

OTHER HEALTH INSTITUTIONS

16.1 ALL INDIA INSTITUTE OF PHYSICAL MEDICINE AND REHABILITATION (AIIPMR), MUMBAI

All India Institute of Physical Medicine and Rehabilitation, established in 1955 as a Pilot Project with technical expertise and manpower support from United Nations Organization, came under the administrative control of the Ministry of Health and Family Welfare, Government of India in 1959.

AIIPMR is an apex institute and is well recognized for its commitment to provide comprehensive rehabilitation services to persons with severe and permanent locomotor disabilities.

16.1.1 Annual Statistics (April 14 – March 15)

		OPD	Physio-therapy	Occu-pational Therapy	Radiology	Pathology	Speech
1.	No. of PWD (Assessed & Intervened)	33916	16989	16326	8613	25910	2494
2.	Surgeries performed (Major & Minor)	3460	–	–	–	–	–

In addition 6314 number of aids and appliances were delivered. 3542 certificates were issued.

Vocational Training Workshop

- | | | |
|--|---|-----|
| a) Number of candidates assisted, trained & evaluated for employment and placed in various organizations | - | 244 |
| b) Fabrication of Mobility Aids and Seating Devices | - | 84 |

16.1.2 Augmentation of capacity

- Commissioning of Aadhar enabled Bio-Metric Attendance System.
- Commissioning of Infra-Red Oven with Roll-Out Trolley and Water Bath for Heating Low Temperature Thermoplastics to augment fabrication of plastic orthosis.
- Provision of Endoskeletal Trans-Femoral Prosthesis with Polycentric Knee joint having an Optional Locking Mechanism.
- Thermoplastic Knee Pads for Bilateral Amputees.
- ARMEO – Computerized Automated Arm Therapy System to facilitate a goal directed activity using virtual reality.
- Arm Ergometer for upper extremity strengthening exercises.
- Oto Acoustic Emission and Auditory Brain Stem Response Scanner for screening of hearing for pediatric cases.

16.1.3 Special Services provided

- Bone densitometry and sensory evaluation camps for elderly.

16.1.4 Research and Development: Some of the important research and development activities are:

- Effectiveness of use of platelet rich plasma in various musculo skeletal conditions like planter fasciitis and lateral epicondylitis of humerus.

- Sensory motor functioning in diabetic patients.
- Cognitive stimulation therapy on Dementia patients.
- Development of a Vertebral Orthosis.
- Development of a Coil Spring Loaded Ankle Joint.

Scientific Publications & Research

S I. No	Department	Staff Guided Research				
		Papers Presented	Papers Published	Dissertation Completed	Invited Lectures	Conference/ Workshop/ Seminar/ Attended
1.	Medical a) PMR b) Radiology	12 02	02 -	02 -	- -	- -
2.	Physiotherapy Department	03	04	15	-	-
3.	Occupational Therapy	-	01	08	-	04
4.	Prosthetic & Orthotic	-	-	18	-	02

16.1.5 Academic Activities

Sl. No.	Name of Course	Recognized by / Course affiliated to	Duration	Intake Capacity (A/Y) April 14-March 15	Student on Roll (2014 - 2015)		Passed out student in Summer 2014 Exam
					1 st year	2 nd year	
1	MD (Physical Medicine & Rehabilitation) MD(PMR)	MUHS, Nashik	3 years	02	01	01	01
2	Master of Physiotherapy (MPT)	MUHS, Nashik	3 years	06	06	04	04
3	Master of Occupational Therapy (MOT)	MUHS, Nashik	3 years	06	03	01	01
4	Master of Prosthetics & Orthotics (MPO)	MUHS, Nashik/ RCI	2 years	04	04	04	04
5	Bachelor of Prosthetics & Orthotics (BPO)	MUHS, Nashik/ RCI	4 years	30	22	08	08

• Other training activities

- Two Doctors nominated by WHO office Tajikistan in association with Government of Tajikistan were trained in Physical Medicine and Rehabilitation for six months from October, 2014.
- Short-term Training Programme - 1st Batch of 14 - Physiotherapists and Occupational Therapists from all over India trained from 12th to 27th November, 2014 for Rashtriya Bal Suraksha Karyakram (RBSK), an initiative by MoHFW and UNICEF.

16.1.6 Visitors

- Dr. Pavel Ursu, WHO representative & High Level Deligates from Tajikistan country on 9.5.2014.
- Shri Jagat Prakash Nadda, Union Minister for Health and Family Welfare – 15.1.2015.

16.1.7 Implementation of Right to Information Act

Number of RTI received and replied - 19

16.1.8 Data of Persons with disabilities

Staff Strength	No. of PWD's employed	
Group A	- 50	02
Group B	- 55	00
Group C	- 166	10
Total	271	12

Institute is taking initiative in building up capacity further by building up infrastructure and manpower by proposing to start satellite centre in the District hospitals so as to reach large number of Persons with disabilities.

16.2 ALL INDIA INSTITUTE OF SPEECH AND HEARING (AIISH), MYSORE

16.2.1 Introduction

The All India Institute of Speech and Hearing (AIISH) is a premier educational establishment pertaining to communication and its disorders in the country; providing training, research, clinical care and public education in communication disorders. The Institute successfully completed its fifty years of dedicated service to the nation in 2015. The activities carried out by the institute during the year till November, 2015 are given below:



All India Institute of Speech and Hearing

(a) Academic Activities: The institute offered 16 academic programmes and 480 students were admitted to various programmes. Activities such as guest lectures by eminent personalities, orientation/short-term training programmes, journal club and clinical conference presentations were organized during the period. These include a guest lecture on Evidence Based Practice by Prof. M.N. Hegde, Professor Emeritus of Speech Language Pathology, California State University, USA. In addition, faculty calibration was performed in accordance with ISO 9001-2008 standard.

(b) Research Accomplishments: Three research projects were completed and 24 projects were newly initiated at the institute during the period. Also, 47 projects were progressing in different departments. The funding for the research projects

were provided by organizations such as the Department of Science and Technology, Govt. of India and Indian Council of Medical Research, in addition to the funding given by the Institute. A Next Generation Sequencing Lab to determine the nucleotide sequence of DNA in a massively parallel way was opened in the Human Genetic Lab of the Institute during the period.

(c) Clinical Services: The institute offered a wide variety of clinical services to a total number of 40380 persons with communication disorders. The clinical services offered include assessment and rehabilitation pertaining to speech, language and hearing disorders, psychological and otorhinolaryngological disorders related to communication disorders. In addition, specialized clinical services were also rendered on augmentative and alternative communication, autism spectrum disorders, cleft lip palate and other craniofacial anomalies, fluency, learning disability, listening training, motor speech disorders, neuropsychological disorders, professional voice care, voice disorders and vertigo. The details of the core clinical services from April to November, 2015 are given below.

Core Clinical Services	No. of Clients	Therapy Sessions
Hearing Evaluation/ Listening Training	8300	6105
Speech and Language Assessment	5261	20350

(d) Outreach Clinical Services: The Institute opened three new Newborn Screening (NBS) Centers at JIPMER, Puducherry; Netaji Subhash Chandra Bose Medical College (NSCB), Jabalpur; and Rajendra Institute of Medical Sciences, Baritayu, Ranchi during the period. Also, a new Outreach Service Center (OSC) was inaugurated at the Sub-divisional hospital, Sagara Taluk, Shivamogga, Karnataka. Diagnostic services were provided to 1369 clients at the four outreach clinical centers. In addition, 1099 school

children in Mysore and 22682 newborn/infants at 15 hospitals and three immunization centres in Mysore, four outreach service centres and the three newborn screening centres were screened for communication disorders. Four screening camps were conducted. The Institute also offered tele-intervention service at the nine DHLS centres of the Institute located across the country.

(e) Public Education Activities: Public education activities such as organization of Public Lectures, Noise Awareness Rally, observation of commemorative days such as World Voice Day, Autism Day and World Alzheimer's Day, and preparation and dissemination of public education materials on prevention and control of communication disorders were carried out.

(f) Other Activities and Events: The Institute celebrated its Golden Jubilee Year of establishment on 9th August, 2015. Three newborn screening centres of the Institute were inaugurated on the occasion.

16.2.2 Budgetary Support: The institute has been allotted a total of Rs. 73 crores as per Budget Estimates for 2015-16.

16.3 AII INDIA INSTITUTE OF HYGIENE & PUBLIC HEALTH (AIIH&PH), KOLKATA

16.3.1 Introduction

All India Institute of Hygiene & Public Health was established on 30th December 1932. It has been a Pioneer Institute of its kind dedicated to teaching, training and research in various disciplines of Public Health and Allied Sciences. The teaching, training, and research at AIIH&PH have the unique support of its field laboratories, namely, Urban Health Centre, Chetla and Rural Health Unit & Training Centre, Singur. It has recently added Farakka Barrage Project Hospital under its fold to further widen and strengthen its public

health activities. The Institute has two campuses at Kolkata. The main campus is at I10, Chittaranjan Avenue, Kolkata-700 073 and the second campus is at Bidhan Nagar (JC Block, Sector - III, Salt Lake) Kolkata. There are eleven academic Departments. Besides these, the Institute also has two field practice units.

16.3.2 Teaching and Training Activities

The institute has been providing teaching and training in various disciplines of public health through its regular and short term training programs. Details of various courses by the Institute are given below:

Sl. No.	Department	Course
1.	Preventive & Social Medicine (PSM)	MD (Community Medicine)
2.	Environmental Sanitation and Sanitary Engineering	Short courses and assistance to other courses
3.	Microbiology	Master of Veterinary Public Health
4.	Epidemiology	Post-graduate Diploma in Public Health Management.(PGDPHM)
5.	Biochemistry & Nutrition	M.Sc. in Applied Nutrition. o Diploma in Dietetics.(Dip. Diet)
6.	Public Health Administration	Diploma in Public Health (DPH)
7.	Maternal and Child Health	Short courses and assistance to other courses
8.	Occupational Health	Short courses and assistance to other courses
9.	Department of Health Promotion & Education	Diploma in Health Promotion & Education (DHPE)
10.	Statistics	Diploma in Health Statistics, Short Courses & Assistance to other courses
11.	Public Health Nursing	Short Courses and assistance to other courses

16.3.3 New Initiatives and Activities

- Indian Journal of Hygiene and Public Health: The first issue of the e-journal, Indian Journal of Hygiene and Public Health, was launched.
- Constitution of Academic Cell, Public Health and Medical Education Unit and

Scientific Advisory Committee.

- Reconstitution of Institutional Ethics Committee.
- Revision of Stipend for Non-Medical Courses: Stipend for non-medical PG students was revised after a gap of more than two decades.
- Revival of Diploma in Health Statistics (DHS) Course.
- Special Drive for JE vaccination: JE Vaccination in the adult population (15-65) of the services area of RHU&TC, Singur has been planned during the period 07.12.2015 to 29.12.2015 under the NHM Scheme. It is expected to cover about 70000 population.
- Introduction of IPV for polio eradication: Introduction of IPV for polio eradication at 14 weeks of age under routine immunization in the service area of RHU&TC, Singur w.e.f. 01.01.2016 has been planned and accordingly training has been imparted.
- UHU & TC: Two slums having total no. of households 1938, located in KMC ward no. 81 & 82, are included in MCH service area.
- The Urban Health Unit & Training Centre, Chetla covers an area with population of 1.2 lakh comprising of a slum population around 35,000. The centre also provides primary health care services for the Beneficiaries and specialist clinic services on MCH, Gynaecology & Obstetrics, Skin & VD, occupational Health, RNTCP, NCD, School Health, Nutrition & Public Health Laboratory Services.
- A MoU has been signed between National Vector Borne Disease Control Programme (NVBDCP) & AIIH&PH for capacity building program in the Kala-azar endemic

districts of Bihar. Conducted base line data collection from three districts of Bihar for Kala-azar elimination program during 22 – 29th August 2015.

- Yellow Fever Vaccination was given to 707 persons by the relevant unit.

16.3.4 Budget allocation (2015-16)

Plan	Non-Plan	Total
16.00 Cr.	46.70 Cr.	62.70 Cr

16.4 CENTRAL LEPROSY TEACHING AND RESEARCH INSTITUTE (CLT&RI), CHENGALPATTU

16.4.1 Introduction

The Central Leprosy Teaching and Research Institute (CLT&RI), Chengalpattu was established in 1955 by the Government of India by taking over Lady Wellington Leprosy Sanatorium established in 1924. Later, in 1974, Govt. of India had made CLT&RI as a subordinate office of the Directorate General of Health Services, Ministry of Health & Family Welfare with an objective to provide diagnostic, treatment and referral services to leprosy patients, trained manpower development for leprosy, control/elimination, besides research on various aspects of leprosy and its control.

It has separate wings of Epidemiology and Statistics, Clinical, Medicine, Microbiology and Biochemistry laboratories with Animal House facilities, Surgery and Physiotherapy. This institute caters services to both indoor and outdoor patients. The hospital has a bed capacity of 124 patients. The Institute serves the following objectives:

- To undertake research in basic problems relating to the occurrence and spread and complication of leprosy.
- To train manpower necessary to implement NLEP.

- (iii) To provide specialized services for diagnosis of leprosy, reaction, relapse and Reconstructive surgery.
- (iv) To monitor and evaluate the National Leprosy Eradication Program.
- (v) To function as a pivotal center for promoting anti leprosy work in the country.

16.4.2 Clinical Division

Clinical Division comprises 8 inpatient wards and OPD and a Nursing Section.

Data on patient care services is as under:

Inpatients services

Total Admission	=	509
Total Discharges	=	515
No. of Deaths	=	006

Out patients

Total No. of New Case of Leprosy	=	48 (PB -12 + MB - 36)
Total No. of Old Cases Treated	=	4025
Total No. of Other Cases	=	1030
Total Patient from GLC Block	=	2064
Total patients treated	=	7167

16.4.3 Surgical Division

The Surgical Division comprises Physiotherapy Section, Artificial Limbs and Footwear Section and Micro-Cellular Rubber (MCR) sheets manufacturing Unit. The surgical division has a major and minor OT and X-ray facilities

Surgical division provide following services:

- i) Reconstructive Surgery (RCS),
- ii) Disability Prevention and Medical Rehabilitation (DPMR) activity
- iii) Support in Training Programs

- iv) Camp based RCS Surgery in Tamil Nadu
- v) The Division conducted a total of 96 surgeries including 9 major ones.

16.4.4 Physiotherapy Section

Physiotherapy Section provides Physiotherapy services, counseling of patients, by imparting health education in the case of insensitive hands & feet, support training activity and Physiotherapy Technician Training.

The treatment modalities employed are hand and foot exercises, wax therapy, oil massage, short wave diathermy, ultra-sound therapy; trans cutaneous nerve stimulation, infra-red treatment, Interferential therapy and electrical stimulation of muscles and nerves. The Division handled over 4037 cases.

S. No.	Description	Total
1.	New Cases	134
2.	Assessments	407
3.	Hand Excerices	750
4.	Foot Excerices	525
5.	Wax therapy	958
6.	Splints	292
7.	Electrotherapy	675
8.	Training	187
9.	General Cases	109

16.4.5 Micro-Cellular Rubber (MCR) Mill

The Micro-Cellular Rubber Mill is a small production unit manufacturing MCR sheets of the quantity needed for use in the manufacturing of footwear for leprosy patients. Quality Assurance of MCR Production has been initiated. Dispersion kneader was installed with the help of Central Leather Research Institute, Chennai. Mill is providing MCR Sheets to various State Leprosy Societies.

MCR Sheet Production	=	800
MCR Supplied to other institute/ states/ NGOs	=	266

16.4.6 Artificial Limb and Footwear Centre

The Artificial Limb and Footwear Centre produces and supplies various types of customized braces and prosthesis to leprosy deformed patients.

Simple and Modified Microcellar Rubber Sandals	= 619 pairs
Orthotic and Prosthetic Appliances	= 11 nos
Repairs of Orthotic and Prosthetic Modifications Arch Support and Metatarsal Bars	= 25 nos
	= 108 nos

16.4.7 Laboratory Division

Laboratory division is basically involved in the investigations of cases from out / inpatient departments for leprosy related and other routine investigations and also involved in the basic and applied research activities in leprosy.

The Molecular Biology section of the Division has been upgraded with the basic facilities for the isolation of DNA, PCR amplification and Gel documentation. These facilities are being utilized for various institutional projects and also in the collaborative and Post Graduate Course project.

A separate Animal House with different kinds of animal colonies with provisions for animal experimental investigations, including Mouse Foot Pad inoculation for the viability and drug susceptibility tests for *M.leprae* is also available.

Clinical Pathology	= 2108
Haematology & skin smear	= 2096
Microbiology	= 0269
Histopathology & Molecular Biology	= 70
Bio Chemistry	= 4118

16.4.8 Epidemiology & Statistics Division

This Division comprises of Technical, Training, Statistical and Electronic Data Processing Unit.

This division involves in Operational Research, Monitoring and Evaluation of NLEP, Surveillance, Activities, Software development and providing Training in Leprosy to the Medical and Paramedical Health professional

16.4.9 Monitoring & Evaluation of NLEP Activities

From April 15 to Nov 15 this division has undertaken following M& E activities

- Tamil Nadu, Karnataka, Kerala & Pondicherry States/UT for planning M & E Activities.
- Tamil Nadu – 9 districts (Nagapattinam, Madurai, Virudhunagar, Nammakal, Theni, Karur and Thiruvarur, Kanniyakumari and Nilgiris)
- Kerala- Preliminary meeting with SLO, Kerala and monitoring in Kozhikode District
- Karnataka- Bengaluru (Rural)

16.4.10 Data Analysis

- Absentees and Defaulters from CLTRI OPD data extraction
- OPD Patient Profile Software is under construction
- Data Entry of Study on the Household Contacts and Neighbourhood Contacts of Newly Reported Leprosy Patients from Thirukalukundram Area

16.4.11 Training

The institute is actively providing training to State/ District Leprosy officer (5 days) Medical Officer (5-days), post graduates Physiotherapy Technician (9 months course), Non-Medical Supervisor (2 months), Skin Smear Training (5 days), Skin Smear Refresher Training (2 days), Biotechnology Students, Master Public Health Students and

CRRI. Academic visit training Programme for various Medical, Paramedical and Biotechnology Institutions. A total of 187 persons were trained.

16.4.12 Budget: A sum of Rs. 13.75 crores has been provided for 2015-16.

16.5 REGIONAL LEPROSY TRAINING AND RESEARCH INSTITUTE (RLTRI), RAIPUR

RLTRI, Raipur established in the year 1979 with the aim to provide training, research and treatment for the leprosy affected persons.

16.5.1 Patient Care

The Institute is having 60 bedded indoor patient services and carries out various kind of Re-constructive surgery for leprosy and polio related deformity. Details of Patient Care Services rendered are as follows:

- Total patients attended OPD - 6602
- New Leprosy Cases detected - 715
- Total No. of patients admitted in the Wards - 564
- Total No. of Lab investigations done - 13136
- Total No. of patients provided Physiotherapy - 870
- No. of Reconstructive Surgeries - 133

16.5.2 Training

Sl. No	Name of the training	Duration of training	Number of Batch trained	Number of Participants trained
1	Senior Regional Directors	3 days	1	15
2	National level SLO/DLO/BMO/MO Training	5 days	8	95

3	Training imparted to Medical College Students	1 day	10	194
4	Training imparted to BPT Intern students	1 week	9	17
5	Training of Laboratory Technicians in Skin Smear	5 days	4	33
6	Non-Medical Supervisor/Non-Medical Assistant	3 days	4	165
7	Training imparted to Nursing Students	1 day	2	55
TOTAL			40	574

16.5.3 Special Activities under RLTRI

- (a) The Institute acts as the Regional Office of Health and Family Welfare (ROHFW) for the State of Chhattisgarh to monitor various National Health Programs including NLEP at state and district level.
- (b) Technical supervision of NLEP activities in the 8 districts: During the year 8 districts were covered for assessment of the NLEP programs, during the visit to the districts, apart from district hospital, 32 CHC, 43 PHC and 38 SHC were visited and suggestions for improvement and to bridge the gaps noticed during visit were given to the concerned districts.

16.6 REGIONAL LEPROSY TRAINING AND RESEARCH INSTITUTE (RLTRI), ASKA

16.6.1 Introduction

Established in the Year 1977, the Institute has a 50 bedded hospital and works as a referral center for management difficult to diagnose leprosy cases and problematic, complicated and intractable cases of reaction and ulcers. Surgical procedures are carried out regularly and RCS (reconstructive Surgery) camps have been done in the past. It also works as a nodal training and research center for the cause of leprosy elimination.

16.6.2 Patient Care

Brief of Services provided are as under:

- OPD Attendance-1425
- In-door- Total admission: 168
- Major surgeries :- 21 & Minor Surgeries-149
- Lab.- Total Inv.- 143

16.6.3 Trainings

A total of 87 M.Os trained in 3 batches, 137 AYUSH MOs trained in 4 batches and 28 MPH trained in one batch from different districts of Odisha.

16.7 REGIONAL LEPROSY TRAINING AND RESEARCH INSTITUTE (RLTRI), GOURIPUR

16.7.1 Introduction

Regional Leprosy Training and Research Institute, Gouripur, Bankura, is a 50 bedded leprosy hospital set up by Govt. Of India in 1984 with the objectives as mentioned below:

- a) To create sufficient trained manpower of different categories including Medical Officers, for better implementation of NLEP in different Indian states, especially, of the North-Eastern states to eradicate/eliminate leprosy and
- b) To carry out operational research on leprosy.

The institute is located at a village named Gouripur which is well connected with the district town Bankura (12 kms), Kolkata city (240 kms) Durgapur town (56 kms) and Kharagpur Jn. (130 kms).

16.7.2 Activities

In the changing scenario of NLEP management, presently, the institute has been conducting Training of Trainers (TOT) course on NLEP for Senior Medical Officers (DLOs & BMOs) throughout the

year as per schedule. In addition, it provides OPD services 3 days a week, for the public and runs 30 bedded indoor facilities for complicated ulcer cases and reaction problems of recurrent nature. The institute runs one laboratory, one X-ray unit & one physiotherapy unit. The field unit carries out IEC activities regularly throughout the year in its' field area covering 300000 population approx. to increase voluntary case reporting for early case detection, prevention of disability and to help establishing leprosy as a 'Common Ailment' in the society by removing stigma attached to it.

The institute is having an excellent infrastructure for carrying out training activities for different kinds of leprosy training e.g. training of trainers (TOT) and that is being regularly organized since 2011-12. PMW Training course on NLEP for one batch has been scheduled this year in the month of February, 2016. In addition, inclusion of training of Medical Officers on NLEP of three days duration has been scheduled in the Training Calendar of the year 2016-17.

The institute is an ideal place for clinical and epidemiological studies on leprosy considering its location and resources. The performance report of the Institute up to 31st December, 2015 is detailed below:

1. **Indoor Admission:-** 129 nos., Discharge — 120 nos. Bed Occupancy Rate 56.55, Bed Turn Over Rate – 4
2. **O.P.D.:-** New Case- 18 Nos. , Other Cases — 10, Old Cases - 968, MDT given — 211, Refer Patient — 447, General Patient attend — 643, RFT- 18 nos, Relapse — 6,
3. **Field/IEC activities:-** Group Discussion - 104, Leaflet distribution- 905 nos., IEC programme - 18, Village Cover -18, School. Survey — 07, Student Examination-459, Suspected Case – 06

4. **Laboratory Unit:-** Slit Skin Smear - 665 nos, (Out of that 395 were referred cases from other hospitals from smear.) Bio-chemistry 507 nos. Clinical Pathology - 331.
5. **Physio. Unit:-** Plaster — 02 nos., Exercise — 2688, Muscle stimulation — 14, Infra Ray 147.
6. **Training:-** One TOT programme conducted. 9 nos. candidates attended the TOT Programme. Out of nine participants, 03 nos. of candidates were from Assam & 06 nos of candidates were from the state of West Bengal.

16.8 VALLABHBHAI PATEL CHEST INSTITUTE (VPCI), DELHI

16.8.1 Introduction

The Vallabhbhai Patel Chest Institute (VPCI) is a Post Graduate Medical Teaching and Research Institution devoted to the study of chest diseases and allied sciences.

Achievements/Activities taken up during 2014-15

16.8.2 Patient Care

- Diagnostic labs tests : 22655

Specialized investigations in respect of:

- Pulmonary function tests : 20084
- Arterial blood tests : 12820
- Bronchoscopy : 342
- Bronchoalveolar lavage : 75
- CT scans : 3585
- Electrocardiogram : 6268
- Polysomnograms : 167
- HIV testing : 59795

16.8.3 Teachings

- Post graduate MD students of Pulmonary Medicine at VPCI. Co supervisor on MD thesis on lung cancer

- PhD students enrolled in FAMS, DU, VPCI
- Undergraduate students of MSc Life Sciences
- Senior and Junior Research Fellows working in various projects in the department
- CME programme on Molecular diagnosis of Lung diseases was conducted on 11th July, 2014

16.8.4 Budget

Approved Budget during the year 2014-15 & 2015-16
(Rs. in Crores)

Year	Plan	Non-Plan
2014-15	16.90	26.50
2015-16	17.60	31.35

16.9 NATIONAL INSTITUTE OF TB AND RESPIRATORY DISEASES, NEW DELHI

16.9.1 Introduction

National Institute of Tuberculosis and Respiratory Diseases (NITRD) is an autonomous Institute under the Ministry of Health & Family Welfare, recognised for diagnosis, treatment, teaching, training and research in the field of tuberculosis and respiratory diseases. The Institute has 15 Departments.

The Department of Microbiology, which has a National Reference Laboratory, provides quality diagnostic care to both Indoor and Outdoor patients through the availability of state of art facilities like Line Probe Assay, MGIT system, Gene Xpert and BSL-III facility and has been recognized as a National Centre of Excellence by the World Health Organization (WHO). Other depts like Paediatrics, Respiratory Critical Care and Thoracic Surgery facilitate management of TB and Respiratory Diseases respectively in children, critical patients and those requiring thoracic surgeries.

16.9.2 Patient Care

The Institute runs a daily OPD for diagnosis of TB

and various non-tubercular respiratory diseases. The Institute has been implementing DOTS and Programmatic Management of Drug Resistant TB (PMDT) strategies in the management of TB and multi-drug resistant (MDR) TB respectively. The Public Health Dept. of Institute runs the Revised National Tuberculosis Control Programme (RNTCP) in 8 lac population of South Delhi through 8 Designated Microscopy Centres (DMCs) and 10 DOT Centres. Special Clinics like Sleep Clinic, Lung Cancer Clinic, Thoracic Surgery Clinic, Allergy Clinic, Tobacco Cessation Clinic, Pulmonary Rehabilitation Clinic and Laser Therapy clinic, and Pre-Anesthesia Check-up Clinics focus on various Non-tubercular Respiratory Diseases. The Institute provides indoor treatment to the seriously ill patients of Tuberculosis and Respiratory Diseases through 470 beds in wards and ICU. Availability of a 24-hour Respiratory Emergency facilitates critical care delivery to these patients. Diagnostic services are mainly provided by the Departments of Microbiology, Pathology, Biochemistry and Radiology, in addition to, the Pulmonary Function Test (PFT) Lab, Bronchoscopy Lab and Sleep Lab.

During the period from April 2015 to December 2015, a total of 37821 new chests symptomatic attended the NITRD-OPD with an average of 171 new registrations per day. The total OPD attendance was 1.6 lacs averaging 659 patients daily. 6423 cases were diagnosed to have TB and were referred out from NITRD-OPD to NITRD-DOTS Centres (18%), to other Chest Clinics in Delhi (53%) and to neighbouring states (29%). A total of 57794 Smear Microscopy tests were carried out by the Department of Microbiology. Conventional cultures were applied for 3989 pulmonary and 2541 extra pulmonary specimens, while MGIT liquid cultures were applied for 8510 pulmonary and 2097 extra-pulmonary specimens. Drug susceptibility tests were done for first and second line drugs by Conventional and MGIT methods in a

total of 476 and 2400 tests respectively. Line Probe Assay for early molecular diagnosis of resistant TB was done for 4037 samples. Following were other main investigations carried out during the year:

- 148161 Haematology Tests
- 230899 Biochemistry Tests
- 4443 Cytology Tests
- 755 Histopathology Tests
- 54579 X-rays
- 2708 Ultrasounds
- 1478 CT scans
- 5292 PFTs with 129 Body Plethysmographies
- 382 Bronchoscopies with 673 procedures
- 2797 ECGs
- 127 Sleep studies

Hospitalisation and treatment of patients in the Institute were as under:

- 5926 Indoor admissions
- 7904 patients attended Emergency ward
- 656 ICU admissions
- 472 Major Thoracic surgeries
- 743 patients alive on Anti Retroviral Therapy (ART) among those registered with the ART Centre.

16.9.3 Trainings

- The Institute has infrastructure to provide trainings in various fields of TB and Respiratory Diseases to the trainees from within and outside the country. It is a WHO Collaborating Centre for Training. Further, Institute is a recognized centre for post-graduate DNB (Respiratory Diseases) degree course since 1999 and is now admitting 16 DNB students in the Course during the year.

In addition, two students are being admitted to a 3-year DNB Course in the sub-specialty of Thoracic Surgery started recently. Teaching and research activities are carried out regularly within the Institute.

- The Institute is actively involved in the training of various medical and paramedical personnel from other states of our country, in implementation of strategies under RNTCP. Training is also imparted in the management of tuberculosis to the nursing students from Rajkumari Amrit Kaur College of Nursing and the trainee health visitors from New Delhi TB Centre. During the period, more than 800 participants (including nursing students) from various areas of health care attended the trainings within the Institute. These included the International training by The Union.

16.9.4 Research and Publications

Many research projects were carried out in the various sub-specialties of Respiratory Diseases within the Institute during the year. These included the researches carried out by the DNB and the Masters in Physiotherapy (MPT) students as well as by the Institute Faculty. During the period, more than 10 publications of the Institute Faculty came out in various reputed peer reviewed national and international journals. The Institute continues to publish the regular 3-monthly Newsletter.

16.10 NATIONAL TUBERCULOSIS INSTITUTE, BANGALORE

16.10.1 Introduction

Established in 1959, National Tuberculosis Institute (NTI), Bangalore is a premier Institute in the field of Tuberculosis control in South East Asia, which caters to the human resource needs for TB control and operational research in the region. Since 1985, the Institute has been functioning as a WHO Collaborative Centre for Training

and Research. The Institute is also involved in carrying out Operational Research on various components of TB Control. The Bacteriological Wing of the Institute has been recognized as a National Reference Laboratory for External Quality Assessment in the TB Control activity. It also assists in establishing Intermediate Reference Laboratory for Culture and Drug Sensitivity tests, across the country to support Programmatic Management of Drug Resistant TB (PMDT).

16.10.2 Training

(a) The Institute has pioneered in the field of Human Resources Development. It was involved in conducting the following training programmes to the TB Programme Managers positioned at different parts of the country:

Name of the training	Nos. of Training	Nos. of participants
Revised National Tuberculosis Control Programme (RNTCP) Modular Training	5	157
Training on Procurement and Supply Chain Management	1	27
Training in External Quality Assessment	2	30
Training in Culture (solid) and Drug Sensitivity Testing	1	16
Training on Preventive Maintenance & Minor Repairs of Binocular Microscope	1	15
Training on LED Fluorescent Microscopy	1	9
Comprehensive Training Course for Laboratory Personnel (Solid Culture, LPA & CBNAAT)	1	12
National TB Operational Research Training course for professionals associated with Revised National Tuberculosis Control programme	1	23
Training of Trainers (ToT) on Standards for TB Care in India	1	29
OR capacity building workshop and project mentorship for professionals working with RNTCP conducted in collaboration with WHO-India, The Union, CTD & NTI.	1	11

Financial Management Training	1	17
PMDT (Programmatic Management of Drug Resistant TB) Training	1	25

(b) Computer Training Unit, HRD Division

The Computer Training Unit has been entrusted with the responsibility of implementing the data management module for the ongoing First National Anti-tuberculosis Drug Resistance Survey of India. The Data management module for the survey involves implementation of IT features like bar coding of Sputum samples to streamline the receipt of samples from over 120 Tuberculosis Units across the nation at NTI, Optical mark recognition to ensure data accuracy and customized Laboratory Information Management System (LIMS). The development of the said module is functioning & updates are done as & when it requires. Some of the important activities are as under:

- Design & development of DRS data management module;
- Correspondence & execution of all NDRS related preparatory activities like printing of stationary & other related issues;
- Conducted in-house sensitization programme for lab and data management staff, related to NDRS software module;
- I/c CTU facilitated the three Trainers of Training (TOT) programme of NDRS held at Institute;
- Day to day correspondence and submission of interim reports to WHO related to Technical Service Agreement & other survey related activities;
- Periodic NDRS project related correspondence is being handled;
- Interim analysis & presentation of NDRS data to the Principle Investigator, CTD and WHO were compiled & presented

periodically and

- Monthly reports of NDRS is being compiled & forwarded to CTD & WHO.

(c) Laboratory Division

- Operationalise the EQA for sputum smear microscopy network in the states in conjunction with STDCs or IRLSs. Carry out NRL responsibilities of EQA such as Onsite Evaluation (OSE). Panel testing (proficiency testing of lab staff) to ten states at least once in a year for 3-4 days (including one to two districts visits), and make visits as and when required depending on the priorities/necessity to improve and help the performance of labs. Prepared slides are used for panel testing during the visits.
- Conducting quality improvement workshops for the state level programme managers with a view to find solutions to EQA related operational and technical problems faced in the field.
- To implement and verify Random Blinded Rechecking (RBRC) producers and improve the performance of labs based on analysis of the RBRC data in conjunction with STDCs.
- Capacity building and strengthening the ten state level TB laboratories (STDCs) with respect to proficiency in culture and Drug Susceptibility Testing including second line drugs.
- Conducting Anti-TB Drug resistance surveillances of priority states involving processing of representative sample of the states to obtain information of prevalence of drug resistance, with a view to support logistics of DOTS – Plus programme under expansion of DOTS and RNTCP and conduct/participate in National Level disease prevalence studies/surveys.

- The Lab team of the Institute carries out on site evaluation of STDC laboratories of different states and provides necessary guidelines to establish quality laboratory to undertake EQA and DRS studies.
- Carry out Lab based research studies using modern diagnostic techniques and tools viz., Gene expert, Genetic Analyzer, HPLC for NTMs, LPA and MGIT 960
- **Training:** Laboratory staff participated in all the laboratory related training programme organized for different categories by HRD.
- **National Drug Resistance Survey (NDRS):** The laboratory Division has been entrusted with the responsibility of conducting First National Anti-tuberculosis Drug Resistance Survey (NDRS) of India.
- **Specimens Processed:** Details of Specimens received & processed from various stake holders under PMDT, EQA, NDRS from different states during the period April 2015-October 2015:

Particulars	No of Specimen
Total Specimens (Sputum + Culture, XDR PMDT and OP) registered	3263
Total number of Specimens from Karnataka registered for LPA (PMDT)	1365
Total No. of specimens put up for primary culture(OP + Karnataka -PMDT)	737
Total No. of Sensitivity test done by proportionate method for 1st line drugs using LJ for proficiency testing for	733
Total No. of Sensitivity test done by proportionate method for 2nd line drugs using LJ for proficiency testing for	1385
Total number identification test done	1051
XDR suspect culture samples registered	1018
Total no. of drug Susceptibility tests performed by using MGIT	591
No. of Specimens subjected for identification test (Immuno- Chromatographic Test)	535

Total no. of Line Probe Assay performed	796
Total number of HPLC done	397
Total number of specimens subjected to Gene-Xpert	111
Total number of Patients registered for NDRS Survey	2298
Total number of Specimens registered for NDRS Survey	4556
Total number of Specimens rejected for NDRS Survey	341
Total number of Specimens put for primary culture for NDRS Survey	2620
Total number of NDRS Survey samples put up for DST by (MGIT)	820
Total number of NDRS Survey samples subjected for Gene Xpert	30
Total number of Patients registered for Relapse study	331
Total number of Specimens registered for relapse study	588
Total number of Relapse study Specimens put for primary culture	588
Total number of Relapse study samples put up for DST by Solid culture (LJ)	118

(d) Animal Lab Unit

- One hundred and Seventy Seven animals were raised in healthy condition. From the newly born homogeneous stock of albino guinea pigs, weaned animals were raised to attain required body weights for the ongoing animal experimentations.
- Continued weighing of animals at the weaning time and recorded weights of animals. Appropriate preventive measures were taken to avoid outbreak of disease among the stock of albino guinea pigs. Maintenance of old animals in the outdoor shelter for the retired breeders was continued satisfactorily
- Breeding and maintenance of homogenous stock of laboratory animals (Guinea pigs)

16.10.3 Epidemiology and Research Division

The major responsibility of Epidemiology and Research Division comprises conducting epidemiological and Operation research studies on TB and imparting training in TB Epidemiology and Operation research. The research activities of the division during the period of reporting are briefed as under:

1. Multi centric Cohort Study of Recurrence of TB among newly diagnosed sputum positive PTB patients treated under RNTCP – a collaborative study
2. Improving TB case finding efficiency and management of TB cases in private health care facilities in Bangalore city;
3. A study of knowledge of Private Practitioners of Bangalore city in diagnosis & treatment of TB
4. 99 DOTS: a novel project using Mobile Phones to Monitor and Improve Adherence to Tuberculosis
5. An active TB case finding (ACF) survey to improve the case detection in the slums of Bangalore city, Karnataka
6. Inventory study in Karnataka state to find out the extent of under reporting of TB cases in routine surveillance system
7. Baseline data collection for planning of a pediatric TB inventory study in Tumkur district

Publication Activities: The faculty of the Institute publishes research papers in the leading journals on TB. Make Presentations and Poster sessions on the basis of the research studies conducted by the institute in the National Conference on TB and Chest Disease. The in-house publications of NTI Bulletin are undertaken.

16.10.4 Teaching

Major activities carried out

Students from organizations mentioned below visited the Institute between 1st April 2014- 31st October 2015 and they were sensitized about TB problem, TB control program, its strategies and the role that they could play in control of TB.

Sl. No	Date	Category of students	No. of students	Organization
1	13-04-15	Bsc (N)	43	Dr.Shyamala Reddy college of nursing, Bangalore
2	11-05-15	Bsc (N)	10	BMJ College of nursing, Bangalore.
3	14-05-15	PG students (MPH)	06	RGIPH & CDC, Bangalore
4	15-05-15	Bsc (N)	55	Sri Devaraj Urs college of nursing, Kolar
5	25-05-15	Msc (N) GNM	03 32	Padmashree school of nursing, Bangalore
6	26-05-15	Bsc (N)	55	St.John's college of nursing, Bangalore
7	27-05-15	Bsc (N)	50	SJB College of nursing, Bangalore
8	28-05-15	GNM	55	
9	12-06-15	Community Health workers	20	SOCHARA school of public health & Equity, Bangalore.
10	17-07-15	Bsc (N)	38	Garden city college of nursing, Bangalore.
11	30-07-15	PG's community medicine	05	Rajarajeshwari medical college, Bangalore
12	13-08-2015	Bsc (N)	32	SSSIHMS College of nursing, Bangalore
13	17-08-2015	MSW Students	30	Oxford college of Arts, Bangalore
14	14-09-15	MPH Students	20	Padmashree school of public health, Bangalore.
15	18-09-15	MD Community medicine	13	Govt.Medical college, Calicut, Kerala.
16	21-09-15	MD Community medicine	07	AFMC, Puna, Maharashtra

16.10.5 Budget

Details of Budget received under Non Plan and Plan and Expenditure up to end of October 2015 is as follows:

(Rupees in Thousands)

	Budget received	Expenditure
Non Plan	83400	55309
Plan	27500	16265
Total	110900	71574

16.11 NEW DELHI TUBERCULOSIS (NDTB) CENTRE, NEW DELHI

From a modest beginning in 1940 as a Model TB Clinic, NDTB Centre has now grown into a fully functional National level institute for TB and Chest Diseases. The objectives of imparting health care, training and education are being met in an integrated form here. With the objective of expansion of quality DOTS services to the entire country, the Centre continues to render the services in the field of TB and Respiratory diseases. At present, the institute has following activities:

1. Referral OPD services for TB and Allied diseases patients.
2. Special clinics for TB and Diabetes, TB and HIV, COAD and Tobacco Cessation Clinic.
3. State TB Training and Demonstration Centre related activities
4. Intermediate Reference Laboratory activities.
5. Research in the field of TB and Respiratory Diseases.

16.11.1 Summary of Activities of New Delhi TB Centre

An insight on New Delhi TB Centre's activities during 2015-2016

A. Outpatient attendance

Parameters	Year 2014-2015	Year 2015-2016	
		Achievement up to September, 2015	Target for 2015-2016
New out patient registered	7843	5223	10000
Revisits	6144	4556	9000
Total	13987	9779	19000

B. Patients attendance for utilizing various diagnostic/treatment facilities available at New Delhi TB Centre.

Parameters	Year 2014-2015	Year 2015-2016	
		Achievement upto September 2015	Target for 2015-2016
Attending for Laboratory tests	34415	11492	23000
Attending for Mantoux test	5837	4142	8000
Taking treatment under DOT Centre of NDTB Centre	64	66	-
Radiological Examinations	980	847	1650
Attending special clinics (Diabetes, HIV, COAD)	252	130	-

C. Training/IRL Visits/Publications

	2014-2015	Achievements up to September 2015
Personnel trained	2084	1066
IRL Visits for EQA	22	12
Supervision & monitoring of chest clinics	18	14
Research and publications	4	3

16.11.2 Research and Publications

During the year 2014-15, the following research papers have been published or submitted by faculty of the Centre:

- “Molecular diagnostics in tuberculosis revisited with clinician's perspective” – An editorial published in Indian Journal of Tuberculosis, 2014. Sanjay Rajpal and V.K.Arora.IJT; 2014:61:277-280.

- **“Information and communication technology – application in Health sector”** article published in souvenir of Tuberculosis Association of India on the occasion of TB seal release.
- **“Challenges in Tuberculosis Diagnosis and Management: Recommendations of Expert Panel”** – Editorial published in journal of Laboratory Physician/Jan-June2015/Vol 7/Issue
- **“Piloting upfront Xpert MTB/RIF testing on various specimens under programmatic conditions for diagnosis of TB & DR-TB in paediatric population”** article accepted for publication in PLOS ONE.

16.12 NATIONAL CENTRE FOR DISEASE CONTROL

The Institute is under administrative control of the Director General of Health Services, Ministry of Health and Family Welfare, Govt. of India. The Director, an officer of the Public Health subcadre of Central Health Services, is the administrative and technical head of the institute. The Institute has its headquarters in Delhi and had 8 branches located at Alwar (Rajasthan), Bengaluru (Karnataka), Kozhikode (Kerala), Coonoor (TamilNadu), Jagdalpur (Chhattisgarh), Patna (Bihar), Rajahmundry (Andhra Pradesh) and Varanasi (Uttar Pradesh). There are several technical Centers/Divisions at the headquarters of the institute i.e. Centre for Epidemiology and Parasitic Diseases (Department of Epidemiology, and Parasitic Disease), Division of Microbiology, Centre for AIDS & related Diseases and Biotechnology), Division of Zoonosis, Centre for Medical Entomology and Vector Management and Division of Malariology and Coordination. Due to emerging public health challenges, three new centers/divisions (Centre for Non-Communicable Diseases & Biochemistry, Centre for Environmental

& Occupational Health and Division of Climate Changes & Health) have been formed.

16.12.1 Integrated Disease Surveillance Programme (IDSP)

Integrated Disease Surveillance Project (IDSP) was launched with World Bank assistance in November 2004. The project envisaged data collection on a number of communicable as well as non-communicable disease risk factors, but later focused on epidemic prone diseases only in 2007 on the recommendations of international and national experts. The project continues in the 12th Plan with domestic budget as Integrated Disease Surveillance Programme under NHM for all States at an outlay of Rs 640.40 crores.

Programme Components:

- Integration and decentralization of surveillance activities through establishment of surveillance units at Centre, State and District level.
- Human Resource Development – Training of State Surveillance Officers, District Surveillance Officers, Rapid Response Team and other Medical and Paramedical staff on principles of disease surveillance.
- Use of Information Communication Technology for collection, collation, compilation, analysis and dissemination of data.
- Strengthening of public health laboratories.
- Inter-sectoral co-ordination for zoonotic diseases

Current Status of IDSP Implementation

Surveillance units have been established at all State and District Headquarters (SSUs, DSUs). Central Surveillance Unit (CSU) is integrated

in the National Centre for Disease Control (NCDC), Delhi. The Units are maintained by 407 epidemiologists, 115 microbiologists, 27 entomologists and 8 Veterinary Consultants. Training of State/District Surveillance Teams (Training of Trainers) and Rapid Response Teams (RRTs) has been completed in all 36 States/UTs.

The main focus of training for State level participants is on basis of disease surveillance, concepts of epidemiology and data management, whereas the district training focuses on correct procedures of data collection, compilation and reporting and outbreak response. A need based special two-week disease surveillance and Field Epidemiology Training Programme (FETP) have been initiated for the District Surveillance Officers. 729 District Surveillance Officers have already been trained in this special 2 week FETP.

The IT network has been established at 776 sites (connecting all the State/UTs and district headquarters, medical colleges, Infectious Disease Hospitals (IDHs), and premier health institutions) for data entry, data transference, analysis and video conferencing with the help of National Informatics Centre (NIC). Recently, ISRO has allocated the bandwidth and has started migration of network from GSAT-3 to GSAT-12 to restart the satellite connectivity. Out of 367 installed sites 130 sites have been migrated till November 2014.

IDSP has started one stop portal (<http://www.idsp.nic.in>) for data access and transmission, trend analysis and free resources like training material, guidelines, advisories for health personnel related to disease surveillance.

SHOC (Strategic Health Operations centre)

The Strategic Health Operations Centre (SHOC) is established under IDSP to strengthen the outbreak detection and response capacities of the states and districts by utilizing state-of-the-art information technology. An infectious disease outbreak plan

has been prepared along with 47 standard operating procedures (SOPs) encompassing all the divisions and technical activities of NCDC that pertain to utilization of SHOC during a response to an infectious disease outbreak. Further strengthening of SHOC is being undertaken.

Data Management

Under IDSP data are collected on epidemic prone diseases on weekly basis (Monday–Sunday). The information is collected on three specified reporting formats, namely “S” (suspected cases), “P” (presumptive cases) and “L” (laboratory confirmed cases) filled by Health Workers, Clinicians and Laboratory staff respectively. The weekly data gives information on the trends and seasonality of diseases. Whenever there is a rising trend of illnesses in any area, it is investigated by the Rapid Response Team (RRT) to diagnose and control the outbreak. Data analysis and actions are being undertaken by respective State/District Surveillance Units. Emphasis is now being laid on reporting of surveillance data from major hospitals. Presently, about 90% districts in the country report weekly surveillance data on epidemic prone diseases through e-mail or portal.

Media scanning and verification cell

Media scanning and verification cell was established under IDSP in July 2008 to detect and share media alerts with the concerned States/Districts for verification and response. A total of 3487 health alerts have been detected till November 2015 since its establishment in July 2008. Majority of alerts were related to diarrheal, food borne and vector borne diseases.

Strengthening of Laboratories

District laboratories are being strengthened for diagnosis of epidemic prone diseases in a phased manner. Till date 105 labs in 29 States have been made functional. These labs are being supported by trained manpower, funds for essential equipment

and an annual grant of Rs 4 lakh per annum per lab for reagents and consumables.

A state based referral laboratory network has been established by utilizing the existing functional labs in the identified medical colleges and other major centers in the States and linking them with adjoining districts for providing diagnostic services for epidemic prone diseases during

outbreaks. Presently this network is functional in 22 States involving 99 labs.

In addition, a network of 12 laboratories has been developed for Influenza surveillance in the country. These Laboratories are testing clinical samples of Influenza A H1N1 in different regions of the country.

State-wise total no. of outbreaks reported by all States/UTs in 2008, 2009, 2010, 2011, 2012, 2013, 2014 and 2015 (up to week ending 8.11.2015)

Sl. No.	State / UTs	Year								Total
		2008	2009	2010	2011	2012	2013	2014	2015	
1	Andaman & Nicobar	0	0	0	0	0	1			1
2	Andhra Pradesh	72	64	75	91	97	123	64	47	633
3	Arunachal Pradesh	6	6	6	10	9	7	8	17	69
4	Assam	16	30	53	97	75	70	84	68	493
5	Bihar	1	6	21	144	181	134	86	96	669
6	Chandigarh	3	3	2	1	5	0		7	21
7	Chhattisgarh	1	7	2	55	45	58	50	49	267
8	Dadra and Nagar Haveli	0	0	1	0	0	2	3	16	22
9	Daman & Diu	0	1	1	0	2	0		3	7
10	Delhi	3	1	0	3	1	4	4	11	27
11	Goa	2	3	0	2	1	8		5	21
12	Gujarat	24	49	83	150	102	117	109	113	747
13	Haryana	10	9	18	21	19	15	27	24	143
14	Himachal Pradesh	3	13	7	4	13	5	11	22	78
15	Jammu & Kashmir	*	*	2	23	43	54	33	41	196
16	Jharkhand	*	5	4	29	24	50	53	62	227
17	Karnataka	54	97	89	196	156	251	163	161	1167
18	Kerala	17	47	54	56	80	76	74	83	487
19	Lakshadweep	*	*	*	*	*	*	2	1	3
20	Madhya Pradesh	16	65	70	89	65	98	83	123	609
21	Maharashtra	99	27	65	141	215	256	205	167	1175
22	Manipur	1	2	2	4	1	4	4	4	22
23	Meghalaya	5	3	2	1	1	1	3	12	28
24	Mizoram	5	0	0	0	1	1	2	4	13
25	Nagaland	0	1	2	1	0	1	1	2	8
26	Odisha	17	38	19	55	36	113	87	66	431

27	Puducherry	3	2	4	1	2	0	5	1	18
28	Punjab	17	22	18	44	34	24	21	39	219
29	Rajasthan	8	43	84	68	41	33	33	58	368
30	Sikkim	3	0	2	4	1	3	3	3	19
31	Tamil Nadu	50	113	90	127	173	149	122	112	936
32	Telangana							7	27	34
33	Tripura	1	2	2	7	3	4	13	8	40
34	Uttar Pradesh	40	67	98	34	40	37	35	112	463
35	Uttarakhand	27	30	25	36	23	33	19	19	212
36	West Bengal	49	43	89	181	95	232	148	136	973
	Grand Total	553	799	990	1675	1584	1964	1562	1719	10846

16.12.2 National Centre for Disease Control is being upgraded at a cost of Rs. 382 crore.

- Till date 95% work has been completed under Phase-1.
- It is also proposed to establish 30 Branches (including 8 existing branches) of NCDC in all States and one UT at a total cost of Rs. 367.60 crore.
- States have been requested to provide 2-3 acres free of cost land form for setting up of NCDC branch.

16.12.3 Division of Parasitic Diseases

(i) Yaws Eradication Programme (YEP)

Yaws Eradication Programme (YEP) was launched as a centrally sponsored scheme in 1996-97 in Koraput district of Orissa, which was subsequently expanded to cover all the 51 Yaws endemic districts in ten states (Andhra Pradesh, Telengana, Orissa, Maharashtra, Madhya Pradesh, Chhattisgarh, Tamil Nadu, Uttar Pradesh, Jharkhand, Assam and Gujarat). The programme aimed to reach the un-reached tribal areas of the country.

National Centre for Disease Control has been identified as the nodal agency for the planning, monitoring and evaluation of the Programme. The

number of reported cases has come down from 3751 to nil during the period from 1996 to 2003 and subsequently no case has been reported from any of the states after November 2013.

The disease has been declared eliminated on 19th September, 2006. An International Verification Team (IVT) of WHO consisting of International and National experts visited India during 4-17 October, 2015. The IVT strongly recommended to World Health Organization to consider issuing a Certificate of Eradication of Yaws for India.

(ii) Guinea Worm Eradication Programme (GWEP)

In 1983-84, National Centre for Disease Control was made the nodal agency by the Ministry of Health & Family Welfare, Govt. of India, for planning, co-ordination, guidance and evaluation of Guinea Worm Eradication Programme (GWEP). At the beginning of the Programme i.e. in 1984, about 40,000 GW cases were reported in 12,840 guinea worm endemic villages across 89 districts of seven endemic states, viz. Andhra Pradesh, Gujarat, Karnataka, Madhya Pradesh, Maharashtra and Rajasthan. The State of Tamil Nadu has been remained free from GW disease since 1982.

The last guinea worm case in India was reported in July 1996 in Jodhpur district of Rajasthan. World

Health Organization certified India as guinea worm disease free country in February 2000. However, routine surveillance is being continued till the disease is eradicated globally.

16.12.4 Zoonosis Division

The objectives of the division is to provide technical support for outbreak investigations, conduct operational research and trained manpower development in the field of Zoonotic disease and their control in the country. Diagnostic support is provided to State Governments for laboratory diagnosis of Zoonotic infections of public health importance.

The Division has Reference Laboratory for Plague. It has also been recognized by the World Health organization as WHO Collaborative Centre for Rabies. Currently the work is being carried out on following Zoonotic diseases: Rabies, Kala-azar, Toxoplasma, Brucellosis, Rickettsiosis, Hydatidosis, Arboviral Diseases, Plague- rodent sera and organs, Leptospirosis, Anthrax, Virus isolation, Lyme's Diseases by ELISA, Cysticercosis diagnosis by ELISA and Hanta virus by ELISA.

Three New Initiatives under the 12th Five Year Plan (2012-2017)

- **National Rabies Control Programme:** It has two components viz. Human Component which is being implemented in all States and UTs. NCDC is the nodal centre. The Animal Health Component is being pilot tested in Haryana and Chennai. Animal Welfare Board of India, Min of Environment & Forest is the nodal agency.
- **Programme for prevention and Control of Leptospirosis:** It is being implemented in the endemic states viz- Tamilnadu, Gujarat, Karnataka, Maharashtra, Kerala and Andaman & Nicobar islands

● **Strengthening of Intersectoral Coordination for Prevention and Control of Zoonotic Diseases**

16.12.5 Division of Microbiology (including CARD and Biotechnology)

(i) **Broad activities of the Division**

- Referral diagnostic services for viral, bacterial and mycotic diseases. Prominent among these are Influenza, Polio, Hepatitis, Measles, Cholera, Meningococcus etc.;
- National laboratory for Polio surveillance (AFP) and environmental (sewage) polio virus surveillance;
- Laboratory support to outbreak investigations;
- Laboratory support to Integrated Disease Surveillance Project (IDSP);
- Microbiological analysis of environmental samples;
- Training on laboratory aspects of epidemic prone communicable diseases;
- Preparation and supply of reagents; culture media; diagnostic kits to the Country network of collaborating laboratories and for outbreak investigations and
- Investigations for rare or new pathogens (e.g. Ebola Virus).

(ii) **Programmes**

National Programme on Containment of Anti-Microbial Resistance

- Two separate groups i.e. the Expert Working Group and the Steering Committee has been constituted under the chairmanship of the DGHS for implementation of the program.
- In the first phase of the program 10 Medical

College Labs have been identified. The Memorandum of Understanding has been signed between these Colleges and NCDC. The transfer of funds from MoHFW IFD is underway.

- A common unified **National Treatment Guidelines** for use of antimicrobials in different infectious diseases has been developed by a large group of experts cutting across various disciplines of medical science.

National Programme on surveillance of Viral Hepatitis in India

- Guidelines on safe injection practices have been formulated and released for use of Doctors and other health care workers
- Guidelines on “Prevention and control of viral hepatitis” are in the final state of completion and it would be released shortly.
- Shortly a network of 10 Laboratories would be set up to generate laboratory based data on viral hepatitis across the country.

National Influenza surveillance

A network of 12 laboratories located in medical colleges across the country has been established for generating quality data on influenza viruses through ILI surveillance.

(iii) Projects

- NCDC has already been doing testing for measles for many years. Now NCDC is also a part of **Measles Elimination Project** in collaboration with WHO as the Virology Laboratory of NCDC has been approved for this project. The staff has already been trained for testing of Measles samples.
- NCDC has already been a part of **National Polio Surveillance Project (NPSP)**. At

present; the Laboratory is doing Polio virus isolation and Intra-typic differentiation of polio virus. For genomic sequencing of polio virus samples are sent to ERC, Mumbai.

- **AIDS Division** had completed the project on NFHS-4. A number of samples logged in the month of April-2015 to Oct-2015 were 17481.
 - **Diarrhoeal Diseases Laboratory (DDL)** has been carrying out a project (**Laboratory based surveillance of Cholera in and around Delhi**) since 1968. The Laboratory received 104 rectal swab specimens from ID Hospital during the year from suspected acute gastroenteritis or cholera cases.
 - **DDL is carrying out another project entitled –“Study of acute gastroenteritis cases in pediatric population of Aruna Asaf Ali Hospital”** (Since last 10 yrs). 67 stool samples were received from this pediatric population suspected of acute gastroenteritis.
 - New project initiated: **Surveillance study on rotavirus in 0-5 year admitted children of Aruna Asaf Ali Hospital, Delhi**. Total 67 samples were received.
 - New Project: **“Early detection of neonatal septicaemia due to bacterial or fungal pathogens in a Paediatric ICU of a Delhi Govt Hospital”** was initiated in Jan 2014 in collaboration with AAA Hospital. This was to determine the burden of fungal and bacterial pathogens responsible for neonatal septicaemia in a hospital ICU setting. 16 samples of blood culture were received during the period.
- (iv) Outbreak Investigations:**
- Dr Somenath Karmakar, Joint Director NCDC visited Hyderabad (from 15 to 24

April 2015) for Avian Influenza containment measures.

- An outbreak of mysterious fever in Kanpur, UP was investigated by a team of officials from NCDC.

(v) Annual output

Name of the Lab	Name of Investigation	Number of Samples processed /Outcome
Virology-1 Laboratory	Poliovirus isolation	9055 Stool sample & 248 sewage samples processed
	Measles, EBV, Parvovirus, Varicella Zoster Virus & mumps diagnosis.	382 serum
Virology – II (H1N1) Laboratory	Pandemic Influenza A H1N1, H3N2 and Influenza B by PCR.	929 throat swab in VTM samples were tested by real time PCR
	Influenza sentinel surveillance.	From 2 sites of Delhi 261 samples were processed
	For rubella IgG/ IgM; CMV IgM and HSV-1 /2 IgM.	1262 serum samples tested for terratogenic viruses
Hepatitis Laboratory	For Anti HAV – IgM; anti HEV- IgM; anti HCV and HBsAg.	400 serum
Bacteriology Laboratory	For isolation of various pathogens like E.coli, Klebsiella, Pseudomonas, <i>Staphylococcus aureus</i> , Streptococcus, Proteus, Acenetobacter, Enterococcus and <i>Corynebacterium diphtheriae</i> .	267 urine culture; 93 blood culture, 15 pus; 22 CSF / blood samples (for meningitis) and 60 blood samples (for Widal tests) were processed.
Diarrhoeal Diseases Laboratory	For detection of E. coli in pure culture, Vibrio cholera, NAG Vibrio, Shigella, Salmonella, Giardia and Rotavirus.	184 Stool /rectal swab were processed by culture, microscopy and ELISA methods
	Detection of antibiotic sensitivity patterns. of bacterial isolates	32 antimicrobial susceptibility testing carried out.

Environmental Laboratory	Bacteriological analysis of water to determine sample portability.	184 water samples were processed for bacteriological analysis by MPN method
	For polio virus isolation.	Under the National Polio Surveillance programme 276 sewage samples were processed
Tuberculosis Laboratory	For isolation – identification of <i>Mycobacterium tuberculosis</i> .	22 sputum samples for microscopy /culture
Medical Mycology Laboratory	For fungal culture / serodiagnosis	18 specimens of CSF, sputum, tissue processed
Central Media Supplies	For laboratory diagnosis, surveillance and field investigations.	A total of 14860 numbers of dehydrated media of culture plates and tubes were prepared and supplied to various Labs / Divisions.
Biotechnology Division	For DC-SIGN gene region (634bp) and p-24 gene region (717bp) in HIV-1; HCV RNA (249 bp) and for dengue specific -cPrM gene (511 bp) detection.	80 serum samples for PCR /RT-PCR amplification and subsequent automated sequencing
Centre for AIDS and related Diseases	For confirmation of HIV serostatus, sentinel surveillance testing and ICTC client testing.	873 serum samples tested
	Preparation and distribution of proficiency testing (PT) panel for linked SRLs and their associated ICTCs	Distributed to 12 members.
	Participated in EQAS for HIV serology conduct by NARI Pune.	100% concordance obtained.
	For HIV/HBV/ HCV.	20 batches of diagnostic kits Evaluated

16.12.6 Centre for NCD & Biochemistry Division

In view of emergence of Non-Communicable Diseases (NCD) as a serious public health threat the Centre for Non Communicable Disease was established at National Centre for Disease Control on 24 February 2015 with the following objectives:

- To facilitate policy analysis and policy development for prevention and control of Non Communicable Diseases (NCD) in the country
- Capacity building in terms of human resources and diagnostics, of public health facilities with special focus on primary care for prevention and control of NCD in the country.

During 2015 the Centre for NCD started its activities by celebrating International days of Public health importance. i.e. World No Tobacco Day, International Day of Yoga and World Heart Day.

To explicitly lay down the mandate of Centre for NCD, an expert group meeting on NCD was held under the Chairmanship of Dr NS Dharmshaktu, Addl. DGHS on 25th June 2015.

Centre for NCD is also coordinating for International Health Regulations (IHR 2005).

Biochemistry Division

Advisory Committee meeting was held for strengthening the Biochemistry Division at NCDC on 13.02.2015 under the chairmanship of Dr. N.S Dharmshaktu, Addl. DGHS. The key recommendations of the Committee are (i) Infrastructure development (for immunology, toxicology, genetics & molecular biology), (ii) Network linkages and collaboration with national institutes of excellence and (iii) Recruitment of consultants.

16.12.7 Centre for Environmental & Occupation Health

(i) Overview of sub-units/sub-divisions/laboratories of the Division.

Centre for Environmental and Occupational Health a new centre functional at NCDC since February 2015 with the following objectives:

- Enhance health-sector leadership for creating a healthier environment through intensifying primary prevention aimed at tackling the root causes of environmental & occupational threats to health, and influencing public policies in all sectors to respond to emerging & re-emerging consequences of development.
- Provide technical assistance and support to Central and State governments for strengthening environmental & occupational health policy-making, planning of preventive interventions, service delivery and surveillance.
- Identify, assess & promote actions that reduce the burden of diseases associated with environmental pollution and occupational hazards.
- Make evidence-based assessments, and formulate & update norms & guidance on major environmental & occupational hazards to health.
- Support development of technical & operational guidelines & manuals, building capacity, for preparedness & timely response to minimize health consequences following disasters.
- Plan & conduct operational research on critical areas to support programme activities.

(ii) Main activities conducted by Centre for Environmental & Occupational Health

- Centre has supported National Expert Group on Climate change and Health (NEGCCCH). To draw on the available technical resources in the country for formulation of a policy, strategy and action plan on climate change and health, a National Expert Group on Climate Change and Health has been

constituted with leading academicians, researchers, administrators and policy makers.

- Centre is coordinating the meetings of the Core group constituted under the chairmanship of Director NCDC to develop the methodology for reporting/creation of information system of health impact in Critically Polluted areas for Comprehensive Environmental Pollution Index (CEPI).

16.12.8 Epidemiology Division

1. **Manpower Development:** National Centre for Disease Control (NCDC), Delhi is a WHO Collaborating Centre for Epidemiology. The participants to these courses come from different States/Union Territories of India. In addition, trainees from some of the neighboring countries like Nepal, Bhutan, Sri Lanka, Thailand, Timor-Leste, Maldives and Indonesia also participate in some of the training programmes. NCDC is collaborating with GGSIP University for MPH (FE) course and with GDD India for development of manpower in epidemiology.

The Training courses organized during the reported period:

- **Regional Training Programme on Prevention and Control of Communicable Diseases** for the paramedical personnel of South East Asia Region from 28 October to 24 November, 2014. A total of 9 participants from two countries attended the training.
- **India- Epidemic Intelligence Services (EIS):** The fourth cohort of the India EIS training was launched on 5th October 2015. It is a Govt of India initiative in collaboration with US Centers for Disease Control, Atlanta. [A total of 24 officers (thirteen in third cohort and eleven in the fourth cohort)

are attending the training programme].

2. Officers of Epidemiology division mentored outbreak investigations carried out by EIS Officers. Provision of technical support to State government for investigation and control of disease outbreaks.
3. **Provision of administrative and technical supervision** to three branches of the Institute viz., Alwar (Rajasthan), Jagdalpur (Chhattisgarh) and Conoor (Tamil Nadu).
4. **Provision of technical support to various National Health Programmes** in the form of developing guidelines for control, manpower development, evaluation of different components/indicators.
5. **Outbreaks Investigated/Rapid Health Assessment:** During the period, officers from the division of Epidemiology carried out investigations of outbreaks in the country and suggested containment measures to the authorities.
6. **CD Alert:** A bulletin on communicable diseases and an important tool for Rapid Dissemination of Information towards Control of Diseases is published by the National Centre for Disease Control, Delhi.
7. **NCDC Newsletter:** It is a quarterly publication of the National Centre for Disease Control (NCDC). The purpose of this newsletter is to provide a forum for sharing information on outbreaks, programme updates from various departments at NCDC, technical and programmatic news.

16.12.9 Centre for Medical Entomology and Vector Management

Centre for Medical Entomology and Vector Management is reorganized to develop it as a National Centre par excellence for undertaking

research, providing technical support and to develop trained manpower in the field of vector-borne diseases and their control. The centre provides technical guidance, support and advice to various states and organizations on outbreak investigations and entomological surveillance of vector-borne diseases and their control. Major achievements are highlighted below:

- Approval of MPH, Medical Entomology & P.G Diploma has been approved from Ministry of Health & Family Welfare and submitted to Guru Govind Singh Indraprastha University for affiliation.
- Outbreak investigation of mysterious fever was carried out at Bouhara village Bheetar Gaon PHC, Kanpur, Dehat District, U.P. and outbreak of Malaria in Punhanna CHC Mewat District, Haryana
- *Aedes* surveillance at international Airports/ seaports was also carried out in Goa, Amritsar, Kandla and Vishakapatnam and communicated to International Health, MoHFW.
- **Capacity Building**
 - (1) Training has been conducted on Dengue Surveillance for sanitation officer, sanitary inspectors, health Inspector of Central Govt. Hospital, Delhi.
 - (2) **Entomology training for EIS Officers** was also organized on Entomological aspects related to vector borne diseases
- **Ongoing Research Projects: “Development of a protocol for entomological surveillance and for detection of early warning signals for Dengue outbreak in Delhi”:** Total of 252 localities searched for *Aedes* breeding and total 110 localities were found positive till February, 2016. The breeding mainly

detected mainly in four types of containers namely **plastic storage, coolers, cement tanks and over head tanks**. Plastic storage containers contributed maximum breeding.

16.12.10 Division of Malariology & Coordination

Broad activities of the Division

- To provide technical support for outbreak investigations, conduct operational research and trained manpower development in the field of malarial diseases and their control in the country.
- Diagnostic support is provided to state Governments for laboratory diagnosis of malaria infection.
- Coordination of visits of dignitaries / delegations to NCDC.
- Coordination of the short term orientation/ training visits of under and post graduate medical, nursing and homeopathic students.
 1. A total of 1479 (From 1st April, 2015 to 17th November, 2015) blood slides were examined and 90 were found positive (Pv -84, Pf -05 and Pm -01). 848 slides were received from Government hospitals and 599 from private hospitals. 32 slides were received from NCR (Ghaziabad, Sonipat, Bagpat, Uttar Pradesh, Haryana and Faridabad)
 2. The division extends regular short term orientation/ training to the visiting under and post graduate medical, nursing and homeopathic students. A total of 205 students from different institutes viz: Hospitals, Veterinary Army officers, MBBS Students of Army, Medical officers of AFMC, Senior Medical officers of BSF , MD (CHA) & DHA

Final Year students, M.Phil, MPH and Ph.D students, Nursing students (Bachelor's and Master's) from various Nursing Institutions, Post Graduate students of Community medicine of Medical Colleges.

16.12.11 Statistical Monitoring & Evaluation Cell

- I. **Masters in Public Health (FE)** The Institute conducts a Course on Master in Public Health (Field Epidemiology) (MPH (FE)) of two years duration. 6 (six) students passed out in 2014 and 4 (four) students in 2015. For the batch 2015-17, three (3) students have been enrolled

- II. **Training** Conducted two Training programmes on Biostatistics including computer training for NCDC officers/staff including those of officers/staff of NCDC branches during June – July 2014.

16.13 CENTRAL RESEARCH INSTITUTE (CRI), KASAULI

Established in 1905, Central Research Institute is a subordinate office of Directorate General of Health Services, under the Ministry of Health & Family Welfare. Currently, the Institute is engaged in (i) production of Vaccines & Sera, (ii) research and development in the field of immunology and vaccinology, and (iii) teaching and training.

16.13.1 Performance during the Current Year

Sl. No.	Vaccine & Anti-Sera	Installed Capacity (LAKH VIALS)	Production	% Produced	Demand	Supplies	% Supplied
1	DPT	255	41,16,490	16.14%	75,00,000	52,00,000	69.33%
2	DT	200	–	–	–	–	–
3	TT(UIP) TT(NON UIP)	300	35,19,190	11.73%	1,01,00,000 81,060	34,00,000 71,560	33.66% 88.28%
4	Yellow Fever Vaccine (CRI K)	0.35	93,600	267%	52,965	41,700	78.73%
5	ARS	2.50 (Lakh)	22,407	8.96%	53,375	18,500	34.66%
6	ASVS(IYO) ASVS(LIQ)	3.00 (Lakh)	1,519	5.06%	– 6,901	– 1,421	– 20.59%
7	DATS(IYO) DATS(LIQ)	0.80 (Lakh)	5,154	6.42%	– 8,165	– 4,240	– 51.92%
8	NHS	0.004 Lakh)	–	–	225	10	4.44%
9	DR	2.75 (Lakh)	14,250	5.09%	27,066	12,200	45.07%

16.13.2 Achievements during the Current Year

Six batches of T.T. Vaccine have been produced

and manufacturing of D.P.T. Vaccine has been initiated in New cGMP Facility.

16.14 NATIONAL INSTITUTE OF BIOLOGICALS (NIB), NOIDA

16.14.1 Introduction

The National Institute of Biologicals (NIB) has been performing Quality Evaluation of Biological and biotherapeutic products including Albumin, normal and specific, Immunoglobulin, Coagulation Factor VIII, Insulin and its Analogues, Erythropoietin, Granulocyte Colony Stimulating Factor (G-CSF), Streptokinase, Immunodiagnostic Kits (HIV, HCV, HBsAg), Blood Grouping Reagents and Glucose Test Strips in its various State-of-the-art Laboratories and Animal House by following various National/ International Pharmacopoeias. The Institute has performed Quality Evaluation of 1978 batches of 159 types of various biologicals during the year 2014-15.

Efforts have been initiated to establish a laboratory for evaluation of high profile novel drugs like Therapeutic Monoclonal Antibodies which are used for haematological, immunological and oncological disorders. In this regard, standardization and validation of Rituximab and Herceptin are going on. Testing of Glucose Test Strips has been taken up.

Standardization and validation of Viral Vaccines like Cell Culture Rabies Vaccine (CCRV), MMR Vaccine, Live Attenuated Measles Vaccine, Rubella Vaccine & BCG Vaccine have been completed. Standardization of the other vaccines like JE Vaccine, HPV, Polysaccharide Quadrivalent, Typhoid Vi Polysaccharide are in progress.

16.14.2 The Institute has been declared as Central Drugs Laboratory (CDL) for 12 additional biologicals and biotherapeutics products etc.

As an on-going exercise, the Institute is supplying National Reference Standard of insulin and Reference Sera Panel of HIV, HCV, HBsAg to the

indigenous manufacturers as and when required. The Institute has successfully participated in External Quality Assurance Programme of HIV, HBsAg, HCV and Syphilis with National Reference Laboratory, Australia. The Institute is regularly participating in EQAS of Glucose Testing at Christian Medical College (CMC), Vellore, India. The Institute has also successfully participated in proficiency testing conducted by the European Directorate of Quality Medicine, Strasbourg, France for HCV RNA testing and Coagulation Factor VIII. The NABL accreditation of biologicals has reached up to 61. In addition, 27 Monographs on biologicals have been prepared by the Institute and the same has been incorporated in Indian Pharmacopoeia, 2014.

16.14.3 The Haemovigilance Programme of India has been initiated by the Institute to report adverse drugs reactions (ADR) caused due to administration of blood and blood products in the country. The NIB has so far organised 21 Continuing Medical Educations (CME) across the country and 4200 trainees have been trained besides publishing three Haemovigilance News Letters. India is now a member of International Haemovigilance Network.

A Survey of Extent of Problems of Spurious and Not of Standard Quality (NSQ) Drugs in the country is going on under the direct supervision of Director, NIB.

16.14.4 Budget

The funds of the institute are received as Grants-in-Aid from the Ministry of Health and Family Welfare. The BE and RE of the Institute are as under:

(in crores)

Year	BE	RE	Expenditure
2014-15	31.00	31.00	30.93
2015-16	35.00	34.60	15.75*

*Upto October, 2015

16.15 BCG VACCINE LABORATORY, GUINDY

16.15.1 Introduction

The BCG Vaccine Laboratory, Guindy, Chennai was established in 1948. The major activities of the Institute are:

- Production of BCG Vaccine (10 doses per vial) for control of childhood Tuberculosis and supply to Expanded Programme of Immunization (EPI) since 1948.
- Production of BCG Therapeutic (40 mg) for use in Chemotherapy of Carcinoma Urinary Bladder since 1993.

16.15.2 Performance of BCG VL (Production, Demand & Supply)

Sl. No.	Particulars	Quantity
1	Installed capacity per annum	400 lakh doses
2	Quantity manufactured	Nil
3	Quantity of demand received	9.00 lakh doses
4	Quantity of Supply Released	9.00 lakh doses

16.15.3 Significant Achievements

- The new facility is in advanced stage of completion. All major equipment and all utilities have completed Operational Qualification stages. The trial batches will be initiated soon.
- Validation of trial batches of BCG Vaccine from the new facility will be followed by regular production of BCG Vaccine as per cGMP.
- Internal training on cGMP standards / documentation / SOP is being imparted to BCGVL staff. Documentation as required

and for cGMP compliance is being undertaken.

16.16 PASTEUR INSTITUTE OF INDIA (PII), COONOR

16.16.1 Introduction

Pasteur Institute of India, Coonoor (PIIC) started functioning as Pasteur Institute of Southern India, on 6th April, 1907 and the Institute took a new birth as the Pasteur Institute of India (registered as a Society under the Societies Registration Act 1860) and started functioning as an autonomous body under the Ministry of Health and Family Welfare, Government of India, New Delhi from 10th of February, 1977. The affairs of the Institute are managed by the Governing Body.

16.16.2 Present Activities

- This Institute is engaged in the production of DPT and Tissue Culture Anti Rabies (TCAR) vaccines.
- Establishment of cGMP compliant DPT vaccine laboratories is underway.
- Academic programmes like Ph.D. Microbiology, Biochemistry and Biotechnology (Part time & Full time) affiliated to Bharathiar University, Coimbatore.
- Breeding of Mice and Guineas pigs for experimental purpose like Quality Control of DPT group and TCAR vaccines.
- The Institute has Rabies Diagnostic Lab and Anti Rabies treatment centre to cater to the need of the general public.

16.16.3 Activities for Green Field Manufacturing GMP Facility for Production of DPT Vaccine

- The Ministry has proposed to create Green Field GMP facility for manufacturing DPT

group of vaccines at PIIC. HLL Life care Ltd., Trivandrum has been engaged to carry out the project for an estimated expenditure of Rs. 149.16 crores.

- The specification with customisations of critical equipment has been finalized. The technical bid evaluation for the procurement of equipments is in process.

After equipment installation, validation and process validation, the new facility will supply 130 million doses (DPT-60Mid; TT-55 Mid; DT-15 Mid) annually.

16.17 INSTITUTE OF SEROLOGY, KOLKATA

16.17.1 Introduction

Institute of Serology, Kolkata is a sub-ordinate office of the Directorate General of Health Services (DGHS) under the Ministry of Health and Family Welfare.

Mandate of the Institute is as below:-

- Production of various quality diagnostic reagents such as Venereal Disease Research Laboratory (VDRL) Antigen, species specific Antisera, Anti H Lectin, etc.;
- Forensic Serology for determination of origin of species of different biological exhibits which have been sent to this Institute from different Forensic Science Laboratories (FSLs) and Regional Forensic Science Laboratories (RFSLs) and also to undertake blood group serology in case the species origin is human. This Medico-legal report is accepted as expert opinion in the court of law;
- Reference centre for A,B,O Blood grouping & Rh typing from antenatal cases;
- The V.D. Serology Section works as internal

quality control of the VDRL antigen and standardization of VDRL antigen produced in Antigen Production (A.P) section;

- Act as Regional STD Reference Laboratory for East Zone under NACO;
- Training of Laboratory Technicians in various fields of Serology and Sexually Transmitted Diseases (STDs) and imparting training in Forensic Serology to post-graduate students of MD(FSM);
- Isolation of Polio Virus from stool samples of AFP cases from Eastern and NE Region and part of Bihar, Jharkhand by National Polio Laboratory under the WHO and NPSP. Isolation of Polio Virus from environmental samples (drain water) from some municipal corporation areas in Kolkata;
- Intratypic differentiation of Polio Virus by ITD Laboratory using PCR technique and
- National Measles Laboratory for detection from Eastern and North Eastern States and part of Jharkhand and Bihar.

16.17.2 Achievements

- In Forensic Serology Section, 2838 exhibits were tested for species origin and group determination;
- In VD Serology Section 1447 blood samples were tested for syphilis;
- In Antibody Production Section 3180 ml of antisera were produced and 2615 ml supplied to different State & Central Forensic Science Laboratories;
- In BGRC Section 2600 ml Anti H Lectin was produced and supplied to different Forensic Laboratories;
- 1054 samples were received and tested for Measles and Rubella;

- VDRL Antigen Production unit produced 920 ml antigen and supplied 1600 ml antigen to different hospitals and STD Clinics throughout India;
- 8104 stool samples were tested for NPV and VDPV and 120 samples tested for environmental surveillance;
- 8821 tests were done for diagnosis of different types of STIs from STI Clinics of Medical Colleges of Kolkata.

16.18 INTERNATIONAL INSTITUTE FOR POPULATION SCIENCES, MUMBAI

Established in 1956, the International Institute for Population Sciences (IIPS), Mumbai was declared as a 'Deemed University' on 19th August, 1985 by the Government of India.

16.18.1 Teaching

During the year 2014-15, the Institute offered the following regular courses: (a) Diploma in Health Promotion Education (D.H.P.E.), (b) Post-Graduate Diploma in Community Health Care (P.G.D.C.H.C.) (c) Master of Arts/Science in Population Studies (M.A./M.Sc.), (d) Master of Science in Biostatistics and Epidemiology (M.Sc.) (e) Master of Population Studies (M.P.S.), (f) Master of Philosophy in Population Studies (M.Phil.) and (g) Doctor of Philosophy in Population Studies (Ph.D.). Apart from these programmes, the Institute also offers Master of Population Studies (M.P.S.) and Diploma in Population Studies (D.P.S.) through distance learning.

During 2014-15, 24 students qualified for award of Diploma in Health Promotion Education, 3 students qualified for award of Post Graduate Diploma in Community Healthcare, 32 students qualified for award of degree in Master of Arts/

Science in Population Studies, 7 students qualified for award of Master of Science in Biostatistics & Epidemiology, 38 students qualified for award of degree in Master of Population Studies, 35 students qualified for the award of degree in Master of Philosophy in Population Studies, 11 students had qualified for the award of Doctor of Philosophy in Population Studies, 17 students qualified for award of degree in Master of Population Studies (Distance Learning) and 6 students had qualified for the award of Diploma in Population Studies (Distance Learning).

16.18.2 Research and Publications

Institute conducts research programmes using its own resources and also through external funding. The externally funded projects are usually initiated at the request of the concerned agencies. The completed and ongoing projects at the Institute are given below:

(a) Research Projects Funded By the Institute

- Population Scenario in India: Long Term Prospective.
- Magnitude, Causes and Consequences of Kala-azar in India: A Study of Eastern Bihar.
- Use of verbal autopsy for estimating the causes of death in Amravati district of Maharashtra.
- Estimation of Vital Rates for Mumbai Presidency in the Colonial Period.
- Changes in Household Amenities and Assets in India: A Census Based Study.
- Comparative Study of two different methods of data collection used in a large scale survey in India-Questionnaire/Papers-Pen and techno-based CAPI.
- Follow-up of Comprehensive Nutrition Survey in Maharashtra in Amravati and Nashik Divisions.

- Historical Trends and Patterns of Population and Development in India: A District Level Analysis.
- (b) **Research Projects Funded By External Agencies**
 - Longitudinal Aging Study in India (LASI) Main Wave (2014-19).
 - Study of Global Ageing and Adult Health (SAGE)-India, Wave-2, 2014-16.
 - Family Health and Wealth Study (FHWS).
 - Enhancing Capacity to apply research evidence in Policy Making.
 - National Family Health Survey-4.
 - Unintended Pregnancies and Abortion in India (UPAI).
 - Population Environment and Settlement (ENVIS).
 - Comprehensive Nutrition Survey in Gujarat.
 - Counting Women's Work.

The professional Journal of Indian Association for the Study of Population (IASP) is presently managed at IIPS. This long standing journal publishes peer-reviewed articles and book reviews, focusing on demographic and health issues and more specifically on Indian demography.

16.18.3 Library

The International Institute for Population Sciences Library has a collection of about 83,156 books, 15,959 bound volumes of periodicals, 16,767 reprints and 600 audio-visual materials and subscribes to over 300 journals.

The library has a special collection of all the census volumes published in pre-independence period (Census of India 1872 to 1941 in PDF format) till the latest Census 2011. The library provides access to the several online databases like JSTOR, SCIEDIRECT (social science

collection), SCOPUS, INDIASTAT and other leading publisher's online collection relevant to health and population sciences.

The IIPS library has institutional membership with INFLIBNET (UGC), DELNET and exploring maximum services for the benefit of the Institute.

16.18.4 Major Event

The International Seminar on "Assisted Reproductive Technologies in Northern and Southern Countries: issues, challenges and the future" was held at IIPS during 30-31 October, 2014.

16.19 MAHATMA GANDHI INSTITUTE OF MEDICAL SCIENCES SEVAGRAM (MGIMS), MAHARASHTRA

Mahatma Gandhi Institute of Medical Sciences (MGIMS) with its Kasturba Hospital is probably the finest example of what Public Private Partnership can achieve especially when private party is a non-profit making organization devoted to service. MGIMS is a joint collaborative project of the Government of India, Government of Maharashtra and the Kasturba Health Society and all the three share the total expenditure in the ratio of 50:25:25 respectively. The Institution has now developed into into 972 bedded hospital with all modern facilities and well equipped departments with state of the art ICUs. The Institute admits 100 undergraduate students and 70 postgraduate students.

16.19.1 Patient Care

- On 16th December, 2014, Kasturba Hospital added a cardiac catheterization lab to the facilities it offers to patients. A 5000 square feet cardiology block has been built which houses a ceiling mounted cath lab. In addition, a 10-bed ICCU equipped with pendants, central oxygen, central

suction, central cardiac monitoring system, pacemakers, defibrillators and a system to display radiologic images (PACS) monitored by HIS has also been added to the cath lab.

- Department of Paediatrics becomes IAP accredited CPR training centre: The Department of Pediatrics has become the second centre in Maharashtra to start a cardiopulmonary resuscitation (CPR) training centre accredited by the Indian Academy of Pediatrics (IAP). This centre will enable health care professionals and public acquire resuscitation skills.
- Linear Accelerator unit has been introduced in the Department of Radiotherapy.
- A new Operation Theatre (OT) complex which houses ten state-of-the-art Operation Theatres, an Intensive Care Unit and a preoperative assessment unit with ten beds each; two recovery rooms and a medical store has been put in place.
- Department of Ophthalmology, Kasturba Hospital, MGIMS, Sewagram, has been providing preventive, promotive, curative and rehabilitative eye care. The Department is conducting daily eye screening camps and also conducted door to door eye screening in all the villages of 8 blocks of Wardha district covering a population aged more than 50 years. Screening for blindness and operable cataract is conducted door to door. Blind register is prepared at village level. This year 52,432 villagers have been screened by doctors at their door steps in 855 villages. Individuals aged more than 50 years with visual acuity less than 6/60 due to cataract in either eye, who were in need of cataract surgery were motivated and provided free to-and-fro transport and brought to Kasturba Hospital Sevagram for operation.

All services including surgical treatment, medicines, Intra Ocular Lenses and glasses were provided free of cost. Computerized data bank is maintained to keep data records pertaining to all patients screened and operated for follow-up.

- Dr. Sushila Nayar Eye Bank is functional in Department of Ophthalmology Kasturba Hospital which promotes eye donation activity and provides facilities for corneal transplantation to patients suffering from corneal blindness. During the year 40 eyes were processed in eye bank. Out of these, 22 eyes were collected from donors in Wardha district and 18 eyes were brought from Govt. Hospital Chandrapur & Lions eye bank Chandrapur. Out of 40 Donated eyes 17 had cornea suitable for transplantation and 17 patients were provided facility for Keratoplasty (Corneal Transplantation) free of cost. Members of two voluntary organizations were trained in grief counseling and motivation for eye donation.
- The **100 bedded model Maternal and Child Health (MCH) wing** for comprehensive reproductive, maternal, newborn and child and adolescent health (RMNCH+A) funded by the Ministry of Health and Family Welfare, Govt of India with a budgetary provision of Rs.20 crores is in the final leg of construction. This centre aims to provide quality maternal and child health services covering the whole perspective of RMNCH+A. The MCH wing shall have the outpatient department, 10-bed labour unit, obstetric intensive care units, antenatal and postnatal wards, operation theatres, pediatric wards, neonatal ICU (Level 1, 2 and 3), pediatric ICU, outborn nursery and a skills lab. The departments of Obstetrics and Gynaecology and Paediatrics are expected

to move into the new building by October 2015.

- **Infertility Lab:**

- Close to one in ten couples don't get pregnant despite a year of trying - after which doctors typically recommend evaluation for infertility. Infertility treatment is expensive, requires repeated visits to the hospital and is not available in small towns. Each cycle of infertility costs a fortune, and most patients have to pay from their pockets for the tests and treatment.

- The infertility lab, located in the Gynaecology OPD of the hospital was inaugurated in January 2015. The lab offers access to (a) semen analysis to check the sperm count and motility; (b) four key reproductive hormones: prolactin, LH (Luteinizing Hormone), FSH (Follicle Stimulating Hormone), and TSH (Thyroid Stimulating Hormone); (c) an ultrasound (to scan follicles) and (d) a hysterosalpingogram to confirm that uterus and tubes are normal. These basic tests allow the gynaecologists to check whether the eggs, sperm, uterus and tubes are normal. Infertility caused by a low sperm count or decreased sperm mobility can now be treated at Sevagram by Intrauterine insemination (IUI) - a fertility treatment that involves placing sperm inside a uterus to facilitate fertilization.

- Patients accessing dental care in the department of Dental Surgery at MGIMS can have state of the art ceramic crowns, bridges as well as zirconia crowns implants at a price they can afford. The department also offers full mouth rehabilitation for partially edentulous patients and face mask for correcting face and jaw discrepancy.

- The multi speciality OPD started in the

campus of the Gandhi Memorial Leprosy Foundation offers access to healthcare to people with medical, surgical, orthopedic, ophthalmic, ear-nose-throat and gynaecologic problems. All biochemical tests are also performed on an autoanalyzer at the center.

- MGIMS has launched an e-learning platform to supplement the classroom, clinical and community based training of under-graduate and postgraduate students. The potential uses of this initiative could be developing courses on personal and professional development of the students: during their rural posting, professional education of practitioners, both public and private sector, developing courses for in-service training of various cadres of health care providers in public health system. The online course has been developed and training of first batch of faculty members was completed. The plan was to train all faculty members at MGIMS within a period of 6 months.

- The monthly Magazine "Careers 360" which is India's largest higher education & career counseling portal and gives bird's eye view of the popular study destinations across the globe has ranked Mahatma Gandhi Institute of Medical Sciences 10th in the list of India's Best Private Medical Colleges based on student's quality, output, impact and learning.

16.19.2 Research and Training

- The MGIMS has been sanctioned a non funded advocacy project called "Labs for Life" by Centre for Diseases, Maharashtra Govt. and Govt. of India for improvement in quality work of laboratory services.

- An ICMR Task Force Study "Surveillance of select zoonotic diseases in central

India” was also sanctioned for Department of Microbiology, Community Medicine, Medicine and Pediatrics.

- The Department of Obst. and Gynae has been sanctioned an ICMR sponsored project titled Epidemiological determinants of hypertensive disorders of pregnancy in a cohort of rural women in central India.
- Dr. Sushila Nayar School of Public Health has been sanctioned by Department of Health Research (ICMR), New Delhi grant for Centre for Advanced Research for community based maternal, newborn and child health with a funding of Rs 4.31 crores.

16.19.3 Communication

Self-Help Group is a very effective tool for not only women empowerment, but overall development of the community. The department of Community Health has now achieved the formation of 3-4 SHGs per village in all the villages of its field practice area. The department provides assistance to SHGs to add a health action agenda to their primary financial function (Finance Plus) so that the women are able to determine health priorities and to play a proactive role in health care delivery in their villages. A total of 276 Self-Help Groups were functioning on March 31, 2015 in the adopted villages of the Institute. Kisan Vikas Manch (Farmers’ Club) are also being used to involve men in the health activities at village level. A total of 12 Kisan Vikas Manch were functioning on March 31, 2015 in the adopted villages of the Institute.

The Department of Community Medicine has taken an initiative to form groups of non-school going adolescent girls in several villages and forming Kishori Panchayats. Adolescent to Adolescent Education Programme is undertaken in all the villages through these groups. These groups have been oriented towards the issues of adolescent health, maternal health, child survival,

environmental health, family life education, RTI/STD, HIV/ AIDS etc. In turn, these girls will train their peers and younger adolescents in their villages.

16.19.4 Rural Placement Scheme

In order to fully acquaint the students with the health problems encountered in the villages, MGIMS in 1992 designed a programme for placement of graduate students in rural areas. Under the programme if the graduates desire to take up post graduation in MGIMS, they have to compulsorily serve in the villages for a period of two years. It is an eligibility criteria for post graduation admission. However, after the completion of one year of rural service, the students become eligible for admission to the post-graduate courses in the Institute provided they give a bond to complete the remaining period after post graduation.

The rural placement scheme has become so popular that almost all students opt for it and so far 19 batches have completed their 2 years of rural service and have taken up post-graduate studies in various specialties.

16.20 CENTRAL BUREAU OF HEALTH INTELLIGENCE (CBHI)

16.20.1 Introduction

Central Bureau of Health Intelligence (CBHI), established in 1961, is the Health Intelligence wing of the Director General of Health Services in the Ministry of Health & FW, GOI with the vision to have “**A strong Health Management Information System in entire country**”. CBHI has three divisions viz. (i) Policy, Training and Co-ordination, (ii) Information & Evaluation, and (iii) Administration. It also consists of six Health Information Field Survey Units (FSUs) at Bengaluru, Bhopal, Bhubaneswar, Jaipur, Lucknow & Patna and Regional Health Statistics Training Center (RHSTC) of CBHI at Mohali, Punjab.

The Objectives of CBHI are:

- To Collect, Analyze & disseminate Health Sector related data of the country for evidence based policy decisions, planning and research activities;
- To identify & disseminate innovative practices for Health Sector Reforms;
- To develop Human resource for scientifically maintaining medical records in both Government & private medical Institutes in India;
- To Carry Out Need Based Operational Research for Efficient implementation of Health Information System & use of Family of International Classifications in India;
- To sensitize & create a pool of Master Trainers in Health sector for implementation of Family of International Classification in India;
- To collaborate with National & International Institutes for imparting knowledge & skill development;
- To Collect & disseminate indicators for Health related Millennium Development Goals;
- To function as collaborating centre for WHO FIC in India & SEAR countries.

16.20.2 Data Collection

- CBHI collects primary as well as secondary data on various communicable and non-communicable diseases, human resource in health sector and health infrastructure from various Government organizations/ departments to maintain and disseminate Health Statistics through its annual publication “National Health Profile” which highlights most of the relevant health information under 6 major indicators viz.

Demographic, Socio-economic, Health Status, Health Finance, Health Infrastructure and Human Resources.

- CBHI collects the information on reform initiatives for Health Sector Policy Reform Option Database (HS-PROD). [www.hsprodindia.nic.in]. It is a web-enabled database that documents and further creates a platform for sharing of information on good practices, innovations in health services management while also highlighting their failures that are very important for the success of NRHM.
- For capacity building and human resources development, in health sector CBHI conducts in-service training programme for the officers and the staff working in various Medical Record Department & health institutions of the Central/State governments, ESI, Defense and Railways as well as private health institutions through its various training centres. Following are the in-service training conducted:

Sl. No.	Name of the training	Batch	Duration	Training Centre
1	Medical Record Officer	2 (at each training centre)	1 Year	1. Medical Record Deptt. & T.C. at Safdarjung Hospital in New Delhi 2. JIPMER, Puducherry
2	Medical Record Technician	4 (at each training centre)	6 Months	1. Medical Record Department & T.C. at Safdarjung Hospital in New Delhi 2. JIPMER, Puducherry

- CBHI Provides Internship and Health Management Programmes for the students of National Universities and Institutes.
- CBHI publishes a concise list of all MDGs

and comprehensive list of Health related MDGs i.e. Goal-4 (Reduce Child Mortality) and Goal-5 (Improve Maternal Health) and Goal-6 (Combat HIV/AIDS, Malaria and Other Diseases) in its annual publication “National Health Profile”.

- Function as WHO Collaborating Centre on Family of International Classifications (ICD – 10 & ICF) in India with the following major objectives:-

- To promote the development & use of the WHO Family of International Classifications (WHO-FIC) including the International Statistical Classification of Diseases and Related Health Problems (ICD), the International Classification of Functioning, Disability and Health (ICF), and other derived and related classifications and to contribute to their implementation and improvement in the light of the empirical experience by multiple parties as a common language.

- ✓ Contribute to the development of methodologies for the use of the WHO-FIC to facilitate the measurement of health states, interventions and outcomes on a sufficiently consistent and reliable basis to permit comparisons within and between countries at the same point in time by:
- ✓ Supporting the work of the various committees and work groups established to assist WHO in the development, testing, implementation, use, improvement, updating and revision of the member components of the WHO-FIC.
- ✓ Participating in the quality assurance procedures of the WHO-FIC classifications regarding norms of use, training, data collection and application rules.

- Networking with current and potential users of the WHO-FIC and act as reference centre by:

- ✓ Assisting WHO Headquarters and the Regional Offices in the preparation of member components of the WHO-FIC and other relevant materials.
- ✓ Participating actively in updating and revising the member components of the WHO-FIC.
- ✓ Providing support to existing and potential users of the WHO-FIC and of the data derived in India and SEARO Region. Linkage will also be made with other countries of Asian Pacific Region for seeking status on FIC implementation.

- Work in at least one related and/or derived area of the WHO-FIC: Specialty-based adaptations, primary care adaptations, interventions/procedures, injury classification (ICECI).

16.21 CENTRAL HEALTH EDUCATION BUREAU (CHEB)

Established in 1956, the Central Health Education Bureau (CHEB) is an apex institution for health education. The mandate of CHEB is to plan and formulate programmes for the promotion of health education in the country; conduct behavioral research in the field of health education; provide training to health professionals and school teachers and to produce various kinds of printed, electronic and mass media material for creating health awareness.

16.21.1 Major Activities

Organization/Participation in Exhibitions:-

- Display of Exhibition during “Health Awareness Week” organized for Members of Parliament from 30th November to 4th

December, 2015 at the Parliament Annexe.

- Awareness programme for general public/visitors on healthy lifestyle and related health issues at India International Trade Fair-2015 from 14th to 27th November 2015 at Health Pavilion of Ministry of Health and Family Welfare.
- Display of Exhibition on “Healthy Life Style” in Army Base Hospital on 24th April, 2015.
- Participation and organizing an Exhibition on “World Health Day” on 1st April, 2015 along with WHO, NCDC and FSSAI on the theme: “From Farm to Plate- Make Food Safe” at Hotel Taj Palace, New Delhi.
- Awareness on Organ and Tissue donation among faculty, Students of Lady Harding Medical College (LHMC) and 600 students from various Govt. and Private Schools who were a part of “Centenary Celebration” of LHMC on 29th July, 2015.
- Printing of Booklet on Healthy lifestyle for dissemination of health information among members of parliament.
- Printing of Brochures on Healthy lifestyle for dissemination to General Public in India International Trade Fair 2015.
- Conducted 17 Orientation Training Programmes comprising 528 students from Medical / Nursing Colleges/ ANM Training Centres from different parts of India and Rural Health & Family Welfare Training Centre to sensitize them about health education & health promotion and also to apprise about the functioning, achievements and initiatives taken by CHEB to create health awareness through various health educational activities.
- Developed and finalized IEC messages for Prevention & Control of Fluorosis

and Arsenic Toxicity at CHEB with the experts from DGHS, NCDC, Maulana Azad Medical College.

16.22 REGIONAL OFFICE OF THE HEALTH AND FAMILY WELFARE, NEW DELHI

Regional Offices of Health and Family Welfare (ROH&FW) were established by merging Regional Coordinating Offices (RCO) and Regional Health Offices (RHO) in 1978 to supervise, monitor and co-ordinate matters relating to Centrally Sponsored Health & Family Welfare Programmes. Currently, there are 19 Regional Offices of Health & Family Welfare functioning under the Directorate General of Health Services, located in the various State Capitals and headed by a Senior Regional Director. The essential units of the ROH&FW are (i) Malaria Operation Field Research Scheme (MOFRS) (ii) Entomological Section (iii) VBDC Section (iv) Health Information Field Unit (HIFU) and (v) Regional Evaluation Team (RET).

16.22.1 Roles and Responsibilities

- Liaison of centre - state activities for implementation of National Health Programmes.
- Cross-checking of the quality of the malaria work, running free malaria clinic in the office premises and review / analysis of the technical reports related to NVBDCP.
- Checking of the records in respect of beneficiaries of family welfare services and other registers maintained during field visit and provide feedback related to Family Welfare programme activities.
- Organizing training for laboratory technicians, medical and para-medical staff as well as other categories of staff on orientation in various National Health Programmes.

- Specified responsibilities are undertaken by Regional Evaluation Team (RET), Health Information Field Unit (HIFU) and Malaria Operation Field Research Scheme (MOFRS).

16.22.2 Performance of Technical Activities

The Activities under taken by ROHFW for the year 2015-16 are as below:

- 257 Review meetings were held with State Programme Offices to review the implementation of National Health Programmes.
- Implementation of National Health Programmes was reviewed by field visits to district & sub-district level health facilities.
- Officers from ROHFW participated in 143 National and 379 state level meetings.
- 74 Training Programmes were organized in which 2054 participants were imparted training in malaria microscopy, ICD-10 and other activities.
- 4 Drug resistance studies, 61 entomological survey and 22 evaluation studies were undertaken through MOFRS, RET and CBHI teams.
- 372036 peripheral smears were cross examined for malaria. Of them 2092 slides were found with discrepancies. Feedback was given to concerning health care facility and corrective action was taken.

16.22.3 Technical Activities

Activities		Total
Review Meetings	257	
National Level Meetings	143	
State Level Meetings	379	

Training Programmes		
● In Malaria Microscopy	20	74
● CBHI related training	21	
● Other training	33	
Participants		
● In Malaria Microscopy	391	2054
● CBHI related training	419	
● Other training	1244	
Drug resistance studies	4	
Entomological survey	61	
Evaluation Studies	22	
Peripheral smears cross examined	372036	
Discrepancies	2092	

16.23 NATIONAL MEDICAL LIBRARY (NML), NEW DELHI

16.23.1 Introduction

National Medical Library (NML) provides valuable library information services to support the academics, research and clinical work of health science professionals in the country. It occupies important position in country's health care information delivery system.

The library remains open on 359 days of the year from March-October 09:30 A.M. – 08:00 P.M. & November–February (winter) 09:30 A.M. to 07:00 P.M. and on holidays & weekends from 9.30 A.M. to 6.00 P.M. Over 200 users visit the library every day for reference and consultation.

16.23.2 Urban Services

National Medical Library (NML) is known for its rich collection of Books, Serials, Reports, Monographic Publications and Bound volumes of journals. Library subscribed 1520 print medical journals and received 90 journals on gratis. Library procured 616 books and 167 serials amounting to Rs 48.58 lakhs and received 37 books on gratis.

The Library has a collection of over 1.50 lakhs books and over 6 lakhs bound journals. During the year it had 29630 visitors.

16.23.3 Document Delivery Service

A large number of requests for photocopy of articles are received from outside Delhi by post, e-mail and fax through Government as well as private purpose. Photocopies of about 60,000 copies (approx.) during the year were provided to medical research scholars across the country. No postal charges were taken for delivery of articles outside Delhi.

16.23.4 Online Public Access Catalogue (OPAC)

Servers and computers in the library are networked to form a LAN having an integrated Library Management Software Package – LIBSYS. About 42,500 records of books are now available through OPAC computer search by library users. Leased lines of 2 mbps and broad band of 2 mbps internet facility are available to provide access to full-text of the journals.

16.23.5 ERMED-India e-journal consortium

NML disseminated over 8000 (8000 x 5 =40,000 pages) photocopy of articles from medical journals per month to medical scholars across the country. The system involves sizeable photocopy machines + man power + maintenance of back volumes of medical journals, their shelving and repeated binding due to extensive use of journals.

In order to cope up with the problem, NML started ERMED (Electronic Resources in Medicine) electronic journal consortium since January 2008 for 39 organisations (28 ICMR Institutes + 10 DGHS Institutes/Medical Colleges + AIIMS), by spending Rs. 2.5 crores.

In 2015 NML proposed to subscribe 249 e-journals for ERMED consortium for 70 members at cost Rs.15 crores (approx.) for the calendar year 2016. The membership has been divided into Level I and

Level II (depending upon the size of the institute and number of end users) to make the consortia more cost effective.

16.23.6 Branch Library

National Medical Library maintains a branch library in Nirman Bhawan to cater to the library and information needs of staff and officers in the Directorate General of Health Services and the Ministry of Health and Family Welfare for reading purpose.

16.24 RURAL HEALTH TRAINING CENTRE, NAJAFGARH, NEW DELHI

Rural Health Training Centre, Najafgarh, New Delhi was set up in 1937. It was re-organized in 1954 to carry out to the functions of an Orientation Training Centre on regional basis to train the Rural Health Workers. The centre was reorganized as Rural Health Training Centre, Najafgarh in 1960.

16.24.1 Training

- Training to Medical Interns under ROME Scheme. Around 350 unpaid Medical Interns underwent rural posting from this Centre.
- Training to ANM 10+2 (Voc.): intake capacity of 40 students per academic session.
- Community Health Nursing Training to BSc/MSc/GNM: 1000 trainees were trained during the period.

16.24.2 Delivery of Health Services

Providing Primary Health Care, Preventive, Promotive and Curative Services to the low socio-economic group of people of 64 villages and 9 town of Najafgarh area through its three Primary Health Centres and 16 Sub-Centres including 24x7 Emergency Services in PHC Najafgarh. OPD Services were provided to 209360 patients upto 30.9.2015. During the same period 42 institutional deliveries were carried out.

16.24.3 Field Studies

Conducts field studies aspects of Health & Family Welfare, RCH, Nutrition, Health Education and Communicable Diseases and also provides field services for research work to the various health institutions, i.e. NIHAI, AIIMS in public health.

16.24.4 Other Activities

Upgradation of OT: Operation Theatre of this centre has been made fully air conditioned with the financial assistance of GNCT under NRHM.

Strengthening of ANM Training School: ANM Training School has been strengthened with the construction of two lecture halls in ANM School and construction of three rooms and attached toilets in Hostel. The funds were released by CDMO (SW) Govt. of NCT Delhi under NRHM.

All India Pulse Polio Programme: Pulse Polio Programme is being run at this centre with the coordination of GNCT/MCD for the last twenty years. Regional Vaccine Centre is set up in this centre and a Nodal Medical Officer is appointed to look after the activities.

DOTS Centre: A DOTS Centre of GNCT/MCD is set up in this centre to investigate and treat the TB patients. Patients are being referred for sputum tests to this centre by the MOs of the PHCs.

ICTC Centre: An ICTC Centre has been set up in coordination with GNCT/MCD for counselling and treating the HIV/AIDS patients.

Malaria Clinic: A Malaria Clinic of MCD is functioning in this centre. The patients are being referred to this clinic by the MOs for Malaria Tests.

RCH Camps: Two RCH camps were organized under PHC Najafgarh in Gopal Nagar and Qutab Vihar. Following services were provided by RHTC Najafgarh in the RCH Camps: (i) General OPD (ii) Antenatal care including immunization

(iii) Immunization to the children below five years of age (iv) Family Planning Services (v) Female Genital Tract Diseases (vi) Contraceptive Counseling (vii) Laboratory Investigations (viii) Drug/Medicine distribution to the patients (ix) Specialist services of Dental, Ophthalmology and Paediatrics.

16.25 LADY READING HEALTH SCHOOL, DELHI

16.25.1 Introduction

Established in 1918, Lady Reading Health School, Delhi is considered as one of the pioneer institutions and first of its kind for training Health Visitors. The School aims at providing training facilities to various categories of Nursing Personal in community health as well as M.C.H. and family welfare services through the attached Ram Chand Lohia MCH and Family Welfare Centre. In 1952 the Government of India took over the school and attached Ram Chand Lohia MCH Centre to it.

16.25.2 Activities

The Institution is imparting the following courses at present.

(i) Auxiliary Nurse-Cum-Midwife Course

This course is become under Indian Nursing Council and eligibility criteria for the course is 12th pass. This year 40 students have been admitted for session 2015-17. Total number of students are 80 i.e. 40 students for 2014-16 and 2015-17.

(ii) Certificate Course for Health Workers (Female) under multipurpose workers scheme

This course is of six months duration. Students are admitted twice a year i.e. in January and July every year. 34 students were selected for January, 2015 to June, 2015 batch, All the 34 candidates joined the course and all passed out in June, 2015. 35 candidates were selected for July, 2015 to December, 2015 batch and all the candidates joined the course.

(iii) Post Basic B.Sc (Nursing): Administrative approval of the Ministry has been granted for conducting post basic B.Sc (Nursing) at this institution.

(iv) Clinical Experience

The students are sent for their clinical experience in Rural and Urban Health Centre, different Hospitals like Safdarjung Hospital, RML Hospital, Lady Hardinge Medical College and Kalawati Saran Children's Hospital in Delhi and out of Delhi.

Students are also posted for Rural Field Experience at Rural Health Training Centre, Najafgarh & Rural Field Training Centre, Chhawla. Students are also posted to different MCH Centres of Municipal Corporation of Delhi in 2 Km radius of school.

(v) Ram Chand Lohia MCH and Family Welfare Centre

It provides field practice area for Urban Health experience for the students. It gives integrated Maternity and Child Health & Family Welfare Services to over 40,000 population. Weekly clinics are conducted like Antenatal Care, Post Natal Care, Well Baby Immunization, Family Planning Clinics, door to door services are also imparted to the community by students and staff. Exhibition and Health education are also organized in the community by MCH centre through students & staff.

Programmes like regular survey are conducted to find out the latest status of Immunization and number of target couple in the community under Ram Chand Lohia Maternity Child Health & infant welfare centre of Lady Reading Health School. The target couple detected during the period was 7054 which gives approximately 70% coverage of family planning and it is also found that there is 100% coverage of all immunization.

16.25.3 Other Activities

Health Education Programme is organized in the

school, centre as well as in the community by different approaches i.e. Film shows, Baby shows, Magic show, Cultural programme, Puppet show, Role play followed by group exhibitions, Speech competition.

ITF: Students and staff participated in the free health check-up camp at Indian International Trade Fare at Pragati Maidan organized by the MoH&FW.

Pulse Polio Programme: Students and staff participate in all the Pulse Polio programs organized in Delhi, Reproductive Child Health Programme and Perfect Health Mela etc.

SNA Activities: Regular SNA activities are done at LRHS as students extracurricular activities.

16.25.4 Budget

The total budget for the institution and welfare of staff is Rs.4,13,00,000 (Rs. Four crore thirteen lakh only) for the year 2015-16

16.26 HSCC (INDIA) LIMITED, NOIDA

16.26.1 Introduction and Functions

- HSCC has been incorporated under the Companies Act, 1956 in March, 1983 as Public Sector Enterprise under the Ministry of Health & Family welfare with an authorized Capital of Rs. 50 Lakhs and paid up Capital of Rs. 40 Lakhs. Authorized Capital and paid up capital has been increased from time to time. The Authorized Capital of the company as on 31.03.2015 is Rs. 500 Lakhs divided into 5,00,000 equity shares of Rs. 100/- each. The paid up Capital of the company as on 31.03.2015 is Rs. 240 Lakhs. It includes the Bonus Shares of Rs. 120 Lakhs and 80 Lakhs issued during the financial year 2003-04 and 2008-09 respectively, to existing shareholders out of its Reserves & Surplus. Since inception the total business of the Company has been managed without

any borrowing either from the Government or from other sources. HSCC has earned the distinction of maintaining its “Mini Ratna” Status from September 1999 onwards.

- HSCC is a multi-disciplinary renowned consultancy and procurement management service organization in the health care and other social infrastructure development sectors. Its service spectrum covers feasibility studies, design engineering, detailed tender documentation, construction supervision, comprehensive project management, procurement support services in all areas of civil, electrical, mechanical, information technology and auxiliary medical service areas. Its important clients include:
 - Ministry of Health & Family Welfare and its Hospitals / Institutes
 - Ministry of External Affairs and other Ministries
 - State Government and their Hospitals / Institutes
 - PSUs / Other Institutes such as ICMR, CSIR, ICAR, DOBT, PIMS, PGI Chandigarh, and other Business Associates.

HSCC being knowledge management consultancy company in health infrastructure sectors employs competitive and highly skilled cadres of Architects, Engineers, Economists, Chartered Accountants, Cost Accountants, MBAs and a pool of Consultants in the areas of Medicines and Corporate Planning, etc. HSCC enjoys a good working employees relationship at levels.

In order to develop into a world class Consultancy Organization, thrust is on diversifying and expanding the operations and also the client base of the company. Further, the Company has also been exploring business operations abroad through

Ministry of External Affairs.

The Company is an ISO 9001 accredited company. The Company has from time to time, taken various step to upgrade quality assurance system and degree of client satisfaction. The Company is “ISO 9001:2008” certified Company and has internal quality control as required for its various projects and assignments.

The Company follows good Corporate Government practices. Corporate Government Practices in the Company focus on transparency, integrity, professionalism, accountability and proper disclosure, Knowledge Management System, E-tendering, E-Procurement and Internal cum Concurrent Audit.

16.26.2 Summary of Major On-going Consultancy Projects

A. Architectural Planning, Design Engineering & Project Management Services

- Construction for AIIMS their OPD Blocks, Hostel Block Mother & Child Block, Paid Ward, Surgical Block within AIIMS Campus, Ansari Nagar, New Delhi
- Super speciality Block and Emergency Block under Redevelopment (Phase I) of Safdarjung Hospital, New Delhi
- Superspeciality Block at Dr. Ram Manohar Lohia Hospital, New Delhi
- Construction of All India Institute of Ayurveda (Under Department of Ayush, MOH&FW) at Sarita Vihar, New Delhi
- Comprehensive Re-development Plan for Lady Hardinge Medical College, New Delhi
- National Centre for Disease Control (NCDC), New Delhi.
- Construction of Housing & Hospital at AIIMS Raebareilly

- Construction of National Cancer Institute at 2nd Campus AIIMS, Jhajjar (Haryana)
 - Nursing college & National level Physiotherapy Workshop and substation at GMC, Patiala
 - Advanced Cancer Diagnostic, Treatment & Research Centre, Bhatinda
 - Kalpana Chawla Govt. Medical College, Karnal, Haryana
 - Construction of Satellite Centre at PGIMER, Sangrur (Haryana)
 - Construction of Guru Tegh Bahadur Diagnostic Centre at Govt. Medical College, Amritsar under PMSSY
 - Construction of Super Specialty Block, OPD & Academic Block at Kolkata Medical College, Kolkata Under PMSSY
 - Construction of AIIMS Housing Balance and phase II work at Bhubaneswar (Orissa) under PMSSY
 - Construction of 750 Bedded Hospital (Phase I – 400 bedded) for IIT Kharagpur
 - Vaccine processing facilities for Institute of Veterinary Biological Products, Pune.
 - Construction of Cancer Hospital at Cochin (Kerala)
 - National Institute of Unani Medicine (NIUM), Bangalore Construction of Regimental Therapy Block, Auditorium & Pharmacy building under phase - III works
 - National Institute of Animal Bio-technology, Hyderabad
 - Construction of Housing & Hostel for Dr. R.P. Medical College, Kangra.
 - Construction of Super speciality Block in Neuro Sciences at NIMHANS Bangalore.
 - Mother & Child - Metro Block within the campus of Bangalore Medical College for Bangalore Metro Rail Corporation
 - NRHM – Chhattisgarh, Uttar Pradesh, Kerala & Himachal Pradesh.
 - Construction of General hospital at Naharlagun (A.P)
 - Construction of OPD block at RIMS Imphal.
 - Construction of PG Gents & Ladies Hostel, UG Ladies Hostel, Nursing Hostel and Internee Hostel at Regional Institute of Medical Sciences (RIMS), Imphal (Package - I)
 - Construction of Bio - Safety Level-3 Laboratory at RMRC, Dibrugarh
 - Upgradation of LGBRIMH at Tezpur (Main Building) (Rs. 175.16 Cr.)
 - Construction of North Eastern Institute for Ayurveda & Homeopathy for NEIGRIHMS, Shillong
- ABROAD**
- 200 Bedded Emergency and Trauma Centre for Bir Hospital, Kathmandu, Nepal
 - District General Hospital at Dickoya, Sri Lanka.
- B. Procurement Management Services**
- Medical Equipment for Super Speciality & Emergency Block, Safdurjung Hospital, New Delhi.
 - Medical Equipment for Kalpana Chawala Government Medical College, Karnal, Haryana.
 - Drugs and Pharmaceuticals for Central Government Health Schemes
 - Procurement of Equipment for AIIA Sarita Vihar

- Medical Equipment for NEIGRIHMS, Shillong
- Medical Equipments for Bir Hospital, Kathmandu, MEA
- Supply of Medical Equipment for Srilanka
- Medical Equipments for Yangon & Sittway Myanmar

16.26.3 Financial Highlights

The Company recorded the highest ever Total Income, Consultancy Fees, Profit Before Tax, Profit After Tax, Revenue & Surplus and the Dividend.

The Total Income achieved was Rs. 63.85 Crore as compared to Rs. 60.45 Crore in the previous year posting 5.62% growth. The Company earned Consultancy Fees of Rs. 42.28 Crore as compared to 39.19 Crore for previous year resulting 7.88% growth.

The Company posted profit before tax of Rs.37.95 Crore as against Rs.37.14 Crore during previous year. Thus company achieved 2.18% growth in profit before tax for the year 2014-15. The Company earned Profit after tax of Rs.24.54 Crore as compared to 23.98 Crore earned in previous year posting 2.34% growth.

Company has recommended 205% dividend on paid up capital amounting to Rs. 4.92 Crore out of Current year's profit for the year 2014-15. This is the 31th consecutive year the company declared the dividend. Upon paying this year's dividend, cumulative dividend paid to Government of India would be Rs.40.42 Crore around 17 times of current paid up equity capital of the Company.

16.26.4 Corporate Social Responsibility:

During the year under review the company had made efforts towards Corporate Social Responsibility as under:

- In line with the DPE guideline the Company has contributed during the financial year

2014-15, Rs. 40.20 Lakhs (Rupees Forty lakhs Twenty Thousand Only) towards Contribution to "Clean Ganga Fund" and Blood Donation Camp.

16.27 HLL LIFECARE LIMITED

16.27.1 Introduction

HLL Lifecare Limited (HLL), under the administrative control of Ministry of Health & Family Welfare, was incorporated in the year 1966. HLL's first plant began operations on 5th April, 1969 at Peroorkada in Thiruvananthapuram District in the State of Kerala, in technical collaboration with M/s Okamoto Industries Inc. Japan. Today, with seven manufacturing plants, HLL has grown into a multi-product, multi-unit organisation addressing various public health challenges facing humanity.

Now, HLL is a Mini Ratna, Schedule B Central Public Sector Enterprise. HLL is the only company in the world which manufactures and markets such a wide range of contraceptives. Today, HLL has a capacity to produce 1.9 billion condoms annually, making it one of the world's leading condom manufacturers, accounting for nearly 10 percent of the global production capacity.

With a vast array of innovative products, services and social programmes to meet the country's healthcare needs, HLL Lifecare Limited is firmly on track, with its motto of 'Innovating for Healthy Generations'.

16.27.2 Financial Results: 2014-15

The Company's financial performance, for the year ended March 31, 2015 is summarised below:

(in Lakh)

Financial particulars	Stand alone		Consolidated	
	2014-15	2013-14	2014-15	2013-14
Revenue from operations (gross)	106438.70	94726.54	111363.76	95421.00
Excise duty	633.74	558.38	810.69	563.04

Revenue from operations (net)	105804.96	94168.16	110553.07	94857.96
Other income	398.37	1200.67	455.49	1189.49
Total income	106203.33	95368.83	111008.56	96047.45
Profit before tax	3752.79	3621.08	3903.12	3627.69
Tax expense	597.65	1050.31	589.22	1048.84
Profit for the year	3155.14	2570.77	3313.90	2578.85
Dividend (including tax on distributed profits)	465.87	452.86	465.87	452.86
Transfer to General Reserve	2689.31	2081.11	2801.22	2086.44

HLL achieved the highest ever revenue from operations of Rs. 1,058.04 Cr. during 2014-15 from Rs. 941.68 Cr. in the previous year. Earnings before Interest, Tax, Depreciation and Amortization (EBITDA) increased by 9.71% to Rs. 85.99 Cr. against Rs. 78.73 Cr. in previous year 2013-14. Profit before Tax (PBT) was Rs. 37.53 Cr. vis-a-vis Rs. 36.21 Cr. in the previous year. Profit after Tax (PAT) was Rs. 31.55 Cr. vis-à-vis Rs. 25.71 Cr. in the previous year 2013-14. Net worth has grown to Rs. 426.28 Cr from Rs. 399.39 Cr. in the previous financial year resulting in a growth of 6.7%.

16.27.3 Physical Performance: 2014-15

A review of HLL's manufacturing activities is given below:

Sl. No.	Product	Unit	Installed Capacity	Quantity Manufactured (Previous year)	Capacity utilization (%)
1	Condoms	M.pcs	1801.00	1819.00 (1638.00)	101.00
2	Blood Bags	M.pcs	12.50	12.52 (11.05)	100.14
3	Suture	L. Doz	6.00	1.74 (1.42)	29.12
4	Cu- T	M.pcs	5.50	4.87 (5.12)	88.63
5	Steroidial OCP	Million cycles	98.66	41.25 (32.25)	41.81

6	Non-Steroidial OCP	Million Tablets	30.00	38.81 (28.49)	129.37
7	Sanitary Napkin	M.pcs	315.00	126.44 (97.60)	40.14
8	Pregnancy Test Card	M.pcs	26.00	13.67 (17.75)	52.58

16.27.4 Subsidiaries and Joint Ventures

(i) HLL Biotech Limited (HBL)

HLL Biotech Limited (HBL), the wholly owned subsidiary company has completed third year of its incorporation on 12th March 2015. The construction of state-of-the-art Integrated Vaccine Complex (IVC), a project of National Importance, at Chengalpattu near Chennai, for manufacture and supply of vaccines primarily for the Universal Immunisation Programme (UIP) of Government of India, is in the advanced stage of completion. Engineering works such as Civil, Electrical, Mechanical, HVAC, Modular, Water Treatment System, DG Works, ETP/STP, Sub-station & procurement of long lead process engineering equipment etc. are progressing as per the Project Implementation Schedule.

HBL initiated business operations on 30th January 2015 with the launch of vaccine brands 'PENTAHIL' (for Pentavalent) and 'HIVAC-B' (for Hepatitis-B) under a loan license agreement.

HBL has successfully completed in-house technology development for Rabies Vaccine. The Rabies Vaccine developed by the company, at TICEL Biopark was tested for one year Real Time Stability during May 2014 at NCLAS, Hyderabad and the test confirms the required stability of HBL Rabies vaccine. The two year Real Time stability is scheduled after May 2015 at Pasteur Institute of India, Coonoor.

HBL has also initiated Lab Scale Development of Hib Vaccine at TICEL Biopark, with the clinical isolates/strains being sourced from Christian Medical College (CMC), Vellore.

HBL selected BCG-VL, Guindy as technology partner for taking seed and technology for BCG Vaccine. Similarly technology selection for development & manufacturing of Measles, JE and Pentavalent Vaccine formulation are in progress.

HBL has set targets for mechanical completion of the IVC Project and start of process validation by February 2016, production of trial batches of Vaccines by September 2016 and Commercial production to commence December 2017.

(ii) Goa Antibiotics & Pharmaceuticals Ltd. (GAPL)

During the year 2013-14, HLL has acquired 74% of paid-up share capital of M/s. Goa Antibiotics & Pharmaceuticals Ltd. (GAPL), a Public Sector Undertaking of Government of Goa, for enhancing the Pharma manufacturing capabilities of HLL in line with the growth targeted by HLL in Pharma sector.

During the year under review, the revenue from operations of GAPL has grown by 22.58% as compared with the previous year. GAPL is a Pharmaceutical formulation manufacturing Company and manufactures drugs in the range of Allopathic, Ayurveda and Homeopathic systems of medicine. Majority of the formulations are supplied to the State Government institutions/hospitals. GAPL being the only pharmaceutical formulation manufacturing company under the Ministry of Health and Family Welfare, Govt. of India, can play a strategic role in the national health scenario. The Company plans to focus mainly on three areas namely (i) Generic Drugs (ii) Over the Counter (OTC) drugs and (iii) Contract manufacturing to scale up business to synchronize with the Corporate Vision 2020 plan of HLL.

The authorized and paid up share capital of GAPL is Rs. 25 Cr. and Rs. 19.02 Cr. respectively as on 31st March 2015. The shareholding of HLL Lifecare Limited (holding company) in GAPL is

74% and balance 26% is held by EDC Limited.

(iii) HLL Infra Tech Services Ltd. (HITES)

HITES was incorporated on 3rd April 2014 as a wholly owned subsidiary of HLL Lifecare Limited to carry on the business of providing services viz., Infrastructure Development, Facilities Management, Procurement Consultancy and allied services, foreseeing the enormous scope of business in these segments. All ongoing projects were being managed by HLL during the initial year; accordingly the Company has not generated any revenue during the period under review. HLL plans to sub-contract the projects to HITES (both ongoing and future projects) with the consent of the clients concerned. Thus, the Company is expected to generate revenues from the year 2015-16.

The Central Government has proposals to set up a number of Rural Health services Centers, AIIMS like institutions, new Medical Colleges, National and Regional Institutes of Nursing & Paramedical Science etc. There are enormous opportunities for investment in healthcare infrastructure in both urban and rural India. About 1.8 million hospital beds will be required by the end of year 2025. Physical infrastructure is expected to play a vital role in India's journey towards higher growth in the coming few years and improvement in social infrastructure (especially health, sanitation and education) will help the country to move towards inclusive growth. HITES would be primarily focusing on healthcare infrastructure development and allied fields and hence the aforesaid opportunities are expected to increase the business prospects of HITES in the coming years.

(iv) Lifespring Hospitals Private Limited

During the year 2014-15, the business income of LifeSpring Hospitals (P) Ltd (LSH), the 50:50 joint venture between HLL Lifecare and Acumen Fund, had grown by 22.50% as compared to 2013-14. LSH has facilitated delivery of 7618 babies

during the year under review. Presently the JV is running a cluster of 12 hospitals in Hyderabad. Among these, 1 hospital has completed 7 years, 2 have completed 6 years, 3 have completed 5 years and the remaining 6 have completed 4 years of operation as on 31-03-2015. The Company recorded a cash profit of Rs. 52.59 lacs during 2014-15.

16.27.5 Hindustan Latex Family Planning Promotion Trust (HLFPPT)

HLFPPT is a not-for-profit professional health service organization set up by HLL Lifecare Ltd, carried out projects under the following strategic areas:

- Social Marketing and Franchising;
- Prevention, Care and Support for HIV and Technical Assistance to NRHM;
- Knowledge Management and
- Engaging PSUs and Private Corporate on Corporate Social Responsibility Project.

HLFPPT has been rendering support in implementation of Reproductive and Child Health, HIV and AIDS Prevention, Care and Support Programmes in partnership with the Ministry of Health & Family Welfare, Government of India, several State Governments and International Development Agencies.

The achievements during the year are summarized below:

(i) Social Marketing

In 2014-15, National AIDS Control Organization (NACO) awarded the Targeted Condom Social Marketing Program to HLPPT for implementation in six States namely Andhra Pradesh, Bihar, Delhi, Madhya Pradesh, Uttar Pradesh & Uttarakhand. The sales achieved in these States are: 244.69 million pieces of condoms in UP & Uttarakhand, 60.12 million pieces of condoms in Bihar, 64 million pieces of condoms in MP, 23 million pieces of condoms in Delhi and 34 million pieces of condoms in AP.

During fiscal year 2014- 2015, HLPPT could provide quality Family Planning (FP) services at a standardized price in the States of Bihar & Odisha.

(ii) Social Franchising:

- Uttar Pradesh: The Merry Gold Health Network (MGHN) model is a Social Franchising model established across 38 districts of Uttar Pradesh to provide high quality affordable MCH and FP services. In 2014-15 under MGHN in Uttar Pradesh, 80 Merry Gold Hospitals, 180 Merry Silver Clinics were operational in 38 districts with 9,516 Merry Tarang members at remote villages/slum locations to provide information, counselling and referral services.
- Rajasthan: Under Merry Gold, the project on Access to Maternal Health Products and Services is operational in 19 districts of Rajasthan. During the year, MGHN grew to include 40 Franchisees, out of which 21 are Urban and 19 are Rural. After scrutiny, 1,286 Merry Tarang members have been selected.
- Andhra Pradesh: Rolled out in 2014-15, 11 Merry Gold Hospitals are operational in 8 districts with 368 community level volunteer or Merry Tarang partners at remote village locations to provide information, counselling and referral services. In 2014-15, total services provided to the network include: 677 Outpatient Services for ANC, 91 Deliveries, and 5 Hysterectomy Services.

(iii) HIV Programming and Technical Support in Sexual and Reproductive Health (2014-15)

Technical Support Group (TSG) for Condom Promotion essentially functions with an intent to ensure continuous increase in the demand for socially marketed condoms, strengthen logistics, availability & accessibility and reduce wastage of free condoms by working closely with NACO.

(iv) Knowledge Management

HLFPPT has established knowledge management unit with the objective of documenting learnings in social marketing, various projects in HIV/AIDS and RCH for conducting research related to reproductive health and undertaking capacity building under NACP-IV, NRHM and FP 2020.

(v) Corporate Social Responsibility

HLFPPT's CSR vertical is responsible for creating a sustainable source of funding for HLFPPT's projects and programs and position the organization as a preferred partner to corporate for end-to-end CSR solutions. Going forward in 2014-2015, CSR partnerships with the corporate sector increased by adding new programs.

The new corporate are Suzlon Energy, Jindal Steel & Power Limited, DLF, Essar Steel and Essar Oil & Gas. HLFPPT has established networking for CSR business development with the following industry bodies and their state counterparts:

- CII (Delhi, Chennai, Lucknow and Raipur)
- FICCI (Delhi)
- ASSOCHAM (Delhi)
- PHDCII (Delhi)

HLFPPT has active liaisoning with national and international organizations which have core focus on CSR. These include:

- United Nations Global Compact
- IICA.

