Chapter

National Disease Control Programmes

9.1 National Disease Control Programmes (NDCP)

Programmes for disease control such as National Programme for Control of Blindness, National Vector Borne Disease Control Programme, Revised National Tuberculosis Control Programme, National Leprosy Eradication Programme, National Iodine Deficiency Disorders Control Programme and Integrated Disease Surveillance Project were brought under NRHM umbrella. For planning, implementation and monitoring of these programmes, the Government formed (16 November 2006) the "Medical and Health Programme Implementation Committee" which was chaired by the Principal Secretary, Medical, Health and Family Welfare. The Director General, Medical and Health was member secretary of this committee and NDCPs were implemented by his Directorate under the supervision of SHM/ SHS.

9.1.1 **National Programme for Control of Blindness (NPCB)**

NPCB was launched in 1976 and brought into the ambit of NRHM in 2005-06. As per the survey conducted in 2001-02, prevalence rate of blindness in Uttar Pradesh was one per cent. NPCB aimed to reduce the cases of blindness to 0.5 per cent by 2012 through increased cataract surgery (46 lakh cases by 2012); school eye screening and free distribution of spectacles to children; and strengthening of infrastructure by way of supply of equipment and imparting training to eye surgeons and nurses.

9.1.1.1 Cataract operations

Cataract operations were performed in the Government hospitals, private practitioners and by NGOs. Sector wise details of cataract operations performed in the State during 2005-11 were as under:

Table 9.1: Sectorwise details of cataract operations in State

Year	Total Cataract Operations		Performance of ataract Operations in the Government sector		nance of perations by GOs	Performance of Cataract Operations by private practitioners and others		
	(in lakh)	Number (in lakh)	Percentage	Number (in lakh)	Percentage	Number (in lakh)	Percentage	
2005-06	6.24	1.66	26.60	2.23	35.74	2.35	37.66	
2006-07	6.37	1.45	22.76	2.34	36.74	2.58	40.50	
2007-08	5.98	1.40	23.41	2.35	39.30	2.23	37.29	
2008-09	6.82	1.60	23.46	1.89	27.71	3.33	48.83	
2009-10	7.32	1.69	23.09	2.89	39.48	2.74	37.43	
2010-11	7.68	1.94	25.26	2.62	34.11	3.12	40.63	
Total	40.41	9.74		14.32		16.35		

(Source: NPCB, Uttar Pradesh)

The Cataract Operation performed by private and Government sectors was expected to be in the ratio of 1:1. However, the number of cataract operations performed by NGOs and private sector exceeded 75 *per cent*. Further, the cataract operations rate was lower than the envisaged 600 *per* lakh population *per* year and ranged between 300 and 400 during 2005-11.

The Government stated that there were only 202 posts of Eye Surgeons in District Hospitals and some selected hospitals. The number of operations performed by them was satisfactory.

9.1.1.2 Irregular payments to NGOs in eye care activities

Under NPCB, NGOs were engaged to carry out various eye care activities including performance of free cataract operations. The scheme for participation of NGOs, relating to cataract operation provides:

- NGO/Voluntary Organisation (VO), empanelled, should be registered under the Indian Societies Registration Act, 1860/Charitable Public Trust registered under any extant law and have facilities for secondary level eye care services, well trained staff, infrastructure and the required managerial expertise to organise and carry out cataract operation and other eye related activities; and
- Financial assistance upto a maximum of \mathbb{Z} 750¹ for performing each free cataract operation.

Under the scheme, camps were allowed only for eye screening (not operation). The screened patients were referred and all the cataract operations were performed in only Fixed OT facility. CMOs of Agra, Budaun and Mirzapur accorded permission for holding eye screening camps to NGOs from time to time. In these districts, NGOs performed cataract operations in camps also and were irregularly paid ₹ 66.98 lakh as below:

Sl. No.	Name of the district	Cataract Operations performed by NGOs in camps	Total amount paid to NGOs (₹ in lakh)
1.	Agra	2593	10.94
2.	Budaun	1834	12.43
3.	Mirzapur	10467	43.61
	Total	14894	66.98

Table 9.2: Details of irregular payment

In reply, DPM, Budaun stated that operations were performed by NGOs in camps having fixed OT facility and DPM, Mirzapur stated that plain surgeries were undertaken in camps due to availability of very few surgeons trained in IOL method. No reply was furnished by DPM Agra.

9.1.1.3 Doubtful payments to NGOs

As per NPCB guidelines, NGOs performing cataract surgeries were required to maintain Cataract Surgery Record² (CSR) and other OPD/ Indoor ward records; submit monthly report

¹ For Intraocular Lens (IOL) cataract surgery-Drugs and consumables: ₹ 200; Sutures: ₹ 50; Spectacles: ₹ 125; Transport/POL: ₹100; Organisation and Publicity: ₹ 75; IOL, Viscoelastics and additional consumables: ₹ 200.

² CSR: a format in which details relating to identity, pre-operative examination and cataract surgery performed in respect of each beneficiary is kept.

on cases screened, treated and operated in the prescribed format and seek reimbursement within three months of surgery. A maximum of ₹ 125 and ₹ 75 were payable for each cataract surgery to NGOs for distribution of spectacles and publicity respectively.

During 2005-11, the District Blindness Control Society (DBCS), Bareilly, paid ₹ 1.67 crore for cataract operations to 10 NGOs³. No records in support of payments made (like claims lodged, bill diary/register, copy of acknowledgement of the claim etc.) were available with the DBCS, except cash book. Even CSRs for 2005-08 were not available. CSRs for the subsequent years lacked complete details of the beneficiaries. In the absence of any verifiable detail with DBCS, Audit requisitioned records of NGOs for verification, but only three NGOs⁴ responded.

None of the NGOs produced any vouchers/records relating to purchase and distribution of spectacles to the beneficiaries and expenditure incurred on organisation and publicity. There were no records with DBCS relating to intimation given by NGOs for organising eye screening camps, acknowledgement given by DPM and records showing that the reimbursement of expenditures on account of procurement and distribution of spectacles and organising publicity were made after due verification. Audit observed that:

- DBCS, Bareilly paid ₹ 26.89 lakh to seven NGOs⁵ during 2005-08. No record in support of above payment (except cash book) was available with the DBCS. The concerned NGOs also did not furnish any records;
- One NGO (Lok Kalyan Vikas Samiti, Bareilly), that received ₹ 60.52 lakh for cataract surgeries performed during 2006-11, did not produce any record to audit and informed that those (2004-10) were lost;
- Another NGO (*Prerna Utthan Samiti*, Bareilly) received ₹ 43.12 lakh during 2008-11. The Balance Sheet showing receipt of grant from DBCS, produced by the Society, pertained to Bareilly Institute of Para Medical Sciences;
- Sri Ram Murti Smarak Trust, Bareilly received ₹ 31.51 lakh during 2005-11. In most of the cases, the produced CSRs lacked verifiable details of the beneficiaries;
- Three NGOs⁶ that received ₹ 11.64 lakh during 2008-11, did not produce any record; and
- Despite the fact that no records relating to the period 2005-08 was available with DBCS and though NPCB guidelines required that claims be lodged within three months of cataract surgery, failing which the claims would become invalid, the DBCS cleared old

Shri Ram Murti Smarak Trust, National Society For Prevention of Blindness, Astha Samaj Seva Samiti, Lok Kalyan Vikas Samiti, District Eye Relief Society, Prema Utthan Samiti, Bharat Seva Trust, Om Satva Charitable Trust, Mata Prasad Jan Kalyan Seva Samiti and Pandit Keshava Dutta Gaur Memorial Society - all in Bareilly.

⁴ Prema Utthan Samiti, Shri Ram Murti Smarak Trust and District Eye Relief Society- all in Bareilly.

National Society For Prevention of Blindness, Astha Samaj Seva Samiti, Lok Kalyan Vikas Samiti, Bharat Seva Trust, Om Satva Charitable Trust, Mata Prasad Jan Kalyan Seva Samiti and Pandit Keshava Dutta Gaur Memorial Society - all in Bareilly.

⁶ Bharat Seva Trust, National Society for Prevention of Blindness and Om Satva Charitable Trust – all in Barcilly.

liabilities of ₹ 50.90 lakh pertaining to the period 2002-08 during 2007-10. The achievement of cataract operations performed by NGOs in Bareilly was much higher (155 per cent) than the targets fixed during 2008-11.

The Government stated that claim diary/register was not prepared prior to 2011-12, records for 2005-08 were not available with DBCS and payments were made on the basis of CSRs submitted by NGOs. It further stated that records relating to purchase and distribution of spectacles as well as organisation and publicity were available with NGOs and verification of operations performed by NGOs were done by CMO/DPM/Optometrist. Reply was not convincing as none of the NGOs produced records relating to procurement and distribution of spectacles, organisation and publicity. Further, no records supporting payments made to NGOs were available with DBCS.

9.1.1.4 Inadmissible payment to NGOs

NPCB guidelines provided for a maximum payable amount of ₹ 175 per cataract operation to NGOs for identifying, motivating and transporting the beneficiaries to the Government/ NGOs fixed facilities.

Audit observed that:

In March 2008, the Government Eye Surgeon performed 272 plain operations and 168 IOL operations in the District Hospital, Shahjahanpur. The DPM, Shahjahanpur paid at the rate of ₹ 450 and ₹ 500 per plain and IOL operation respectively against permissible rate of ₹ 175 per operations to two NGOs (Lions Club, Central: ₹ 1.41 lakh for 179 plain and 136 IOL operations, Lions Club Vishal: ₹ 57,850 for 93 plain and 32 IOL operations) for identifying, motivating and transporting the beneficiaries to the Government hospital resulting in excess payment of ₹ 1.21 lakh.

The Government stated that payments were made as per the rates prescribed. Reply was not correct as the operations were performed by the Government surgeon in the Government hospital and as per NPCB guidelines, only ₹ 175 per case was payable to NGOs for identifying, motivating and transporting the beneficiaries to the Government hospital.

CMO, Allahabad recognised four to 10 NGOs for eye care activities and made payments of ₹ 1.37 crore (16,922 cataract operations: for ₹ 1.21 crore, 9218 cases of transportation, organisation and publicity: ₹ 0.16 crore) for performing 26,140 cataract operations during 2006-11. The DPM stated (October 2011) that the payments to NGOs were based on the list of beneficiaries verified by the concerned MOICs. No records relating to organising eye screening were, however, available with the concerned CHCs/ PHCs from where beneficiaries were shown to have been sent for cataract operations as these were stated to be available with DPM, DBCS. Due to above, the expenditure incurred could not be verified.

The Government stated that beneficiaries were selected in screening camps and payments to NGOs were made after due verification. Reply was not convincing as records relating to holding of eye screening camps were not available with the concerned CHCs/PHCs.

9.1.1.5 Payment made to ineligible NGO

Under the guidelines of NPCB, NGOs for cataract surgeries were recognised by CMO after obtaining various documents which includes registration under the Societies Registration Act, 1860, details of base hospital, facilities available and audit report of the Chartered Accountant for the last three years.

An NGO (Roopa Lalit Jan Kalyaan Samiti, Kanpur), bearing registration number 1602/2004-2005 valid up to 22 March, 2010, was recognised by CMO, Unnao for performing cataract operations. The society tampered the records and showed its registration to be valid up to 23 March 2015. CMO, however, paid ₹ 2.45 lakh (pertaining to 2009-10) for carrying out NPCB related activities and ₹ 7.16 lakh pertaining to 2010-11 was outstanding for payment (December 2011).

The Government accepted that the NGO was working for many years and the tampered papers were accepted unknowingly.

9.1.1.6 Inadmissible expenditure

Findings of various districts (Appendix-9.1) revealed inadmissible expenditure of ₹ 25.32 lakh on account of payments in excess of admissible amount and irregular expenditure of ₹ 12.68 lakh.

9.1.1.7 Procurement of inadmissible items

SPMU advanced ₹ 7.49 crore (2007-11) to 11 hospitals and adjusted ₹ 6.53 crore in respect of nine out of 11 hospitals (details of Aligarh and SGPGI, Lucknow were not available). Audit observed procurement of 20 inadmissible items for ₹ 66.19 lakh during 2007-11 as detailed below:

Table 9.3: Details of inadmissible items

Hospital	Number of items	Value (₹ in lakh)	Main items
Eye Deptt, CSMMU, Lucknow	05	3.05	Omni eight seater van (Maruti), laptop, computer and deskjet printer.
M. D. Eye Hospital, Allahabad	9	21.97	Eclad surgical laser, slit lamp, etc.
B. R. D. Medical College, Gorakhpur	03	18.20	Software VK-2, computer, printer, computer peripherals, digital camera, cable and accessories.
Ganesh Shankar Vidyarthi Memorial Medical College, Kanpur	01	6.98	A-scan with pachymeter
Maharani Laxmibai Medical College, Jhansi	02	15.99	Green laser console, green laser foot paddle <i>etc</i> .
Total	20	66.19	

(Source: Information collected during field audit)

Further, the hospitals procured admissible items at varying rates during the period (date of procurement not available in the SOE) as given below:

Table 9.4: Details of procurement at varying rates

(Amount in ₹)

Items	Γ	Difference	
Keratio meters	Allahabad	Gorakhpur	
Kerano meters	147619	65000	82619
Fundus camera	Agra	Gorakhpur	
rundus camera	2719500	952000	1767500
OCT machine	Agra	Varanasi	
OCT macmine	3800000	3033217	766783
Phaco emulsifier	Kanpur	Jhansi	
rnaco emuismei	3999190	962520	3036670
Auto refracto meter	Jhansi	Lucknow	
Auto retracto meter	469350	405350	64000
Total	11135659	5418087	5717572

(Source: Information collected during field audit)

Thus, compared to the lower rates at which the other hospitals procured the same items, the excess cost incurred worked out to ₹ 57.18 lakh.

The Government stated that clarification regarding inadmissible procurement was being sought.

9.1.1.8 Refractive error and free distribution of spectacles

The students in the Government and the Government aided schools were to be screened for refractive error for free distribution of spectacles. The status of screening and distribution of spectacles during 2005-11 was as below:

Table 9.5: Status of screening and distribution of spectacles

Year	Eye screening of children (in lakh)		of children refractive error		Free distribution of spectacles to children (in lakh)		Percentage of spectacles distributed to
	Target	Achievement	Target	Achievement	Target	Achievement	children with refractive error
2005-06	50.00	28.18	3.50	1.60	1.05	0.89	55.63
2006-07	58.33	28.16	4.08	1.50	1.22	0.90	60.00
2007-08	58.33	29.57	4.08	1.57	1.22	1.00	63.69
2008-09	26.67	32.06	1.87	1.04	0.56	0.60	57.69
2009-10	33.00	20.75	1.98	0.68	0.70	0.32	47.05
2010-11	33.00	25.38	1.98	0.75	0.70	0.61	81.33
Total	259.33	164.10	17.49	7.14	5.45	4.32	60.50

(Source: SHS)

The target fixed for free distribution of spectacles to children had no relation to the number of children found with refractive error. Further, the number of free spectacles issued did not correspond to the students suffering from refractive error. The achievement of distribution of spectacles ranged between 47.05 and 81.33 per cent during 2005-11 and overall achievement was 60.51 per cent.

The Government furnished no reply.

9.2 National Iodine Deficiency Disorders Control Programme (NIDDCP)

NIDDCP was launched in 1992 to control Iodine Deficiency Disorders (IDDs). The important objectives and components of NIDDCP are to - conduct surveys to assess the magnitude of the IDDs; supply iodised salt in place of common salt through Public Distribution System; conduct resurveys after every five years to assess the extent of IDDs and the impact of iodised salt, monitor urinary iodine excretion and provide health education and create awareness through publicity.

Out of 71 districts of the State, 54 districts were surveyed (1974-1992) in phases and 24 districts were identified as endemic to IDD. During 2005-2011, only eight districts were surveyed (2005-07) and two re-surveyed (2006-07). During 2005-07, neither any target was fixed nor was any salt sample analysed. During 2007-11, 1.80 lakh salt samples were tested. Further, during 2008-11, 15.29 lakh tonnes of salt, against the allotment of 23.33 lakh tonnes, were distributed. For public awareness, ₹ five lakh was allotted under NIDDCP during 2007-08. No allocations were made for public awareness during 2008-11.

The Government accepted the facts and admitted that no funds were received from the Government of India.

9.3 National Leprosy Eradication Programme (NLEP)

NLEP was to ensure leprosy prevalence rate of less than one patient per ten thousand population by the end of 2012 and sustain the level thereof. The status of leprosy cases in the State during 2005-11 was as below:-

Table 9.6: Status of leprosy cases in the State during 2005-11

SI. No.	Year	Population in crore	No. of leprosy cases at the end of year	New cases detected	Prevalence rate ⁷
1	2005-06	18.60	21,761	36,409	1.17
2	2006-07	19.03	18,104	32,413	0.95
3	2007-08	19.54	18,254	31,208	0.94
4	2008-09	19.91	16,206	27,577	0.81
5	2009-10	20.37	16,484	27,473	0.81
6	2010-11	20.37	15,719	25,509	0.77
		Total	1,06,528	1,80,589	

(Source: SHS)

⁷Prevalence rate calculated as balance number of leprosy cases *per* ten thousand population.

Out of 22 test checked districts, the prevalence rate was more than one in 19⁸, 12⁹, nine¹⁰, eight¹¹, eight¹² and six¹³ districts respectively during 2005-11. According to SHAP 2010-11, low achievement was due to late detection, poor awareness and inadequate skills of Staff.

The Government stated that medical officers and staff have been imparted orientation training and various steps have been taken for public awareness and sensitisation.

9.4 National Vector Borne Disease Control Programme (NVBDCP)

NVBDCP endeavours to control vector borne diseases by reducing mortality and morbidity due to Malaria, Filaria, Kala-azar, Dengue, Chikungunya and Acute Encephalitis Syndrome (AES)/Japanese Encephalitis (JE) in endemic areas. Under NRHM following targets were set for these diseases:

- Malaria morbidity and mortality reduction by 50 per cent by 2010;
- Reduction of Filaria/Micro Filaria by 70 per cent by 2010;
- Elimination of *Kala-azar* by 2010;
- Reduction in JE mortality rate by 50 per cent by 2010;
- Reduction in Dengue mortality rate by 50 per cent by 2010; and
- Effective control over Chikungunya morbidity.

9.4.1 Incidence of vector borne diseases

During 2005-11, morbidity and mortality in the State due to various vector borne diseases were as below:

Table 9.7: Details of morbidity and mortality

Year	Malaria		Fila	Filaria AES/JE		S/JE	Dengue/ Chikungunya		Kala-azar		
	Positive	P.f. ¹⁴	Death	Cases	M.f. ¹⁵	Cases	Death	Cases	Death	Cases	Death
2005	105302	3149	0	7249	525	5581	1593	121	4	68	2
2006	91566	1875	0	5609	817	2073	476	617	14	83	0
2007	81580	1989	0	5791	637	2675	577	130	2	69	1
2008	93383	2310	0	5956	491	2730	486	51	2	26	0
2009	54480	660	0	3077	466	3073	556	161	2	17	1
2010	64606	1382	0	2289	412	3548	498	960	8	14	0

(Source: SHS)

⁸Allahabad, Azamgarh, Bahraich, Ballia, Bareilly, Budaun, Deoria, Goarkhpur, Jalaun, Jaunpur, Jhansi, Kanpur Nagar, Kushi Nagar, Mirzapur, Moradabad, Raebareli, Shahjahanpur, Unnao and Varanasi.

⁹Allahabad, Bahraich, Ballia, Budaun, Deoria, Jalaun, Jaunpur, Kanpur Nagar, Mirzapur, Moradabad, Raebareli and Shahjahanpur.

¹⁰ Bahraich, Ballia, Bareilly, Budaun, Jalaun, Kanpur Nagar, Mirzapur, Moradabad and Shahjahanpur.

¹¹ Bahraich, Ballia, Budaun, Jalaun, Jhansi, Mirzapur, Moradabad and Shahjahanpur.

¹²Azamgarh, Bahraich, Bareilly, Budaun, Jalaun, Mirzapur, Moradabad and Shahjahnapur.

¹³ Bahraich, Bareilly, Budaun, Jalaun, Moradabad and Shahjahanpur.

¹⁴ P.f. - Plasmodium Falciparum (species causing cerebral Malaria).

¹⁵ M.f. - Micro Filaria (stage of filarial parasite detected in blood examination).

As evident from the above table in respect of none of the diseases, the targets were achieved by 2010. The cases of Malaria, JE and Dengue/Chikungunya increased during 2010.

The Government stated that targets of Malaria and Dengue/Chikungunya were achieved.

9.4.2 Malaria

NVBDCP targeted ABER¹⁶ of 10 per cent and API¹⁷ of less than 0.5 per thousand for the country. In the State, ABER was 2.53, 2.33, 2.02, 2.38, 2.39 and 2.33 and API was 0.63, 0.54, 0.47, 0.54, 0.31 and 0.37 during 2005-11 respectively. In 22 test checked districts, it was observed that ABER ranged between 0.7 and six and API was more than 0.5 in Allahabad (3), Budaun (0.7), Etah (0.7) and Mirzapur (2.9). Further, poor surveillance due to idle infrastructure/lack of manpower, especially at the grass root level and inadequate measures taken to control breeding of mosquitoes were the reasons attributed for non-achievement of the target.

The Government stated that the target of ABER could not be achieved due to lack of manpower and that necessary steps were taken to improve infrastructure/surveillance and control breeding.

9.4.3 Filaria

To eliminate Filaria by 2015, microfilaria rate in 50 endemic districts¹⁸ needs to be less than one per cent to interrupt transmission. Despite having 29 Filaria Control Units and 31 Filaria Clinics, it continued to be endemic in 50 districts (State PIP of 2010-11). Out of these 50 districts, 15 were covered in audit and it was found that Micro filaria (M.f.) rate in Jaunpur and Mirzapur was more than one per cent during 2010.

The Government stated that insecticidal/larvicidal activities were undertaken and there was no "epidemic" area of filaria. Reply was not convincing as M.f., rate of less than one was yet to be achieved in all the districts.

9.4.4 Kala-azar

Kala-azar which is hyper endemic in four districts of eastern Uttar Pradesh viz. Ballia, Deoria, Kushi Nagar and Varanasi was targeted for elimination by 2010. Audit observed that in these districts, there were 179 cases and two deaths during the years 2006 to 2010, of which 14 cases were reported during 2010. Thus, the target of elimination of Kala-azar by the end of 2010 was not achieved. As per PIP of 2010-11, the constraint in implementation of programme was non-availability of reliable kits (RK-39).

The Government stated that due to migration of labourers from neighbouring State (where the disease is prevalent), the elimination of *Kala-azar* could not be achieved. Reply showed lack of planning in eradication of *Kala-azar*.

¹⁷ API (Annual Parasite Incidence)-Positive Malaria cases *per* thousand population.

¹⁶ ABER - Annual Blood Examination Rate.

¹⁸ Allahabad, Ambedkar Nagar, Auraiya, Azamgarh, Bahraich, Ballia, Balrampur, Banda, Barabanki, Barcilly, Basti, Chandauli, Chitrakoot, Deoria, Etawah, Faizabad, Farrukhabad, Fatehpur, Ghazipur, Gonda, Gorakhpur, Hamirpur, Hardoi, Jalaun, Jaunpur, Kannauj, Kanpur Nagar, Kaushambi, Kheri, Kushi Nagar, Lucknow, Maharajganj, Mahoba, Mau, Mirzapur, Pilibhit, Pratapgarh, Raebareli, Ramabai Nagar, Rampur, Sant Kabir Nagar, Sant Ravidas Nagar, Shahjahanpur, Siddhartha Nagar, Sitapur, Sonbhadra, Sravasti, Sultanpur, Unnao and Varanasi.

9.4.5 Dengue/Chikungunya

To treat the disease, the number of Super Speciality Hospitals (SSHs) was enhanced from 10 to 22 in the State during 2010-11 and all SSHs were linked to SGPGI, Lucknow - an apex referral laboratory. Deaths due to Dengue/Chikungunya indicated that the disease remained uncontrolled during these years due to lack of preventive measures in incipient stage before spreading.

The State has five districts ¹⁹ endemic to Dengue and two districts ²⁰ endemic to Chikungunya. Out of these districts, Kanpur Nagar and Agra were covered in audit. There were one and three cases of Chikungunya in Kanpur Nagar in 2006 and 2010 respectively. Non-sensitisation of VHSCs to contain mosquito breeding by improving sanitation; awareness among the habitants; lack of training to Medical Officers and lab technicians; and inadequacy of infrastructural facilities were the reasons for the increasing trends.

The Government stated that there was effective control over the disease as there was no increasing trend. Reply was not convincing as number of cases and deaths increased from 121 to 960 and four to eight respectively during 2005 and 2010.

9.4.6 Acute Encephalitis Syndrome (AES)/Japanese Encephalitis (JE)

JE is the leading cause of viral encephalitis and a significant cause of disability in children. Extensive and devastating outbreaks were a feature of JE in eastern region of Uttar Pradesh.

9.4.6.1 Early diagnosis and treatment

Establishing/strengthening diagnostic facilities and arranging for adequate medicines and equipment in all JE treating centres was required for early diagnosis and prompt treatment. Sentinel laboratories were established only in 14 districts while 26 districts were sensitive as recently as 2009. One regional laboratory was established in Chhatrapati Sahuji Maharaj Medical University, Lucknow. Seven²¹ out of these 14 districts²² were covered in audit. In Allahabad, Azamgarh and Bahraich, no medicine for treatment of JE was available whereas in Kushi Nagar the stock of medicine was below the minimum required. In Allahabad and Bahraich, there was no equipment for treatment of JE patients while in Azamgarh, Deoria and Kushi Nagar these were partially available.

The Government stated that though district Allahabad is not an endemic district for JE but the sentinel laboratory at Allahabad caters to the diagnosis of JE for the neighboring districts. Regarding Kushi Nagar, it was stated that diagnostic facilities were available in Joint District Hospital. Reply was not convincing as laboratories were established (Allahabad and Kushi Nagar) without developing/strengthening basic infrastructure for treatment of JE.

9.4.6.2 Vaccination of children

Vaccination for JE is undertaken under routine immunisation programme with other diseases. In Deoria, Gorakhpur and Kushi Nagar, JE vaccination was done in 2006 and 2010; in

¹⁹ Agra, GB Nagar, Ghaziabad, Kanpur Nagar and Lucknow.

²⁰ Kanpur Nagar and Lucknow.

²¹ Allahabad, Azamgarh, Bahraich, Deoria, Gorakhpur, Kushi Nagar and Raebareli.

²² Allahabad, Azamgarh, Bahraich, Basti, Deoria, Faizabad, Gonda, Gorakhpur, Kheri, Kushi Nagar, Lucknow, Raebareli, Saharanpur and Siddhartha Nagar.

Bahraich and Raebareli vaccination was done in 2007; in Azamgarh in 2008; while in Allahabad in 2009. Thus, there was no uniformity in vaccination of children.

GoI released (March 2009) ₹ 5.88 crore for JE vaccination programme. Of that, SHS released (May 2009) ₹ 4.57 crore to seven districts as below:

Table 9.8: Details of funds transferred to districts for JE vaccination

Sl. No.	District	Amount transferred (₹in lakh)
1.	Allahabad	94.90
2.	Fatehpur	46.75
3.	Ghazipur	56.88
4.	Jaunpur	77.01
5.	Kanpur Nagar	80.33
6.	Pratapgarh	51.31
7.	Shahjahapur	50.16
	Total	457.34
		Say ₹4.57 crore

(Source: SHS)

In none of the above districts (Allahabad, Jaunpur, Kanpur Nagar and Shahjahanpur were selected in audit), there were death/JE affected cases except two JE affected cases reported in Allahabad. Audit further observed that:

CMO, Jaunpur utilised ₹ 88.56 lakh against ₹ 77.01 lakh released. Neither were any medicines available nor equipment and laboratory for diagnosis of JE patients in Jaunpur. Thus, release of funds, utilisation thereof and creation of liability of ₹ 11.55 lakh, were unjustified. Despite excess expenditure, the target for vaccination was not met (achievement was 89 per cent).

Out of ₹ 88.56 lakh, ₹ 46.41 lakh was spent on publicity and printing of immunisation cards, posters, banners, handbills and stickers. Deficiencies/irregularities were observed in the tender for printing viz. short-term tender with 10 days for publicity and estimated quantities of printing not mentioned. The agreement was also not signed with the successful bidder.

The Government stated that though there was no case of JE in the district but JE being highly infectious, JE Vaccination was done on war footing. Reply was not convincing as even after incurring expenditure in excess of funds received, the achievement was 89 per cent and there was no infrastructure for treatment of JE patients.

9.4.6.3 Establishment of epidemic ward at BRD Medical College, Gorakhpur

Under NVBDCP, GoI sanctioned (June 2009) ₹ 5.88 crore for up-gradation of JE epidemic ward at BRD, Medical College, Gorakhpur (Department of Paediatrics). SPMU released the funds in July 2009. The project cost included non-recurring expenditure of ₹ 3.34 crore (one time cost of building, alteration: ₹ 1.05 crore and purchase of equipment: ₹ 2.29 crore) and recurring expenditure of ₹ 2.54 crore (for recruitment of specialists and supporting staff on contract basis etc.). DGMET accorded administrative approval for ₹ 97.84 lakh

(October 2010) after 16 months of release of fund by GoI and appointed Construction & Design Services, Uttar Pradesh, Jal Nigam (C&DS) as executing agency. C&DS accorded technical sanction in March 2011. The executing agency started the work in June 2011. Thus, due to administrative delays of about 22 months, the work which was to be completed by 2009 was still in progress (November 2011).

Further, the work of ₹ 97.84 lakh, awarded to C&DS did not include various items valuing ₹ 24.28 lakh, though the GoI's sanction (₹ 1.05 crore) included these items. Equipment worth ₹ 224.31 lakh were purchased between February 2010 and August 2011. However, equipment procured worth ₹ 10.19 lakh were not included in the sanctioned list. Equipment worth ₹ 2.87 lakh were purchased in excess of requirement and equipment worth ₹ 25.95 lakh, included in the GoI list, were not procured. The proposed recruitment of specialist on contract basis was also not made.

The Government stated that the purchases were made as per requirement. Reply was not acceptable as the purchases were to be made in accordance with the sanction issued by GoI. Regarding deployment of manpower, it was stated that despite making appointment to the post of Professor, Paediatrics, the candidate did not join.

9.4.6.4 Vector Control

As per information furnished, DHSs in seven test checked districts²³, did not receive any funds during 2005-11. Funds were provided for limited periods to four districts viz. Deoria (₹ 0.87 lakh) in 2009-10; Gorakhpur, Kushi Nagar (₹ nine lakh each) and Raebareli (₹ four lakh) in 2010-11. DHS, Deoria spent ₹ 0.87 lakh, DHS, Gorakhpur did not incur any expenditure while DHS, Kushi Nagar and Raebareli spent only ₹ 5.20 lakh and ₹ 0.56 lakh on fogging. In CHC, Tamkuhi, Kushi Nagar, only one round of fogging was done in 51 out of 53 villages although PIP of 2010-11 provided for two rounds.

9.4.6.5 Information, Education & Communication (IEC)/Behavior Change **Communication (BCC)**

The change in behavior of people in JE affected districts was to be effected through IEC/BCC. During 2005-11, Allahabad, Bahraich, Kushi Nagar and Raebareli did not receive any fund for IEC; Gorakhpur received ₹ 2.50 lakh during 2009-11; Azamgarh received ₹ 0.65 lakh during 2010-11; and Deoria received ₹ 0.50 lakh and ₹ two lakh during 2008-09 and 2010-11 respectively. These were spent on IEC/BCC.

The Government stated that IEC/BCC activities were done through ANMs/ASHAs and Anganwadi Workers. The reply was not convincing as there was no uniformity in the distribution of funds for IEC/BCC activities.

9.4.6.6 Sentinel Surveillance Laboratories

Under the programme, 14 Sentinel Laboratories in District Hospitals and one Regional Laboratory at Lucknow were established in the State. With a view to strengthen the diagnostic facilities in these labs ₹ 7.60 lakh was released (November 2010) to each district

²³Allahabad, Azamgarh, Bahraich, Deoria, Gorakhpur, Kushi Nagar and Raebareli.

having Sentinel Laboratory for procurement of equipments²⁴. Out of the said fund, Allahabad procured only a computer for ₹ 0.29 lakh and the balance was lying with CMO; Gorakhpur and Raebareli procured Elisa Reader and Deep Freezer; Deoria procured Elisa Reader (lying uninstalled); and Kushi Nagar transferred the entire amount to CMS, District Children Hospital, where no equipment were procured (October 2011). Azamgarh and Bahraich did not procure any equipment. Further, no data operator was appointed in any of the test checked districts, except in Kushi Nagar and Raebareli. Thus, the objective of strengthening of sentinel laboratories was defeated.

The Government stated that 14 sentinel labs were active in the State and sending reports continuously. The reply was not convincing as strengthening of laboratories and appointment of data operators was yet to be made in various districts.

Revised National Tuberculosis Control Programme (RNTCP)

National Tuberculosis Control Programme, operational since 1962, was subsumed under NRHM in 2005-06. The main objective of RNTCP was to detect at least 70 per cent new smear positive cases and achieve a cure rate of at least 85 per cent of smear positive cases through Directly Observed Treatment Short Course (DOTS).

9.5.1 Detection of cases

Against the target of 200 sputum examinations per lakh population per year during 2006 to 2010, the achievement ranged between 125 and 154 per lakh population. The detection of new smear positive cases during 2005-10 ranged between 49 to 79 per cent. Further, in 2010, the new sputum positive case detection rate was less than the targeted 70 per cent in 57 districts (State PIP 2011-12) whereas the cure rate for detected cases was less than the targeted 85 per cent in 19 districts²⁵ (Eight²⁶ districts covered in audit).

The Government stated that achievements of some districts were below the norms for which expert opinion was being obtained to achieve the target.

9.5.2 Effectiveness of DOTS Centres

The numbers of failures, defaulters and death cases were fluctuating during 2005-10 as detailed below:

Table 9.9: Details of number of failures, defaulters and death cases

(Figures in numbers)

Year	TB patients registered	Cured + treatment completed (percentage)	Death ²⁷ (percentage)	Failures ²⁸ (percentage)	Defaulters ²⁹ (percentage)
2005	172821	149834 (86.70)	5690 (3.29)	2000 (1.16)	15077 (8.72)
2006	217935	186624 (85.63)	7536 (3.46)	2811 (1.29)	19722 (9.05)

One Computer, one deep freezer, one Elisa Reader and consumable articles.

²⁵ Allahabad, Auraiya, Azamgarh, Ballia, Chandauli, Deoria, Fatehpur, Firozabad, Ghazipur, Kanpur Nagar, Kheri, Lalitpur, Lucknow, Moradabad, Pilibhit, Raebareli, Sant Kabir Nagar, Shahjahanpur and Sitapur.

²⁶ Allahabad, Azamgarh, Ballia, Deoria, Kanpur Nagar, Moradabad, Raebareli and Shahjahanpur.

²⁷ Patients died of TB.

²⁸ Patients not successfully treated.

²⁹ Patients left the treatment in between.

2007	236540	204921 (86.63)	8048 (3.40)	2692 (1.14)	16927 (7.16)
2008	265711	231700 (87.20)	9447 (3.56)	2769 (1.04)	19499 (7.34)
2009	270954	238715 (88.10)	9007 (3.32)	2575 (0.95)	18354 (6.77)
2010 (September)	211366	187481 (88.03)	6078 (3.29)	1706 (1.16)	14140 (6.60)

(Source: SHS)

The Government stated that drug resistance was the main reason for deaths and failures. In view of fluctuating numbers of deaths, failures and defaulters, it appeared that more concerted efforts were needed to address the problem.

9.5.3 **Expiry of TB medicines**

RNTCP drugs were supplied by GoI, free of cost and stored at Regional Drug Warehouse at Agra, Bareilly, Lucknow and Varanasi for further distribution. AD, Medical Health and Family Welfare intimated (06 January, 2011) to AD/State TB Control Officer, DGMH that medicines supplied during 2005-10 were distributed to the districts and the following quantities of medicines expired at Regional Drug Warehouse, Lucknow as tabulated below:

Table 9.10: Details of medicines lying at Regional Drug Warehouse

Sl.	Medicine	Recei	ived from GoI	Expiry date	Expired quantity
No.		Date	Quantity (in Numbers)		(in Numbers)
1	Streptomycin	28.06.2007	41760	May 2008	31239
	(Injection)	22.05.2008	115500	August 2008	1920
		20.10.2008	73440	June 2008	25335
2	Isonex 100 mg.	20.02.2006	2051400	June 2009 December 2009 January 2010	330394
		17.09.2010	500000	March 2011	343200
3	Isonex 300 mg.	14.11.2005	2054900	August 2009	
		03.09.2007	211200	August 2009	358380
		22.12.2009	72400	October 2010	42168
4	Ethambutol 800 mg.	14.11.2005	1649700	March 2009	181330
		03.09.2009	211200	June 2009	204684
		22.03.2010	50000	November 2010	27500

(Source: SHS)

Further, all medicines supplied by Regional Drug Warehouse, Lucknow were not distributed to the beneficiaries and the same expired, as detailed below:

Table 9.11: Details of medicines supplied and not distributed

Medicine	District	Expiry month	Quantity expired
Streptomycin	Bulandshahar	November 2008	9900 vials
	Kanpur Nagar	August 2008	2640 vials
	Bareilly	March to October 2008	4842 vials
Isokin	Kanpur Nagar	August 2009	24,000 tablets
Isonex 100 mg.	Shahjahanpur	July 2011	18,500 tablets
Isonex 300 mg.	Shahjahanpur	August 2009	21,700 tablets
Ethambutol	Kanpur Nagar	December 2009	4,200 tablets
	Moradabad	November 2010	13,346 tablets
	Shahjahanpur	March 2009	17,122 tablets
Category III	Kanpur Nagar	August and December 2009	For 240 persons

(Source: DHS)

Despite the disturbing trend in death and failure cases during 2005-10, supplied medicines were unjustifiably not distributed.

The Government stated that directives have been received from GoI for writing off the expired medicines valuing less than one per cent of the cost of supply. Reply was not convincing as the medicines expired in the stores without distribution to the districts and ultimately to the beneficiaries.

9.5.4 Involvement of NGOs

RNTCP aimed to improve cure rate among TB patients by more than 85 per cent. NGOs were also involved in RNTCP to provide treatment and care to the identified patients. As per terms of MoU, they were to submit quarterly UCs to the concerned DHS, bringing out details of expenditure and unspent balances. Audit observed that:

- During 2005-10³⁰, DTO, Allahabad engaged 12 NGOs to provide treatment and care to the identified patients without executing MoU. These NGOs found 1141 sputum positive cases. The NGOs, however, did not submit details of 463 sputum positive patients on proper format to DTO. As a result these patients remained uncovered.
- Six³¹ out of seven NGOs engaged in Jaunpur received grant of ₹ 11.82 lakh during 2005-11 but these did not submit adjustment vouchers and UCs to DHS as of October 2011. These NGOs, however, were being released grants regularly.

The Government accepted that NGOs in Allahabad were engaged without executing MoUs. Regarding observations on Jaunpur, it stated that directives had been issued to furnish activity-wise adjustment and UCs respectively.

Programme runs in calendar year.

³¹ Gaurav Shiksha Samiti Jaunpur, Gram Vikas Samiti, Jaunpur, Home for Disabled Society, Jaunpur, Kushtha Niyantran Evam Unmoolan Samiti, G B Nagar, Navjagriti Samiti, Lucknow and Srijan Shiv Seva Samiti, Jhansi.

9.5.5 Miscellaneous irregularities

- (a) As per RNTCP guidelines, all TB patients were to be registered and subjected to treatment under effective monitoring system. By sputum examination, SRN hospital, Allahabad identified 2222 smear positive cases during the last five years up to September 2011. Of these cases, only 1268 cases were put on DOTS, i.e. only 57 per cent of the smear positive cases detected.
- (b) In contravention of RNTCP guidelines, ₹ 2.08 lakh of interest earned on the balances in the bank account was diverted and allotted to MLN Medical College, Allahabad under RNTCP and spent on POL & maintenance of vehicle (₹ 0.89 lakh), hiring of vehicle (₹ 0.43 lakh), payment of contractual staff (₹ 0.57 lakh) and miscellaneous items (₹ 0.18 lakh). Further, ₹ 0.42 lakh was spent on procurement of laptop without provision in PIP of 2010-11.

The Government stated that NGOs and Medical Officers intentionally put the patients on private treatment and accepted that ₹ 2.08 lakh was spent without approval of DHS.

9.6 Integrated Disease Surveillance Project

Integrated Disease Surveillance Project (IDSP) aims to detect early warning signals of impending outbreaks and to initiate effective timely responses. This included human resource development, strengthening of Information Technology (IT) and Networking and laboratory upgradation.

IDSP in the State was launched (2006-07) to establish a decentralised system of surveillance for communicable and non-communicable diseases by strengthening disease surveillance at the State, district and sub-district levels, improving laboratory support, training for disease surveillance and action.

9.6.1 Manpower

9.6.1.1 State Level

Against the sanctioned posts, the posts of Epidemiologist (one); Entomologist (one); Consultant, Finance (one); and Consultant, Training (one) at State Surveillance Unit (SSU) were lying vacant (November 2011).

9.6.1.2 District Level

District level Surveillance Units (DSUs) were set up in all 71 districts in the State. However, there was inadequate deployment of manpower at DSUs as detailed below:

Sanctioned Posts Persons-in-Number of vacancies SI. Designation No. Position (percentage) 2. Microbiologist 0 2 (100) 2 **Epidemiologist** 72 41 31 (43) Data Manager 72. 61 11 (15) 4 **DEO** 72 44 28 (39) DEOs at 10 Medical Colleges 10 6 (60)

Table 9.12: Status of deployment of manpower at DSUs levels

(Source: DGMH)

The vacancies ranged from 15 to 100 per cent. The vacancy at the level of DEOs was as high as 60 per cent in Medical Colleges and about 39 per cent in the DSUs.

The Government accepted the observations.

9.6.2 District level Surveillance Units

In 22 test checked districts. Audit observed that:

- DSU, Ballia was not functional (November 2011) as all personnel posted there had resigned;
- Posts of Epidemiologist were vacant in DSUs Ballia, Budaun, Bulandshahar, Etah and Varanasi:
- Posts of Data Manager were vacant in Ballia, Etah and Mirzapur;
- Posts of DEOs were vacant in Allahabad, Ballia, Bareilly, Deoria, Jaunpur, Kushi Nagar, Mirzapur, Moradabad, Shahjahanpur and Unnao;
- IDSP equipment were partially received and partially functional in DSU, Raebareli. Although all equipment were received in DSUs of Agra, Bahraich, Jalaun, Jaunpur, Kanpur Nagar, Moradabad and Unnao, these were not fully functional. Some equipment were reported to be missing from DSU, Shahjahanpur. No equipment was installed in Bareilly for want of space and the installed equipment in Ballia were lying idle. In other 11 districts³², the equipment were reported to be installed and functional;
- Online data entry had started in 21 test checked districts (except Ballia) but video conferencing was yet to take off in these districts;
- Of six Medical Colleges located in 22 test checked districts, IDSP centres had been established at Gorakhpur, Jhansi, Kanpur Nagar and Varanasi but not established at Agra and Allahabad;
- Private hospitals/nursing homes had not been associated with IDSP except in Bulandshahar, Jalaun and Bareilly; and
- It was envisaged to have EDUSAT (satellite dedicated for educational services) installations (2008-09) at headquarters and ten medical colleges. Very Small Aperture Terminal (VSAT), installed at SSU, had not been working since January 2011 (November 2011).

The Government stated that the project was implemented as per guidelines and yielding desired results. Reply was not convincing as desired human and physical infrastructure, envisaged in the IDSP, was yet to be put in place.

9.6.3 Laboratory Up-gradation

GoI issued instructions (State PIP of 2009-10) to include the strengthening of district level laboratories under IDSP in 2009-10. The objectives were to strengthen the diagnosis centres for outbreak investigations of various epidemic diseases and create laboratory based surveillance data at the district and State level. This was not considered for inclusion in the PIP for the year 2011-12.

³² Allahabad, Azamgarh, Budaun, Bulandshahar, Deoria, Etah, Gorakhpur, Jhansi, Kushi Nagar, Mirzapur and Varanasi.

As per guidelines of IDSP, the District and CHCs/PHCs labs were required to be strengthened. Only five (Azamgarh, Bahraich, Gorakhpur, Raebareli and Varanasi) out of 22 test checked districts reported to be having District Surveillance Laboratory although the seventh and the last year of the Mission period is coming to an end.

CHCs were to function as peripheral surveillance unit and collate, analyse and report information to DSUs, which in turn were to repeat the exercise for the whole district and transmit the same to SSU.

In DHAP 2010-11 of Allahabad, requisition for ₹ 17 lakh was sent for strengthening of labs (22 CHCs/PHCs: ₹ 11 lakh and 3 Hospital labs: ₹ six lakh), against which no fund was allotted. As a result, district and peripheral labs were not strengthened. Further, in PHC, Mauaima and CHC, Harakhpur, only Malaria and sputum tests were being done.

The Government stated that PIP of 2011-12 was prepared in accordance with GoI guidelines for strengthening and upgradation of district level laboratories but it did not get approval.

9.7 District Innovation

GoI approved ₹ 21 crore under "District Innovation" in the State Action Plan for 2008-09. This fund was to be utilised for activities like Sanitation day (on 2 October), health camp at Magh Mela in Allahabad besides district specific interventions like prevention of occupational diseases, health camps in arsenic and flurosis affected districts and in weaver belt, performance rating of CHCs/PHCs, display of immunisation schedule in villages, birth companionship programme, outsourcing of sanitation facilities, outreach and blood donation camps etc. SPMU released (January 2009) ₹ 30 lakh for each district to undertake the activities mentioned above.

A test check of records revealed that the:

State Government ordered (21 July 2010) special audit by Director, Local Fund Audit, Allahabad (DLFA). DLFA's report for 29 districts pointed out irregularities and misuse of funds in the districts. The report was submitted (April-May 2011) to the concerned CMOs along with a copy to the Mission Director, NRHM recommending enquiry against delinquent officials/officers and recovery of involved amounts. However, no information on action taken on DLFA's report was made available to audit.

Audit observed, in 22 test checked districts, that a large part of the funds received under District Innovation were utilised for purposes other than those for which it was meant. The districts spent:

- ₹ 13.65 lakh on purchase of television/DVD player/Dish TV connection in Budaun, Bulandshahar, Gorakhpur, Kanpur Nagar, Mirzapur, Raebareli and Unnao during 2008-09;
 - In case of Bulandshahar, the Government stated that proposals were approved by DHS. Reply was not convincing as purchase of TV/DVD player, Dish TV was not provided in the State PIP;
- (ii) ₹ 13.74 lakh on renovation, repair and maintenance of office buildings and office vehicles (for which regular provision under NRHM exists) in Jaunpur (₹ 11.58 lakh),

Bahraich (₹ one lakh), Varanasi (₹ 0.66 lakh) and Raebareli (₹ 0.50 lakh) during 2008-09;

In case of Bahraich, the Government accepted the facts for compliance in future whereas in case of Jaunpur and Varanasi, it stated that proposals were approved by respective DHSs. Reply was not convincing as maintenance of office and vehicles were not part of district innovation;

(iii) ₹ 10 lakh on construction of road in Moradabad during 2008-09, which was admissible in new districts only;

The Government stated that DHS had approved the work. Reply was not convincing as strengthening of infrastructure was admissible in new districts only;

(iv) ₹ 7.20 lakh, during 2008-09, on one day training camps on kishori balikaon hetu prashikshan at CHCs/PHCs in Budaun (₹ 4.50 lakh) and Jalaun (₹ 2.70 lakh).

The Government did not furnish any reply.

(v) ₹ 5.71 lakh during 2008-09 on wall painting and ₹ 5.24 lakh on ASHA/ANM registers in Bareilly.

The Government stated that activities were proposed and approved in DHS. Reply was not convincing as approval of DHS was not taken.

- (vi) As per information furnished, no activity for prevention of Fluorosis was undertaken in Agra and Unnao districts. No health camps for weavers were organised as envisaged in State PIP in Mirzapur.
- (vii) There was no expenditure on IEC activities in Mirzapur. Other districts spent three per cent to 60 per cent of the innovation fund on IEC.
- (viii) As per information furnished ₹ 29 lakh in Agra and ₹ 10.31 lakh in Azamgarh remained unspent as of November 2011.
- (ix) Details of expenditure were not furnished by CMOs of Etah and Ballia.

Most of the expenditure was characterised by irregularities like purchase orders were split, quotations were selectively invited and not given due publicity by publishing them in newspapers etc. The fund was released in January 2009 and utilised by March 2009 and largely spent on inadmissible items.

The Government furnished no reply.

9.8 Recommendations:

- Due documentation of work done by NGOs may be ensured to enable verifiability;
- Efforts may be made to ensure achievement of targets for screening for various diseases so that effective and timely treatment can be provided; and
- Laboratories and surveillance network needs to be strengthened for effective disease surveillance.