

## Chapter XI

### MEDICAL AND PUBLIC HEALTH SERVICES

Consequent on the Reorganisation of States, the newly integrated areas of Karnataka state were lacking in medical and health service facilities especially, in rural and border areas of the state. To overcome this, the State Government rigorously started implementing various national and state health programmes to improve the prevailing health services in the state in a short span. The policy of expansion and successful implementation of comprehensive public health service schemes has enabled the state to occupy a unique place in the country.

The Department of Health and Family Welfare Services implements various National and State Health programs of Public Health importance and also provides comprehensive Health Care Services to the people of the State through various types of Health and Medical Institutions. Health Care Services are provided through the implementation of: Rural Health component of the Minimum Needs Programme, Curative Services, National Rural Health Mission (NRHM), National Leprosy Eradication Programme, National Tuberculosis Control Programme, National Programme for Control of Blindness, National Vector Borne Control Programme (NVBDCP), National Guinea Worm Eradication Programme, Prevention and control of Communicable Diseases like Diarrhoeal diseases, Kyasanur Forest Diseases, etc., Health Education, Training and School Health Services, Nutritional Services, National Iodine Deficiency Disorder Control Programme, Laboratory Services, A major Externally Aided Project, Karnataka Health Systems Development & Reforms Project.

#### Selected Indicators of Health Facilities in Karnataka

Sl. No	Physical Indicators	Unit	2006-2007	2007-2008
1	No. of Hospitals			
	District Hospitals	No	24	26
	Other Hospitals	No	42	42
2	Community Health Centres (Cumulative)	No	301	325
3	Primary Health Centres (Cumulative)	No	1679	2193
4	Primary Health Units	No	553	-
5	Sub Centres	No	8143	8143
6	Eligible Couples	No in Lakh	91.32	85.24
7	Couples Protected	No in Lakh	55.13	56.67
8	Proportion of Couples protected	Per cent	60.38	66.00
9	Immunization (Measles)	No in Lakh	10.43	10.40

Source: Directorate of Health and Family Welfare Services.



*Victoria Hospital, Bangalore*



*Minto Eye Hospital, Bangalore*

### Departmental Set up

The Commissioner, Health & Family Welfare, co-ordinates and monitors the working of various programs and project wings of the department. The Department provides Services to the Community by implementing various National and State Health Programmes in the State. The National Rural Health Mission is headed by the Mission Director (NRHM). The Karnataka Health System Development & Reforms Project (KHSDRP) is headed by Project Administrator who is also the Mission Director (NRHM). The Director of Health and Family Welfare Services is assisted by Additional Directors, Joint Directors, Demographer, Chief Accounts Officers cum Financial Adviser and Chief Administrative Officer to assist in all matters pertaining to Finance, Accounts and Administration of the Department respectively. There are Deputy Directors to assist the Joint Directors. During the year 2007, two new Districts namely Ramanagara and Chikkaballapur were formed and new Health Offices were established. The taluk level hospitals of these districts will be upgraded as District Hospitals.

At the District level, there are District Health and Family Welfare Officers assisted by the District Leprosy Officers, District RCH Officer, District Malaria Officers, District TB Officers and District Surveillance Officer. These officers are responsible for implementing and reporting various National and State Health Programmes including RCH and MCH Services. The District Surgeons of the District Hospitals are responsible for providing curative and promotive services including referral services. At taluk Level, there are 176 Taluk Health Officers and they are responsible for prompt and effective implementation of various National and State Health Programmes in their taluks. At Primary Health Centre Level, the Medical Officers of Health are similarly responsible for the implementation of various National and State Health Programmes including Family Welfare Programme and MCH Services. The State has a network of 8143 Sub Centres, 2195 Primary Health Centres, and 323 Community Health Centres throughout the State, for Primary Health Care.

**Urban Health Services:** The District Hospitals provide preventive, promotive and curative services. Major Hospitals, Teaching Hospitals and Specialized Hospitals provide Secondary level Services. The details are as follows:

Hospitals	No. of Institutions	No. of Beds
District Hospitals	26	10045
Urban Primary Health Centres	17	102
Other Hospitals	42	10461

Each District Hospital has got the following Specialties:

1. Medicine
2. Surgery
3. Obstetrics and Gynaecology
4. Paediatric
5. Orthopaedic
6. Ophthalmology
7. Ear Nose and Throat
8. Skin and STD
9. Radiology
10. Anaesthesia
11. Dental
12. Psychiatry
13. Blood Bank

The Specialist Departments in the District Hospitals are catering to the needs of the patients coming directly as well those referred from small peripheral rural centers and moffusil hospitals. Emergency and Casualty Departments work round the clock. The existing Blood Banks are being strengthened in all the District Hospitals and all Major Hospitals of the State. AIDS screening facility is being developed in District Hospitals and Major Hospitals in a phased manner. Radiology services are available in all the District Hospitals and in all Taluk level hospitals and Community Health Centres. Epidemic Diseases Hospitals are functioning at Bangalore, Mysore and KGF. These Hospitals are meant for treating epidemic diseases like Cholera, Gastroenteritis, Diphtheria, Tetanus, Whooping Cough, Rabies, Measles, Chicken Pox and other infectious diseases.

**Rural Health Service:** Primary Health Care is one of the items under the restructured 20 Point Programme. The State is following the National Pattern of three tier Health Infrastructure in rendering Primary Health Care by establishing health institutions viz., Sub Centres, Primary Health Centres and Community Health Centres. Sub Centers: One Sub Center with a Female / Male Health Worker is established for every 5000 population in plain areas and for every 3000 population in Hilly and Tribal areas. It is the closest point between Primary Health Care System and the Community. There are 8,143 Sub-Centres in the State. Primary Health Centres: One Primary Health Center is established for every 30,000 population in plain and for every 20,000 Population in Hilly and Tribal areas. PHC is the first contact point between village community & the Medical Officers. It is manned by a Medical Officer supported by 14 Para-medical & other staff. It acts as a referral unit for 5-8 Sub-Centres. It has 6 beds for in patients. The activities of PHC involve curative, preventive, promotive & Family Welfare services. There are 2195 PHCs in the State. The increase in Primary Health Centres is due to the up-gradation of 516 Primary Health Units

**Community Health Centres:** One Community Health Centre is established for one lakh twenty thousand population or one out of four Primary Health Centres is to be made functional as referral institution for the rural Population. CHCs are manned by four medical specialists i.e., Surgeon, Physician, Gynaecologist, Paediatrician and one Dental Surgeon supported by 21 paramedical and other staff. CHCs in taluk headquarters have 100 beds. There are 323 Community Health Centres in the State.

**Family Welfare / Mother And Child Health Programme** (Reproductive and Child Health Programme): Family Welfare Programme is renamed as Reproductive and Child Health (RCH) from Oct.1997 and it is being implemented in the State as a 100% Centrally Sponsored Scheme. The objective of the programme is not only to have stabilization in population but also to improve the health of Mother and Child including interventions against RTIs and STIs. Karnataka deserves a special mention in the history of Family Planning

Programme due to the pioneering steps taken as early in 1930's by the Maharaja of Mysore by ordering establishment of Birth Control Clinics one at Vani Vilas Hospital, Bangalore and the other at Cheluvamba Hospital, Mysore. Further, in the implementation of the programme, Karnataka has been fairly successful, scaling more heights than many a major state. In many of the demographic indicators, Karnataka has bettered the national average. The important goals of the Family Welfare and MCH Programmes (RCH Programme), as set in the National Population Policy 2000 by 2010 are as follows: Reduce infant mortality to below 30 per 1000 live births, Reduce maternal mortality to below 100 per One lakh live births, Promote vigorously the small family norm to achieve replacement levels of TFR, address the unmet needs of basic reproductive and child health services, supplies and infrastructure.

Karnataka State has credited itself extremely well in the implementation of the Reproductive and Child Health Programme. More than 2.47 crore births have been averted since inception. The other notable achievements are given here: Fall of crude birth rate from 41.6 in 1961 to 20.1 in 2006, Decline of crude death rate from 22.2 in 1961 to 7.1 in 2006, Reduction in infant mortality rate from 95 in 1971 to 48 in 2006, Decrease in General Fertility Rate in rural areas from 154.9 in 1972 to 90.1 in 1999 and in urban areas from 124.9 to 67.8. The findings of the National Family Health Survey -III, (2005-06), reveal that Karnataka has inched forward to a total fertility rate of 2.1, an infant mortality rate of 43. The effective couple protection rate has gone up to 60.60 by 2005-2006 as per official reports.

**Community Needs Assessment Approach:** The success of the programme (Reproductive and Child Health Services) and the attainment of goals can materialize faster only if it becomes a people's programme. In due recognition of this, a paradigm shift has been ushered in, according to which the needs of the community are assessed and incorporated in the action plans formulated for implementing the programme. Now planning for RCH services has started at the sub-centre level and goes up to centre level. In other words, instead of the previous "Centre to sub centre" approach, we have the "sub centre to centre" approach now. In this process, quality of service also gets sufficient priority and ensures desired impact. Implementation of special programmes like "Sterilization-bed Scheme", and Medical Termination of Pregnancy Act are contributing to fertility control and population stabilization. During 2007-2008, up to the end of December - 2007 - 15,067 unwanted pregnancies were medically terminated.

**Reproductive And Child Health Services Programme:** The Family Planning Programme has crossed several milestones absorbing new schemes and interventions like Expanded Immunization Programme (E.I.P), Universal Immunization Programme (U.I.P), Child Survival and Safe Motherhood, (C.S.S.M), Oral Rehydration Therapy (ORT). It is with the "REPRODUCTIVE AND CHILD HEALTH SERVICES" Programme that it is entering a totally new era with a new name, look and thrust. In deference to the decisions of the International Conference on Population and Development, held at Cairo in

1994, the emphasis is now on providing quality – conscious Reproductive and Child health Services more effectively by encouraging the community voluntary involvement for achieving faster result rather than on mere Family Planning. The RCH Programme encompasses Fertility Regulation, Child Survival and Safe Motherhood, management of Reproductive Tract Infections and Sexually Transmitted Infections and a life cycle approach to women’s reproductive health problems. This project is externally assisted and has been shaped as a 100% centrally sponsored scheme. Apart from services, its significant components are civil works, hiring the services of consultants, operationalizing FRUs, appointing contractual staff for promoting institutional deliveries, provision of equipment and evaluation of the services and facilities.

Reproductive and Child Health Programme (RCH) Phase I was completed during 2004-05. RCH II is taken up from April – 05 to March 2010 under National Rural Health Mission. The main objectives of RCH II which is part of NRHM are to give importance towards Mother and Child Health Care, Janani Suraksha Yojane, Adolescent Health, Urban Health, Tribal Health, NGO, Family Welfare Services and Infrastructure Strengthening.

Department Of Ayush ((Ayurveda, Yoga & Naturopathy, Unani, Siddha And Homoeopathy)

The Department of AYUSH is rendering Medical relief to the public in Ayurveda, Unani, Yoga, Naturopathy and Homoeopathy Systems of Medicine and regulates Medical Education, Drugs Manufacture and practice of Medicine in these systems. The Director of AYUSH is being assisted by one Chief Administrative Officer, one Drug Licensing Authority , one each Deputy Directors for Ayurveda, Unani, and Homoeopathy, one Administrative Officer and one Accounts Officer at the Directorate level and Deputy Directors at Bangalore, Mysore, Belgaum and Gulbarga, AYUSH Officers in Shimoga, Bijapur, Hassan, Kolar, Tumkur, Bidar, Mandya, Dakshina Kannada, Bellary, Dharwad, Ramanagara, Chikkaballapura and 12 DHO’s, at Chamarajanagar, Kodagu, Raichur, Koppal, Uttara Kannada, Udupi, Chikamagalur, Chitradurga, Davanagere, Haveri, Gadag & Bagalkot at the District level.

There are 103 hospitals with 1545 bed strength and 659 dispensaries functioning in this State as on 31.12.2007. The system wise break up is given here under:-

Sl No.	Systems	Government Hospitals		No. of dispensaries
		No. of Hospitals	No. of Beds.	
01.	Ayurveda	76	1167	561
02.	Unani	11	202	50
03.	Homoeopathy	10	135	43
04.	Nature Cure	03	26	05
05.	Yoga	03	15	-
	Total	103	1545	659

**Training of MBBS doctors in the field of Anaesthesia and Obstetrics and Gynaecology:** To reduce the Maternal Mortality Rate and Infant Mortality Rate in Karnataka, Government has taken steps to fill up the vacant posts of Specialists in Anaesthesia and Obstetrics. To overcome the shortage of specialists, MBBS doctors who are in Government service will be trained in OBG (16 weeks) and Anaesthesia (18 weeks) to give Emergency Obstetric Care Services. A core group was formed under the chairmanship of Commissioner, Health & Family Welfare services and the members are from Government and established private Medical colleges and FOGSI in Karnataka state. The First meeting was held on 28/6/06. 11 Medical colleges were identified for training of MBBS doctors. 6 Medical colleges were identified in the first phase. Orientation training programme in Anaesthesia for faculty of Anaesthesia department from all the 6 medical colleges was done on 22nd December 2006 by the HOD, Anaesthesia, AIIMS, New Delhi and Asst. Commissioner, (Maternal Health), Government of India.

Bangalore Medical College is recognized as a training institute for giving training in OBG. FOGSI has taken the responsibility for upgrading BMC as Training institute. So far, 192 MBBS doctors (81 in anaesthesia, 111 in OBG) have given consent for training. These trained doctors will be able to give emergency obstetric care, spinal Anaesthesia and do caesarian sections in identified FRUs. These trained doctors will be posted to identified FRUs.

**Urban health Centers:** Urban health centres are established to improve the health status of the urban poor community, by the provision of quality integrated primary health care services. They have the objective to give primary health services in urban slums and un-served areas like antenatal care, postnatal care, referral for institutional deliveries, immunization, services under national programmes like DOTS, NMEP etc, family planning including IUD/NSV. So far, as per the Government of India guidelines 34 urban health centers are identified in Karnataka State, in the towns / cities with a population 1-10 lakhs, which have been approved by Government of India. These centers will be started in the phased manner. The staff for these centers will be appointed on contractual basis.

**ASHA (Accredited Social Health Activist):** Under NRHM & RCH II Health Programme's like decrease in Maternal and Child deaths, institutional Deliveries etc., to work between Community and Health Centres 11,200 ASHA Women Workers are appointed for every thousand population. They are identified in 9 districts of the State (1. Mysore 2. Chamarajnagar 3. Kodagu 4. Bijapur 5. Bagalkot 6. Raichur 7. Gulbarga 8. Koppal & 9. Bidar)

**Pulse Polio Immunization Programme (PPI):** With the main objective of eradication of Poliomyelitis by 2000 AD, the Pulse Polio Programme is being implemented in the State since 1995-96 continuously. Every year, Polio drops

were administered to the children below the age of five years in two rounds. During February 2008, 73.56 lakh children aged less than 5 years were administered oral Polio Vaccine.

### **Vital Statistics**

The Director of Economics and Statistics is the Chief Registrar of Births and Deaths. The Joint Director, the Deputy Director and Assistant Directors are in charge of Vital Statistics, as the Joint Chief Registrars. The Registration of Births and Deaths Rules 1970 came into effect from 1971 in the State. The Chief Registrar is the Chief Executive Authority in the State for implementing the Act.

The total number of births and deaths, are 7,80,496 and 209,873, respectively in 1990-91. And in 1998 the total number of births and deaths is 11,07,096 and 4,11,700 respectively. The crude birth and death rates for the year 1990-91: 27.9 and 8.7 for 1991-92: 27.8 and 8.1; for 1992-93: 26.8 and 9.0; and for 1993-94: 26.8 and 9.0, respectively, and the infant mortality rate for the same period was 80, 71, 77, 77 (for 1000 infants). For 1998-99 and 1999-2000 the crude birth and death rates are 22, 7.9 and 21.5, 7.5 respectively and the infant mortality rates are 58 and 50 respectively.

### **Indian System of Medicine**

The Ayurveda system of medicine was in practice from very early times. Several Ayurvedic Vaidyas enjoyed royal patronage. In every village there were at least one or two families capable of offering relief to patients with the help of herbs. Restricted to towns the Unani System of medicine was introduced in around the 14th century, during Muslim rule. The Unani physicians known as Hakeems enjoyed the confidence of the Muslim rulers as well as the general public. The Bahmani King Ahmed II (1436-53) ordered the construction of a splendid Shara Khana (hospital) at Bidar which attracted patients from all communities. Homeopathy, Yoga, Naturopathy and Siddha systems are also in practice.

A Separate Directorate for Indian System of Medicine was created in 1972. Prior to 1972, the system was under Health Department. Ayurveda, Unani, Homeopathy, Yoga, Naturopathy and Siddha Systems come under Indian system of medicine. There were 34 hospitals with 901 bed strength and 436 dispensaries, three Government Ayurvedic Colleges, 39 private Ayurvedic Colleges, one Government Unani College at Bangalore and one Nature Cure Yoga College at Bangalore during 1992-93 in the State. There is a Nature Cure College at Ujire near Dharmasthala.

As on 31-12-2003 there are 103 hospitals with a provision of 1,535 Beds and 639 dispensaries in the state. The systemwise break up is given here below:

Name of the system	Hospitals	No. of Beds	Dispensaries
Ayurveda	75	1147	507
Unani	11	202	45
Homeopathy	10	135	25
Nature Cure	03	26	05
Yoga	03	15	-
Siddha	01	10	-
<b>Total</b>	<b>103</b>	<b>1535</b>	<b>582</b>

There are 19 Ayurvedic Hospitals at District Level, of them Sri Jayachamarajendra Institute of Indian Medicine Bangalore, Government Ayurvedic Medical College Mysore and Government Taranatha Ayurvedic Hospital Bellary are teaching hospitals.

### Unani

There are 11 Unani Hospitals and 51 dispensaries in the state. The Unani wing of 100 beds attached to SJIIM Bangalore is serving as a Teaching Hospital for government Unani Medical College, Bangalore. 20 beds are earmarked in Government Ayurvedic Medical College and Hospital, Mysore. 10 bedded Unani wings are functioning at Bidar, Tumkur, Shimoga, Bijapur, Raichur and Ramanagara. A 10 bedded Government Unani Hospital is functioning at Bellary and Two six bedded Unani hospitals are functioning at Manvi and Timmapur Rangampet.

A clinical research unit in Unani has been functioning at SJIIM Bangalore by Government of India.

### Homeopathy

Government Homeopathy Hospital is functioning at Bangalore with 40 beds as a Teaching Hospital to Government Homeopathy Medical College, Bangalore, Ten bedded Homeopathy hospitals are functioning one each at Mysore, Hassan, Shimoga, Bellary, Bijapur, Kolar and Mangalore. One 15 bedded Homeopathy wing is functioning at Gulbarga. And the Homeopathy dispensaries are functioning at the rural areas of the state.

**Nature cure:** Two ten bedded Nature Cure Hospitals are functioning at Bangalore and Bellary. One six bedded Hospital is functioning at Mysore. There are five Nature Cure dispensaries in the state.

**Yoga:** Five beds Yoga wings are provided each at SJIIM Bangalore, Ayurveda Medical Hospital, Mysore and Bellary to provide treatment in Yoga therapy. Further Yoga camps are being conducted.

### Communicable Diseases

**Cholera:** Diseases like Cholera, diarrhoea and gastroenteritis are serious intestinal diseases which become fatal if timely treatment is not given. In Karnataka State, eight districts namely Belgaum, Bellary, Bijapur, Chitradurga,

Dharwad, Bidar, Mysore and Gulbarga have been declared as endemic for Cholera. Cholera Combat Teams take up investigation, treatment and containment on spot in each of the above districts. During 1992-93 the attacks and deaths due to cholera were 401 and 14 respectively and the figures for gastro enteritis for the same period were 15,262 and 608. The number of anti-cholera inoculations administered was 12,50,316. But with the provision of drinking water through borewells on a large scale, the incidence of cholera has declined during the last one decade. But industrial pollution has contributed to its appearance in many new areas like Mysore district. During the year 1999 there are 134 cholera attack cases noticed and three deaths occurred. For the same period the incidence of of Gastroenterities were 17,743 and 126 deaths caused due to gastroenteritis. Bangalore City also registered several cases in early 2001.

**Plague:** Plague is primarily a disease of some rodent and human infection on an appreciable scale. Plague appears in two forms (1) bubonic and (ii) pneumonic, the latter being more severe of the two. Sulphathiazole and Sulphapyridin have been found to be useful in the treatment of the disease. Plague is not of recent origin and dates from 1886 when it was introduced in some parts of Bombay Presidency from China and spread rapidly over a large part of the country. During 1897, the disease took a heavy toll. In 1898 Bangalore City alone had 4,472 deaths. Further the disease spread to Kolar, Tumkur and Mysore districts. In Bombay State, it took a heavy toll killing nearly 30,000 in Dharwad district alone in 1898 and the disease persisted killing thousands for almost two decades in Dharwad. After the advent of state-wide insecticidal spray operations under the National Malaria Control Programme, Plague declined. There have been no cases of plague in recent years. The plague surveillance unit was founded in Bangalore in 1975 and became functional in 1976. Once again in 1994, Pneumonic plague appeared in Maharashtra spread to Karnataka also.

**Tuberculosis:** All the district headquarters of the state are having Tuberculosis Control Centres besides additional centres at Sira, Hospet, Sirsi, Yadgir and Koppal. The Central Programme was fully integrated with the general health service in 1992. There were 10 TB Hospitals, 172 X-ray Centres, 805 Microscopic Centres, 840 referral centres and one aftercare and rehabilitation training centre at Bangalore. In 1992-93 as many as 68,109 tuberculosis cases were detected, 11,89,401 were administered BCG inoculations. During the year 1999-2000, 1,87,936 sputum examined and 48,086 T.B. cases were detected and 11,75,688 were administered BCG inoculations. During 20-3-04 (up to end of December 2003) 2,45,372 sputum examined and 46,212 new T.B. cases were detected.

## National Leprosy Eradication Programme

Leprosy is a public health problem and also a social problem in the State. National Leprosy Elimination Programme (NLEP) was conceived of as a Control Programme and launched in 1954-55. Its main thrust was early detection, sustained and regular treatment of all patients with 'Dapsone'. This had some limitations like, treatment was long leading to irregular treatment and this was leading to development of drug resistance. After the inception of Multi-Drug Treatment (MDT), the prevalence rate which was 50 per 10,000 populations during 1986 was brought down to 0.61 as on 31st December 2007. Remarkable achievement was made in prevention of deformity, i.e. the deformity rate was brought down to 0.87 of the new case detection. As on today, the goal of elimination i.e., prevalence rate less than one has achieved in 24 districts (Chitradurga, Shimoga, Tumkur, Chikamagalur, Dakshina Kannada, Hassan, Kodagu, Bangalore Urban, Bangalore Rural, Belgaum, Davangere, Bagalkot, Haveri, Gulbarga, Uttara Kannada, Gadag, Bidar, Udupi, Mandya, Raci hur, Bijapur, Dharwad, Kolar, Chamarajanagar and Mysore) and two districts has prevalence rate between 1-2 (i.e., Bellary, Chamarajnagar and Koppal).

Four Modified Leprosy Elimination Campaigns were conducted to detect hidden and left out cases, actively and passively during the years 1998-2002. 18,911 New Cases were detected and treated. Prevention of Deformity (POD): Orientation Training Camps for Prevention of Deformity have been conducted for Medical Officers and Health Workers. MCR Footwear, Splints & Crutches have been provided to the needy leprosy patients as Welfare Supportive Measures. Five per cent of Jobs have been reserved for Cured Leprosy patients with Grade II Deformity, in Group 'D' vacancies of Health Department as Welfare & Rehabilitation Measures. Integration: As per Government of India guidelines, during 2002-03, Integration of Leprosy Programme into General Health Care Services has been implemented. All the Leprosy Staff along with Other General Health Care Staff are involved in the Leprosy Control Work, as part of their duty. Karnataka is considered as a low endemic state up to end of 31/12/2007. There are 3,580 cases. So far, 4,85,884, have been cured with MDT from 1986. Infrastructure facilities available for Eradication of Leprosy in Karnataka is as follows:-

Joint Director (Leprosy), 'EPST', SSA Units – 1, DLOs – 25, NLCCs – 20, MLCUs –9, ULCs – 48, THWs – 22, LTCs – 2, LRPUs –2 in addition to this infrastructure, there are 25 Voluntary Organizations working for Elimination of Leprosy. There are 1,110 beds available, out of which, 410 beds are maintained by Voluntary Organizations for which, grant-in-aid is provided by Government of India at the rate of Rs. 185/- per bed for adults and Rs. 90/- per bed for children. The achievement under this programme is given hereunder.

Year	New Cases Detected	Cases Cured	Deformity Rate
2005-06	5253	6705	0.42
2006-07	4299	4455	1.23
2007-08 up to Dec 07	3555	3188	0.87

### National Programme For Control Of Blindness

Blindness is a major public Health problem of our country with an estimated 12.00 million (120.00 lakhs) blind persons. To tackle this problem National Programme for Control of Blindness was launched with the aim to reduce prevalence rate of blindness from 1.4 to 0.3% by the turn of 2012. Encouraging Eye Ball Collection for Keratoplasty among the blind so as to give them vision is one of the important activities of National Programme for Control of Blindness. Cataract is the dominant cause for Blindness accounting for nearly 2/3rd of the Blind population. Timely intervention through cataract operations restores Eye Sight for the cataract affected patients. Through Grant-in-Aid to NGO Sector they are encouraged to perform free cataract operations for the patients irrespective of social or economic status. As per the National Health policy the basic human right is the Right to see we have therefore to ensure that no citizen goes blind needlessly. Hence cornea collection is given a thrust to increase Keratoplasty.

The Programme aims at reduction in the incidence of the blindness from 1.78% to 0.3% by 2012 A.D. The main cause of blindness are cataract which covers 69%, Refractive Errors -19.7%, Corneal Blindness-0.9%, Glaucoma-5.8%, Surgical Complications-1.2%, Posterior Segment Disorders -4.7% and others-5.0%. The population of Karnataka is 5.20 crores. The incidence rate in Karnataka is 1.29%. The estimated prevalence is above 4.8 lakhs. To tackle this aspect following infrastructure was developed. One State Ophthalmic cell has been created to plan, monitor and to evaluate the programme with the following staff. Joint Director (Ophthalmology), Assistant Statistical Officer, Stenographer Grade-1, Second Division Assistant, Driver, Group'D'

**Karnataka State Blindness Control Society:** To implement the National Programme for Control of Blindness effectively, strengthening monitoring of District Blindness control Societies and release of Grant-in Aid to the Districts. The Karnataka State Blindness Control Society (KSBCS) was registered on 08-08-2002. The KSBCS has since been merged with State Health and Family Welfare Society under NRHM. The Principal Secretary to Government Health and FW Department is the Chairman of the Society with Joint Director (Ophthalmology) as the Member Secretary.

**District Blindness Control Societies (DBCS):** The DBCS functions at the district level as per the guidance of the KSBCS .The National Blindness Control Programmes are implemented and coordinated at the district level as many NGOs are actively involved in implementing various activities. District

Blindness Control Societies have been established in all the 29 districts. The DBCS functions with the Deputy Commissioner/Chief Executive Officer of Zilla Parishad as the Chairman and the District Leprosy Officer and in charge District Programme Manager as the Member Secretary.

**Minto Regional Institute of Ophthalmology:** Minto Ophthalmic Hospital, Bangalore has been upgraded as Regional Institute of Ophthalmology with state of the art ophthalmic equipments under NPCB to provide Advanced Eye Health Care and to provide IOL training for Eye Surgeons Reorientation training for Para medical Ophthalmic Assistants, Staff Nurses under NPCB programme.

**Upgradation of Medical Colleges:** Five medical colleges have been upgraded to provide higher clinical ophthalmic services. Qualified Super specialists are working in these institutions. They are: JJM Medical college, Davanagere, J.N. Medical college, Belgaum, KMC Hubli, Medical college, Mysore & Medical college, Bellary.

**Upgradation of District Hospital:** All district hospitals of Karnataka have been developed to provide surgical / clinical ophthalmic services with Ophthalmic Eye surgeons & Paramedical Ophthalmic Assistants. These District Hospitals have been provided with a separate Operation Theatre and provided with an Operating Microscope and other costly equipments. So that, they can do regular camps and other eye operations can be conducted even daily. Upgradation of General Hospital: Seven General Hospitals in the State have been upgraded to provide Clinical and surgical Ophthalmic Services to Rural Communities by Ophthalmic Surgeon & Paramedical Ophthalmic Assistants. Upgradation of District Mobile Ophthalmic Units: 31 District Mobile Ophthalmic units are functioning in the State to provide creative, promotive and surgical facilities to rural and tribal communities by adopting camp approach. For arranging rural camps, NGO's are actively participating in the programme. Upgradation of Primary Health Centres: 426 Primary Health Centres were developed with a creation of one ophthalmic assistant post to give primary eye health care facilities to rural community.

**Eye Bank & Eye Donations Centres:** Three eye banks are functioning at Minto Hospital, Bangalore, K.R. Hospital, Mysore and District hospital, Belgaum to provide grafting services with super specialists. About 3 Eye Banks are working in Non Government Sector, and 2 Eye Donation Centres are working. Government of India had also introduced the scheme to encourage the voluntary organizations for establishing / development of eye banks and Eye Donation Centres. All voluntary organizations have been informed through district blindness control societies to utilize the opportunity to serve people.

**IOL Training:** Under National Programme for Control of Blindness, IOL insertion training is given in Minto Hospital, Bangalore. Duration of the training is 2 months. Two Eye surgeons are deputed for each batch. Till date, 105 eye

surgeons have been trained for IOL and 22 eye surgeons are trained for Small Incision Cataract Surgery. NPCB orientation training has been given to 192 Staff nurses and 226 Para Medical Ophthalmic Assistants.

**School Eye Screening Programme:** Refractive errors is the second commonest cause of Blindness after Cataract, school going years are the formative years for determining once Physical, Intellectual and Behavioral development. Any problem in the vision during the formative years can hamper intellectual development, maturity and performance of a person in his future life. Since children do not complain of defective vision so it is necessary to conduct screening of school children for refractive error. Screening of School children for refractive error is the important activity of the National Programme for Control of Blindness. Every year, middle school children are primarily screened by the trained teachers and then by Para Medical Ophthalmic Assistants, and poor students who have refractive errors, will be distributed free spectacles by District blindness Control Society. The targets and achievements under this programme are given here.

Year	Target	Achievement	Percentage
2005-2006	2,50,000	2,86,427	115%
2006-2007	2,50,000	2,98,555	119.42 %
2007-2008	3,50,000	2,26,568	65.00%

### **National Vector Borne Disease Control Programme**

The malaria control activities in the State are implemented as per the guidelines of the Directorate of NAMP, Delhi. The Modified Plan of Operations was started in the year 1977, after the resurgence of Malaria in the country. The programme was revised as 'Malaria Action Plan - 95' from 1996, and revised drug policy was introduced. The programme was renamed as 'National Anti Malaria Programme' from NMEP, on 1-4-2000. However, from December 2003, the Ministry of Health, Government of India, has merged Malaria, Filariasis, Japanese Encephalitis and Dengue programme and renamed the integrated programme as "National Vector Borne Disease Control Programme". The programme is monitored at State level by the State programme officer viz., Joint Director (Malaria & Filariasis). He is assisted by the Deputy Director, (Malaria & Filariasis), Senior Entomologist and Scientific Officer at the State level, the Zonal Deputy Directors at the divisional level, the District Malaria Officers at the District level, and the Medical Officer of Health at the Primary Health Centre level.

The main components of the programme are: Surveillance and Case detection, Examination and Treatment, Residual Insecticidal spray operations, Entomological studies on Vector behaviors and resistance status of Vector to Insecticides, Bio-environmental methods of Vector Control, and Information Education and Communication activities. The physical progress is as follows:

Year	B/S Collected & Examined	Malaria Cases	Pf Cases	Radical Treatment	Deaths due to Malaria
2005	10080290	83181	21284	82544	26
2006	9924797	62842	16458	62161	32
2007	8830766	48415	11069	46587	18

### National Filaria Control Programme

The Filaria control activities are implemented in the districts of Gulbarga, Bagalkot, Bidar, Raichur, Dakshina Kannada, Udupi and Uttara Kannada. Under the Filaria Control Programme, there are 8 Filaria control Units and 25 Filaria clinics functioning in the above districts, in the endemic towns. A Filaria survey cell is functioning at Raichur, which is also conducting Filaria survey. The main activities under the programme are: Anti-larval measures carried out through Filaria control units while Filaria Clinics undertake parasitological surveys to detect and treat micro-Filaria and disease manifested cases with DEC tablets (Diethyl Carbamazine Citrate tablets). The objective of the Survey Cell is to delimit the problem of Filariasis in Raichur district. The physical progress is as follows:

Year	No. of persons examined	No. of persons tested Positive for Micro-Filaria	No. of persons with disease manifestations	No. of persons treated	Micro-Filaria rate %
2005	188310	885	6240	1725	0.47
2006	175623	653	4470	5123	0.37
2007	170048	623	4121	4744	0.37

### Mass Drug Administration for elimination of Lymphatic Filariasis in the State

The mass drug administration programme started in 2004 under 100% Cash assistance envisages administration of a single dose of DEC tablets to the eligible population above 2 years of age on a single day. 5th June 2004, 11th November 2005, 28th July 2007 and 15th November 2007 were observed as National Filaria Day and the MDA was conducted. The programme is covered in 8 endemic districts of Gulbarga, Bagalkot, Bidar, Raichur, Dakshina Kannada, Udupi and Uttara Kannada with as objective of eliminating Lymphatic Filariasis by 2015. The programme will continue for 5 years subject to review of micro filarial rate prevailing in the community.

**Japanese Encephalitis (J.E.) Control Programme:** The Japanese Encephalitis is a State-sector scheme under Plan for the supply of Drugs,

Insecticides and Health Education materials. The epidemic season for the virus disease is normally post-monsoon. It is a mosquito borne viral disease, spread by Culex vishnui group. Affects mainly children and mortality is found to be high among the Japanese Encephalitis affected cases. The physical progress is as follows:

Year	Suspected		Confirmed	
	Attacks	Deaths	Attacks	Deaths
2005	113	10	13	1
2006	80	3	4	0
2007	18	3	3	0

Vaccination programme: JE Vaccination programme has been completed successfully in Bellary District in the month of JUNE 2006. During 2007 the Vaccination programme has been completed successfully in Kolar and Raichur Districts in the month of July. Regular Japanese Encephalitis control activities are being carried out in the JE prone districts.

District	Year	Target	Achievements	Percentage
Bellary	June 2006	720517	535613	74.33%
Kolar	July 2007	798392	626268	78.44%
Raichur	July 2007	595975	493884	82.44%

### Dengue Fever

Dengue fever is a mosquito borne viral disease. The epidemic occurs during the pre and post monsoon periods. The vector mosquito usually breeds in domestic and peri-domestic water collections such as Cement tanks, drums, old tyres, tins, coconut-shells, air coolers, and so on. The diagnosis is by serological methods and the treatment is symptomatic. Source reduction methods, larvicide's adulticides and fogging operations are some of the control activities adopted. The disease which was mainly an Urban problem, has now percolated into Rural areas due to environmental changes and change in water storage practices.

The incidence of Dengue fever in Karnataka from 2006 to 2007 is as follows:

Year	Attacks	Deaths
2005	587	17
2006	109	7
2007	228	0

### Chikungunya:

'Chikungunya' – being mosquito borne viral diseases was a major public health problem in the State during 2006. 7.6 lakh cases of clinically suspected Chikungunya were reported in all the 27 districts. Chikungunya was first of its kind noticed in Karnataka during 2006 which has widely spread both in Urban

and Rural areas with 15.16 million population exposed to the risk. Though the disease is not fatal, patients had suffered from fever, severe joint pain with prolonged arthritic and arthralgic symptoms. This has greatly affected the lively hood of such patients. The disease has no specific drugs for treatment, but the treatment is purely symptomatic in uncomplicated cases. The control activities involve source reduction as well as community awareness for proper water and solid waste management.

### Chikungunya Incidence In Karnataka(2006 & 2007)

Year	Affected					Suspected cases	No. of Blood Samples collected	No. of cases Confirmed
	Dist.	Tq.	PHCs	Vill-ages	Population			
2006	27	158	1167	7942	15.16 Million	762026	5000	305
2007	21	49	96	147	236559	1705	641	144

The State has been able to bring down the incidences of Chikungunya fever to manageable proportions by providing all necessary inputs.

**AIDS :** Acquired Immune Deficiency Syndrome, a recent nightmare in public health had its first case found in Saundatti of Belgaum district in 1987. AIDS Surveillance activities started in 1987 in the state. There are 8 blood testing centres spread over different parts of Karnataka. The disease spreads mostly through sexual contacts and blood transfusion. During 1992, as many as 1,02,336 persons were examined 168 (HIV) Human Immune Deficiency Virus cases were noticed. Since 1987 to December 1999, 4,15,169 blood samples have been examined out of which 5,820 are found HIV positive, 255 AIDS cases confirmed and 90 have died.

### Mental Health Programme.

The definition of Health Includes Mental Health also. Care of mentally ill & Epileptics has to be integrated into general Health care system as it is cost-effective, reduces stigma and disability. Hon'ble High Court of Karnataka in its suo-moto W.P.No.18741/96 is monitoring the care given by the Government, & is issuing orders from time to time. Due to shortage of qualified Psychiatrists at District Hospitals it is planned to train all medical officers in Mental Health Skills and drugs are to be made available at peripheral institutions. One Programme Officer for Mental Health is identified at all District Health & FW Officer Offices by renaming FW Officers as Programme Officer, Mental Health. They are trained at NIMHANS for 4 months. Psychologists are recruited & are to be trained. Training of Para Medical Staff, Doctors & Others has to be taken up. A Deputy Director for Mental Health is posted at Directorate of Health & Family Welfare Services to monitor the whole programme since 3.11.05.

**List of Hospitals in Karnataka**

1. A. J. Hospital & Research Centre, Kuntikana, Mangalore, 575004.
2. Aadithya Hospital (Adithya Adhikari Hospital), Gokulam, Mysore 570021.
3. Abhaya Hospital Bangalore 560027.
4. Adarsh Heart Care Centre Pvt Ltd , Bellary 583001.
5. Adarsh Nursing Home, Bellary 583103.
6. Adarsha Nursing Home, Tumkur 572103.
7. Agadi Hospital And Research Centre, Bangalore 560027.
8. Amrik Nethralaya Super Speciality Eye Hospital, Bangalore 560043
9. Annapura Hospital, Chikmagalur 577101
10. Apollo Hospital-Bangalore, Bangalore 560041.
11. Ashraya Hospital, Chikmagalur 577101.
12. Athena Hospital, Mangalore 575002.
13. Bangalore Baptist Hospital, Bangalore 560024.
14. Bangalore Institute of Oncology, Bangalore 560027.
15. Basappa Memorial Hospital, Mysore 570012.
16. Basaveswara Medical Centre, Bellary 583103.
17. Belle Vues Cambridge Hospital, Bangalore 560008.
18. B G S Apollo Hospital(Mysore), Mysore 570023.
19. Bharath Hospital & Institute Of Oncology, Mysore 570017.
20. Bibi Ayesha Milli Hospital, Mysore 570007.
21. Chandrakala Hospital & Institute Of Medical Research, Mysore 570012.
22. Chinmaya Mission Hospital, Bangalore 560038.
23. Chitra's Hospital, Mysore 570001.
24. Church Of South India Hospital, Bangalore 560051.
25. City Central Hospital Pvt.Ltd., Davangere 577002.
26. City Clinic, Hubli 580020.
27. City Hospital ( Udupi), Udupi 576101.
28. City Hospital Research & Diagnostic Centre, Mangalore 575003.
29. Colaco Hospital Mangalore A Unit Of Icmc Trust, Mangalore 575002.
30. Columbia Asia Hospital Pvt. Ltd., Bangalore 560024.
31. D.G.Hospital, Bangalore 560070.
32. Deccan Medical Centre Private Ltd, Belgaum 590001.
33. Devi Eye Hospital, Bangalore.
34. Dr Nukapur Hospital, Kolar 563101.
35. Dr. Agarwal Hospital, Bangalore 560025.
36. Dr. Rao's Maternity Hospital, Bangalore 560079.
37. Dr. S.R.Ramanagoudar Nursing Home, Dharwad 580008.
38. Garden City Hospital & Medical Centre, Bangalore 560011.
39. Gayathri Hospital, Bangalore 560040.
40. Gopala Gowda Shanthaveri Memorial Hospital, Mysore 570023.

41. Greenview Healthcare, Bangalore 560034.
42. Guru Nanak Hospital (Bidar), Bidar 585402.
43. Highland Hospital, Mangalore 575002.
44. Hitech Kidney Stone Hospital, Bangalore 560001.
45. Hitech Medicare Hospital& Research Centre, Udupi 576103.
46. Hosmat Hospital, Bangalore 560025.
47. Hosmath Hospital, Gadag 582101.
48. Jedi Speciality Hospital Pvt. Ltd., Madikeri 571201.
49. Jindal Sanjeevani Hospital, Bellary 583278.
50. K. R. Hospital ( Uttarahalli - Bangalore ), Bangalore 560050.
51. K.R.Hospital, Bangalore 560050.
52. Kairali Ayurvedic Health Resort Pvt. Ltd., Karwar 581326.
53. Kamakshi Hospital, Mysore 570009.
54. Kapl Hospital - Ayurvedagram Heirtage Wellness Center Pvt Ltd, Bangalore 560067.
55. Karnataka Nephrology And Transplant Institute, Bangalore 560042.
56. Karuna Hospital, Mysore 570023.
57. Koshys Hospital ( Bangalore), Bangalore 560016.
58. Lakeside Medical Centre & Hospital, Bangalore 560042.
59. Lokhande's Health Care Pvt. Ltd., Bangalore 560043.
60. M. S. Ramaiah Medical Teaching Hospital, Bangalore 560054.
61. Maharaja Agrasen Hospital (Bangalore), Bangalore 560070.
62. Mallige Medical Centre, Bangalore 560001.
63. Mallya Hospital, Bangalore 560001.
64. Manasa Hospital, Bangalore 560079.
65. Mangala Hospital, Hassan 573201.
66. Mathru Nursing Home, Bangalore 560060.
67. Mediscope Hospital Pvt.Ltd, Bangalore 560045.
68. Mitra Hospital, Udupi 576101.
69. Namratha Nursing & Maternity Home, Bangalore 560086.
70. Nandini Nursing Home, Mandya 571401.
71. Nanjappa Hospital, Shimoga 577201.
72. Narayana Hrudayalaya ( Bangalore), Bangalore 562158.
73. Narayana Netralaya, Bangalore 560010.
74. New Pragathi Nursing Home, Mandya 571401.
75. Northside Hospital & Diagnostic Centre, Bangalore 560092.
76. P. D. Hinduja Sindhi Hospital, Bangalore 560027.
77. Panacea Hospital Limited (Bangalore), Bangalore 560079.
78. Prashanthi Medical Centre, Bangalore.
79. Prayavi Hospital, Bidar 585401.
80. Pristine Hospital. Bangalore 560086.
81. Rajiv Gandhi Superspeciality Hospital, Raichur 584101.
82. Rajshekar Hospital, Bangalore 560078.
83. Raman Medical Services, Mysore 570004.

84. Ramkrishna Hospital Pvt Ltd/Ram Krishna Nursing Home, Bangalore 560011.
85. Ravi Kirloskar Memorial Hospital, Bangalore 560058.
86. Republic Hospital, Bangalore 560042.
87. Sagar Apollo Hospital, Bangalore 560041.
88. Sahana Hospital, Bangalore 560060.
89. Saikrupa Hospital For Women & Surgical Centre, Bangalore 560040.
90. Santosh Hospital, Bangalore 560005.
91. Sarojini Hospital, Bangalore 560057.
92. Sarvodaya Hospital(Bangalore), Bangalore 560079.
93. Seventh-Day Adventist Hospital, Bangalore 560005.
94. Shakuntala Memorial Hospital & Reserach Centre, Hubli 580030.
95. Shanbhag Nursing Home, Bangalore 560079.
96. Shekar Netralaya ( Bangalore), Bangalore 560078.
97. Shekhar Hospital ( Jaya Nagar - Bangalore ), Bangalore 560069.
98. Shekhar Hospital(Bangalore), Bangalore 560040.
99. Shiridi Sai Hospital, Bangalore 560054.
100. Shiva Krupa Hospital & Intensive Care Unit, Dharwad 580020.
101. Shree Sapthagiri Hospital, Kunigal, 572130.
102. Shreeya Hospital (Dharwad), Dharwad 580001.
103. Shreya Hospital, Bangalore 560060.
104. Shridevi Hospital, Tumkur 572101.
105. Sri Basaveswara Hospital, Shimoga 577201.
106. Sri Ram Hospital ( Bangalore), Bangalore 560036.
107. Srinivasa Cardiology Center Pvt.Ltd.(Bhagwan Mahaveer Jain Heart Centre),Bangalore 560052.
108. St. John's Medical College Hospital, Bangalore 560034.
109. St. Martha's Hospital, Bangalore 560001.
110. St. Philomena's Hospital, Bangalore 560047.
111. Suraksha Nursing Home, Mandya 571401.
112. Sushruta Nursing Home, Bidar 585401.
113. The Bangalore Hospital, Bangalore 560004.
114. The Eye Surgical Centre, Bangalore 560010 .
115. Trinity Hospital & Heart Foudation, Bangalore 560004.
116. Unity Health Complex, Mangalore 575002.
117. Varalakshmi Nursing & Maternity Home, Bangalore 560010.
118. Vasan Eye Care Hospital (Hubli), Hubli 580029.
119. Vinayaka Hospital (Bangalore), Bangalore 560050.
120. Wockhardt Hospital Limited(Bangalore), Bangalore 560052.
121. Wockhardt Hospitals (Bannerghatta), Bangalore 560076.
122. Yellamma Dasappa Hospital, Bangalore 560027.

### **State Institute Of Health And Family Welfare**

The State Institute of Health and Family Welfare is sanctioned in the year 1995 under IPP-IX (K) vide Government Order No. HFW/33/FAP/94 dated 04-03-1995 and started functioning from 14-10-1996 with posting of full time Director to this Institute.

This Institute an apex Level Training Institute of Health and Family Welfare Department established by the Government of Karnataka under World Bank assisted Project IPP-IX (K) in 1996. This Institute aims at improving/enhancing the total effectiveness of Health care delivery system through improving knowledge and skills in Administration Management and Technical skills at different levels by identifying training needs of the Health Personnel and Planning, Organizing, Monitoring and Evaluation of the Training Programmes of the Department in the State.

This Institute also aims to improve the over all Health care delivery system through Human Resource Development, consultancy and coordinating with other Health Training Centres in the State with Objective of enhancing the quality of the Training to the Health Personnel in the State.

#### **Objectives of the Training Institute:**

1. An apex body facilitates the state in planning, budgeting, implementation, monitoring and evaluations of required trainings under all National Health Programmes, Human Resource Management and Logistics.
2. Developments of Manuals and updating of existing Curriculum for basic trainings and in-service training of Health Staff.
3. Training of Trainers for faculty of training Institutions, District Training Centres and District level Programme officers including Teaching Faculty of the Medical Colleges.
4. To develop research activities in the field of Health and Family Welfare.
5. To initiate Post-Graduation Diploma courses in Health Education and Diploma in Public Health Nurse.
6. Decentralizing the Training Activities at Districts by establishing District Training Centres.
7. Special Training programmes under 12th Finance Commission.

#### **State Institute of Health And Family Welfare, Bangalore:**

Works as the State Level Nodal Agency for the training under department of the Health and Family Welfare. Works in formulating state training policy, planning, implementation and monitoring evaluation of the in-service training to Medical and paramedical personal in the department. In-service trainings are taken up under NRHM, IDSP, 12th Finance Commission, NLEP, NPCB and other programmes. 19 District Training Centres, 4 Health & Family Welfare Training Centres are working under SIHFW, and helps in disseminating the trainings to districts and sub district levels. Short term courses in Public

Health Nursing and Public Health Education has been proposed to be started in future course.



*Distribution of Emergency Contraceptive Pills*



*Distribution of Baby Care Kit*

## **PUBLIC HEALTH INSTITUTE**

The Public Health Institute is the State Health laboratory and one of the oldest Institutions in the Department. At present the following sections are functioning in this Institution.

Diagnostic Bacteriology Section, Water Bacteriology Section, Water Chemical Section, Chemical Examiners Section, Yellow Fever Vaccine Section, Pesticide Lab Section, Training Section, Media Section, State Food Laboratory Section.

### **Integrated Disease Surveillance Project**

The “Integrated Disease Surveillance Project”, has been launched in the country during the year 2004. In Karnataka, the Integrated Disease Project has been launched on 28-5-2005.

The state Head Quarters has been provided with the Control Room, which is functioning 24x7 hours, required communication net work has been provided to report any outbreak of epidemic diseases, wherever it occurred in the state. In all 27 Districts Communication net work equipments like, Computers, Fax Machines, Broad Band Connections, Video Conferencing equipments, have been provided to State & District Surveillance Units for transfer of disease data reports to the State & Central Surveillance Units. Minor Civil Works at 19 District Surveillance Units, Districts Labs. Selected CHCs under the jurisdiction of 19 Districts have been completed and made them functional effectively. In 4 districts i.e. Bellary, Chamarajanagar, Madikeri, Mysore, assessment of the work order were issued to Contractors through KHSDP.

### **Population Centre**

The main objective of the Population Centre is to assist the Government of Karnataka especially the Directorate of Health and Family Welfare Services in implementing various Health and Family Welfare Programmes more effectively and efficiently by undertaking various research and evaluation studies.

### **Drugs Control Department**

Drugs Control Department in Karnataka is functioning as an independent Department since 1962 under the Health & Family Welfare Department, Government of Karnataka with the Drugs Controller as the Head of Department.

There are three wings in the Department:

Administration and Enforcement, Drugs Testing Laboratory and Pharmacy Education

The main function of the Department is to protect the health of the consumers by enforcing the provisions of drugs and cosmetics Act, 1940 and Rules there under and other allied Acts and exercising strict control and vigilance so that the drugs which are manufactured and sold in this State are of standard quality, safe and effective and are available at controller prices.

The department enforces the following Central Legislations through its administrative machinery:-

1. Drugs and Cosmetics Act, 1940 and Rules there under.
2. Drugs (Prices Control) Order, 1995.
3. Drugs and Magic Remedies (Objectionable) Advertisements Act, 1954 and Rules there under.
4. The Pharmacy Act, 1948 and Education Regulations there under.
5. The Poisons Act, 1919 and Karnataka Poisons Rules, 1966.
6. Narcotics and Psychotropic Substances Act, 1985 in relation to Drugs covered by the Drugs and Cosmetics Act & Rules there under.

Presently there are 229 Drug Manufacturing Units comprising of small scale and large scale manufacturers engaged in the manufacture of bulk drugs and formulations. 415 Loan Licensees and 89 Cosmetics Manufacturing Licensees, 19 Cosmetics Loan Licensees and 05 Re-packing Units There are 164 Blood Banks operating in the State and 10 approved Testing Laboratories are functioning. There are 21438 dealers, namely, Chemists and Druggists, Wholesale dealers and restricted licensees who sell House hold Remedies.

Drugs Testing Laboratory: The Drugs Testing Laboratory is provided with Hi-tech equipments and Technical personnel and is equipped to analyze all types of drugs and cosmetics except Vaccines, Sera, Blood & Blood Products

### **Directorate Of Medical Education, Bangalore**

The Directorate of Medical Education of the Government of Karnataka was bifurcated from the Department of Health & Family Welfare Services, in the year 1978 and is functioning independently since then. The main aim of the Department is to provide a good quality education in medical sciences.

The primary responsibility of the Directorate of Medical Education is to conduct various medical courses, for providing quality medical education at graduate, post-graduate, and super-specialty levels, para-medical courses, nursing, etc. To fit into the above philosophy, the Department is geared up to bring in a qualitative change, with due emphasis on providing a low-cost & curative health care services, at tertiary level hospitals.

There are fourteen Teaching Hospitals, four Nursing Colleges and eight Nursing Schools, under the direct control of the Directorate. Further, two Government Medical Colleges at Bangalore & Mysore and one Government Dental College at Bangalore, which were under the direct control of the Directorate of Medical Education have been given autonomous status; and six newly started Government Medical Colleges at Hassan, Shimoga, Mandya,

Bidar, Belgaum and Raichur, which are also autonomous; and one Para - Medical Board, are functioning independently in the State and are catering to the academic needs in varied fields of medicine and nursing.

The following are the Medical Institutions and Teaching Hospitals:

1. Bangalore Medical College & Research Centre, Bangalore;
2. Mysore Medical College & Research Centre, Mysore;
3. Mandya Institute of Medical Sciences, Mandya;
4. Hassan Institute of Medical Sciences, Hassan;
5. Shimoga Institute of Medical Sciences, Shimoga;
6. Raichur Institute of Medical Sciences, Raichur;
7. Belgaum Institute of Medical Sciences, Belgaum;
8. Bidar Institute of Medical Sciences, Bidar;
9. Government Dental College & Research Centre, Bangalore;
10. Government College of Nursing, Bangalore;
11. Government College of Nursing, Hassan;
12. Government College of Nursing, Holenarasipura and
13. Government College of Nursing, Gulbarga, (School upgraded to College).
14. Karnataka Diabetic Centre, Bangalore.
15. Regional Advanced Paediatric Care Centre attached to Wenlock District Hospital, Mangalore.

#### **Nursing Schools (eight):**

1. Nursing School, Victoria Hospital, Bangalore;
2. Nursing School, Bowring & Lady Curzon Hospital, Bangalore;
3. Nursing School, District Hospital, Chitradurga;
4. Nursing School, Chigateri General Hospital, Davanagere;
5. Nursing School, District Hospital, Belgaum;
6. Nursing School, District Hospital, Bijapur;
7. Nursing School, K.R. Hospital, Mysore &  
Nursing School, District Wenlock Hospital, Mangalore.

The following seven Autonomous Medical Institutions coming under Medical Education Department are functioning independently, each headed by a Director, under the direct control of the Government:

1. Karnataka Institute of Medical Sciences, Hubli (KIMS);
2. Vijayanagar Institute of Medical Sciences, Bellary (VIMS);
3. Sri Jayadeva Institute of Cardiology, Bangalore;
4. National Institute of Mental & Neuro Sciences, Bangalore;
5. KIDWAI Memorial Institute of Oncology, Bangalore;
6. Indira Gandhi Institute of Child Health, Bangalore &
7. Nephro-Urology Institute, Bangalore.

There is a separate Health University viz., Rajeev Gandhi University of Health Sciences, which is an apex body in the academic field.

### **Nursing Activities**

During the academic year 2007-08, 295 candidates for admission in 8 Nursing Schools, for Diploma in Nursing Training; 1961 candidates for Diploma Nursing Course against the Government quota of seats in Private Nursing Schools in Karnataka to the extent of 10% of the total seats in the Institutions, have been made.

46 eligible in-service nursing personnel have been selected for Post-Certificate B.Sc.(N) at Government Nursing College, Bangalore and 122 in-service nursing personnel have been selected to undergo post-graduation in Nursing, under the Government quota in 31 Private Nursing Colleges in the State.

### **Para-Medical Activities:**

Prior to 1997, all the Para-Medical Courses were conducted and monitored by the Vocational Education Board. Since these courses are of inter-disciplinary in medical subjects, the Para-Medical Board has been reconstituted by the Government, vide its Order dated: 02-05-1997 and is functioning under the control of the Director of Medical Education in the State.

The objects of Para-Medical Courses are to introduce scientific principles and quality, during the study and training period, so that the trainees acquire adequate knowledge and skills in their respective fields of specialty. This inter-disciplinary feature of the Para- Medical Courses, besides having great employment potentiality, ensures well-trained and qualified Para-Medical personnel, essentially required for the up-keeping of a good health care system in the Country, in times of growing needs for the same.

### **Karnataka State Chief Minister's Medical Relief Society:**

Karnataka State Chief Minister's Medical Relief Society has been constituted as per the Order dated 18.4.1995, with an object of giving free medical treatment to the financially backward people from the below-poverty line, whose annual family income is less than Rs.20,000/- , suffering from major potentially fatal illness

like cardiac illness, neurological sickness, requiring kidney transplantation, brain tumor, etc. The participating Hospitals under this Scheme for giving free medical treatment are: 1. Sri Jayadeva Institute of Cardiology, Bangalore, 2. Kidwai Memorial Institute of Oncology, 3. National Institute of Mental Health & Neuro Sciences, Bangalore, 4. Victoria Hospital, Bangalore, 5. Indira Gandhi Institute of Child Health, Bangalore, 6. Sanjay Gandhi Accident Relief Hospital and Research Institute, Bangalore, 7. Rajiv Gandhi S.D.S.T.B. and Chest Diseases, Hospital, Bangalore, 8. Minto Ophthalmic Hospital, Bangalore, 9. Karnataka Institute of Medical Sciences, Hubli, 10. Vijayanagar Institute of Medical Sciences, Bellary and all the Government Hospitals including the teaching hospitals in the State.

The Government of Karnataka have formed this Society with an amount of Rs.100.00 crores as Corpus Fund for the Karnataka Chief Minister's Medical Relief Society. Initially the Government of Karnataka has provided Rs.10.00 crores in the annual budget of 1995-96 which has become the nucleus of this fund. The remaining amount of Rs.90.00 crores should be collected from the Philanthropists, Non-Resident Indians and other Charitable Institutions. Total grants received hitherto for this fund is Rs.45.65 crores, out of which Rs.30.77 crores is from the State Government, Rs.5.00 crores from the Government of India and an amount of Rs.9.88 crores was collected as donations from the Charitable Institutions and the Philanthropists, as per the provisions of section 80G of the Income tax Act 1961. The total accrued interest earned on the investment made hitherto in this regard, is about Rs. 26.90 crores. Only the interest amount is being utilized for the said purpose. During the year 2007-08, a provision of Rs. 975.00 lakhs has been made in the State Budget and so far, 43,677 beneficiaries have been covered.

### **Karnataka Drug Logistics Warehouse Society**

Karnataka Drug Logistics Warehouse Society has been implemented with the assistance of European Commission through Govt. of India, vide Govt. Order No. HFW 64 HPC 2003 Dated: 17-5-2003.

The main objective of the Karnataka Drug Logistics Warehouse Society is to provide good quality Drugs, Chemicals and other essential items at lower prices (as compared to market prices) to various health institutions in the State under the Directorate of Health and Family Welfare Services as well as Directorate of Medical Education at all times, in accordance with their indents by following scientific drug management using Information Technology. To identify the essential drugs and to coordinate with the State Therapeutic Committee in preparing list essential drugs required by the State to cater to the needs of different level hospitals in the State.

**District-wise health institutions and hospital facilities in karnataka  
2007-08 (in numbers)**

District	District Hospitals		Other Hospitals		Community health centres					
	Nos.	Beds.	Nos.	Beds.	Taluka Hospitals		Others		Total	
	Nos.	Beds.	Nos.	Beds.	Nos.	Beds.	Nos.	Beds.	Nos.	Beds.
Bangalore	0	0	12	4327	03	300	03	90	06	390
Bangalore Rural	0	0	0	0	04	400	0	0	04	400
Ramanagara	01	100	0	0	03	300	04	120	07	420
Chitradurga	01	450	0	0	05	500	10	300	15	800
Davanagere	01	850	02	180	05	500	04	120	09	620
Kolar	01	400	04	538	04	400	02	60	06	460
Chikkaball-pura	01	100	0	0	05	510	02	60	07	570
Shimoga	01	600	01	25	06	650	05	150	11	800
Tumkur	01	400	0	0	09	900	04	120	13	1020
Chikmagalur	01	300	01	100	06	600	04	120	10	720
Dakshina Kannada	01	705	02	360	04	400	06	180	10	580
Udupi	01	124	01	76	02	200	08	240	10	440
Hassan	01	850	0	0	07	950	14	420	21	1370
Kodagu	01	200	01	210	02	360	06	180	08	540
Mandya	01	400	01	148	06	600	05	150	11	750
Mysore	0	0	04	1970	06	600	11	330	17	930
Chamarajana-nagar	01	250	0	0	03	350	03	90	06	440
Belgaum	01	740	0	0	09	900	15	450	24	1350
Bijapur	01	400	01	110	04	400	08	240	12	640
Bagalkot	01	150	0	0	05	500	07	210	12	710
Dharwad	01	250	03	1180	03	300	0	0	03	300
Gadag	01	114	02	112	04	400	02	60	06	460
Haveri	01	100	0	0	06	600	05	150	11	750
Uttara Kannada	01	400	01	50	10	1000	03	90	13	1090
Bellary	01	512	05	1045	06	600	07	210	13	810
Bidar	01	400	0	0	04	400	06	180	10	580
Gulbarga	01	750	0	0	09	900	21	630	30	1530
Raichur	01	400	0	0	04	400	05	150	09	550
Koppal	01	100	01	30	03	300	08	240	11	540
State	26	10045	42	10461	147	15220	178	5340	325	20560

Source: Karnataka at a glance, 2007-08, Directorate of Economics and Statistics, Bangalore.

District	Primary Health Centres		Urban PHCs		Sub centres	Total Beds
	Nos.	Beds	Nos.	Beds		
Bangalore	73	251	0	0	185	4968
Bangalore Rural	46	213	0	0	192	613
Ramanagara	54	279	0	0	240	799
Chitradurga	86	312	0	0	273	1562
Davanagere	103	446	0	0	291	2096
Kolar	60	308	01	06	201	1712
Chikkaballpura	56	278	0	0	184	948
Shimoga	88	376	01	06	307	1807
Tumkur	134	656	01	06	477	2082
Chikmagalur	88	352	01	06	334	1478
Dakshina Kannada	67	364	0	0	431	2009
Udupi	72	374	0	0	293	1014
Hassan	124	566	01	06	420	2792
Kodagu	32	257	0	0	188	1207
Mandya	106	620	02	12	375	1930
Mysore	135	641	02	12	432	3553
Chamarajanagar	57	350	0	0	246	1040
Belgaum	146	780	01	06	539	2876
Bijapur	64	324	0	0	285	1474
Bagalkot	47	248	0	0	224	1108
Dharwad	31	166	01	06	179	1902
Gadag	35	172	0	0	174	858
Haverly	68	281	0	0	290	1131
Uttara Kannada	78	394	01	06	120	1940
Bellary	70	323	01	06	272	2696
Bidar	50	244	01	06	234	1230
Gulbarga	126	574	01	06	378	2860
Raichur	52	270	01	06	196	1226
Koppal	45	220	01	06	183	896
State	2193	10639	17	102	8143	51807

Source: Karnataka at a glance, 2007-08, Directorate of Economics and Statistics, Bangalore.

District	Sterilization	Immunisation				
		D.T.P.	Polio	B.C.G.	Measles	T.T.
Bangalore	67590	274316	274316	266468	262206	302322
Bangalore Rural	13189	32486	32486	31812	30984	34097
Ramanagara						
Chitradurga	8841	31325	31325	31643	31208	34776
Davanagere	13370	37686	37686	37379	35984	41513
Kolar	17471	49577	49577	51380	45681	51671
Chikkaballpura						
Shimoga	10639	31961	31961	32196	31076	33221
Tumkur	14787	53521	53521	52845	50534	57783
Chikmagalur	6870	18048	18048	17835	16978	17702
Dakshina Kannada	6851	22519	22519	22224	22288	24172
Udupi	5222	14423	14423	14352	14195	15421
Hassan	10708	27688	27688	27529	27139	27799
Kodagu	4148	10184	10184	11578	10437	11482
Mandya	10546	26420	26520	26894	25997	28467
Mysore	20766	42877	42877	42833	41984	46650
Chamaraja- nagar	6253	15033	15033	14683	14556	16698
Belgaum	34906	92261	92450	98239	90761	95000
Bijapur	12997	47796	47758	48942	43298	45567
Bagalkot	14835	41326	41513	42537	39158	43402
Dharwad	16029	36539	36539	38790	34540	40365
Gadag	6114	23430	23430	22754	22769	25157
Haverly	11424	29153	29153	28932	28405	31956
Uttara Kannada	5455	19689	19591	19790	19351	21301
Bellary	11478	51176	51176	54333	48768	53942
Bidar	13501	37597	37597	36879	35269	37415
Gulbarga	21068	84793	84793	88964	82226	87572
Raichur	12586	38885	38885	39405	37549	39511
Koppal	7185	29328	28328	29486	28027	30498
State	384829	1220037	1219377	1230702	1171368	1295460

Source: Karnataka at a glance, 2007-08, Directorate of Economics and Statistics, Bangalore.

District	Indian System of Medicine Hospitals		Dispensaries (Coming under Indian System of Medicine)	Drug Shops		Blood Banks
	Number	Beds		Retail Shops	Restricted Shops	
Bangalore	06	396	15	4099	212	60
Bangalore (R)	01	06	08	318	03	02
Ramanagara	03	26	33	185	02	0
Chitradurga	03	22	32	356	01	04
Davanagere	01	06	06	557	03	04
Kolar	02	20	34	340	06	04
Chikkaballpura	03	26	28	258	01	0
Shimoga	03	60	42	507	09	07
Tumkur	05	46	07	621	14	06
Chikmagalur	04	28	14	258	01	03
Dakshina Kannada	03	31	58	396	42	13
Udupi	0	0	09	261	11	01
Hassan	05	57	23	431	06	02
Kodagu	03	30	31	96	05	01
Mandya	04	43	12	415	08	03
Mysore	09	209	05	776	50	11
Chamarajanagar	02	16	08	114	02	0
Belgaum	05	34	32	1172	22	07
Bijapur	03	70	13	581	03	06
Bagalkot	03	26	16	398	01	04
Dharwad	01	25	13	582	26	08
Gadag	02	16	20	264	02	02
Haverly	02	12	14	363	03	01
Uttara Kannada	03	26	12	236	06	02
Bellary	10	169	68	662	04	07
Bidar	03	31	23	499	08	02
Gulbarga	10	81	50	852	19	04
Raichur	03	31	17	501	15	05
Koppal	03	22	16	357	0	0
State	105	1565	659	16455	485	169

Source: Karnataka at a glance, 2007-08, Directorate of Economics and Statistics, Bangalore.

