Quarter-1 consolidated report of VRDLNs (Jan 1, 2014-March 31, 2014)

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.

Central & West networking Labs

- Jabalpur VDRL reported clustered cases of fever with rashes in children. 52 houses were surveyed by the investigating team; 4/8 suspected cases were positive for chickenpox (PCR and IgM).
- Jaipur VRDL processed 1002 samples with 5101 tests(1723 by Serology, 3227 by Real time PCR / PCR, rest by others)

East & North networking labs

Bhubaneswar VRDL

Lab reported **outbreak of measles in January** in OMC Colony, Hating and Suakati, Bansapal Block & CDMO of Keonjhar district. **18/30 samples were positive for Measles IgM**. Among the positive cases 84% were immunized previously. The lab overall ran 1101 no. of tests out of which 105 were collected for outbreak investigation & follow-up.

Lab also reported continued outbreak of measles in the end of march in Nuagaon village of Samatarapur. 4 children (3 cases and one house hold contact) were tested positive of the 35 blood samples were collected by the investigating team. Vaccination coverage though was found to be 100%.

- Lucknow VRDL tested 1938 patients (1884 by serology and 1612 by RTPCR). Other details not obtained.
- Patna VRDL processed 202 samples (107 by serology) for Rotavirus, Japanese encephalitis, Dengue, Hepatitis group of viruses like HAV, HCV, HBV, HEV, VZV, HSV, CMV Influenza, and Dengue(numbers not obtained). During February 2014, fever with rashes was reported from Hasanpura, Block-Punpun (Patna District, Bihar). Varicella Zoster outbreak was reported with 4 positive cases (IgM ELISA)
- Ranchi VRDL tested 240 clinical samples (41 for faeco-oral viruses, 41 for vector-borne disease viruses, 38 for respiratory viruses and 120 for viruses transmitted by body or body fluids). Other details not reported. No outbreak reported.

South networking Labs

Chennai VRDL

- The lab tested 1262 samples (410 samples were screened for respiratory viruses, 103 for faeco-oral viruses, 364 for vector-borne disease viruses, 385 viruses transmitted by blood and other body fluids).
- Activity of Respiratory virus cases in Chennai was consistently seen throughout. Both seasonal and pandemic Influenza cases were found in all three months. Influenza B/Yamagata was the only seasonal Influenza virus type detected during the first quarter. Activity of Influenza A/H1N1 (pdm09) was comparatively higher when compared to their previous year Q1 as 10 of the 154 cases were positive.
- The lab also reported that there was a significant dip in the number of Dengue, JE and Chikungunya cases.
 CMV cases and positivity was consistent throughout the quarter. Rubella cases were more in January and decreased in subsequent months. Positivity of EBV cases declined significantly when compared to their previous year numbers. No outbreaks were reported during this period.

Manipal VRDL

- The VRDL tested 1093 patients with 2062 samples. Of these, 357 samples were screened for respiratory viruses, 69 for faeco-oral viruses, 677 for vector-borne disease viruses, and 959 for miscellaneous viruses.
 Sporadic activity of Influenza A/H1N1 (pdm09) activity. Decreased activity of Dengue.
- Japanese Encephalitis outbreak in Udupi district of Karnataka (3 cases), Uttar Kannada district in (1 case) of Karnataka and Kozhikode district of Kerala state (1 case) were reported in January.
- **Mumps outbreak** in Gadag District, Karnataka state in Feb 2014. (3 cases). Maskal PHC, Hiriyur Taluk Chitradurga District, Karnataka (4 cases), Nehru Nagar, Kadan Koppa Plot, Mishrikoti Village & Post, Dharwad District, Karnataka state (4 cases) in March was reported.
- **Measles outbreak a**mong students in Manipal University campus, Manipal, Udupi Dist, Karnataka in March 2014(2 cases) was reported.
- **Kayasanur Forest Diseases (KFD) outbreak in** Kannangi village of Thirthahalli Taluk, Shimoga District, Karnataka in Feb 2014. (5 positive out of 14 cases- Real Time PCR) was reported
- Chickenpox outbreak in Tumkur District, Karnataka state in Feb 2014 (4 cases), PHC Mydolalu, Bhadravathi TQ, Shimoga District, Karnataka State in March 2014 (10 cases), Maruthi Nagar, Ballalasamudra PHC, Molakalmooru Taluk, Chitradurga District, Karnataka State March 2014. (4 cases), Chamarajapura Post & Village, Kembadi PHC, Vadeyuru, Kolar District, Karnataka March 2014. (7 cases) was reported.
- Alappuzha VRDL processed 376 numbers of samples with 825 tests. Individually by virus, 3/90 JE(IgM), 3/85 Entero (PCR), 1/30 Measles (IgM+ PCR), 1/16 HAV(IgM), 9/50 EBV (IgM+ PCR), 3/57 Rubella (IgM+ PCR), 24/57 Adeno(PCR) positive were reported. No outbreaks were reported during the first quarter of the year.
- Hyderabad VRDL tested a total of 1126 samples, reported positive dengue (7/142) and HCV (2/290). Others details were not obtained. No out-breaks were reported during this quarter.
- Thiruvananthapuram VRDL tested 828 samples from 799 patients (275 by serology, 167 by conventional PCR and 372 by Quantitative PCR. No outbreaks documented.
- Port Blair VRDL processed 1064 samples. 10/146 were positive by serology, 95/2310 by conventional PCR and 3/161 by RTPCR from hospital samples. The aetiology of viral conjunctivitis in Port Blair during January was identified as Adenovirus (details not reported).

Respiratory virus

Lab	Adeno	Measles	VZV	RSV	Influenza*	Influenza A(H1N1)	Para-influenza	
Manipal	0/357	29/177	NT	18/164	12/1427	8/357	0/37	
Port Blair	50/505	NT	NT	16/505	2/436	NT	0/48	
Lucknow	0/58	3/108	2/28	3/58	2/340	NT	0/58	
Orissa	2/29	20/93	3/7	0/29	1/58	0/29	6/116	
Jaipur	8/200	1/60	3/30	2/65	5/127	1/170	111/368	
Tvpm	1/37	0/1	0/1	NT	0/22	NT	NT	
Alappuzha	24/57	1/35	2/3	0/1	NT	NT	NT	
Chennai	NT	27/40	8/32	0/12	11/146	10/154	NT	
Ranchi	NT	NT	NT	NT	NT	NT	NT	
Jabalpur	NT	0/4	NT	3/27	0/43	NT	NT	
Patna	NT	1/1	7/21	NT	0/2	NT	NT	
Hyderabad	NT	NT	NT	NT	NT	NT	NT	
Total	85/1243	82/519	25/122	42/861	33/2601	19/710	117/627	

Numerator- No. positive, Denominator- No. tested, NT: Not Tested. Total positives given are for all tested samples in the three months. 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. Vizag had not begun reporting in this quarter yet.

GE viruses

Vector-borne viruses

Lab code	Rota	Entero	Hep-A	Hep-E	Lab code	Dengue	СНІК	JE	WN
Manipal	NT	11/96	0/2	7/154	Manipal	37/646	2/36	5/78	6/57
Port Blair	NT	20/209	NT	NT	Port Blair	9/149	1/45	NT	NT
Lucknow	NT	NT	11/147	5/137	Lucknow	7/104	0/2	1/167	0/16
Orissa	48/98	3/38	13/41	4/60	Orissa	8/50	0/5	0/19	NT
Jaipur	NT	0/2	NT	46/216	Jaipur	54/93	6/19	0/127	0/159
Tvpm	NT	0/7	NT	NT	Tvpm	1/4	1/8	NT	0/8
Alappuzha	NT	5/114	1/6	0/6	Alappuzha	0/10	NT	3/141	0/58
Chennai	NT	0/75	58/149	3/59	Chennai	11/291	21/72	4/148	0/10
Ranchi	0/2	NT	5/25	1/18	Ranchi	0/14	0/4	2/20	NT
Jabalpur	NT	NT	2/40	3/55	Jabalpur	2/41	0/16	0/6	NT
Patna	19/115	NT	2/13	4/15	Patna	0/17	NT	0/4	NT
Hydrbd	NT	NT	NT	NT	Hyderabad	15/204	NT	NT	NT
Total	67/215	39/541	92/423	73/720	Total	144/1612	31/207	15/710	6/308

Numerator- No. positive, Denominator- No. tested, NT: Not Tested. Rotavirus listed includes tests by both Electrophoresis & Rapid diagnostic tests. Hep-A, E by IgM ELISA, Enterovirus by PCR Numerator- No. positive, Denominator- No. tested, NT: Not Tested. Dengue listed includes tests by IgM, NS1 antigen detection tests & PCR. JE, CHIK, & West Nile (WN) listed includes tested by PCR & IgM ELISA