

Chapter

22

ACTIVITIES IN
NORTH EAST
REGION

22.1 INTRODUCTION

A separate North East (NE) Division in the Department and a Regional Resource Centre (RRC) at Guwahati, has been set up to provide capacity building support to the States in the NE region. Flexibilities have been provided under the RCH and NRHM Flexi pools to take care of the specific developmental requirements of the NE Region while ensuring that the national priorities are also kept in view. In order to address the gaps in the secondary and tertiary healthcare infrastructure requirements of the NE States, a scheme namely 'Forward Linkages for NRHM in North East' has been introduced for the State of NE region from the 11th Plan onwards.

Problems in the Health Sector in the North Eastern States:

- Shortage of trained medical manpower;
- Providing access to sparsely populated, remote, far flung areas;
- Improvement of Governance in the Health sector;
- Need for improved quality of health services rendered;
- Making effective and full utilization of existing facilities;
- Effective and timely utilization of financial resources available;
- Morbidity and Mortality due to Malaria;
- High level of tobacco consumption and the associated high risk to cancer; and
- High incidence of HIV/AIDS in Nagaland, Manipur and the increasing incidence in Mizoram and Meghalaya.

22.2 NATIONAL RURAL HEALTH MISSION (NRHM)

The National Rural Health Mission (2005-12) was launched to provide effective healthcare to rural population throughout the country with special focus on 18 States, which have weak public health indicators and weak infrastructure. These 18 States include all the 8 North Eastern States namely Arunachal Pradesh, Assam, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim and Tripura. NRHM has been approved for continuation during the 12th Plan period also.

The Mission seeks to provide universal access to equitable, affordable and quality health care which is accountable at the same time responsive to the needs of the people. Reduction of child and maternal mortalities population stabilization, and reduction of disease burden on account of communicable disease like TB, Vector Borne Diseases, Leprosy etc. are some of turn key goals of the Mission.

Achievements under NRHM in respect of NE region

- A total of 236 CHCs, 898 PHCs and 127 centres working as First Referral Units (FRU), have been made operational on 24x7 basis since the inception of NRHM. Ayush facilities are available in 1076 centres, including DHs, CHCs, other than CHC at or above block level but below district level, PHCs and other health facilities above SCs but below block level.

- 150 Specialists, 1036 Medical Officers, 2776 Paramedics, 4281 Staff Nurses and 7327 ANMs, have been augmented under NRHM. Besides this, 56124 ASHAs have been selected under NRHM.
- Out of the 1,52,67,337 Institutional Deliveries reported, 5,99,686 Institutional Deliveries relate to States of NE and 6,92,000 children fully immunized in NE States of the all India figure of 1,90,31,000.

Forward Linkages to NRHM

With a view to complement the initiatives under the NRHM Programme, the Scheme for Forward Linkages to NRHM in NE was introduced during the 11th Five year Plan, to be financed from likely savings from other Health Schemes. This aims at improving the Tertiary and Secondary level Health Infrastructure of the region in a comprehensive manner. An outlay of Rs.748.00 crore has been made for the scheme in the 12th Plan. An amount of Rs. 192.07 crore has been released in this plan period so far. In FY 2016-17, an amount of Rs. 13.50 crore has been released till the third quarter.

22.3 NORTH EASTERN INDIRA GANDHI REGIONAL INSTITUTE OF HEALTH & MEDICAL SCIENCES (NEIGRIHMS), SHILLONG

North Eastern Indira Gandhi Regional Institute of Health & Medical Sciences (NEIGRIHMS), Shillong was set up in 1987 with the objective of

providing inter-alia specified medical care to the people of entire North Eastern Region and to produce trained medical manpower. Initially, the Institute was envisaged as a Post Graduate Medical Institute on the lines of AIIMS, Delhi and PGIMER, Chandigarh. With expanded mandate, the Institute has started MBBS course from 2008-09 with annual intake of 50 Students that is now recognised course by Medical Council of India (MCI) vide Notification dated 7th November, 2013.

The Institute has following major equipments:

- 4 Haemodialysis Machine for the D/o General Medicine (Dialysis Unit);
- Endoscope System for the D/o General Surgery;
- 4 ICU Ventilator with Accurate Tracheal and Esophageal Monitoring with ILV Option Software & Cable (Synchronized Independent Lung Ventilation Capability) Avea Comprehensive Model for the D/o Anaesthesiology/CCU;
- 1 Set Medical Oxygen Concentrator (PSA Technology) Unit with Compressor (Air) with a capacity of 30-35 D type bulk units per day;
- Virtual Dissection Table/ System for the D/o Anatomy and
- 8 Haemodialysis Couch for the D/o Gen. Medicine (Dialysis Unit).

The 38th Standing Finance Committee Meeting of the Institute was held on 04.08.2016 under the Chairmanship of Secretary, Ministry of Health & Family Welfare. The Government of India has approved for award of work to lowest bidder (M/s Larsen & Turbo, Chennai) for construction of Undergraduate Medical College and Hostel,

Construction of Regional Cancer Centre and Guest House and Expansion of Nursing College and Hostel at an estimated cost of Rs. 373.33 crore and the Construction work is under process.

12 Post Graduate (MD/MS) Students and 2 post-doctoral DM (Cardiology) students admitted during the session 2013-14 had successfully completed their programmes with 100 % result.

The Institute had conducted online entrance examination for admission in various courses of:

- B. Sc. (Nursing),
- PG (MD/MS),
- DM (Cardiology) and
- M. Sc. (Nursing).

The admission into MBBS course for the academic session 2016-17 from the 18 North East Open Category was based on NEET-UG 2016 conducted by CBSE.

At present the Institute has 541 beds and presently offering super speciality services in the Departments of Cardiology, Neurology, Neurosurgery, CTVS, Urology and speciality services in Gen. Surgery, Gen. Medicine, Paediatrics, Orthopaedics, Obst. & Gynae, Ophthalmology, ENT, Dermatology, Psychiatry, Oncology and Dentistry. These departments are very well supported by Department of Radiology, Anaesthesiology, Pathology, Microbiology, Forensic Medicine and Biochemistry.

An amount of Rs. 178.98 and Rs. 188.84 crore (Out of BE of Rs. 300.00 crore) were released to the Institute as Grants-in-aid by the Ministry of

Health and Family Welfare during the Financial Year (FY) 2015-16 and FY 2016-17 till 22.11.2016.

22.4 REGIONAL INSTITUTE OF MEDICAL SCIENCES (RIMS), IMPHAL, MANIPUR

Regional Institute of Medical Sciences was set up in 1972 and has been functioning under the Ministry of Health & Family Welfare since 1st April, 2007. RIMS is an Institute of regional importance catering to the needs of the North Eastern Region in the field of medical education by providing undergraduate and post-graduate courses. RIMS is a 1,074 bedded teaching hospital equipped with modern state of the art equipment and teaching facilities having an intake capacity of 100 Undergraduate and 150 Post Graduate students every year. It also runs the Ph. D. Courses in various subjects and M. Phil in Clinical Psychology as well.

The courses being run along with intake capacity in the institute are as follows:

1	MBBS	100 seats per annum	15% All India Quota
2	MD/MS/DCP	147 seats per annum	50% All India Quota
3	M. Ch.	03 seats per annum	50% All India Quota
4	M. Phil.	07 seats per annum	All Beneficiary States of RIMS
5	B. Sc. Nursing	50 seats per annum	All Beneficiary States of RIMS
6	BDS	50 seats per annum	15% All India Quota
7	BASLP	10 seats per annum	10% All India Quota

The major projects of RIMS are as under:

- The Project for up-gradation of RIMS to bring it at par with AIIMS, New Delhi (Phase-II) at an estimated cost of Rs. 129.36 crore is under implementation.
- Increasing the number of undergraduate seats from 100 to 154 for which EFC proposal at a cost of Rs. 202.00 crore has already been approved.

An amount of Rs. 243.693 and Rs. 197.93 crore (Out of BE Rs. 269.00 crore) were released to the Institute as Grants-in-aid by the Ministry of Health and Family Welfare during the Financial Year (FY) 2015-16 and FY 2016-17 till 22.11.2016.

22.5 REGIONAL INSTITUTE OF PARAMEDICAL AND NURSING SCIENCES (RIPANS), AIZWAL, MIZORAM

The Regional Institute of Paramedical and Nursing Sciences (RIPANS), Aizawl was set up by the Ministry of Home Affairs, Govt. of India in 1995-96 to provide Nursing, Pharmacy and Paramedical education to the people of North East including Sikkim and to maintain the pace of nursing education and nursing services with other developments of medical and technological services in the North East. The Institute was transferred to the Ministry of Health & Family Welfare, Govt. of India with effect from 01.04.2007.

The Regional Paramedical and Nursing Sciences Training Institute (RP&NTI), which was later

renamed as Regional Institute of Paramedical and Nursing Sciences (RIPANS) on 05.08.2005, was started functioning in 1996 with only 182 students. The present strength of students is 680 for academic session 2016-17.

At present the Institute is conducting the following courses as given below:

- B. Sc. Nursing;
- B. Sc. MLT (Medical Laboratory Technology);
- B. Pharm;
- B. Sc. RIT (Radio Imaging Technology);
- B. Sc. OOT (Optometry & Ophthalmic Techniques) and
- M. Pharm.

The courses are affiliated to Mizoram University (MZU) and are recognized by Indian Nursing Council (INC), Pharmacy Council of India (PCI) and All India Council for Technical Education (AICTE).

The Major Projects of RIPANS are as under:

DPR and SFC Memo of outlay of Rs. 445.80 Crore is under consideration for construction of work of (i) Academic Building Block- IV, (ii) Guest House, (iii) General Hostel Block, (iv) Indoor Sports Complex cum Auditorium, and (v) Hospital Complex for 100 bedded facility along with Quarters of Resident Doctors, Medical Superintendent, Nurses and other staffs.

An amount of Rs. 29.00 and Rs. 28.6037 crore (Out of BE of Rs. 75.00 crore) were released to the Institute as Grants-in-aid by the Ministry of Health and Family Welfare during the Financial Year (FY) 2015-16 and FY 2016-17 till 22.11.2016.

22.6 LOKOPRIYA GOPINATH BORDOLOI REGIONAL INSTITUTE OF MENTAL HEALTH, TEZPUR, ASSAM

The Lokopriya Gopinath Bordoloi Regional Institute of Mental Health (LGBRIMH), Tezpur, completes 140 years of its existence and service in the area of mental healthcare since its inception in 1876.

The Institute has played a significant role in manpower development and research in the field of mental health and allied disciplines. The Government has approved the establishment of a Neuro Surgery department and a Neurology department in LGBRIMH on the lines of NIMHANS, Bengaluru.

The Institute has an attached hospital with inpatient care facilities for 336 patients. The treatment facilities are offered free of cost to all the patients. The Institute offers regular courses under the Guwahati University with M.D in Psychiatry, M.Sc. in Nursing (Psychiatric Nursing), M. Phil in Psychiatric Social Work and M. Phil in Clinical Psychology and also Post-Basic Diploma course in Psychiatric Nursing. The Institute has also been recognized as a Centre for conducting Ph.D programmes in Psychiatric Nursing, Psychiatric Social Work and Clinical Psychology by the Guwahati University. The Institute also provides exposure training to visiting students from various medical, para-medical and non-medical institutions.

Patient care statistics of the Institute:

- **OPD Treatment:** From April 2016 to October, 2016, a total of 64,990 patients

visited the OPD which included 36,236 male patients and 28,754 female patients.

- **Patient Admission:** From April 2016 to October 2016, a total of 1082 patients were admitted for in patient care and treatment out of which 817 were male patients and 265 were female patients.
- **Patient Discharge:** From April 2016 to October 2016, a total of 1068 patients were discharged which included 809 male patients and 259 female patients.
- **Laboratory Investigation:** A total of 1,36,991 diagnostic tests were conducted in the Central Laboratory from April 2016 to October 2016 under the department of Pathology, Microbiology, Biochemistry and Radiology. Tests in clinical psychology are routinely carried out in the Institute along with other psychometric tests.
- **Ongoing research activities:** For development and up-gradation of the Departments of Pathology, Biochemistry and Microbiology at LGBRIMH, Tezpur (Assam), the Institute has been running DBT (Department of Biotechnology, Ministry of Science and Technology, Govt. of India) sponsored project titled "*Development and Up-gradation of Pathology, Microbiology and Biochemistry Departments at LGBRIMH, Tezpur, Assam,*" from 2010 onwards. The Department of Psychiatric Social Work is a consultant for collaborative program by IGSSS (Guwahati) for the intervention program titled "Psychosocial care for persons affected by communal violence in Assam in Mizoram." The Department also signed a

TOR with IGSSS for a 6 month psycho-social care program with persons affected by the disaster at Karbianglong.

- To address the twin issues of estimating the burden of mental health problems in a nationally representative population and identifying current status of human resources and services available for mental health in the country, the Ministry of Health and Family Welfare has identified that undertaking a nationwide representative mental health survey is a priority area. The Lokopriya Gopinath Bordoloi Regional Institute of Mental Health has been nominated to undertake the survey in the State of Assam.
- **Community Services programmes:** The Institute organizes community treatment services on a monthly basis in three different centres i.e. Sootea Extension Clinic, Jakhalabanda Extension Clinic and Missionary of Charity Extension Clinic and extends mental health services at community levels. A total number of 4923 patients received treatment during the period.
- **Rehabilitation Attendance:** The rehabilitation services of the Institute comprises clinical rehabilitation, occupational therapy and physiotherapy unit. A total number of 5017 physiotherapy sessions and 332 vocational sessions respectively were administered for the benefit of patients till October, 2016.
- **Student Intake:** A total number of 35 students were enrolled under different courses (M. Phil in Psychiatric Social

Work – 6, M. Phil in Clinical Psychology – 8, M. D. (Psychiatry) – 2, M. Sc. Nursing (Psychiatric Nursing) – 12 and DPN – 7 during the session 2016-17.

- The number of students passed during the last academic session is as follows: MD – 2; DNB – 2; M.Sc. Nursing (Psychiatric nursing) – 12; M. Phil in Clinical Psychology- 8; M. Phil in Psychiatric Social Work- 5; Diploma in Psychiatric Nursing – 7.
- **Training in Mental Health:** Other than the regular courses, the Institute has also been providing short term training in mental health for both medical and non-medical students from different parts of the country. 760 students were given the short term training during the current year.
- **Infrastructure Development Activities:** Up-gradation of infrastructure facilities of the Institute is currently in progress. HSCC (India) Ltd. has been engaged as consultant for undertaking the construction work at LGBRIMH. Construction of the main hospital building, outpatient department, academic block, residential quarters, junior residential hostel, Senior residential hostel, cafeteria building and Director's Residence has been completed. Construction of Auditorium, Nurses Hostel electric substation, STP, Incinerator and other external services is under progress.

22.7 NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS (NPCB)

National Programme for Control of Blindness (NPCB) was launched in the year 1976 as a 100% centrally sponsored scheme (now 60:40 in all States and 90:10 in NE States) with the goal of reducing the prevalence of blindness to 0.3% by 2020.

The programme is being implemented in a decentralized manner through respective State/District Health Societies. Benefits of the scheme are meant for all needy population including tribal population. NE States including Sikkim being tribal predominant and having peculiar geographical conditions and inadequate eye-care infrastructure, is a priority area under NPCB. With the aim to improve eye-care services in these states, following new initiatives have been introduced under NPCB:

1. Assistance for construction of dedicated Eye Wards & Eye OTs in District Hospitals.
2. Appointment of Ophthalmic manpower (Ophthalmic Surgeons, Ophthalmic Assistants and Eye Donation Counsellors) in States on contractual basis.
3. In addition to Cataract, provision of grant-in-aid to NGOs for management of other Eye diseases other than Cataract like Diabetic Retinopathy, Glaucoma Management, Laser Techniques, Corneal Transplantation, Vitreoretinal Surgery, Treatment of childhood blindness etc.
4. Development of Mobile Ophthalmic Units in NE States, Hilly States & difficult Terrains for diagnosis and medical management of eye diseases.
5. Involvement of Private Practitioners in Sub District, Block and Village level.

The performance of cataract surgeries under NPCB in NE States during the last three years (2013-14, 2014-15 and 2015-16) are as under:

Sl. No.	State	No. of cataract surgeries in NE states		
		2013-14	2014-15	2015-16
1	Arunachal Pradesh	1651	1511	1780
2	Assam	64679	73081	74395
3	Manipur	3715	3594	2891
4	Meghalaya	1576	1337	1448
5	Mizoram	1898	2006	2125
6	Nagaland	651	862	907
7	Sikkim	303	210	460
8	Tripura	6372	8180	8734
	Total	80845	90781	92740

22.8 NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME (NVBDCP)

The North-Eastern region is prone to malaria transmission mainly due to:

- Topography and climatic conditions that largely facilitate perennial malaria transmission,
- Prevalence of highly efficient malaria vectors,
- Pre-dominance of Pf as well as prevalence of chloroquine resistant pf malaria.

The North-Eastern States namely Arunachal Pradesh, Assam, Meghalaya, Mizoram, Manipur, Nagaland, Sikkim and Tripura together contribute about 4% of the country's population, 11% of malaria cases, 14% of Pf

cases and 35 % of malaria deaths reported in the country for the year 2015. The epidemiological and malario-metric indicators are given below:

Malaria Situation in the NE States during 1996-2016				
Year	Cases (in million)		Deaths	API
	Total	Pf		
1996	0.28	0.14	142	8.01
1997	0.23	0.12	93	6.51
1998	0.19	0.09	100	5.12
1999	0.24	0.13	221	6.40
2000	0.17	0.08	93	4.49
2001	0.21	0.11	211	5.29
2002	0.18	0.09	162	4.57
2003	0.16	0.08	169	3.93

2004	0.14	0.08	183	3.36
2005	0.15	0.09	251	3.64
2006	0.24	0.15	901	5.67
2007	0.19	0.12	581	4.58
2008	0.19	0.13	349	4.38
2009	0.23	0.18	488	5.19
2010	0.17	0.13	290	3.80
2011	0.11	0.09	162	2.49
2012	0.08	0.06	113	1.80
2013	0.07	0.05	119	1.53
2014	0.14	0.12	222	2.85
2015	0.13	0.11	135	2.73
2016 (upto November)	0.06	0.05	61	1.29

State-wise situation of Malaria in NE States -2015

Sl. No.	States/ UTs	Pop. (in 000)	B.S.E.	Positive Cases	P.f. Cases	Pf %	ABE R (%)	API (per 1000)	SPR (%)	SfR (%)	Deaths (No.)
1	Arunachal Pradesh	1444	146229	5088	1714	33.69	10.13	3.52	3.48	1.17	7
2	Assam	33601	3485405	15557	11675	75.05	10.37	0.46	0.45	0.33	4
3	Manipur	2930	80232	216	119	55.09	2.74	0.07	0.27	0.15	0
4	Meghalaya	3219	599144	48603	43828	90.18	18.61	15.10	8.11	7.32	79
5	Mizoram	1157	310526	28593	24602	86.04	26.84	24.71	9.21	7.92	21
6	Nagaland	2018	235651	1527	532	34.84	11.68	0.76	0.65	0.23	3
7	Sikkim	208	8826	27	11	40.74	4.24	0.13	0.31	0.12	0
8	Tripura	3888	453298	32525	30074	92.46	11.66	8.37	7.18	6.63	21
	Total	48465	5319311	132136	112555	85.18	10.98	2.73	2.48	2.12	135

State-wise situation of Malaria in NE States -2016 (Provisional)

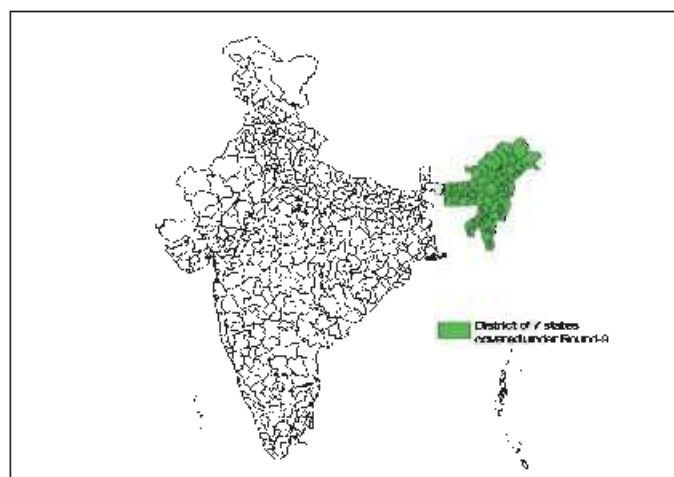
Sl. No.	States/ UTs	Pop. (in 000)	B.S.E.	Positive Cases	P.f. Cases	Pf %	ABER (%)	API (per 1000)	SPR (%)	SfR (%)	Deaths (No.)
1	Arunachal Pradesh	1444	144325	3035	853	28.11	9.99	2.10	2.10	0.59	0
2	Assam	33601	2983451	7473	5663	75.78	8.88	0.22	0.25	0.19	5
3	Manipur	2930	86633	118	56	47.46	3.03	0.04	0.13	0.06	0
4	Meghalaya	3219	448995	34002	30842	90.71	13.95	10.56	7.57	6.87	41
5	Mizoram	1157	245089	6973	5475	78.52	21.18	6.03	2.85	2.23	0
6	Nagaland	2018	241485	788	301	38.20	11.97	0.39	0.33	0.12	0
7	Sikkim	208	8322	13	5	38.46	4.00	0.06	0.16	0.06	0
8	Tripura	3888	332727	10178	9209	90.48	8.56	2.62	3.06	2.77	15
	Total	48465	4493027	62580	52404	83.74	9.27	1.29	1.39	1.17	61

The table shows that Meghalaya, Mizoram and Tripura are having API more than 5.

Assistance to States: Government of India provides 100% central assistance for programme implementation to the North Eastern States. The Govt. of India also provides commodities like drugs, LLINs, insecticides/larvicides etc. as per approved norms to all NE States as per their technical requirements.

An additional support under Global Fund for AIDS, Tuberculosis and Malaria (GFATM) is provided to all NE States except Sikkim for implementation of Intensified Malaria Control Project (IMCP), with the objectives:

- (i) To increase access to rapid diagnosis and treatment in remote and inaccessible areas through community participation;
- (ii) Malaria transmission risk reduction by use of LLINs; and
- (iii) To enhance awareness about malaria control and promote community, NGO and private sector participation.



For strengthening early case detection and complete treatment, more than 52840 ASHAs have been sanctioned of which 52446 are engaged in these areas. Out of them, 47190 have been trained and involved in high malaria endemic areas along with Fever Treatment Depots (FTDs) and Malaria clinics. This is in addition to the treatment facilities available at the health facilities

and hospitals. Anti malaria drugs and funds for training are provided by Gol under the programme.

As per the National Drug Policy, Chloroquine is used for treatment of all P.vivax cases and Artemisinin Combination Therapy (ACT) with Sulfadoxine Pyrimethamine (AS+SP) combination is being implemented for the treatment all Pf cases in the country. However, in North-Eastern states early signs of resistance to currently used SP-ACT, has been noticed and so, as per the advice of Technical Advisory Committee, effective combination of Artemether-Lumefantrine (ACT-AL) has been recommended for the treatment of Pf cases in the North Eastern States.

Indoor Residual Spraying (IRS): Under integrated vector control initiative, IRS is implemented selectively only in high risk pockets as per district-wise Micro Action Plans from domestic budget. The Directorate has issued guidelines on IRS to the States for technical guidance. Guidelines on uniform evaluation of insecticides have also been developed in collaboration with National Institute of Malaria Research (NIMR),

Delhi. Over the years, there is a reduction in IRS covered population in view of paradigm shift to alternative vector control measures such as extensive use of Insecticide Treated Nets (ITNs) and Long Lasting Insecticide Treated Nets (LLINs).

The strategies of the Intensified Malaria Control Project (IMCP) are:

- (i) Early diagnosis and prompt treatment with special reference to the drug resistant pockets,
- (ii) Integrated vector control, including promotion of LLINs, intensive IEC and capacity building and efficient public-private partnership among, CBO, NGO, and other voluntary sectors, and
- (iii) Training the health workers and community volunteers.

Japanese Encephalitis is mainly endemic in Assam, Manipur and Nagaland as these States are regularly reporting JE/AES cases. The details of AES/JE cases from 2013 are as follows:

Sl. No.	Affected States	2013				2014				2015				2016 (provisional)			
		AES Cases	Deaths	JE Cases	Deaths	AES Cases	Deaths	JE Cases	Deaths	AES Cases	Deaths	JE Cases	Deaths	AES Cases	Deaths	JE Cases	Deaths
1	Assam	1388	272	495	134	2194	360	761	165	1409	260	614	135	1713	187	416	85
2	Manipur	1	0	0	0	16	0	1	0	34	0	6	0	475	1	44	1
3	Nagaland	20	0	4	0	20	1	6	0	10	1	0	0	0	0	0	0
4	Arunachal Pradesh	0	0	0	0	102	11	32	3	73	2	32	2	1	0	0	0
5	Meghalaya	0	0	0	0	212	3	72	3	174	8	41	8	150	4	34	4
6	Tripura	211	0	14	0	323	0	14	0	459	4	28	4	365	1	77	1

For control of J.E., Government has established 28 sentinel sites in Assam and one each in Manipur, Nagaland, Tripura and 3 in Meghalaya for diagnosis of J.E. cases. 27 districts in Assam, 3 districts in Arunachal Pradesh, 8 districts in Manipur and 7 districts in Nagaland have been covered under J.E. vaccination programme in

children 1-15 yrs. Adult JE vaccination has been completed in 12 districts of Assam.

Dengue: NE States till few years back did not reported any problems of Dengue. Manipur has reported dengue for the 1st time in 2007. The State-wise details of dengue cases from 2013 are as follows:

Sl.No.	Affected States	2013		2014		2015		2016 (provisional)	
		Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1	Assam	4526	2	85	0	1076	1	4575	4
2	Arunachal Pradesh	0	0	27	0	1933	1	13	0
3	Manipur	9	0	0	0	52	0	38	0
4	Meghalaya	43	0	0	0	13	0	91	0
5	Mizoram	7	0	19	0	43	0	29	0
6	Nagaland	0	0	0	0	21	1	9	0
7	Sikkim	38	0	5	0	21	0	8	0

Chikungunya: Assam, Arunachal Pradesh, Manipur, Mizoram, Nagaland, and Tripura are not endemic for Chikungunya. However in Meghalaya for the first time, the State has reported 16 clinically suspected Chikungunya cases from West Garo Hills district during 2010. During 2011, the State had reported 168 clinically suspected and 32 confirmed cases from West Garo Hills district. No death has been reported due to Chikungunya. Since 2012, no clinically suspected case has been reported from the state of Meghalaya.

Vector Borne Diseases Situation in North Eastern States

Lymphatic Filariasis is endemic in 7 districts of Assam, whereas other states in NE region are reported as non-filaria endemic. These districts are covered under the strategy of Annual Mass Drug Administration with Di-ethyl-carbamazine citrate (DEC) since 2004, however, since 2009, Albendazole was co-administered with DEC. All 7 endemic districts, have successfully completed Transmission Assessment Survey

(TAS) and stopped MDA. The coverage of population from 2013 & 2014 is as under:

Year	Coverage (%)
2013	78.67
2014	90.66
2015	MDA Stopped
2016	

22.9 NATIONAL IODINE DEFICIENCY DISORDERS CONTROL PROGRAMME (NIDDCP)

The National Iodine Deficiency Disorders Control Programme (NIDDCP) is being implemented in all the North Eastern States. State level IDD Control Cell and IDD Monitoring Laboratory have been set up in all the NE States. IDD prevalence surveys have been conducted in all the States. Resurveys done in the State of Arunachal Pradesh, Manipur, Sikkim and Mizoram have indicated a decline in the prevalence of IDD as a result of iodated salt consumption. The consumption of adequately iodized salt at household/community level in the NE States is in the range of 96% to 100 % during the year 2015-16. The States of Mizoram, Nagaland and Sikkim have reported optimal Median Urinary Iodine Excretion (UIE) i.e. UIE >100 µg /L.

22.10 DEVELOPMENT OF MEDICAL SERVICES

Under the CSS for establishment of new medical colleges attached with district referral hospitals, the details of districts selected and fund released

is as under:

Sl. No.	State	Districts	Funds	Remarks
1.	Arunachal Pradesh	Naharlagun	Rs. 52.50 crore	
2.	Assam	Dhubri	Rs. 49.00 crore	
		Nagaon		
		North Lakhimpur		
		Diphu		
3.	Mizoram	Falkwain	Rs. 40.00 crore	
4.	Nagaland	Kohima	Rs. 46.50 crore	

It may be noted that Arunachal Pradesh, Mizoram & Nagaland will have their first medical college.

22.11 DEVELOPMENT OF NURSING SERVICES

Opening of ANM/GNM Schools: For the North Eastern region, the Ministry of Health & Family Welfare has approved 16 ANM schools and 21 GNM schools as per the following details.

State	Name of the identified districts for opening of	
	ANM School	GNM School
Arunachal Pradesh	Lohit	Upper Subansiri
	Tawang	East Siang (Pasighat)
	West Siang	Naharlagun (Papampure)

Assam	Baksa	Bongaigaon
	Udalguri	
	Chirang	
	Kamrup	
Manipur		Bishnupur
		Chandel
		Senapati
		Tamenglong
		Thoubal
		Ukhrui
Meghalaya		East Garo Hills
		Ribhoi
		South Garo Hills
		West Khasi Hills
Mizoram	Aizwal	Champhai
	Lawngtlai	Kolasib
	Mamit	Saiha
		Serchhip
Nagaland	Zunheboto	Mon
	Kohima	Phek
	Mokokchung	Tuensang
Sikkim	East Sikkim	
	West Sikkim	
Tripura	West Tripura	

A sum of Rs.10.0385 crore has been released during 2016-17 for opening of 3 ANM and 2 GNM Schools in the States of Nagaland and Mizoram.

22.12 NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF FLUOROSIS (NPPCF)

NPPCF Programme is being implemented in 4 districts namely Nagaon (2009-10), Kamrup &

Karbi Anglong (2010-11) and Dhubri (2015-16).

Except Dhubri (Administrative Approval in ROP-2015-16), the sanctioned contractual staff i.e. District Consultant, Laboratory Technician and Field Investigator (latter for six months) have been engaged, and Laboratories established along with Ion meters in the 3 districts. The District Nodal Officer, District Consultant (Fluorosis) and Laboratory Technician of all districts have been trained at National Institute of Nutrition, Hyderabad on the implementation of NPPCF.

Surveys regarding Fluorosis have been undertaken and IEC done by distributing leaflets, putting up posters, hoardings, etc. in all 3 districts. Seminars have been conducted in Karbi Anglong. Medical Officers and paramedical have been trained in all three districts. Supplementation in all three districts is being done.

22.13 NATIONAL PROGRAMME FOR HEALTHCARE OF ELDERLY (NPHCE)

In the north-eastern region, the National Programme for the Health Care of Elderly (NPHCE) is in operation in Assam, Sikkim and Mizoram. The States of Assam and Sikkim are among the 21 States/UTs which had been identified for implementation of NPHCE at the time of launch of the programme. The status of the activities approved in North-Eastern States are as follows:-

Assam: For the financial year 2016-17, an amount of Rs. 1154.69 lakhs has been approved

in the ROP and have communicated to the State by NIIM Division for implementation of NPHCE at 24 districts of the State.

Sikkim: For the financial year 2016-17, an amount of Rs. 83.38 lakhs has been approved in the ROP as communicated to State for implementation of NPHCE at 04 districts of the State.

Mizoram: Funds to the tune of Rs. 119.06 lakhs had been released during the year 2014-15 to State of Mizoram. For the financial year 2015-16, no amount has been proposed by the State in the PIP 2015-16. However, the unspent balance of Rs. 119.06 lakhs are still lying with the State as no reports have been received regarding expenditure or activities at District Hospital or below in State. However, 04 districts have been approved in the ROP for 2016-17.

Manipur: NPHCE has not yet started in the State so far but for the financial year 2015-16, an amount of Rs.292.00 lakhs had been approved in the ROP for implementation of NPHCE at 04 districts. For the financial year 2016-17, an amount of Rs. 48.2 lakhs has been approved in the ROP as communicated to State for implementation of NPHCE at 02 districts of the State.

Meghalaya: NPHCE has not yet started in the State so far. Since the State has not proposed any amount in the PIP 2015-16 and also in 2016-17, no amount had been approved in the ROP 2015-16 & 2016-17.

Nagaland: NPHCE has not yet started in the State so far. Since the State had not proposed any amount in the PIP 2015-16, no amount has been approved in the ROP 2015-16 under NPHCE. For the financial year 2016-17, an amount of Rs. 214.96 lakhs has been approved in the ROP as communicated to State for implementation of NPHCE at 04 districts of the State.

Tripura: NPHCE has not yet started in the State so far. Since the State had not proposed any amount in the PIP 2015-16, no amount has been approved in the ROP 2015-16 under NPHCE. For the financial year 2016-17, an amount of Rs. 10.80 lakhs has been approved in the ROP as communicated to State for implementation of NPHCE at 02 districts of the State.

Arunachal Pradesh: During financial year 2015-16, an amount of Rs.365.00 lakhs had been approved in the ROP for implementation of NPHCE at 05 districts of the State. For the financial year 2016-17, an amount of Rs. 290.00 lakhs has been approved in the ROP as communicated to State for implementation of NPHCE at 10 districts of the State.

22.14 NATIONAL PROGRAMME FOR PREVENTION & CONTROL CANCER, DIABETES, CARDIOVASCULAR DISEASES & STROKE (NPCDCS)

NPCDCS is being implemented in all North Eastern States. The funds are being provided to the State under NCD Flexi –Pool through State PIPs of respective States/UTs, with the centre State share in ratio of 90:10 for North Eastern States.

Achievements

The cumulative number of facilities under NPCDCS at all levels in the North-Eastern States established till December 2016 is as under:

State	State NCD Cell	District NCD Cells	District NCD Clinics	District Cardiac Care Units	CIIC NCD Clinics	District Day Care Centres
Arunachal Pradesh	1	17	17	0	20	0
Assam	1	14	14	5	79	5
Manipur	1	9	8	0	5	1
Meghalaya	1	3	3	1	6	2
Mizoram	1	8	6	2	10	2
Nagaland	1	11	11	1	0	2
Sikkim	1	2	2	2	0	1
Tripura	1	4	4	0	8	0
Total	8	68	65	11	128	13

Scheme for Tertiary Care Cancer Centres

Under Tertiary Care Cancer Centre (TCCC) Scheme of NPCDCS, Government of India is assisting States to set up / establish State Cancer Institute (SCI) and TCCC in different parts of the country. The maximum assistance inclusive of State Share for SCI is Rs. 120 Crore and for TCCC is Rs.45 Crore. The cost sharing ratio between Centre and State is 90:10 for North East States.

So far one SCI at Cancer Hospital (RCC), Agartala, Tripura and two TCCCs at Civil Hospital, Aizawl, Mizoram and District Hospital, Kohima, Nagaland are being supported as per details as under:-

Sl. No.	Name of State	Name of Institute	SCI /TCCC	Amount Released (Rs.in crore)
1.	Tripura	Cancer Hospital (RCC),Agartala	SCI	55.00
2.	Mizoram	Civil Hospital, Aizawl	TCCC	14.64
3.	Nagaland	District Hospital, Kohima	TCCC	5.4998

22.15 ACTIVITIES OF NATIONAL CENTRES FOR DISEASE CONTROL UNDERTAKEN UNDER DIFFERENT SCHEMES/ PROGRAMMES

Integrated Disease Surveillance Programme (IDSP): IDSP is a decentralized State based programme to strengthen surveillance system for epidemic prone diseases for early detection and control of outbreaks. As on date, all States and Union Territories including North Eastern States are implementing IDSP. The component wise details of status/achievements in North East States are as under:

- IT networking:** In N.E States, IDSP is establishing linkages with all states/districts HQ & all Govt. Medical colleges on a satellite Broadband hybrid network.
- Manpower status:** Since July 2010, manpower recruitment has been decentralized and state- wise break up of technical manpower is as under:

States	Epidemiologists		Microbiologists		Entomologist		Veterinary Consultant	
	Sanctioned	In position	Sanctioned	In position	Sanctioned	In position	Sanctioned	In position
Arunachal Pradesh	18	16	3	2	1	1	1	1
Assam	28	24	15	12	1	1	1	1
Manipur	10	2	2	0	1	0	1	0
Meghalaya	11	1	2	0	1	1	1	1
Mizoram	10	0	3	3	1	1	1	0
Nagaland	12	12	3	3	1	1	1	1
Sikkim	5	0	2	2	1	1	1	0
Tripura	9	0	2	0	1	1	1	0

- Training Status:** Training of Trainers (ToT) of State and District Rapid Response Teams (RRT) has been

completed for eight North Eastern States. State wise details are as under:

State	Master Trainers Trained in ToT	2 Week Field Epidemiology Training Programme for District Surveillance Officers
Arunachal Pradesh	65	13
Assam	98	34
Manipur	41	15
Meghalaya	47	12
Mizoram	41	11
Nagaland	46	9
Sikkim	31	4
Tripura	20	2

4. Data Management Status: IDSP receives weekly disease surveillance reports from about 88% of the districts of NE region (84 out of 95 districts). Data analysis and action are being taken by respective districts.

States	Districts reporting	Total districts
Arunachal Pradesh	14	20
Assam	26	27
Manipur	8	9
Meghalaya	7	7
Mizoram	7	9
Nagaland	10	11
Sikkim	4	4
Tripura	8	8
Total	84	95

5. Strengthening of Laboratories: In North East States, process of establishing

district priority laboratories, and strengthening of 39 identified district laboratories are in progress. 16 out of these 39 labs have already functional.

6. Finance: The Grants-in-aid released and expenditure incurred in last 7 years i.e. starting from the inception of the project till now is as under.

(As on 29.10.2016) (in lacs of Rs.)

States	Amount released	Amount expenditure
Arunachal Pradesh	1575.55	1,228.67
Assam	475.30	1,632.86
Manipur	468.80	402.89
Meghalaya	733.50	420.57
Mizoram	900.20	780.80
Nagaland	266.57	968.08
Sikkim	229.71	298.98
Tripura	1575.55	237.81
Total	5772.92	5,970.66

Outbreaks detected: In North East states a total of 134 outbreaks have been detected through IDSP during 2016 (up to 09th October). The state-wise break up is as follows:

- Arunachal Pradesh-20;
- Assam-90;
- Manipur-6;
- Meghalaya-9;
- Mizoram-3;
- Nagaland-3;
- Sikkim-3 and
- Tripura-0

The states have been requested to report about outbreaks every week. Even 'Nil' report is mandatory.

22.16 REVISED NATIONAL TUBERCULOSIS CONTROL PROGRAMME (RNTCP)

The entire population of the North Eastern States is covered under the Revised National TB Control Programme (RNTCP). Over the years, a strong network of RNTCP diagnostic and treatment services has been established in NE States through the general health system. 227 sub-district TB Unit and 662 RNTCP Designated Microscopy centres have been established till March, 2016. As the NE region has large proportion of tribal, hilly and hard to reach areas, the norms for establishing Microscopy centres has been relaxed from 1 per lakh population to 50,000 and the TB Units for every .75 to 1.25 lakh (as against 1.5 to 2.5 lakh range). In addition 63 rapid molecular test machines, CBNAAT has been installed across the North Eastern States.

The States have shown improvement in programme performance and in 2015, the annualized total case notification rate was 127 per lakh per year compared to the previous reporting periods 121 per lakh per year. On average in the region and treatment success rate has been consistently maintained over 88%. RNTCP has initiated 61515 patients on treatment in 2015 in the North East Region.

The programme has collaborated with private and public sector health institutions in the area. More than 200 NGOs and PPs have been involved in the entire region and 10 medical colleges have been engaged proactively, including establishment of Zonal Task Force in the region for collaborating with the Medical colleges in the region. Innovative methods have been successfully implemented with the tea gardens in Assam.

HIV-TB coordination activities have been implemented in all North Eastern States. Cross referral activities are being reported by all states. Quality sputum microscopy is an important component of RNTCP. All the states in North Eastern States have initiated Programme Management for Drug Resistant TB (PMDT) services.

Infrastructural requirement as per needs of the programme with enhancement for North Eastern States on account of hilly region and difficult terrain are accorded on priority. In addition to the routing performance monitoring, enhanced focus on monitoring of North Eastern States, CTD regularly monitors the activity through analysis of quarterly performance reports from the districts and feedback is given for necessary corrective action, if required.

Performance of the Programme in the North East State as per Annual TB report 2015:

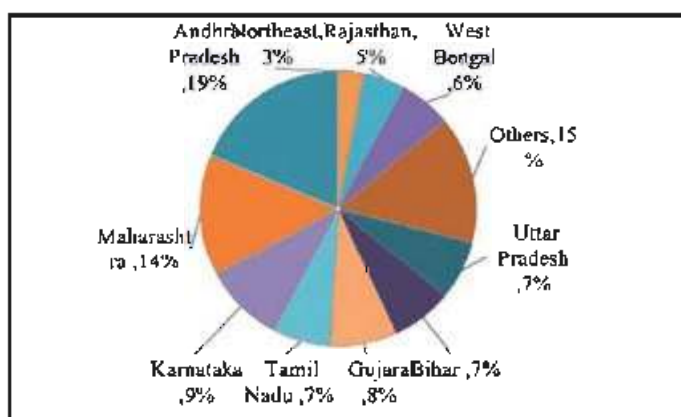
State	Population (in lakh) covered by RNTCP	Suspects examined per lakh population/ Qtr	Total patients registered for treatment	Annual total case notification rate	NSP Treatment success rate
Arunachal Pradesh	15	191	2748	184	88%
Assam	329	125	38014	116	85%
Manipur	29	89	1881	65	85%
Meghalaya	33	205	4674	143	82%
Mizoram	12	207	2088	179	86%
Nagaland	20	171	3316	164	91%
Sikkim	6	235	1400	222	79%
Tripura	38	127	7394	195	89%

22.17 NATIONAL AIDS CONTROL ORGANIZATION (NACO)

HIV Epidemic Scenario

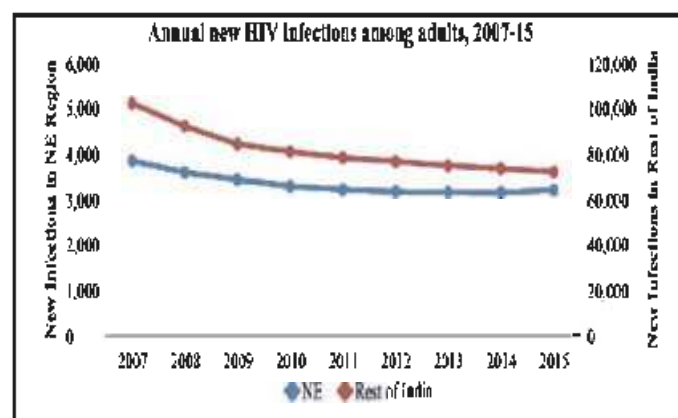
The North-Eastern States of India include Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. With an estimated PLHIV burden of 21.12 lakhs, India has the third largest burden of People Living with HIV (PLHIV) in the world. North eastern States of India contribute 6% of the total PLHIV estimates in country (Figure 1). Manipur is estimated to have the highest burden of PLHIV (24,457) among the North-Eastern States followed by Assam (12,090) and Nagaland (11,050). Tripura and Mizoram are estimated to have around 7,200 and 5,700 PLHIV respectively. The estimated adult prevalence continues to be much higher than national average (0.26%) in States of Manipur (1.15%), Mizoram (0.80%) and Nagaland (0.78%). Sikkim (0.23%) and Tripura (0.31%) reported to have estimated adult prevalence almost similar to national (0.26%) average but with a long term rising trend.

Figure 1: Distribution of PLHIV, India HIV Estimations 2015



North Eastern States contribute around 4% of total new infections among adults thus estimating to around 9 new infections per day with a total of 3,250 new infections among adults during 2015. The decline in new infections in this region has been observed to be slower (16% during 2007-15) than the rest of country (29% during 2007-15) (Figure 2). Tripura & Assam has around 1900 annual new infections among adults that contribute around 60% of total new infections in north east; another 30% of new infections are from Nagaland & Manipur.

Figure 2: Decline in Annual new HIV infections among adults in NE States, 2007-15, India HIV Estimations 2015



The decline in AIDS related deaths have been noticed to be at a much slower pace in North east (27% during 2007-15) than the rest of country (55% in same period) (Figure 3). Manipur is contributing 55% of total annual AIDS related deaths in region with more than 1100 estimated AIDS related deaths in 2015; disproportionate to total PLHIV contribution of

state in region and thus indicative of issues treatment uptake.

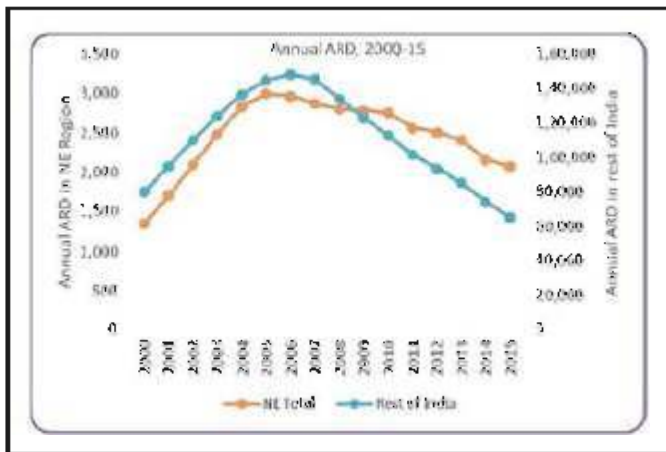


Figure 3: Decline in Annual ARD among adults in NE, 2000-15, India HIV Estimations 2015

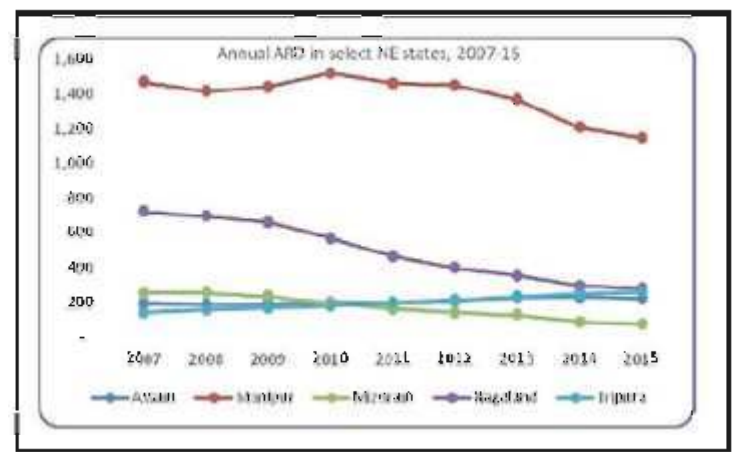


Figure 4: Decline in Annual ARD among adults in select States, 2007-15, India HIV Estimations 2015

As per national Integrated Biological and Behavioural Surveillance the HIV prevalence among female sex workers in the group of Manipur, Mizoram and Nagaland has been recorded to be 5.9% i.e. higher than the national average. While for the group of Arunachal Pradesh, Assam, Meghalaya and Tripura the HIV prevalence among the FSW has been reported to be 0.7% which is lowest in the country. The IDU prevalence as per the IBBS was observed to be higher in Manipur (12.1%) and Mizoram (10%); Nagaland (3.2%) and state group of Assam, Meghalaya, Tripura, Arunachal Pradesh and Sikkim (1.9%) had HIV prevalence below the national average.

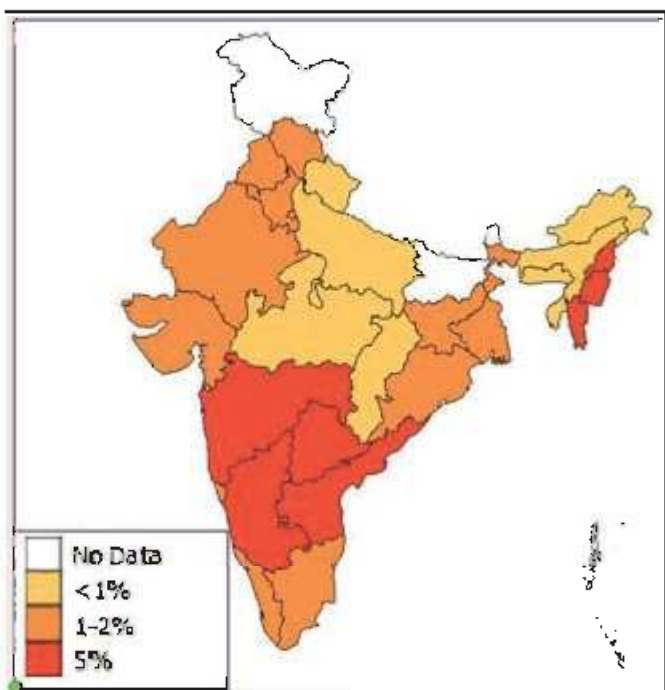


Figure 5: Regional Variation in HIV prevalence-FSW

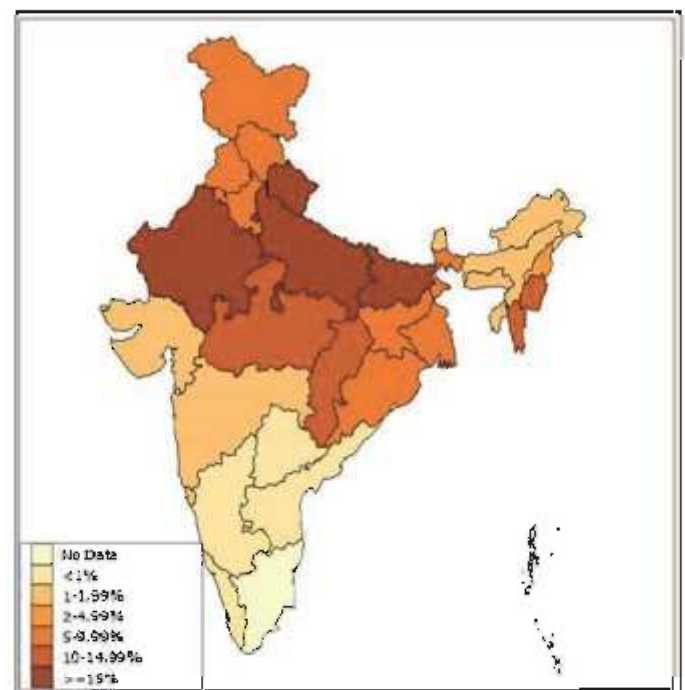


Figure 6: Regional Variation in HIV IDU

Progress of the programme and schemes in the North- Eastern States during 2016-17 (till September 2016)

1. Targeted Intervention (TI): There are 246 Targeted Intervention (TI) being implemented through Non-Government Organisations (NGOs) and 88 Opioid Substitution therapy (OST) buprenorphine and methadone based substitution being implemented through NGO model and collaborative model i.e. Public Health and NGO collaboration in the North-East region. NACO is concerned about the rising HIV prevalence among the People Who Inject Drugs (PWID) population. It is of the view that merely sustaining the present efforts will not be enough to achieve epidemic control and stop deaths from AIDS in the next few years. Therefore, 'Project SUNRISE' has been developed in collaboration with NACO, State AIDS Control Societies (SACS), NGOs, community networks and other key stakeholders to accelerate the response to HIV in NE region.

The new initiative is currently focusing on the following key activities:

- Generate evidence to assess barriers, programmatic gaps and identify strategies for improvement of the organization and delivery of harm reduction services;
- Enhance capacity of state level institutions in high burden PWID states in the NE region to increase coverage and quality of the comprehensive

package of services for People Who Inject Drugs (PWID) population;

- Establish secondary distribution of Needle and Syringe through preferred healthcare providers, PHCs, non-traditional outlets and peer volunteers;
- Organize sensitization Workshops for Law Enforcement Officials to create enabling environment;
- Introduce take home dosage to Improve Opioid Substitution Therapy Coverage and retention;
- Implement HIV prevention and treatment services in Prison settings;
- Strengthen Linkages with Ministries and Government Departments for Re-integration of IDUs;
- Strengthen community mobilization and demand generation;
- Strengthen intervention among Female PWID and spouses of PWID;
- Establish Real Time Monitoring (RTM) system to capture local level data for monitoring progress and improving service delivery;
- Pilot Community Based HIV Testing including test and treat strategy for PWID and
- Scale-up of Methadone Programme.

Details of Typology-wise TIs supported by NACO in North Eastern States is given below:

State-wise and Typology-wise distribution of Targeted Interventions (TIs) supported by NACO during the FY 2016-17 (as on September, 2016)

State	FSW	MSM	IDU	Core Composite	Migrants (Destination)	Truckers	Total TIs	OST
Arunachal Pradesh	4	1	4	0	13	6	28	2
Assam	29	1	6	0	11	2	51	2
Manipur	6	2	46	0	7	2	63	25
Meghalaya	3	0	4	0	2	0	9	5
Mizoram	1	1	18	0	6	4	30	17
Nagaland	2	3	23	0	15	1	45	31
Sikkim	3	0	3	0	0	0	6	3
Tripura	8	0	2	0	1	3	14	3
Total	56	8	106	0	55	18	246	88

2. **Link Worker Scheme (LWS)** is a rural-based intervention for prevention and care needs of High Risk Groups (HRGs) and vulnerable population of rural areas including referral to ICTC services and STI services, condom promotion & distribution, information

related to HIV prevention and related services. Link Worker Scheme is currently functional in 14 districts of NE States (Manipur, Mizoram and Tripura). State wise progress made during 2016-17 is given below:

State-wise Progress made during 2016-17 (as on September 2016)

State	No. of District	HRGs Coverage	Vulnerable Covered
Manipur	9	3872	23107
Mizoram	3	592	3552
Tripura	2	599	9626
Total	14	5063	36285

3. **Integrated Counseling and Testing Centres (ICTC):** The Integrated Counseling and Testing programme offering Counseling and Testing services for HIV includes three main components – Integrated Counseling and Testing Centres (ICTC), Prevention of Parent to Child Transmission (PPTCT) and HIV-TB collaborative activities. Counseling and testing Services were rapidly scaled up through 367

standalone Integrated Counseling and Testing Centres and 497 Facility Integrated Counseling and Testing Centres including those under Public and Private Partnership model. A total of 2.82 lakh general clients and 2.64 lakh pregnant women were tested during 2016-17 (till September 2016). The list of state-wise progress made during 2016-17 (till September 2016) has been provided on next page.

Table 12.3: State-wise performance of the ICTC programme during 2016-17 (till September 2016)

States	Stand Alone	F-ICTC	PPP	General Client tested for HIV	Preg. Women tested for HIV	Gen. Clientfound Seropositive	Preg. Womenfound Seropositive	No. Mother & baby received option B
Arunachal Pradesh	37	20	4	12,655	5,646	13	2	4
Assam	99	174	32	90,718	173,798	649	59	55
Manipur	64	34	10	37,515	22,333	545	36	46
Meghalaya	24	27	0	18,041	18,056	367	55	28
Mizoram	37	39	12	28,646	13,485	968	74	64
Nagaland	71	65	0	41,728	9,092	798	113	80
Sikkim	13	17	0	10,459	4,264	17	0	2
Tripura	22	62	1	42,853	17,527	170	12	3

4. Management of Sexually Transmitted infections (STI)/ Reproductive Tract Infection (RTI) prevention and control Programme:

Control and management of STI is one of the most cost effective means of preventing new HIV infection. NACO supports STI prevention and control programme in all the North Eastern States. NACO has established STI clinics at all the existing District Hospitals, Medical colleges and select sub divisional hospital. The programme supports each of the states with free STI drugs, syphilis test kits, one counsellor at each of these health facilities and one Regional STI Laboratory at Guwahati. The Programme has launched Elimination of Congenital Syphilis in each of these States

where there is need to universalise syphilis and HIV testing and treatment for all the pregnant women and their partner. State-wise key physical indicators as on September, 2016 has been provided in the table listed below.

Table 12.4: State-wise Progress in Achievement of Physical Targets during 2016-17 (till September 2016)

State	No. of STI Clinic	Number of STI/RTI episodes managed
Arunachal Pradesh	18	83
Assam	28	4,352
Manipur	10	11,384
Meghalaya	9	1,096
Mizoram	10	4,817
Nagaland	12	5,914
Sikkim	6	148
Tripura	18	866
Total	111	28,660

5. Blood Safety Programme: Access to safe blood has been ensured through a network of around 112 blood banks across the North East regions. In general, in the NE States, excluding Tripura and Arunachal Pradesh, levels of Voluntary Blood Donation are lower than National average of 79%. The whole region collects only 52% of the total estimated requirement based on the WHO norm of 1%, with access being limited in the far flung and peripheral and hilly districts. Facilities for blood component separation are not available in Sikkim and Arunachal Pradesh. Overall component separation is only 24% in the whole of North East, while the National average is 69%. Also, HIV and HCV sero-reactivity among blood donors is higher than National average in the state of Mizoram and syphilis sero-reactivity among blood donors is higher in Meghalaya and Sikkim.

6. Laboratory Services provide universal availability and routine access to quality assured HIV related laboratory services. The assurance of quality in kit evaluation, assessment of HIV testing services through implementation of External Quality Assessment Scheme (EQAS), CD4 testing, Viral load testing and Early Infant Diagnosis has been addressed. A National Reference Laboratories and 11 State Reference Laboratories provides quality assurance for HIV testing at all ICTCs and Blood Banks under the programme. In North Eastern states, there is one viral load testing lab. State-wise details of SRLs and CD4 machines are as given below:

Table 12.5: State-wise status of SRL & CD4 Machine during 2016-17 (till September 2016)

State	SRLs	CD4 Machine
Arunachal Pradesh	1	1
Assam	3	4
Manipur	1	9
Meghalaya	1	1
Mizoram	1	3
Nagaland	2	7
Sikkim	1	1
Tripura	1	1
Total	11	27

7. Care, Support & Treatment Programme: Care, Support & Treatment Programme provides prevention and treatment of opportunistic infections, Anti-Retroviral Therapy (ART), psychosocial support, home-based care, positive prevention and impact mitigation. The services are provided through 39 ART centres, 430 Link ART Centres and 130 Community Care Centres. As of September 2016, 28382 clinically eligible patients (including children) are receiving free ART in Government health facilities. The list of state-wise progress is given on next page.

Table 12.6: State wise progress during 2016-17 (till September 2016)

State	No. of ART Centres	No. of Link ART Centre	No. of Community Care Centre	PLHIV currently alive & on ART		
				Adult	Children	Total
Arunachal Pradesh	1	4	1	71	1	72
Assam	6	12	4	4093	236	4329
Manipur	13	32	15	10578	663	11241
Meghalaya	1	192	52	1049	61	1110
Mizoram	6	11	9	4587	250	4837
Nagaland	8	5	3	5440	338	5778
Sikkim	1	2	7	131	10	141
Tripura	3	172	39	836	38	874
Total	39	430	130	26785	1597	28382

8. Information Education & Communication: NACO's communication strategy has moved from creating general awareness to Behaviour Change Communication. It aims to motivate behavioural change among most at risk populations, raise awareness and risk perception among general population, particularly youth and women, generate demand for HIV/AIDS related health services like condoms, ICTC/PPTCT facilities; and create an enabling environment that encourages HIV related prevention, care and support activities and to reduce stigma and discrimination at individual, community and institutional levels. North Eastern states implement integrated and comprehensive campaigns using 360° communication approach.

Multi Media Campaign

North Eastern States undertake a multi - media campaign in the North Eastern region of the country for youth between the age group of 15-29 years. The multi-media campaign aims to capitalize on the popularity of local entertainment avenues among youth like music concerts and sports with objective to enhance

risk perception and promote safe behavior and address issues around stigma and discrimination for people infected and affected with HIV and AIDS. Campaign also motivate different population groups to seek services (ICTC, PPTCT, ART, STI and Care & Support services). It highlights the importance of blood safety and increase awareness on the availability of ART.

Under the campaign a series of district level events in form of music competitions and sports event are being organized. The series of events at district level culminated into high voltage state level event in all the states. During these events various innovative and interactive methods are utilized to engage the target audiences to discuss issues related to HIV and AIDS. For instance, writing and composing songs with messages on HIV and AIDS during music competitions. These are further amplified through the use of TV, radio, newspapers and outdoor media. A special effort was made to reach out to the out-of-school youth in the States. BCC messages were developed and disseminated by RRCs and Colleges youth.

IEC, Youth & Mainstreaming activities

1. Nagaland, Manipur, Mizoram, Meghalaya, Tripura & Arunachal Pradesh have constituted State Council on AIDS (SCA).
2. All eight North- Eastern states have also constituted Legislative Forum on AIDS (LFA). Manipur, Mizoram and Nagaland have hold their meetings also.
3. Nagaland has revised its HIV policy and support for PLHIV is being given by Government through Church based organizations.
4. States are conducting Mass media activities with Long format TV programme, Video spots on Doordarshan and private cable channels, long format radio programme and audio spots on AIR.
5. Various Joint working groups has been constituted by North -Eastern States with various departments to successfully rollout the MOUs signed by NACO with different Ministries at Central Level.
6. Out of School Youth programme is being implemented in North Eastern states with the help of Youth Clubs under Nehru Yuva Kendra Sangathan (NYKS) and National Health Mission.
7. Red Ribbon Clubs (RRCs) have been formed in colleges and institutions in all North Eastern States to encourage peer to peer messaging on HIV prevention, and a safe space for young people to seek clarifications on their doubts and myths surrounding HIV/AIDS.