining four belonged to 30-60 yrs of age group.
- **Lab also reported on suspected jaundice outbreak in Cuttack district in February.** 6/6 collected samples were positive for HEV IgM. A total of 24 patients were clinically examined.
- **Chickenpox outbreak in Puri in March.** Cases (n=11) were examined and 6 blood samples were collected and tested for Varicella IgM of which all were positive. The cases include children <15yrs of age (n=3) and adults >15yrs (n=3) of age.
- **Measles outbreak In Raygada District in March.** Cases (n=29) were examined, blood, urine and throat swab samples were collected. 11/29 were positive for Measles IgM and 5/29 were positive by PCR (3 throat swab and 2 urine samples).
- **H1N1 Outbreak Jan-March.** 216 samples were received from 23 health facilities across the state and the patients were admitted in these hospitals from 27 districts. 45/216 samples tested through RealTime PCR for H1N12009 were positive.
- Lab processed 949 number of samples in this quarter (875 from medical colleges and 74 from outbreaks). No. of tests run included 627 by serology, 416 by conventional PCR, 216 by RTPCR, 10 by sequencing and 2 cell cultures.

❖ Ranchi VRDL

- **Lab reports H1N1 outbreak:** 2/15 patients admitted in the hospital were found positive
- Lab reports **Chickenpox outbreak.** 1/5 samples received by IDSP from West Singhbhum district was positive for Varicella IgM.

❖ Jabalpur VRDL

Lab reports H1N1 pdm09 outbreak throughout state. Total no. of 3400 samples were tested by real time PCR test of which about 44% were found positive

❖ Jaipur

Lab reports H1N1 pdm09 outbreak throughout the state. Lab with its limited capacity tested 5996 {{ Infa A pos 477 (79%), H1N1 pdm09 pos 1129(18.8%)}}

South networking Labs

❖ Chennai VRDL

- The lab tested 2487 samples (1514 samples were screened for respiratory viruses, 145 for faeco-oral viruses, 439 for vector-borne disease viruses, 389 viruses transmitted by blood and other body fluids). Dengue and Chikungunya cases were drastically reduced in the first quarter of this year compared to the fourth quarter of last year. Measles and JE cases were consistently reported in this quarter. Hepatitis A cases were more in the month of March. Positivity was reported throughout the quarter.
- **Activity of Influenza A/H1N1 (pdm09) was significantly higher when compared with the last quarter.** Diseases caused by RSV showed a decrease in number in this quarter.
- **Suspected outbreak samples of Dengue** from the districts of **Virudhunagar, Thirunelveli and Madurai** were investigated during the months of January and February. Serotyping was performed on representative samples from those districts and reported. No further details mentioned.

❖ Manipal VRDL

- The VRDL tested **3560 patients** with **4771** samples. Of these, **2807** samples were screened for respiratory viruses, **280** for faeco-oral viruses, **784** for vector-borne disease viruses, and **955** for miscellaneous viruses.
- **Influenza A/H1N1 (pdm09) outbreak** among school children, Bijapur District, Karnataka (7 confirmed cases out of 7 suspected cases) Feb 2015
- **Japanese Encephalitis outbreak** in Mangalore and Udupi districts, Karnataka state (3 cases), Kannur District, Kerala state (1 case) in Jan-Feb
- **Mumps outbreak** in Chitradurga District, Karnataka state (2 confirmed cases out of 2 suspected cases) and Dharwad District Karnataka (2 cases) in Jan 2015
- **Measles outbreak from** Calicut district, Kerala state (2 confirmed cases out of 2 suspected cases) in Jan 2015 and among students of Manipal University campus, Udupi District Karnataka state (13 confirmed cases out of 16 suspected cases) Feb 2015
- **Kayasanur Forest Diseases (KFD) outbreak** in Wayanad district of Kerala State (18 confirmed cases out of 50 suspected cases) Feb 2015
- **Chickenpox outbreak** in Shimoga District, Karnataka (8 confirmed cases out of 8 suspected cases) Feb 2015 and in Chitradurga District, Karnataka. (8 confirmed cases out of 9 suspected cases) in March 2015.
- **Rubella outbreak** among school children Udupi District, Karnataka state. (9 confirmed cases out of 13 suspected cases) Feb 2015 and in Belgaum District, Karnataka. (5 confirmed cases out of 8 suspected cases) in March 2015.

❖ **Alappuzha VRDL** processed 426 numbers of samples with 848 tests. Individually by virus, 3/112 JE(IgM+PCR), 3/115 Entero (PCR), 2/26 Measles (IgM+ PCR), 18/124 H1N1 samples. **No outbreaks were reported.**

❖ **Thiruvananthapuram VRDL** tested 1477 samples from 1210 patients (534 by serology, 20 by conventional PCR and 919 by Quantitative PCR. **No outbreaks documented.**

❖ **Port Blair VRDL** processed **1076 samples**. 47/828 were positive by serology, 44/970 by conventional PCR and 4/12 by RTPCR from hospital samples. **Lab reports upsurge of PANDEMIC INFLUENZA-A (H1N1).** A total of 21 suspected cases (12 cases in February, 9 cases in March) reported, out of which 4 tested positive for Pandemic

Respiratory viruses

| Lab code | Influenza* | H1N1 | Para-influenza | Adenovirus | Measles | VZV | RSV |
|--------------|------------------|-------------------|----------------|---------------|----------------|---------------|---------------|
| Manipal | 26/5514 | 793/2807 | 0/12 | 7/ 159 | 90/254 | 23/211 | 1/133 |
| Port Blair | NT | 4/21 | 0/96 | 1/130 | NT | NT | 0/143 |
| Lucknow | 30/1448 | 779/3119 | 0/23 | 0/20 | 27/88 | 4/154 | 1/26 |
| Orissa | 49/214 | 45/216 | 0/23 | NT | 17/40 | 6/6 | 0/7 |
| Jaipur | 158/2781 | 1058/5608 | 2/272 | 4/ 134 | NT | 0/74 | 7/68 |
| Tvpm | 9/190 | 24/95 | NT | 2/20 | NT | NT | 0/22 |
| Alappulza | NT | 15/58 | NT | 1/20 | 2/26 | 0/1 | 1/58 |
| Chennai | NT | 288/1338 | NT | NT | 37/57 | 6/68 | 1/8 |
| Ranchi | NT | 2/15 | NT | NT | NT | 0/5 | NT |
| Vizag | 8/84 | 9/49 | NT | NT | NT | NT | NT |
| Jabalpur | 4/135 | 1538/3422 | NT | NT | 0/4 | NT | 2/81 |
| Patna | 54/271 | 332/1202 | NT | NT | 0/18 | 0/5 | NT |
| Hyderabad | NT | 73/336 | NT | NT | NT | NT | NT |
| Total | 338/10637 | 4960/18286 | 2/ 426 | 15/483 | 173/487 | 39/524 | 13/546 |

Numerator- No. positive, Denominator- No. tested, NT: Not Tested. H1N1 listed above is tested by PCR.

*Influenza (A, B, not specified) & Para-influenza 1,2 tested by PCR. VZV & measles listed are tested by IgM & PCR. RSV & Adenovirus listed are tested by PCR

GE viruses

| Lab code | Rota | Entero | Hep-A | Hep-E |
|--------------|---------------|---------------|-----------------|-----------------|
| Manipal | 0/6 | 2/418 | 0/2 | 0/2 |
| Port Blair | NT | 11/111 | NT | NT |
| Lucknow | 9/11 | 0/131 | 24/197 | 27/197 |
| Orissa | 43/62 | NT | 35/70 | 35/75 |
| Jaipur | 6/13 | 0/87 | 43/232 | 78/237 |
| Tvpm | NT | 0/3 | NT | NT |
| Alappuzha | NT | 3/115 | NT | NT |
| Chennai | NT | 0/84 | 66/167 | 4/85 |
| Ranchi | NT | NT | 2/144 | 23/186 |
| Vizag | NT | NT | 3/23 | 1/22 |
| Jabalpur | NT | NT | 18/80 | 20/130 |
| Patna | 9/143 | NT | 13/189 | 7/179 |
| Hyderabad | NT | NT | NT | NT |
| Total | 67/235 | 16/949 | 204/1104 | 195/1113 |

NT: Not Tested, NP- No positive. Rotavirus listed includes tests by both Electrophoresis+/ Rapid diagnostic tests. Hep-A, E by IgM ELISA. Orissa sequenced Rota virus as P4, P8 & G1 ,G10 serotypes

Vector-borne viruses

| Lab code | Dengue | Chikungunya | JE | WN |
|--------------|-----------------|---------------|----------------|--------------|
| Manipal | 58/835 | 5/21 | 2/148 | 4/6 |
| Port Blair | 67/848 | 1/87 | NT | NT |
| Lucknow | 38/273 | 0/4 | 0/333 | NT |
| Orissa | 3/69 | 1/18 | 14/74 | 0/3 |
| Jaipur | 0/28 | 3/8 | 0/76 | 0/74 |
| Tvpm | 0/1 | 0/1 | NT | 0/3 |
| Alappuzha | 0/18 | 0/22 | 3/112 | 0/20 |
| Chennai | 64/429 | 19/97 | 15/204 | 1/13 |
| Ranchi | 3/16 | 0/8 | 0/15 | NT |
| Vizag | 40/204 | 14/167 | 0/1 | 0/1 |
| Jabalpur | 11/161 | 1/41 | 0/6 | NT |
| Patna | 0/140 | 0/14 | 0/99 | NT |
| Hyderabad | 16/325 | NT | NT | NT |
| Total | 300/3347 | 98/488 | 34/1068 | 5/120 |

NT: Not Tested, NP- No positive.

Dengue listed includes tests by IgM, PCR & NS1 antigen /rapid tests. JE, West Nile & CHIK listed includes tested only by IgM ELISA & PCR.