

## **Report of the Health Officer, Corporation of Madras Health Department.**

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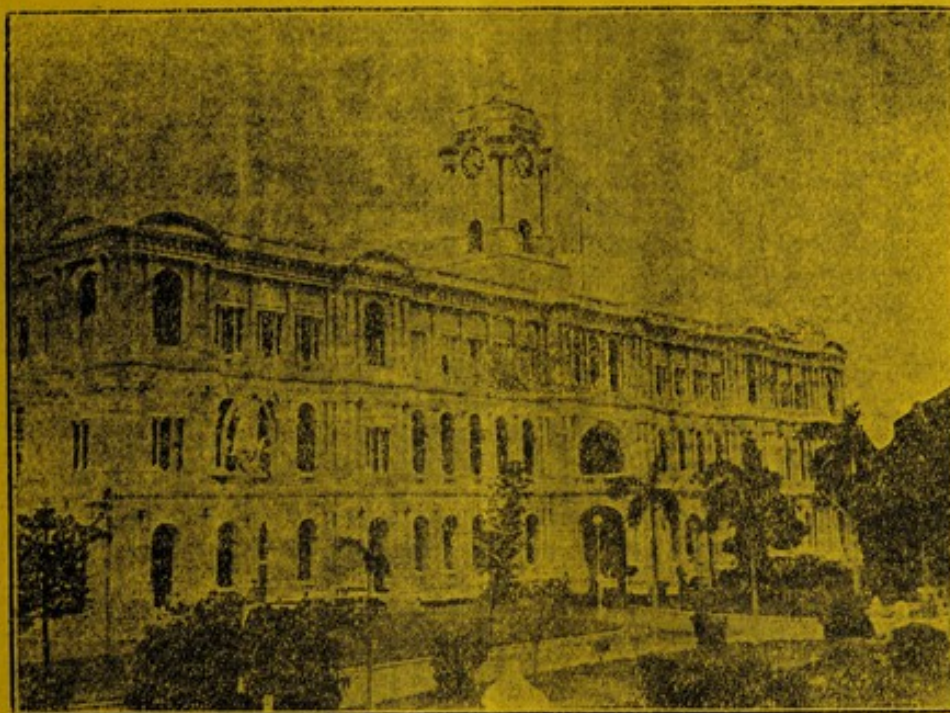
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# CORPORATION OF MADRAS



RIPON BUILDINGS

## ANNUAL REPORT OF HEALTH DEPARTMENT FOR 1959

PRESENTED BY

**Dr. B. V. SUNDARABABU**, M. B. B. S., D. P. H. (CAL.),  
HEALTH OFFICER, CORPORATION OF MADRAS.

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# CORPORATION OF MADRAS



RIPON BUILDINGS

**ANNUAL REPORT**  
**OF**  
**THE HEALTH OFFICER**  
**FOR**  
**1959**

PRINTED BY  
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CORPORATION OF MADRAS

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## FORWARDED

The Report shows that the City was free from Cholera during the year 1959 except very few cases in the first three months of the year. The prevalence of Small-pox has also showed a marked decline.

The Maternal Mortality has been declining year by year due to improved maternity and child welfare services rendered to the people in the City and the medical assistance extended to mothers during ante-natal and post-natal periods and confinement.

The death rate on account of Malaria has considerably decreased and has come to single digit during the year.

The free medical aid rendered to the people through Corporation clinics increased during the year and more number of people have been seeking their services.

The post of the "Medical Officer", I.D. Hospital at Tondiarpet was up-graded during the year and a Superintendent in the rank of an Assistant Health Officer was appointed in-charge of the hospital. The hospital showed remarkable results in the treatment of infectious diseases. The Commonwealth Government of Australia deputed Dr. Louis Weinhold and Dr. Andrew Mac'Arther for training in diagnosis and treatment of Small-pox and Chicken-pox in the Infectious Hospital.

Besides the usual Medical Inspection of the pupils studying in the Corporation schools, eye tests for vision were also conducted and spectacles were given free of cost to those who were suffering from defective vision out of the donation kindly made by Sri C. Rajagopalachari, ex-Governor-General of India.

The four laboratories of the Health Department, namely, the Public Health Laboratory, the Public Analyst Laboratory, the Water Analyst Laboratory and the Malaria Laboratory continued to render useful service to the citizens.

The Zoological gardens attracted larger number of people besides school children during the year. The educative value of the Zoological gardens is growing year by year and students from various places outside Madras are also visiting in large numbers.

The Maternity and Child Welfare Centres rendered very useful and essential services during the year. Out of the total number of 70,155 births during the year, 29,709 labour cases came

under the care and observation of the scheme and 16,502 births were conducted in the maternity wards.

Supply of Mid-day Meals to the poor children attending the Corporation Schools in the City continued during the year. A sum of Rs. 1 lakh was donated by Sri Sivaji Ganesan, Cinema Actor, towards the Mayor's Mid-day Meals Fund.

Family Planning Scheme was extended by opening 5 more centres in the City during the year. The birth rate showed slight decline during the year.

The responsibilities of the Health Officer and his staff are increasing year after year as the City is expanding with new colonies and industries and they are putting forth strenuous efforts to maintain the health of the City in all possible ways. It is also necessary that the Civic Consciousness of the Public should be roused and their co-operation enlisted to make the City clean, healthy and free from diseases.

Before concluding, I should like to mention here that the Health Officer, Dr. B. V. Sundara Babu, M.B.B.S., D.P.H. (Cal.), his Assistants, the Lady Superintendent (C.W.S.) and the staff have put forth their best efforts and carried on the task with zeal and interest.

MADRAS,  
25th October, 1960.

R. BALASUBRAMANIAM, I.A.S.,  
Commissioner,  
Corporation of Madras.

# CORPORATION OF MADRAS

## HEALTH DEPARTMENT

### ANNUAL REPORT FOR 1959

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## INTRODUCTION

It is my pleasure to present my Fourth Annual Report of the Health Department for the year 1959 mentioning therein briefly the salient features of the services rendered, towards the up-keep of better health of the City.

### POPULATION

The mid-year population for the year 1959 as estimated by the Director-General of Health Services was 21,10,000 as against 18,12,694 of the previous year.

The net increase of population calculated by the method of natural increase, i.e., excess of births over the deaths was 36,640.

### BIRTHS

The number of births registered during the year was 70,155 recording a birth rate of 33.24 per mille as against the corresponding figures of 71,888 and 39.65 per mille respectively for the year 1958.

### DEATHS

The total number of deaths excluding still-births, registered this year was 33,515 with a death rate of 15.88 per mille as against 36,888 deaths with a death rate of 20.38 per mille, registered last year.

### INFANTILE MORTALITY

During the year under review, 9,062 infants under the age of one year died and thus the death rate came to 128.9 per 1,000 live births registered against 10,401 and 144.6 in the year 1958.

### MATERNAL MORTALITY

During 1959 the maternal mortality rate also recorded a decline, i.e., 1.93 which is the result of improved and effective services rendered by the Child Welfare and Maternity Centres to the mothers during the ante-natal and post-natal period, and also during confinement.

### ENDEMIC AND EPIDEMIC DISEASES

The incidence of cholera and small-pox during the year 1959 showed a considerable decrease and the same will decline further in the years to come due to intensive measures taken to prevent and cure the disease. The number of attacks of small-pox in the City was only 2,138 as against 4,869 last year.

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## VACCINATIONS AND INOCULATIONS

Vaccination against small-pox and inoculations against cholera were carried out during the year. Mass re-vaccination of school children, workers in factories and officials was also done as a precautionary measure. In Choolai Maternity Home vaccination of the new born within 3 days of the birth is being done as an experimental measure and the children are going to be followed for 5 years. If this proves successful it will go a long way in preventing cases that escape primary vaccination due to frequent change of residences, etc.

11,998 certificates of Vaccination and Inoculation were issued to the International Travellers during the year 1959.

## ANTI-MALARIA OPERATIONS

The staff deputed for anti-malaria work of the Department are not only attending to detecting and destroying the mosquito breedings in storm water drains, pools, cess-pools and the 3 water-ways, the Buckingham Canal, Cooum River and the Adyar River but also attending to de-flying work in the public and private markets, slums, etc. A sum of Rs. 2,268 was collected and credited to the General Revenue of the Corporation by spraying the insecticides.

## NATIONAL MALARIA ERADICATION PROGRAMME

The National Malaria Eradication Programme which was started in 1955 with D.D.T. spraying and anti-larval measures introduced in 1958 had achieved remarkable degree of success. The malaria cases declined to 1,077 as against 7,000 on an average before the implementation of National Malaria Control Programme in 1955 and the National Malaria Eradication Programme in 1958. In addition to the pre-operational surveys, continuous checks are carried out to find the effectiveness of the measures applied to prevent transmission when spraying may be discontinued and malaria eradication may be deemed to have been established.

## MEDICAL RELIEF

More facilities for free medical aid to the citizens were provided during the year by opening two new dispensaries at Chetput and North Mylapore and by converting the two Unani Dispensaries at Pudupet and Mannady into Alopathic Dispensaries thus making a total of 45 dispensaries as against 43 in 1958. Besides these, 9 special Clinics for Tuberculosis, Leprosy and Skin Diseases and Venereals were also functioning including the I.D. Hospital at Tondiarpet.

The activities of the Child Welfare Centres for the care of mothers and children were increased by opening one additional Centre during the year.

The children attending the various Corporation schools were examined medically during the year and the undernourished ones were supplied with milk donated by charitable institutions in addition to the usual mid-day meals given to them.

#### LABORATORY SERVICES

The 4 laboratories of the Health Department were rendering useful services. The Public Health Laboratory particularly became popular with the private practitioners in the City who availed of its services to a great extent. The collections in the laboratory during the year under review were Rs. 27,251-50 nP. as against Rs. 24,304-50 nP. during the preceding year.

And next comes the Food Analyst Laboratory which contributed to the detection of adulteration in the food stuffs ghee, gingelly oil, coffee, tea, etc., and action taken on the reports of the Public Analyst to book the offenders under the Food Adulteration Act.

#### ASHOK VIHAR

Ashok Vihar is one of the useful institutions where medical, maternity and recreation facilities are provided to the poor slum dwellers living around the institution. In Ashok Vihar, Triple antigen, i.e., immunisation against Whooping Cough, Diphtheria and Tetanus is being tried.

#### FAMILY PLANNING

The year showed much progress in the field of Family Planning. Besides, the already existing Pudupakkam Family Planning Scheme, 5 more similar schemes have been introduced. Nearly 328 cases of salpingectomy and 134 cases of vasectomy were performed during the year. The birth rate also showed some decline.

#### SPECIAL HOME

The Corporation Special Home at Krishnampet is another useful institution intended solely to tackle the beggar problem in the City. It is used as a reception home for the diseased, infirm and disabled beggars rounded up by the Police and committed to the Home under the provisions of the Madras City Police Act for detention. There were 226 inmates at the beginning of the year and 326 were newly admitted and 33 were returned from the Hospitals. The strength at the end of the year stood at 235 excluding the discharged 350 inmates.

#### ZOOLOGICAL GARDENS

The Zoo maintained by the Corporation Health Department, is 106 years old and is serving as an educational guide for the young school children and it has gained much popularity. The Wild Life Day was also celebrated

during the year and distinguished persons like Home Minister and Local Administration Minister visited the Zoo.

In conclusion, I wish to express my heartfelt thanks to the Commissioner who extended his full co-operation in the day-to-day administration of the Department under my charge and gave me much encouragement in promoting better health of the citizens during the year. I have to record here my appreciation of the unstinted assistance of my officers and other members of the staff and the co-operation of other Departments of the Corporation relating to the administration of the Department during the year.

My good wishes and thanks go to them.

MADRAS,  
14th Sept. 1960 }

B. V. SUNDARABABU,  
*Health Officer.*

## I. STATISTICAL SUMMARY

1. Area	...319,009,920 Acres
	(or)
	... 49.84 Sq. miles
2. Population as per the Census of 1951	... 14,16,056
3. Population estimated for the mid-year 1959	... 21,10,000
4. Population calculated on the natural increase method (excess of births over deaths)	... 16,59,079
5. Average density per acre	... 53.04
6. Births excluding still births	... 70,155
7. Deaths excluding still births	... 33,515
8. Still births	... 2,253
9. Birth rate as per estimated mid-year population	... 33.24
10. Birth Rate as per population calculated on the natural increase method (excess births over deaths)	... 42.28
11. Death rate as per estimated mid-year population	... 15.88
12. Death rate as per population calculated on natural increase method (excess of births over deaths)	... 20.20
13. Natural increase	... 36,640
14. Rate of natural increase per 1,000 of estimated popula- tion.	... 17.3
15. Still births per 1,000 births (live and still)	... 31.07
16. Infant deaths	... 9,062
17. Infant mortality rate	... 129.17
18. Maternal deaths	... 140
19. Maternal mortality rate	... 1.93
20. Total No. of small-pox cases reported	... 2,138
21. Total No. of deaths due to small-pox	... 443
22. Total No. of cases of cholera reported	... 176
23. Total No. of deaths due to cholera	... 54
24. Total No. of primary vaccinations done	... 51,910
25. Total No. of re-vaccinations done	... 2,36,369

## II. METEOROLOGY

The Meteorological condition of the City recorded during the year 1959 is appended in the Statistical Supplement, Statement No. 1.

*Rainfall* :—The total rainfall recorded at the Nungambakkam Observatory during the year was 38.0 inches as against 54.1 inches during 1958.

The following comparative statement shows the rainfall recorded from 1951 to 1959 monthwar.

METEOROLOGICAL RAINFALL DATA OF MADRAS NUNGAMBAKKAM.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
1951	0.09	0.00	0.01	5.02	0.03	0.95	3.98	8.39	2.87	2.91	12.72	0.60	37.57
1952	0.05	1.14	0.00	0.00	18.54	1.00	1.60	3.95	1.17	9.60	1.30	9.92	48.30
1953	0.41	0.16	0.00	0.55	0.00	0.37	3.38	2.62	5.03	21.81	4.92	1.30	40.55
1954	1.00	0.00	0.00	0.00	0.15	0.14	9.01	6.08	3.63	11.33	2.33	10.62	44.35
1955	3.71	1.10	0.00	1.15	7.13	1.89	3.73	9.71	1.93	8.99	7.56	4.74	51.64
1956	2.13	0.00	0.00	1.91	0.90	3.59	4.49	6.36	8.37	6.76	7.22	3.72	45.43
1957	0.00	5.1	0.00	0.00	10.1	35.3	141.9	139.1	91.1	218.2	422.5	2.8	41.98
1958	10.0	0.3	0.00	2.2	70.5	45.0	45.0	187.3	41.0	417.2	463.6	91.6	54.1
1959	0.00	22.2	0.00	17.5	12.5	51.1	66.1	27.5	84.9	343.1	304.4	36.0	38.0

## III. VITAL STATISTICS

### 1. Population

The City population as per Census of 1951	...	14,16,056
Mid-year population for 1959 as estimated by the Director-General of Health Services	...	21,10,000
The population calculated on the natural increase method (excess of births over deaths)	...	16,59,079

### 2. Births

	1959 as against 1958	
Total births registered during the year	...	70,155 71,888
The birth rate calculated per 1,000 of the mid-year estimated population	...	33.24 39.65
The birth rate when calculated by natural increase method	...	42.28 44.32
Total still-births during the year	...	2,253 2,479
The rate of still-births per 1,000 births (live or still)	...	31.07 33.33

The statement shows the monthwar incidence of births during the year 1959.

Quarter	Months	No. of births	Quarterly total
First	January	3,838	} 13,538
	February	4,961	
	March	4,739	
Second	April	5,490	} 16,426
	May	4,915	
	June	6,021	
Third	July	6,740	} 18,594
	August	5,597	
	September	6,257	
Fourth	October	5,256	} 21,597
	November	5,917	
	December	10,424	
Total		70,155	70,155

The statement gives the details of births among the principal communities in the City:

Communities	No. of births registered		Total
	Males	Females	
Aliens	92	86	178
Anglo-Indians	14	14	28
Indian Christians	1,751	1,588	3,339
Hindus	31,023	30,069	61,092
Muslims	2,863	2,639	5,502
Others	11	5	16
Total	35,754	34,401	70,155

Statement of live births by age of the mother and order of confinement at live births during 1959 is furnished in Statistical Supplement—Statement No. 15.

### 3. Deaths

	1959 as against 1958	
	1959	1958
The total No. of deaths registered (excluding still births)	33,515	36,888
The death rate as per estimated mid-year population.	15.88	20.75
The death rate as per population of natural increase method (excess of births over deaths)	20.20	22.75
Natural increase of deaths	36,640	35,000
Net increase during the year	1,640	2,586

Statement of births and deaths, recorded in the City since 1959 is furnished below with special reference to the natural increase :

Year	Births	Deaths	Natural increase (+) or decrease (—)
1950	52,619	38,726	+ 13,893
1951	58,961	42,039	+ 16,922
1952	62,921	43,207	+ 19,714
1953	54,277	43,753	+ 10,524
1954	59,256	33,181	+ 26,075
1955	66,449	34,264	+ 32,185
1956	67,476	33,927	+ 33,549
1957	69,197	36,783	+ 32,414
1958	71,888	36,888	+ 35,000
1959	70,155	33,515	+ 36,640

The maximum of deaths registered during the last quarter of the year and the minimum in the first, as can be seen from the monthwar incidence—tabulated hereunder :—

Quarter	Months	No. of Deaths	Quarterly total
First	January	2,709	} 8,183
	February	2,722	
	March	2,752	
Second	April	2,223	} 7,113
	May	2,530	
	June	2,360	
Third	July	2,906	} 8,745
	August	3,081	
	September	2,758	
Fourth	October	2,224	} 9,474
	November	2,965	
	December	4,285	
Total		33,515	33,515

The number of deaths registered in each division with the corresponding death rates is furnished in the Ststistical Supplement—Statement No. 5.

### Deaths amongst the Principal Communities

The occurrence of deaths community-wise is as follows :—

Principal Communities	Males	Females	Total
Aliens	5	2	7
Anglo-Indians	57	49	106
Indian Christians	795	705	1,500
Hindus	14,503	14,070	28,573
Muslims	1,709	1,604	3,313
Others	11	5	16
Total	17,080	16,435	33,515

The number of births and deaths registered with respective rates among the principal communities in the City during the year, as compared with the previous years, is furnished in the Statistical Supplement—Statement No. 11.

The statement furnished below gives the age and sex-wise distribution of total deaths :—

Age-group	Males	Females	Total	Percentage rate
Under 1 year	4,781	4,281	9,062	27.03
1 to 4 years	4,070	4,449	8,519	25.41
5 to 10 years	561	578	1,139	3.39
10 to 14 years	217	196	413	1.23
15 to 19 years	240	296	536	1.59
20 to 29 years	811	1,010	1,821	5.43
30 to 39 years	884	853	1,737	5.18
40 to 49 years	1,072	772	1,844	5.53
50 to 59 years	1,351	882	2,233	6.66
60 years and above	3,093	3,118	6,211	18.55
Total	17,080	16,435	33,515	100.00

## Principal Causes of Death

	1959 as against 1958	
	1959	1958
Deaths due to small-pox during the year ...	443	1,267
Deaths due to cholera during the year ...	54	48
Deaths due to respiratory diseases ...	8,415	8,174

The following statement shows the figures under the principal causes of death :—

Causes of death	Males	Females	Total	Rate per 1,000 estimated mid-year population
Plague	...	...	...	...
Cholera	26	38	64*	0.03
Small-pox	248	269	517*	0.24
Measles	...	...	...	0.00
Malaria	6	2	8	0.00
Enteric Fever	70	38	108*	0.05
Other Fevers	496	519	1,015	0.48
Dysentery	1,449	1,534	2,983	1.41
Diarrhoea	906	996	1,902	0.90
Tuberculosis (including T.B. of lungs)	398	274	672	0.31
Other Respiratory diseases.	4,245	4,170	8,415	3.98
Deaths due to child birth	...	140	140	0.06
All other causes	9,236	8,454	17,690	8.38
Total	17,080	16,435	33,515	15.88

\*Includes deaths from mofussil cases.

## Infant Mortality

	1959 as against 1958	
	1959	1958
Infant mortality rate for the year ...	129.17	144.8

Statement showing the number of deaths under different age-groups under 1 year :—

Age-groups	No. of infant deaths
Under 7 days	2,138
Above 7 days and under 1 month	1,030
Above 1 month and under 6 months	2,811
Above 6 months and under 1 year	3,083
Total	9,062

The following statement shows the infant mortality rate recorded in the City since 1946.

Year	Infant mortality rate
1946-1950	176.26*
1951-1955	157.98*
1956	145.24
1957	139.76
1958	144.8
1959	129.17

\* Quinquennial average.

The following statement shows the principal causes of infant deaths.

S. No.	Causes of death	No. of deaths	Age-disease specific death rate
1	Cholera	Nil	Nil
2	Small pox	112	1.16
3	Measles	1	0.01
4	Diphtheria	17	0.10
5	Enteric fevers	3	0.03
6	Malaria	1	0.01
7	Other fevers	153	1.68
8	Dysentery	545	6.14
9	Diarrhoea	699	7.71
10	Infantile debility, malnutrition, including premature births	2,424	26.74
11	Diseases of the respiratory system	3,083	34.21
12	Convulsions	340	3.75
13	Other diseases	1,684	18.46
	Total	9,062	100.00

**Maternal Mortality**

Deaths amongst the mothers as a result of child bearing	1959 as against 1958	
	1959	1958
...	140	145
<b>Maternal mortality rate</b>	<b>1.93</b>	<b>1.94</b>

The maternal mortality rates for the last one decade is furnished hereunder.

Year	Maternal deaths	Maternal mortality rate
1950	112	2.15
1951	151	2.50
1952	155	2.78
1953	155	2.78
1954	150	2.47
1955	156	2.34
1956	153	2.18
1957	150	2.08
1958	145	1.94
1959	140	1.93

## EPIDEMIC AND ENDEMIC DISEASES

### 1. Small-pox

During the year under review the incidence of small-pox was 517 as against 4,869 during 1958. Deaths during 1959 due to small-pox are 443 as against 1,267 during 1958. The apparent decrease in the incidence of the disease is due to the prompt and effective measures taken to control it.

The number of attacks and deaths from small-pox reported in the City during 1959 was as follows :—

Months	City		Moffussil	
	Attacks	Deaths	Attacks	Deaths
January	211	47	34	8
February	173	28	38	10
March	220	47	64	10
April	196	46	79	13
May	116	30	37	9
June	80	10	18	3
July	121	22	26	5
August	277	52	19	2
September	285	60	16	6
October	207	53	19	3
November	116	31	6	2
December	136	17	15	3
Total	2,138	443	371	74

The following statement shows the incidence of small-pox and vaccinations performed month-wise.

Months	Attacks	Deaths	Primary and Secondary Vaccinations	Re-vaccinations
January	211	47	5,156	25,876
February	173	28	6,064	41,047
March	220	47	4,738	26,699
April	196	46	4,397	20,281
May	116	30	3,771	15,123
June	80	10	3,856	10,971
July	121	22	4,206	13,218
August	277	52	3,852	16,688
September	285	60	4,217	15,376
October	207	53	3,623	17,185
November	116	31	4,016	20,487
December	136	17	4,014	13,418
Total	2,138	443	51,910	236,369

## 2. Cholera

1959 as against 1958

The incidence of cholera during the year	...	176	212
Deaths due to cholera during the year	...	54	48

There were 171 cases of cholera during the month of January, 4 cases in February, 1 case in March and during other months of the year it was free from the incidence of cholera.

The following statement shows the month-wise incidence of cholera during 1959:—

Months	City		Moffusil	
	Attacks	Deaths	Attacks	Deaths
January	171	54	10	6
February	4	2	5	1
March	1	...	1	1
April	...	...	...	...
May	...	...	...	...
June	...	...	...	...
July	...	...	...	...
August	...	...	...	...
September	...	...	...	...
October	...	...	...	...
November	...	...	...	...
December	...	...	...	...
Total	176	56	16	8

## 3. Enteric Fever

1959 as against 1958

Number of attacks during the year	...	827	981
Number of deaths during the year	...	108	165

## 4. Measles

1959 as against 1958

Number of attacks during the year	...	650	649
Number of deaths during the year	...	1	3

## 5. Tuberculosis

		1959 as against 1958	
Number of deaths during the year	...	672	629

## 6. Kala-Azar

		1959 as against 1958	
Number of attacks during the year	...	16	58
Number of deaths during the year	...	8	10

## 7. Chicken Pox

Number of attacks during 1959	...	1,737.
Number of deaths during 1959	...	Nil.

## 8. Malaria

The following statement shows deaths due to Malaria year-wise for the last 10 years :—

Year	Death	Death Rate per 1,000 of Estimated Mid-year Population
1950	102	0.100
1951	91	0.060
1952	75	0.050
1953	96	0.060
1954	105	0.070
1955	75	0.050
1956	33	0.020
1957	18	0.010
1958	14	0.070
1959	8	0.003

## MALARIA

The whole City of Madras is divided into 4 Ranges and each Range consists of 25 Divisions.

There are 4 Assistant Health Officers assisted by 5 Malaria Supervisors, specially trained in anti-malarial operations, who were in-charge of anti-mosquito operations.

With the help of 50 Malaria Maistries and 313 Thozhilalies, the anti-mosquito operations were carried in all the 4 Ranges of the City under the direct supervision of Range Assistant Health Officers.

The usual breeding places of mosquitoes are storm water drains, stagnating pools of water, cess-pools and inside the houses, wherein condemned utensils, tins, etc., which are likely to collect water, are stored, and water cisterns. Besides these, unused wells, ponds, tanks and fire buckets are good sources for breeding mosquitoes. To deal with these various sources of breedings, the malaria staff have been divided into various categories of squads. Their main aim is to see that every breeding place is treated once a week since one week is the maximum time required for the egg of a mosquito to become an adult. Though the storm water drains of the city, which run into several miles, are treated every week, the breeding places in the houses could not be attended weekly for want of sufficient staff, with the result the mosquito nuisance in the City could not be completely eradicated.

The different categories of squads employed in the anti-mosquito operations are the drain cleaning gangs, desilting gangs, fish gangs, house inspection squads and tank cleaning gangs. Besides these, as per international sanitary conventions, the Corporation is bound to keep half a mile area around the Harbour, free from aedes mosquito, which is a vector for the disease "Yellow Fever". For this purpose, special Stegomyia Squads are employed in the various divisions that fall within half a mile radius from the Harbour, whose duty is to inspect every house and every collection of water in those areas and see that there is no breeding of aedes aegypti.

The main water ways that flow through the heart of the City, namely Buckingham Canal, Coom River and the Adyar River have become very good sources of breeding of mosquitoes due to the contamination of these waters with the sewage of the City. There is another channel which takes the sewage of Nammalwarpet and the trade wastes of B. & C. Mills,—the Ottery Nullah and it is also source of good breeding. However, the Department is trying to control the mosquito breeding in these water ways, yet they have become a great problem that could not be easily dealt with. Until some arrangements are made to divert all the sewage that enters these water ways, through some other route, this nuisance will continue.

As a routine measure in the endemic areas of the City, the residual spraying against the adults is conducted by the Senior Entomologist. However, on complaints and on payment of the fees at the scheduled rates, D.D.T. spraying has been done by this Department in several places.

1950	2	0.002
1951	14	0.070
1952	18	0.100
1953	20	0.050
1954	28	0.050

MALARIA

The Malaria Control Officer, Madras, has been in charge of the Malaria Control Officer, Madras, since 1950. The Malaria Control Officer, Madras, has been in charge of the Malaria Control Officer, Madras, since 1950. The Malaria Control Officer, Madras, has been in charge of the Malaria Control Officer, Madras, since 1950.

## NATIONAL MALARIA ERADICATION PROGRAMME, MADRAS.

A venture without precedent in human history is the present world wide campaign to stamp out malaria. Never before have concerted international forces on such a scale been deployed against a single disease. Never before have doctors, engineers, laboratory workers and helpers of all kinds been mobilized in such large numbers in so many different countries to combat the same evil. Never before has a scheme been launched that so intimately affects the living conditions of such vast numbers of the earth's inhabitants.

The necessity for this giant undertaking was unanimously recognised by the representatives of all the Governments of the world. They have laid particular emphasis on the need of urgency in eradication programmes and on the great importance of sound plan of action, and of carrying it out with precision and on schedule. This programme will mean an all-out war on malaria—no matter what the cost—its object being to stamp out the disease completely before the mosquitoes develop resistance to insecticides. It is feared that if the eradication programme is not carried out energetically, a time may come when resistance types of mosquitoes will emerge out and spread malaria on an unprecedented scale among the non-immune population in the country and claim millions as its victims.

Having considered the danger constituted by the potential development of anopheline resistance to insecticides, the Government of India have intensified plans of nation-wide malaria control so that malaria eradication may be achieved and the regular insecticide spraying campaigns safely terminated before the potential danger of a development of resistance to insecticides in anopheline vector species materializes.

The Madras Corporation has recognised the importance of extending the fight against malaria and agreed to participate in the programme to afford protection to the population at risk, which was estimated to be about 6 lakhs in the City. At the end of 1955, about 2,08,900 that is 34.5% of the total population at risk, has been protected. In 1956, the scheme was extended to protect 2,53,600 which means 42.3% of the population in malarious areas and in 1957, about 3,50,000 inhabitants were protected. In 1958, the protection was further extended to cover 4,70,110 inhabitants and in 1959, the number of persons under protection was 13,29,000 as shown in the Chart No. 1 graphically represented.

Malaria eradication implies the reduction of the parasite reservoir in human population to such a negligible degree that once it has been achieved, there is no danger of resumption of malaria. Complete coverage of the entire City is necessary to achieve the object. With that in view for the speedy achievement of eradication, both larvicides which have held a place of primary importance among the weapons used in fighting malaria and insecticides have been used in 1959. Anti-larval measures have been intensified in the City supplemented by perimeter DDT residual spraying on the border divisions. It should be emphasized that the application of insecticides do not displace but supplement the dependable larvicides which are being extensively used in the City.

*Staff.*—The introduction of the eradication concept has widened the field of epidemiological and entomological investigation during all stages of campaigns. Trained personnel in Malariology with understanding of the paramount importance of their responsibilities is very necessary to fulfil their duties satisfactorily.

During the year under report, Sri Khasim Ali Miyan continued to be the Senior Entomologist in charge of the Malaria Eradication Programme in the City. The duties entrusted to him are that he should see that the programmes are carried out correctly and according to schedule by the staff of the unit, that he should carry out post operational malaria surveys to assess

the results and study the behaviour of the vector adults and larvae towards insecticides with effect on the incidence of malaria.

The staff for the Malaria Eradication Programme during 1959 consisted of the following :—

Malaria Supervisors	...	...	2
*Malaria Supervisors	...	...	2
Laboratory Technician	...	...	1
Typist	...	...	1
Attenders	...	...	8
*Stegomyia Overseer	...	...	1
*Maistries	...	...	2
*Fish Gang Maistries	...	...	3
*Literate thozhilalies	...	...	2
Drivers	...	...	2
Cleaner	...	...	1
*Peons	...	...	2
Thozhilalies	...	...	55
*Fish Gang thozhilalies	...	...	6

\* (Staff diverted from the General Malaria Section temporarily to the Malaria Eradication Programme).

*Evaluation of Eradication Campaigns :* In addition to the pre-operational surveys, continuous checks have been carried out to find out the effectiveness of the measures applied, to prevent transmission, when spraying may be discontinued and when malaria eradication may be deemed to have been established. Epidemiological investigations have been extended to 33 old divisions of the City during the year under report as against 12 divisions in 1958 examining 15,372 children for spleen enlargement and 3,367 blood smears in 1959 as against 7,186 children and 2,456 blood smears in 1958. The systematic anti-malaria measures have brought about a remarkable drop in the spleen and parasite rates as shown below :—

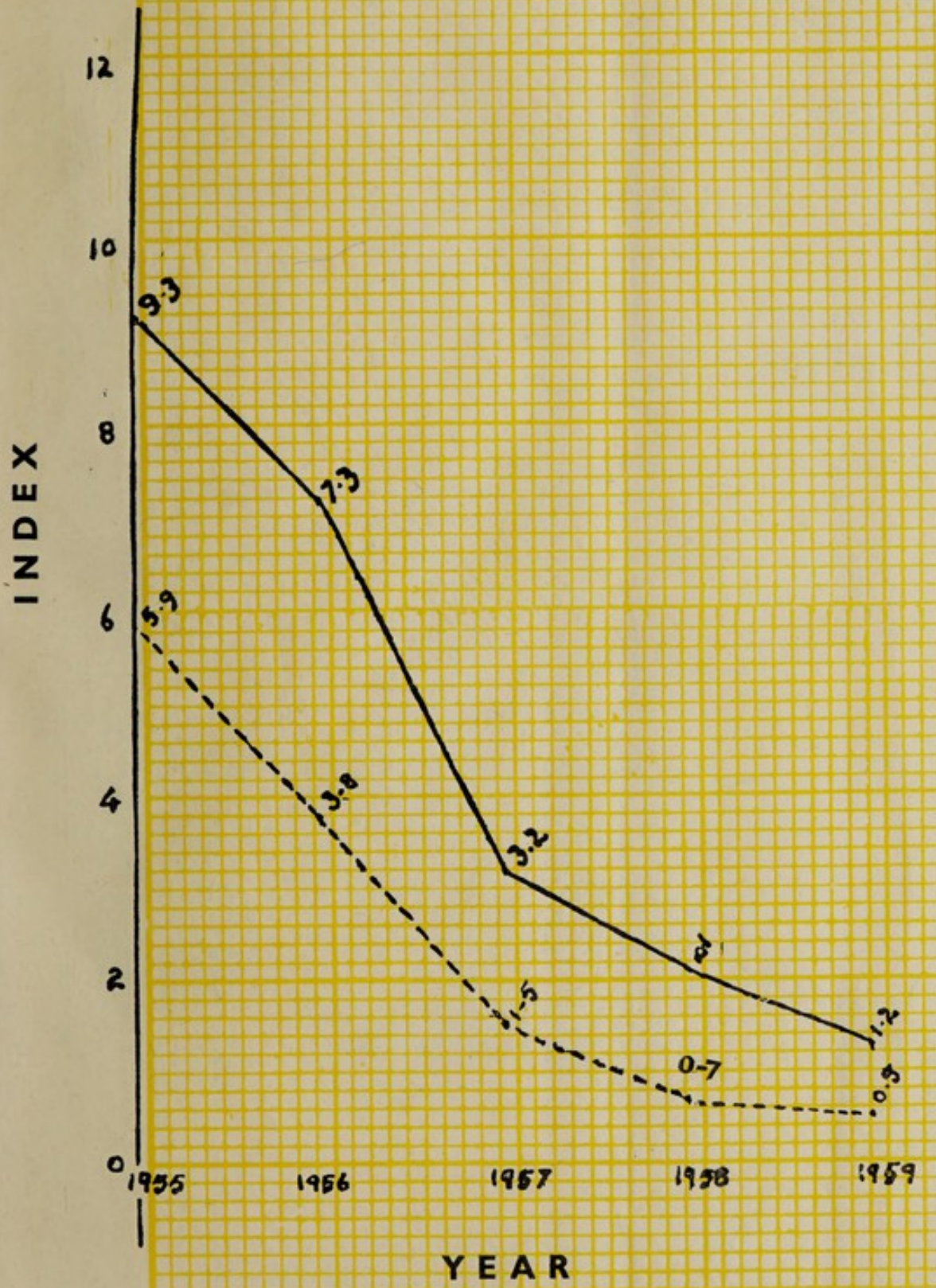
Table No. I

Year	Overall spleen rate			Overall parasite rate		
	No. of children examined	No. found positive	Spleen rate per cent	No. of children examined	No. found positive	Parasite rate per cent
1955	5,042	471	9.3	983	58	5.9
1956	2,643	192	7.3	421	16	3.8
1957	7,170	230	3.2	1,273	19	1.5
1958	7,186	151	2.1	2,456	16	0.7
1959	15,372	192	1.2	3,367	16	0.5

The cumulative spleen rate in the malarious area in George Town which was as much as 9.3% and parasite rate 5.9% in 1955 have now come down to 1.2% and 0.5% respectively in 1959 as shown in Graph II. The decline in the spleen rates and parasite rates has been recorded in all the divisions as shown below :—

GRAPH II  
ILLUSTRATING THE DECLINE OF SPLEEN AND  
PARASITE RATES 1955-1959

SPLEEN RATE ———  
PARASITE RATE - - - - -



GRAPH II  
 ILLUSTRATING THE DECLINE OF SPLEEN AND  
 PARASITE RATES 1952-1959

SPLEEN RATE ———  
 PARASITE RATE - - - - -

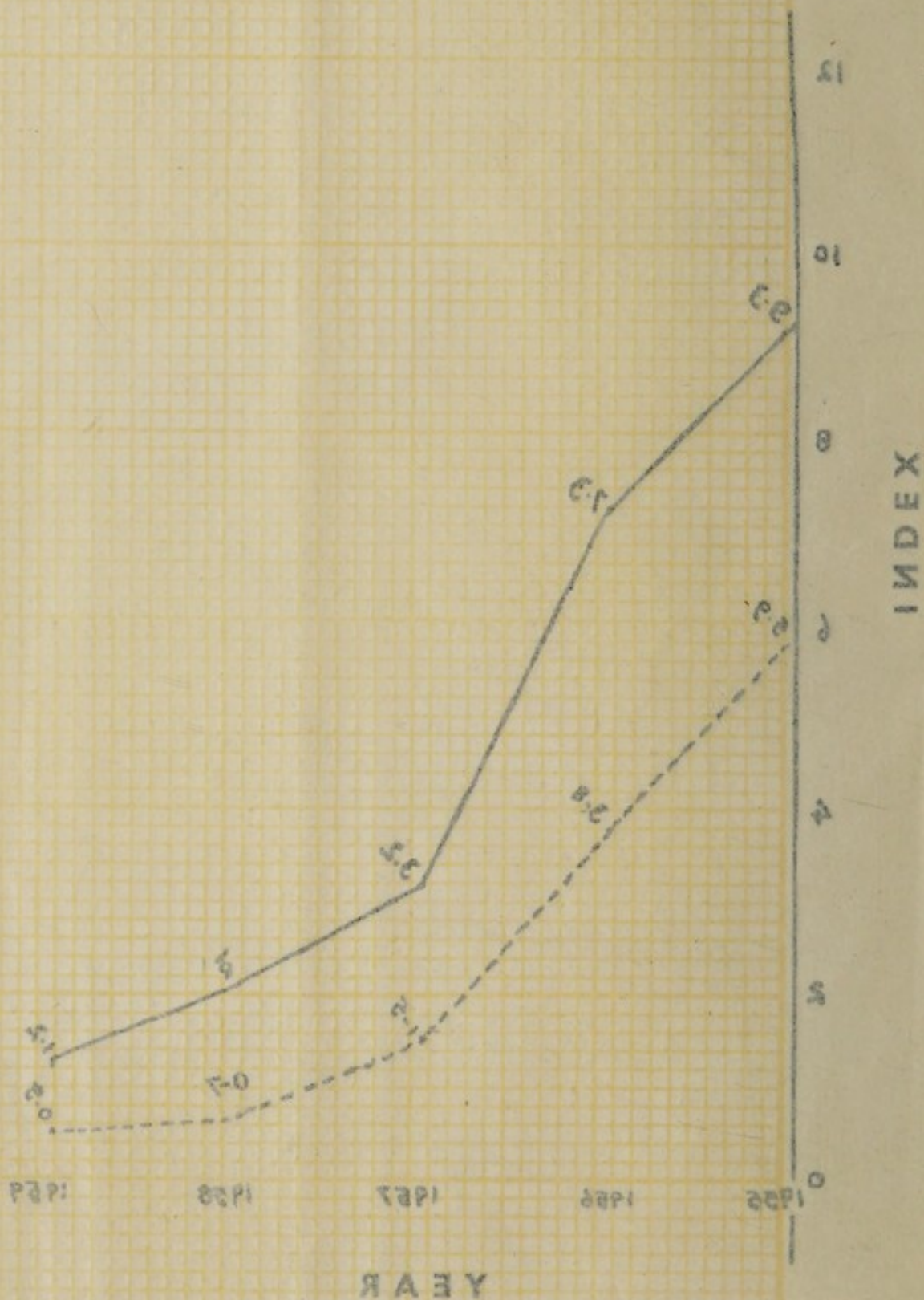


TABLE No. II.

Old Division No.	Names of the Divisions	Pre-operation (1955)			Post-operation (1959)		
		Spleen rate per cent	AES	Parasite rate per cent	Spleen rate per cent	AES	Parasite rate per cent,
7	Basin Bridge ...	17.0	1.4	5.5	0.8	1.8	0.5
8	Peddunaickenpet ...	7.9	1.4	7.4	0.9	1.1	0.0
9	Seven Wells ...	8.4	1.5	6.9	2.0	1.3	1.5
10	Amman Koil ...	10.6	1.4	4.7	1.2	1.0	0.0
11	Muthialpet ...	9.7	1.5	7.3	1.2	2.1	0.0
12	Harbour ...	9.7	1.5	5.2	1.1	1.6	1.1
13	Kachaleeswarar ...	8.7	1.6	5.6	1.6	1.4	0.9
14	Kothawal Bazaar ...	8.2	1.4	7.5	1.0	1.7	0.0
15	Sowcarpet ...	9.5	1.4	7.3	2.4	1.9	0.9
16	Trevelian Basin ...	6.4	1.3	4.7	1.2	2.0	0.0
27	Edapalayam ...	...	...	...	2.2	1.9	1.6
28	Park Town ...	...	...	...	0.9	1.3	1.1

Detailed data collected during malarimetric surveys is herewith appended.

*Degree of Spleen enlargement :*

The degree of spleen enlargement of the size of the spleen mass has also been determined along with the spleen survey. A table consolidating the determination of the spleen mass for the last four years is given below :—

TABLE No. III.

Year	Spleen Size					Total	AES
	(1)	(2)	(3)	(4)	(5)		
1955 ...	180	146	9	...	...	335	1.5
1956 ...	206	225	14	...	...	445	1.6
1957 ...	120	107	3	...	...	230	1.5
1958 ...	45	101	5	...	...	151	1.7
1959 ...	39	46	6	...	...	91	1.6

Children with enlarged spleens found in 1959 show a remarkable reduction in sizes one and two. Out of 91 children found with spleen enlargement during 1959, only 39 children were having spleens of size one as against 45 in 1958 and 120 in 1957. The number of children with size two spleens were 46 and with size three spleens were 6 in 1950 as against 101 and 5 in 1958 and 107 and 3 in 1957 respectively. Children having spleens of sizes 4 and 5 have not been encountered in the controlled area. In the new extended area which has been taken up in the eradication programme during the year under report, 3 cases with spleens of 4th size have been recorded in Kosapet, Zam Bazaar and Theagaraya Nagar (South) one in each division.

*Parasite Survey :*

3,367 blood smears prepared on the accepted methods of marking a thick and thin smears on the same slide were taken in 1959 as against 2,456 smears in 1958 and 1,273 smears in 1957 from children of the age group between 2 and 10 years. The following data gives a comparative parasite rate since 1955 :—

TABLE No. IV.

Year	Blood examination			Plasmodium species			
	No. of smears examined	No. positive.	Parasite index per cent	BT	MT	Q	Mixed
1955	983	58	5.9	21	47	...	...
1956	944	32	3.4	8	23	...	...
1957	1,273	19	1.5	7	12	...	...
1958	2,456	16	0.7	6	10	...	...
1959	3,367	16	0.5	4	12	...	...

The cumulative parasite rate works out to 0.5% in 1959 as against 0.7% in 1958 and 1.5% in 1957. It may be seen from the above data that MT was found to be predominating species of plasmodium followed by BT in all the five years.

The rate of reduction of plasmodium vivax is slow whereas plasmodium facliparum shows a slight increase which is indicative of the static condition of malaria prevalent in the City. No quartan parasites were encountered.

*Malaria Morbidity :*

Up to about 1955, malaria cases treated in the Corporation Dispensaries each year ranged from 6,000 to 17,000. The magnitude of the malaria problem can be assessed from the fact that there were as many as 1,298 deaths in 1925 and 1,342 deaths in 1926 due to urban malaria in the city. From the quantitative evidence it is inferred that there is marked reduction in malariousness in the northern portions of Madras where malaria was prevalent almost throughout the year with periodic outbreaks of epidemics before the implementation of the control measures. The malaria morbidity ranged from 0.5% in 1955 to 0.047% in 1959 as against the average annual malaria morbidity rate of 4.0% before spraying. The statement given below shows that there is marked reduction in malaria cases in the entire City which has resulted from well planned and properly executed larvicidal controls.

Year	Total admission in the dispensaries	Total malaria cases	Morbidity rate per cent	Remarks
1955 ...	13,96,381	5,050	0.32	
1956 ...	16,36,269	2,650	0.16	
1957 ...	16,75,637	2,821	0.16	
1958 ...	13,27,883	2,701	0.20	
1959 ...	15,54,187	1,077	0.06	

The percentage of malaria cases treated in the six Corporation Dispensaries in the malarious area since 1955 as given below shows that malaria incidence is almost restricted :—

Dispensaries in malarious area	Malaria morbidity rates					Remarks
	1955	1956	1957	1958	1959	
	%	%	%	%	%	
Mahfus Khan Dispensary ...	0.01	0.001	0.001	0.00	0.002	
Mannady Dispensary ...	1.40	2.2	0.001	0.07	0.32	
Mint Dispensary ...	0.55	0.3	0.01	0.07	0.007	
Muthialpet Dispensary ...	0.005	0.48	0.00	0.00	0.00	
Seven Wells Dispensary ...	...	0.57	0.32	0.08	0.06	
Trevelyan Basin Dispensary ...	...	0.45	0.18	0.03	0.0002	
Average ...	0.51	0.35	0.09	0.0004	0.047	

Graph No. III illustrates the annual fever case rates in the year 1955.

*Infant Parasite Index.*—The single most important index which is capable of giving a great deal of information with reference to the transmission season and the actual quantum of transmission is the infant parasite index, 1,061 blood smears taken from infants under one year from different parts of the City were examined with negative results as shown in the tabular Statement No. II appended.

*Entomological Findings.*—Besides the epidemiological data given above, the other most satisfactory method of weighing results from the use of insecticides, and larvicides is by measuring its effect on the total population of the anopheline species known to be effective carriers. Regular daily collections of adult mosquitoes are made in 2 human dwellings, 1 mixed dwelling and a cattle shed besides supplementary cattles in each of 6 divisions.

The following anopheline species were individuated in the mosquito population check during the year 1959 :—

- A. Subpictus
- A. Vagus
- A. Aconitus
- A. Stephensi

470 hours and 50 minutes have been spent for adult collections in human and mixed dwellings and 121 hours and 30 minutes in cattle sheds in 1959. The prevailing incidence of the anopheline species in the City in terms of human hours is expressed in a tabular form appended :—

Stations.	1957			1958			1959			Remarks			
	Total man hours		Total Anopheles	Total man hours		Total Anopheles	Total man hours		Total Anopheles				
	H.	M.		H.	M.		H.	M.					
Human and mixed dwelling ...	571	30	1,825	31.93	374	10	2,531	66.2	470	50	2,478	52.6	
Cattle shed ...	106	10	196	18.47	101	20	471	44.2	121	30	466	38.4	

After the initiation of the larval control in 1959, anopheles in catching stations dropped from 66.2 in 1958 to 52.6 in 1959 in human and mixed dwelling and from 44.2 in 1958 to 38.4 in 1959 in cattle sheds.

The fundamental requirements for the prevention of malaria is to effect the quantitative reduction of malaria vector species to densities below levels of malaria transmission and prevent the contact between mosquitoes and sleeping men. Only two *Anopheles stephensi*, the malaria vector in the City were caught during the year 1959 indicative of the efficiency of control measures.

*Larval Survey.*—Supplemental programme of larval collection in wells was continued in the City during the year under report to ascertain the species of mosquitoes prevalent, to identify the areas to which the control measures should be applied and to check the effectiveness of the control measures. The determination of larval density by dipping has been used. Collections were sent to the laboratory where they were identified either in larval stage or adults. 6,303 wells were searched for anopheline breeding in 1959 as against 3,940 wells in 1958 and 1,694 wells in 1957. *A. Stephensi* was found breeding in 128 wells, anophelines in 258 wells and culicines in 355 wells as shown in the statement given below :—

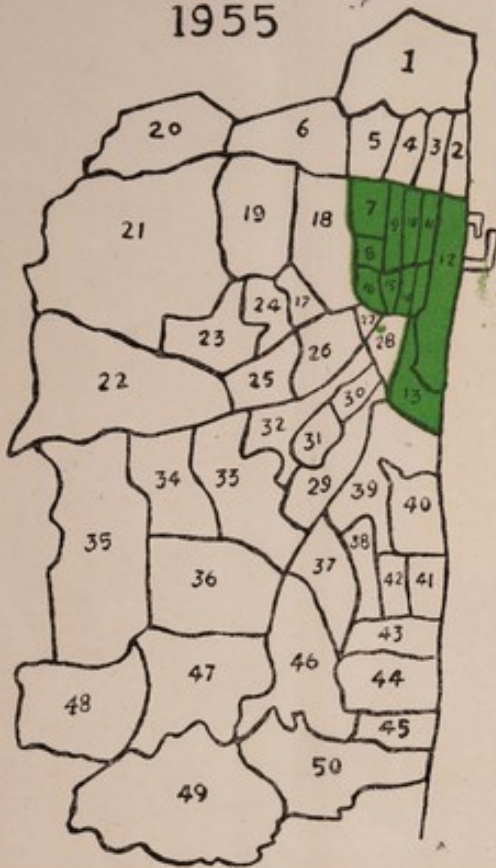
#### LARVAL COLLECTION STATEMENT FOR 1959.

Months	No. of wells searched	No. of wells found breedings		Total	Stephensi
		Culicinae	Anophelines		
July, 1959 ...	1,092	108	71	179	...
August, 1959 ...	964	43	49	92	26
September 1959 ...	923	48	31	79	19
October, 1959 ...	1,087	49	38	87	23
November, 1959 ...	1,150	60	36	96	32
December, 1959 ...	1,087	47	33	80	28
Total ...	6,303	355	258	613	128

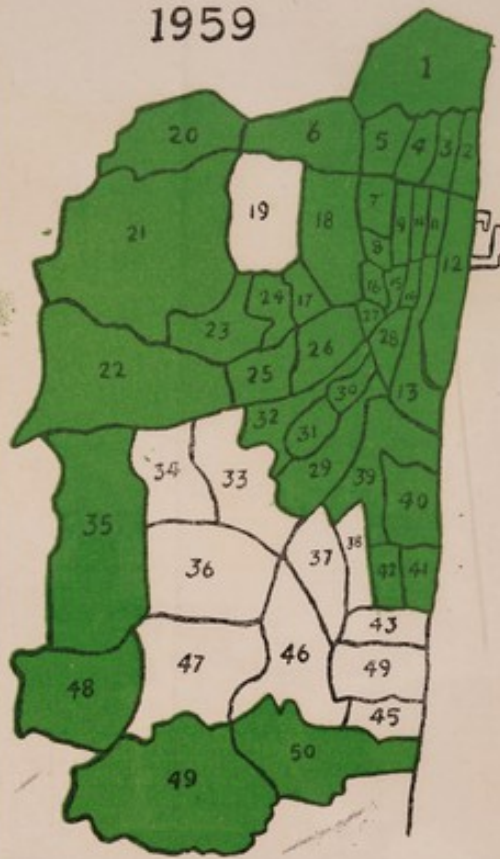
# MALARIA ERADICATION PROGRAMME MADRAS CITY AREA UNDER PROTECTION



1955



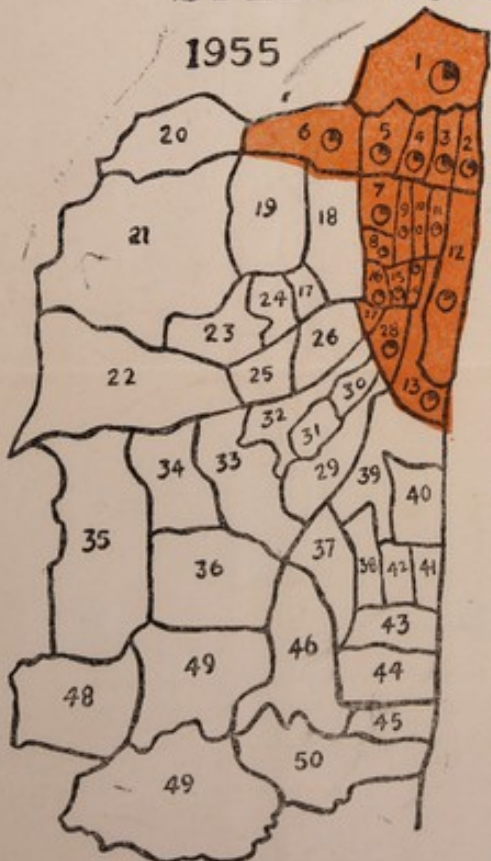
1959



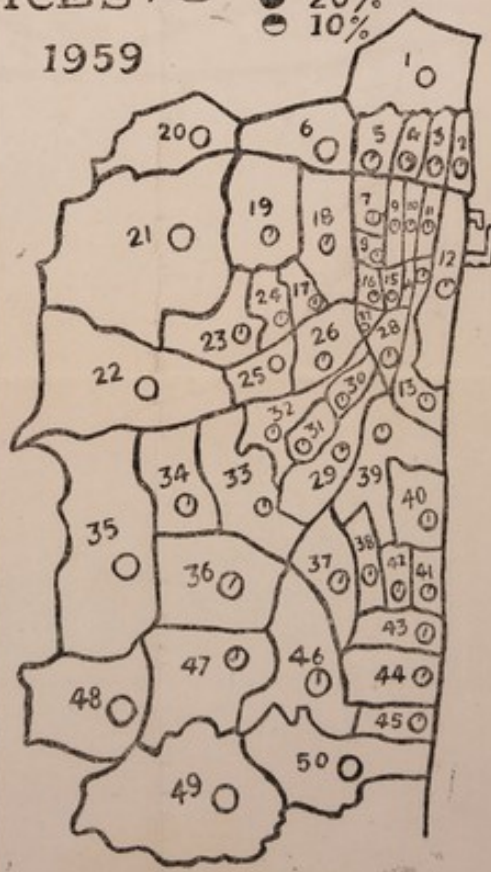
## SPLEEN INDICES

● 20%  
○ 10%

1955

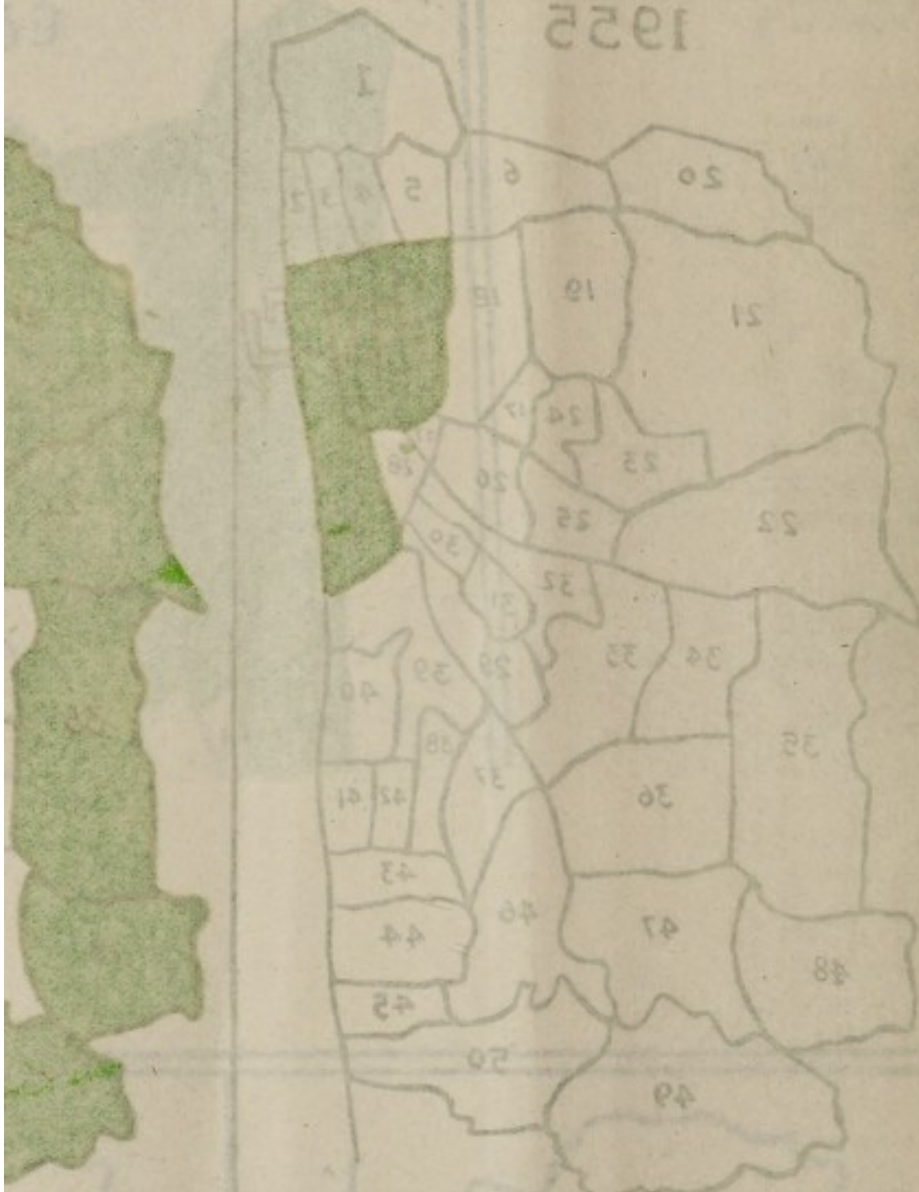


1959



CITY AREA UNDER PROTECT  
MALARIA ERADICATION PROG

1955



SPLIEN INDICES

1955



The breeding was recorded only in wells of those houses whose occupants were opposed to treatment or due to inadequate application of Larvicides. Those wells which are locked up in godowns and stores are the gravest malaria hazards in the City.

*Anti-Parasite Measures.*—Free supervised distribution of anti-malarial drugs was continued among malaria patients in all the divisions in the City during the year under report. A single dose of Avlclor tablets had been administered at the spot to malaria cases. In 1959, the number of malaria cases treated were 184 as against 208 in 1958 and 261 in 1957.

*D.D.T. Spraying Operations.*—The residual D.D.T. spraying was carried out by trained labour under close supervision. The inner surface of walls and as much of the ceilings as could be approached of in human dwellings and cattle sheds were sprayed. The usual application of 1 gallon of 5% "ready to use" suspension to every 2,000 sq.ft. of superficial area of the houses was carried out to give deposit of 100 mgms. per sq. foot. During the year under report, the spraying operations were carried out by the State Unit on the periphery of the City spraying 57,760 structures and by the Corporation Unit spraying 15,954 structures inside the City in one round spending 19,423 lbs. and 21,392 lbs. of 75% wellable D.D.T. respectively. The new divisions included in the programme during the year under report were New Washermenpet, Vyasarpady, Sembium, Ayanavaram, Kilpauk, Kodambakkam, Saidapet, Guindy, Adyar and Periamet.

*Anti-Larval Measures.*—Larvicides have held a primary importance among the weapons used in fighting malaria, especially urban malaria which is transmitted by *A. Stephensi* breeding in wells in the City. There are more than 25,000 wells in the City, most of which are subjected to weekly treatment with Armex soap water emulsion because of its spreading qualities, general availability, low cost and high toxicity to mosquito larve. The second line of attack is the introduction of larvivorous surface feeding fish *Gambusia* in wells which are used for drinking purposes and re-stocking them periodically to maintain an adequate fish population.

During the year 1959 under report, 8,943 wells at an average were treated with Armex soap water emulsion per week and 1,662 wells were stocked with *Gambusia* fish. The residual breeding in cisterns, overhead tanks and other artificial containers was also checked weekly.

The following is the summary and analysis of the work done in eradication campaign in 1959 as compared with 1958.

	1958	1959
(a) Total number of houses treated ...	36,918	73,714
(b) Superficial area treated ...	19,72,92,000 sq.ft.	12,24,44,000 sq.ft.
(c) Inhabitants directly protected ...	4,70,110	13,29,000
(d) DDT consumed ...	65,765 lbs.	40,815 lbs.
(e) Man hours of labour (actual spraying times) ...	58,450	15,000
(f) No. of wells treated with Aromex soap water emulsion. ...	...	3,57,720
(g) No. of wells stocked with <i>Gambusia</i> fish ...	...	1,062
(h) Motor transport ...	6,436 miles	13,276 miles

## ANALYSIS

(a) Superficial area per house treated ...	5,344 sq.ft.	...1,661 sq.ft.
(b) Inhabitants per house both treated and missed ...	11	18
(c) DDT spent per house ...	1.8 lbs.	0.6 lbs.
(d) Man hour of labour per house ...	1.5	0.2
(e) Superficial area treated per capita ...	420 sq. ft.	92. sq.ft.
(f) DDT consumed per capita ...	0.14 lbs.	0.03 lbs.
(g) No. of wells treated with Aromex emulsion per week. ...		8,943

*Cost.*—The Malaria Eradication programme has been carried out in the City in 1959 at a cost of Rs. 65,356-64 nP. (excluding the pay and allowances of the staff diverted from the General Malaria Section) as per detail below :—

	Rs.	nP.
1. Establishment ...	19,117	08
2. Labour ...	37,410	67
3. Contingencies ...	8,628	89

This works out to 5 naye paise per head per annum in the City as against 33 naye paise for the whole of India. Even if the pay and allowances of the diverted staff are included, the *per capita* expenditure does not exceed 7 naye paise.

*Supplies.*—The following supplies have been made from the Central Government :—

	1955	1956	1957	1958	1959
<i>Equipment :</i>					
Trucks ...	2	...	...	...	...
Power sprayer ...	1	...	...	...	...
Hand Compression Sprayers ...	12	...	...	...	...
Stirrup Pumps ...	30	...	...	21	...
<i>Drugs :</i>					
Resohim ...	740	...	...	...	...
Nivaquine ...	1,000	...	...	...	...
Avloctor ...	...	10,000	...	...	...
<i>Insecticides :</i>					
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
DDT 75% wellable ...	1,39,000	75,422	30,095	20,500	...
Dieldrin 50% wellable ...	600	1,000	400	...	...

The following have been spent during 1959 and the previous five years :—

	1955	1956	1957	1958	1959
<i>Drugs :</i>					
Resoctim	...	740	...	...	...
Nivaquine	793	207	...	...	...
Avloctor	...	...	925	806	759
<i>Insecticides :—</i>					
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
DDT 75% wellable	16,762	42,140	47,920	65,765	21,392
Dieldrin 50% wellable	...	...	567	...	...

*Other Activities.*—Laboratory tests were carried out to find out D.D.T. resistance in anophelines in the City of Madras. Adult females which had taken full blood meals the previous nights were collected from mixed dwellings early in mornings and used for tests before 12 noon. Impregated papers supplied by the Director of Public Health, Madras were used. The tests, were carried out with different dosages. The results are summarized in the Table appended. It has been noticed that anophelines are still susceptible to D.D.T.

Eighteen Entomological Assistants deputed by the Director of Public Health, Madras, were given field training on all aspects of anti-mosquito and anti-malaria measures and also in epidemiological and entomological surveys for two weeks.

*Conclusion.*—Out of the total population of 20 lakhs in the City, nearly 13,29,000 have been protected. Energetic DDT spraying begun in 1955 and anti-larval measures begun in 1957 had achieved by 1959 a remarkable degree of success. The spleen rate (Percentage of people with enlarged spleen) and the parasite index (percentage of persons whose blood contains parasites) respectively were 9.3% and 5.9% in 1955. In 1959, they were 1.2% and 0.5%. The drop in the number of malaria cases from 7,000 at an average before the implementation of National Malaria Control Programme to 1,077 in 1959 is impressive. This is a good achievement but it has to be borne in mind that under Eradication programme, effective and concentrated measures are to be carried out to achieve total eradication of malaria in the City. The plan for 1960 is, in addition to gradually more extensive malariometric surveys and entomological investigations, barrier spraying and anti-larval measures against *A. Stephensi* will be continued throughout the City supplemented by intensive search for malaria cases and treatment.

## SANITATION

Madras City Sanitation was under the control of Dr. B. V. Sundarababu, M.B.B.S., D.P.H. (Cal.), Health Officer. He was assisted by the following four Assistant Health Officers:—

- (1) Dr. P. V. Balakrishna Marar, L.M. & S., B.S.Sc.
- (2) Dr. I. Gopalakrishnan, B.A, M.B.B.S., B.S.Sc.
- (3) Dr. N. Dhakshinamurthy, M.B.B.S., B.S.Sc.
- (4) Dr. A. Ramachandra Rao, M.B.B.S., B.S.Sc., till 28—4—1959.  
Dr. P. R. Krishnamurthy, M.B.B.S., T.D.D., B.S.Sc., F.O.Z.,  
from 1—9—1959.

Each Assistant Health Officer was incharge of a range consisting of 25 divisions. There were 61 Sanitary Inspectors in-charge of 100 divisions of the City. Besides these, there were 5 Food Inspectors to take samples under the provisions of the Prevention of Food Adulteration Act of 1954. The Anti-Mosquito Operations in the City were in the charge of 5 Malaria Supervisors.

### 1. Food Sanitation.

#### *Hotel Sanitation.*

1. No. of renewal applications received for licences for Food Handling Establishments' under Section 279 of M.C.M. Act	...	4,175
2. No. recommended	...	3,701
3. No. refused	...	474
4. No. of new applications received under Section 279	...	304
5. No. recommended	...	176
6. No. refused	...	128
7. No. of coffee hotels with meals section	...	136
8. No. of coffee hotels without meals section	...	273
9. No. of eating houses only	...	711
10. No. of Tea Clubs	...	188
11. No. of Tea Stalls, Tea Shops or Tea Stands	...	742
12. No. of Canteens attached to firms, offices, etc.	...	91
13. No. of Mobile Canteens	...	5
14. No. of Lodging Houses without boarding facilities registered under the Public Health Act	...	73
15. No. of Lodging Houses with boarding facilities registered as well as licensed under the Madras City Municipal Act.		57

*Food Adulteration* :—The 5 Food Inspectors who were incharge of 20 divisions each, took samples of foodstuffs under the provisions of the Prevention of Food Adulteration Act of 1954. During the year 1959 they took 8,123 samples consisting of milk, butter, ghee, gingelly oil, tea, ghee substitutes, turmeric, arrowroot, honey, and other articles. Out of 8,123 samples, 5,862 were found genuine and the remaining 2,261 samples were found to be adulterated. Thus the percentage of adulteration came to 27.8 as against 28.5 in 1958.

During the year under review 42.2 per cent of the milk samples were adulterated as against 41.6 in 1958. For the effective prevention of milk adulteration, steps must be taken to eliminate the individual and itinerant milk vendors in the City. Milk supply co-operatives are the only solution to the problem; as such the timely step taken by the Government in starting the milk colony at Madavaram will help to a great extent in minimising adulteration of milk.

#### *Milk Sanitation.*

1. No. of applications received for licences for milk trade under Section 299 of the M.C.M. Act	...	912
2. No. recommended	...	690
3. No. refused	...	222
4. No. of licensed milk-men	...	1,029
5. No. of licences renewed for old depots other than those of Madras Co-operative Milk Supply Union	...	236
6. No. of milk depots of the Madras Co-operative Milk Supply Union for which licences were renewed	...	45
7. No. of new milk depots opened by the Union during the year	...	3
8. No. of licensed milk depots	...	196
9. No. of notices issued in respect of item 8	...	75
10. No. prosecuted for non-compliance	...	55
11. No. improved and made fit for licensing	...	46
12. No. closed as a result of action taken	...	15

#### **Market Sanitation.**

*Markets:*—During 1959, there were 12 public markets and 47 private markets in the City of Madras.

*Public Markets:*—During the year under review a number of proposals were considered for construction of new markets in the City, out of which, one was completed and opened at Jaganathapuram, 53rd Division, as a vegetable market. Subsequently it has been converted into a mixed market on the demand of the public. Besides this, the fish sections of the 3 existing markets at Ayanavaram, T.Nagar and at the junction of McNicholls Road and Poonamallee High Road were remodelled on the modern lines with the subsidy given by the Government of Madras.

Thus the number of public markets in the City totalled 12 as against 11 during 1958. The Corporation maintained the following markets:—

<i>S. No.</i>	<i>Div. No.</i>	<i>Name and location of market.</i>
1	28	Dr. Malliah Market, Wall Tax Road.
2	39	Smith Field Market, Rotlers Street, Choolai.
3	45	Ayanavaram Daily Market, Palavayal Street.
4	51	Shenoy Nagar Market, Shenoy Nagar.
5	52	Market at the junction of Taylors Road and McNicholl's Road.
6	53	Jaganathapuram Market, Jaganathapuram 2nd Street, Chetput.

<i>S. No.</i>	<i>Div. No.</i>	<i>Name and location of market.</i>
7	64	Fruit Market, N.S.C.B. Road
8	64	Moore Market, Poonamallee High Road.
9	80	Nadukuppam Market, Nadukuppam, Triplicane.
10	93	T. Nagar Vegetable Market, Thiagarayanagar Road.
11	93	T. Nagar Meat Market, Thiagarayanagar Road.
12	98	Raazack Market, 14/6, Bazaar Road, Periapet, Saidapet.

#### Private Markets.

The private markets in various divisions of the City a list of which is given below were periodically inspected during 1959, by the Sanitary Inspectors incharge of the divisions to ensure better sanitary upkeep and prevention of sale of foodstuffs unfit for human consumption. At the commencement of the year, before renewal of licences, the owners of these markets were insisted upon to attend to annual repairs, lime and colour washings, etc., and to provide indicative boards to the fish stalls and make special arrangements for keeping these stalls clean and in hygienic condition.

The private mutton stalls in different parts of the City were also inspected periodically by the divisional Sanitary staff during the year for their proper maintenance in conformity with the conditions of licence and for prevention of sale of unauthorised and unstamped meat.

<i>S. No.</i>	<i>Div. No.</i>	<i>Location.</i>
1	1	Tondiarpet Market, 11, Thandavaraya Gramany Street.
2	1	New Washermenpet Market, 322, T.H. Road.
3	3	Kalmandapam Market, 12/13, Kalmandapam Road.
4	4	Venkatakrishna Market, 5/6, Venkatakrishna Street.
5	5	Narasier Market, 82/93, Narasier Street.
6	7	Royapuram, market 16, Mannaraswamy Koil Street.
7	13	Macdonald Market, 67, Sengalaneer Pilliar Koil Street.
8	14	Olakadai Market, 180, Angappa Naicken Street.
9	15	Mannady Market, 88/90, Mannady Street
10	17	Seven Wells Market, 111, Govindappa Naicken Street.
11	18	Chengam Bazaar Market, 84/85, Nattu Pilliar Koil Street.
12	19	Kothwal Market, 1, Audiappa Naicken Street.
13	25	Kondithope Market, 35, Peddu Naicken Street.
14	31	Lakshmi Market, 5, Selvavinayagar Koil Street.
15	32	M.G. Market, 15, Erukancheri High Road.
16	34	Ottery Market, 120, Strahans Road.
17	39	Choolai Market, Vijayavigneswara Koil Street.
18	40	Smith Field Market, Rotlers Street.
19	41	Varadappa Chetty Market, 49, Market Street.
20	42	M/J. Abdul Kadar Market, 17, Madavaram High Road.
21	44	Sandakadai Market, Toll Gate, Othawadai Street.

S. No.	Div. No.	Location
22	48	Kosapet Market, 3, Pudu Street.
23	51	Arumbakkam Market, 326, Poonamallee High Road.
24	54	Village Road Market, 17, Village Road.
25	55	Kodambakkam Market, 54, Kodambakkam High Road.
26	57	Thousand Lights Market, 41/46, Mount Road.
27	62	Purasawalkam Market, 27, Purasawalkam High Road.
28	64	Ellamman Devasthanam Market, Veeraswamy Pillai Street.
29	64	1-C, A.C. Charities Market, 314, Waltax Road.
30	66	Chintadripet Market, 17, Arunachala Naicken Street.
31	67	Egmore Market, 92, Egmore High Road.
32	68	Connemara Market, 32, Harris Road.
33	71	Moulana Market, 730, Triplicane High Road.
34	72	Moosa Sait Market, 91, Venkatesa Naicken Street.
35	76	Zambazaar Market, 428/434, Pycrofts Road.
36	77	New Janda Market, 291, Triplicane High Road.
37	78	Mirsaibpet Market, 184, Venkatachala Mudali Street.
38	79	Sultan Market, Royapettah High Road.
39	81	Azeez Market, 71/1, Mount Road, Teynampet.
40	82	Tannithorai Market, 75, Royapettah High Road.
41	84	Bazaar Road Market, 80, Bazaar Road.
42	86	Mandavalli Market, 65, Mandavalli Street.
43	88	Eldams Road Market, 11-A, Eldams Road.
44	90	Lattice Bridge Market, 12, Lattice Bridge Road.
45	92	Vadapalani Market, 140/141, Arcot Road.
46	96	Kasiviswanathar Market, 40/2, Ellaman Koil Street.
47	98	Karaneeswarar Koil Market, 5/6, Jeenis Road.
48	99	Rajah Market, 14/6, Bazaar Road.

#### **Destruction of the Unwholesome Foodstuffs.**

The divisional Sanitary Inspectors during their rounds of inspection seized and destroyed unwholesome foodstuffs to prevent their sale and consumption by the people. Besides this, a raid van with a complement of one sergeant, a driver, a cleaner, and three thozhilalies was maintained under the immediate control of the Superintendent of the Slaughter Houses, who according to programme drawn up previously conducted raids and seized the edibles exposed to flies and dust and sold in front of markets, schools, road margins and at important junctions of streets. Arrangements are made to destroy the seized foodstuffs in the Corporation dumping grounds. Those vendors and hawkers of food stuffs on the public streets were also prosecuted under Section 349 (11) of the M.C.M. Act IV of 1919.

The State Government was already requested to grant subsidy under the Third Five-Year Plan for purchasing four vans for conducting daily raids in each range simultaneously so as to effectively prevent the unauthorised sale of foodstuffs exposed to contamination by flies and dust.

### Slaughter Houses.

The successful development of Public Health requires besides other things, supply of wholesome meat under hygienic conditions to the consumers. With this in view, the Corporation of Madras is maintaining its own slaughter houses, discouraging private slaughter as far as possible.

There are five slaughter houses run by the Corporation and all of them are under the control of Veterinary Surgeons. They are located as follows :—

Cattle Slaughter House	...	1 at Perambur.
Sheep and Goat Slaughter Houses	...	1 at Perambur and 1 at Saidapet.
Pig Slaughter Houses	...	1 at Perambur and 1 at Saidapet.

The work at the Slaughter Houses is managed by the Superintendent, the Assistant Superintendent and the Sanitary Inspector. The Meat Inspection work is done by the Veterinary Surgeons.

The ante-mortem and post-mortem examinations are conducted and the carcasses are stamped with indelible ink before passing out as fit for human consumption.

The details of Meat Inspection work done during the year 1959 are as follows :—

Kind of Animals slaughtered.	No. of Animals brought for slaughter.	No. rejected on Ante-Mortem.	No. Actually slaughtered.	No. rejected after post mortem Exam.		Organ rejected.
				Whole.	Portions.	
Cattle ...	26,064	...	26,064	...	380	7,445
Sheep & goats.	541,376	1,369	540,007	5	135	9,147
Pigs ...	3,873	5	3,868	1	71	461

The carcasses which were being transported from the slaughter houses to some of the markets in the City by Motor Vans was found to be not economical and hence the scheme was stopped from 1959.

The meat inspection certificate fees collected during the year for export of beef was Rs. 2,355 00.

Raids were conducted to eradicate the pig nuisance in the City, by catching the stray pigs. During the year 120 pigs were caught from the various parts in the City and the amount realised from the sale of slaughtered pigs was Rs. 759-00.

During the year under review, students from various Institutions in the City and outside the State visited the slaughter houses. They were given all facilities to study the working of the slaughter houses. Short lectures were given for their benefit on "Meat Hygiene and Zoonoses". Practical demonstrations were also given regarding 'meat inspection'.

The students from Madras Veterinary College regularly attended the slaughter houses in the evenings along with their concerned lecturers for classes

on "Meat Inspection and Genetics". Flaying Classes for the butcher boys, Livestock Inspectors and Block Development Officers from the districts, were conducted in the slaughter houses by the State Animal Husbandry Department.

Blood from the cattle and sheep and goat slaughter houses at Perambur was collected daily and taken in a Tractor tank attached to the Tractor, to the Blood Meal Manufacturing Centre at Kodungaiyur. At the centre the blood is boiled and dried in the sun. The dried blood meal is powdered and stored. It is then sold as manure to the public and to the fertiliser manufacturing firms. During the year, a sum of Rs. 6,368 was realised by the sale of Blood meal.

Under the 'Scheme for modernising the existing slaughter house' based on the Report of the Slaughter House Expert, the first stage, relating to the Blood meal preparation was taken up. The subject was passed by the Council. Orders of Government are awaited.

During the year, raids were conducted for the seizure of noxious food-stuffs sold in various markets of the City and Road side bazaars.

From 15—12—1959 the Hearse Van was stationed at the slaughter house and a sum of Rs. 120 was collected upto 31—12—1959.

### Meat Inspection.

#### Meat Inspection :

1. No. of Private Mutton Stalls at the beginning of the year.	131
2. No. of Mutton Stalls opened during the year	18
3. No. of Beef Stalls at the beginning of the year	43
4. No. of Beef Stalls opened during the year	3
5. No. of Pork Stalls at the beginning of the year	Nil
6. No. of Pork Stalls opened during the year	Nil
7. No. of unstamped carcasses seized	82
8. No. of cases of illicit slaughter detected	Nil

### 2. Environmental Sanitation.

#### Housing :

1. No. of houses other than huts in the City	1,08,264
2. No. of houses used for dwelling purposes	89,952
3. No. of houses used for purposes other than dwelling	14,547
4. No. of huts	39,874
5. No. of building applications received from the Works Department	250
6. No. recommended for sanction in item No. 5	180
7. No. of building applications recommended for refusal on sanitary grounds	70
8. No. of tenements built prior to 1-1-1959	Nil
9. No. of tenements built prior to 1-1-59 and brought under occupation in 1959	Nil
10. No. of tenements built and brought under occupation in 1959	Nil
11. No. of tenements under construction at the end of the year 1959	496

*House Inspection :*

1. No. of houses inspected as a routine measure	...	31,722
2. No. of houses inspected on complaints made	...	1,709
3. Average No. of houses inspected per mensem	...	3,186
4. No. of houses found untenanted	...	765
5. No. of houses found defective for want of protected water supply	...	1,331
6. No. of houses defective for want of ventilation	...	1,561
7. No. of houses found defective for want of proper drainage arrangements	...	2,183
8. No. of houses found defective otherwise	...	2,960
9. No. of notices issued for rectification of defects	...	5,849
10. No. prosecuted for non-compliance	...	425
11. No. of houses repaired as a result of action taken	...	4,725

*Latrine Accommodation :*

1. No. of houses found without any latrine	...	686
2. No. of notices issued in respect of item No. 1	...	686
3. No. of houses provided with latrine accommodation as the result of action taken	...	377
4. No. of houses found defective for want of adequate latrine accommodation	...	363
5. No. of notices issued in respect of item No. 4	...	361
6. No. of houses provided with additional latrine accommodation as a result of action taken	...	234
7. No. of houses in sewered areas without F.O.Ls.	...	345
8. No. of notices issued for conversion of masonry latrines into F.O.Ls.	...	1,351
9. No. of houses wherein the masonry latrines were converted into F.O.Ls. as a result of action taken	...	261

*Cesspools :*

1. No. of houses with cesspools	...	5,554
2. No. of houses without cesspools	...	10,153
3. No. of notices issued in respect of item No. 2	...	126
4. No. of houses provided with cesspools as a result of action taken	...	54
5. No. of notices issued in respect of inadequate cesspools.	...	52
6. No. of houses provided with enlarged cesspools as a result of action taken	...	28

**Home for the Homeless.**

During the year under review 5 Homes were maintained by the Corporation for Homeless persons as in previous years. These Homes were intended to provide temporary accommodation only, to such of those people who come from the moffussil and stay in the City in search of employment.

<i>Serial No.</i>	<i>Location of the Homes.</i>			<i>Accommodation available for persons.</i>	<i>Strength maintained</i>
1	...	Old Jail Street	...	90	90
2	...	Wall Tax Road	...	100	100
3	...	Behind Zoo	...	160	160
4	...	Ritchie Street	...	175	175
5	...	Gajapathy Lala Street	...	85	85

### Dhobikhanas.

During the year 1959 representations were received from Washermen Associations in the City for provision of new washing houses and proposals were taken up on hands to construct new ones at

- (1) Saidapet.
- (2) Mylapore.
- (3) Park Town.
- (4) Triplicane.

Most of the existing Dhobikhanas were remodelled during the year and increased amenities such as provision of extra stones, increased water supply, provision of ironing tables, construction of rooms, compound walls, etc.

Construction of a new Dhobi Khana at Market Farm site in New Washermenpet, Division (1) was taken up during the year and the work was completed.

The following seven Dhobi Khanas were maintained by the Corporation during the year 1959:—

### Dhobikhanas in the City.

<i>S. No.</i>	<i>Divn. No.</i>	<i>Location.</i>			<i>No. of stones provided.</i>
1	1	Buchiammal Street	...	...	40
2	9	Robinson Park	...	...	62
3	35	Ekanigipuram 1st Street	...	...	3
4	47	Conran Smith Nagar	...	...	52
5	47	School Road, Jaganathapuram	...	...	122
6	54	Pilliar Koil Street, Chetput	...	...	32
7	82	At the junction of Apparswamy Koil Street and Veeraperumal Koil Street.		...	22

### Protected Water Supply :

The Water Works at Kilpauk and infiltration gallery wells at Sembiam and Saidapet continued to supply protected water to the citizens of Madras. The report of Water Analyst about the quality of water supplied is appended to this report.

Slum dwellers in the extended areas were supplied with protected water daily by the lorries maintained by the Water Works Department.

*Public Fountains :*

Public fountains	...	5,528
Bathing fountains	...	146
Cattle troughs	...	51
Overhead tanks including masonry tanks	...	49

*Swimming Pools* :—The Corporation maintained two Swimming Pools one at Peoples Park, adjacent to My Lady's Garden and another at the Marina Beach. Instructors were posted there to give instructions to the youngsters learning swimming.

*Conservancy* :—Collection and disposal of the rubbish and sewage were under the control of Cleansing Department.

*Sewers and F.O.Ls.* :—At the beginning of the year the City was sewered to a length of 16.72 miles. During the year 12.24 miles of sewers were laid in the areas as detailed below :

*Statement showing the length of Sewers laid in 1959 in each area,*

S.No.	Name of Area.	Length of sewers laid (in feet).
1	Tondiarpet ... ..	8,061
2	Royapuram ... ..	585
3	Cochrane Basin ... ..	666
4	Perambur ... ..	380
5	Vyasarpady ... ..	3,459
6	Ekangipuram ... ..	350
7	Purasawalkam ... ..	5,101
8	Nammalwarpet ... ..	513
9	Chetput ... ..	5,792
10	Kilpauk ... ..	3,548
11	Shenoy Nagar ... ..	5,008
12	Greems Road ... ..	403
13	Ice House Road ... ..	850
14	North Mylapore ... ..	3,230
15	South Mylapore ... ..	1,682
16	Gandhi Nagar ... ..	449
17	T. Nagar ... ..	712
18	Adyar ... ..	1,518
19	Saidapet ... ..	22,330
		64,637
		or
		12.24 miles.

### Health Education and Propaganda.

The Health Propaganda work was continued for one more year to the general satisfaction of the public and the Councillors of the City Council.

On six days in a week the Health Propaganda van was sent in turns to the various divisions of the City, both in the mornings and evenings. 370 trips were made and 1,480 hours of Health Propaganda work was done. All the divisions of the City were visited three times by the Health Propaganda van during the year covering a total mileage of 5,880 miles. Propaganda was done on various subjects such as 'General Sanitation', 'Small-pox,' Typhoid, Cholera, water borne and Sewage borne diseases, Malaria, Jaundice, Nutrition, Preventive inoculation, and civic responsibilities. Plays and songs on health were tape-recorded and broadcast over the mike to the residents in the various parts of the City. Gramophone records were played to attract the crowd after which health talks were given on the mike. Some of the Councillors also accompanied the staff in their divisional work.

#### *Exhibitions :*

1. Congress Exhibition at Teynampet upto January 31, 1959.
2. Red Cross Exhibition and Tattoo at the Island Grounds—March 26th to 10th May 1959.

In the above two exhibitions during the evenings daily, the Health Propaganda staff gave talks on health subjects to the crowd assembled there.

#### *W.H.O. Celebrations :*

During the second week of July the W.H.O. week was celebrated in the various divisions by giving talks on 'mental illness.' A public meeting was arranged at Ashok Vihar on the 7th July 1959, when Dr. Thiagarajan, Assistant Surgeon, Government Mental Hospital, gave a talk on 'mental illness' to the audience.

Film shows could not be screened to the public as the projector was out of order and sent for repair. From 19—11—1959 upto the end of the year, there was no health propaganda work as the van was sent for re-conditioning. The Health Propaganda staff took part in the procession on the Corporation Inauguration Day Celebrations held on 29—9—1959.

### 3. INDUSTRIAL SANITATION—TRADES—LICENCES.

#### *Offensive Trades :*

1. No. of renewal applications received for old offensive trades (Section 287 of M.C.M. Act)	...	6,906
2. No. of applications recommended	...	6,270
3. No. of applications refused	...	618
4. No. of applications pending	...	18
5. No. of new applications received for offensive trades (Section 287)	...	916
6. No. of new applications recommended	...	479
7. No. refused for sanitary reasons other than the prohibition under Public Health Act	...	437
8. No. refused in view of the prohibition under the Public Health Act	...	1,752

9. No. of appeals preferred by the parties to the Standing Committee ...	279
10. (a) No. of appeals allowed by the Standing Committee.	114
(b) No. of appeals rejected by the Standing Committee.	135
11. No. of references made to the Council ...	90
12. No. of cases in which the Council reversed the decision of the Standing Committee ...	14
13. No. of cases in which the Council upheld the decision of the Standing Committee ...	65
14. No. in which the Council's decision was given effect to ...	27
15. No. in which Government instructions or orders were sought in respect of Council's decision ...	64
16. No. in which Government orders were received ...	42
 <i>Miscellaneous :</i>	
1. No. of Laundries ...	653
2. No. of Hair Dressing Saloons ...	993
3. No. of Sweet Meat Stalls ...	123
4. No. of Firewood Depots ...	413
5. No. of Charcoal Depots ...	306
6. No. of Charcoal and Firewood Depots ...	306
7. No. of Aerated Water Factories ...	52

#### PORT SANITATION

1. 337 vessels with 18,796 crew and 20,992 passengers were inspected on arrival during the year, 4 cases of Chicken-pox and 1 case of Mumps were landed ex-4 vessels on arrival and suitable measures were taken to prevent the spread of these diseases.

2. Out of 617 vessels leaving this Port during the year under review, only 467 vessels with 26,014 crew and 27,854 passengers were inspected at the time of departure for foreign ports. One case of mumps, 1 case of leprosy, 1 case of pyrexia, 1 case of measles, 5 advanced stage of pregnant ladies and 1 passenger having immature cholera inoculation certificate were detained from embarkation. Five passengers were detained from embarkation for having tampered their vaccination certificates.

3. The personal effects of the infected crew and passengers and their contacts as well as 12 cases of imported second-hand clothing intended for free distribution were disinfected before release.

Bedding, clothing, etc., of 1,069 new crew were inspected and disinfected before the articles were taken on board.

4. Seamen's provisions of 44 vessels were inspected.

5. Twenty-six vessels were examined with regard to the Medical Stores kept on board. They were maintained according to the prescribed scales and wherever necessary, suggestions were made to make good the shortage, if any.

6. Imported foodstuffs were inspected at the request of the Port Trust Authorities and certain Firms of Importers.

During the year under review, 148 lots of foodstuffs comprising Barley, Rice, Tobacco and other articles of food were inspected as desired by the Port Trust Authorities of which only 29 lots were found fit for human consumption, and were declared so. Eighteen lots of betel nuts, Galangal Root, Milk Powder, Saffron, Milk Powder and Nutmegs were inspected on requests from the Customs Authorities out of which only 6 lots were found to be fit for human consumption. Thirty-five bags of wheat, 1 carton, 2 bags, 2 card board drums and one case of milk powder were inspected as desired by the Port Trust Authorities of which only one carton of milk powder was found to be fit for human consumption.

7. 386 Seamen Trainees, Seamen for continuous certificates of discharge and other candidates for employment as Seamen were medically examined and certificates of fitness or otherwise issued.

8. On receipt of radio message from the Masters of 8 vessels at sea seeking medical advice—in connection with sickness on board the vessels, necessary advices were sent immediately to the Masters concerned.

9. Sanitation of the Port area was looked after by the Madras Port Trust and maintained satisfactorily. Storage tanks of water supply of the Port area, were cleaned regularly and water from these sources was analysed at regular intervals. Measures were taken to rectify the defects when noticed.

10. Seventeen De-ratisation Exemption certificates and 18 permits were issued at this port.

## MEDICAL RELIEF.

### I. HOSPITALS.

#### Infectious Diseases Hospital, Tondiarpet.

The Infectious Diseases Hospital, Tondiarpet, run by the Corporation of Madras, which is nearly 35 years old has been one of the biggest hospitals of the type and it has been catering to the needs of not only the City but also the villages of the Chingleput District in isolation and treatment of cases of Infectious Diseases. Though all notifiable Infectious Diseases can be treated at this hospital, yet, Cholera, Choleraic Diarrhoeas, Small-pox Chicken-pox, Measles and Mumps are the usual diseases which are admitted. It has been observed that year after year the voluntary admission are on the increase in the City and the hospital is becoming more and more popular. Hence the average in-patient attendance is rapidly increasing year by year nearly to the increased present bed strength.

At present, the hospital has 152 beds in permanent regular wards and 128 beds in 8 semi-permanent masonry wards with a total strength of 280. But there is scope for accommodating more than 600 cases by putting up emergency wards over the masonry plinth provided with sanitary amenities.

Dr. M. A. Hadi, who was the Medical Officer since 1940, retired from service on the 24th March 1959 after putting in a service of 27 years in the Corporation. He was relieved by Dr. I. Prahlad, M.B.B.S., who was acting as Medical Officer till 29th April 1959. In view of the importance the Institution was gaining, even in the International sphere, the post of "Medical Officer" was up-graded to that of a "Superintendent", and Dr. A. Ramachandra Rao, M.B.B.S., B.S.Sc., one of the Assistant Health Officers who worked in the I.D. Hospital for 10 years previously, as Resident Medical Officer, was posted as the First Superintendent and he took over charge on the 29th April 1959.

One unique feature that is worth mentioning in the year under report is, the Commonwealth Government of Australia have selected this hospital for training of their Medical Officers of Health in diagnosis and treatment of small-pox and under that scheme two Officers Dr. A. A. McArthur, Commonwealth Director of Health, Tasmania and Dr. L. J. Wienholt, Director of Health, New South Wales, came to Madras in July 1959. They were given training in Diagnosis and Treatment of Small-pox by the Superintendent. The Australian Government have acclaimed that this training has benefited their doctors a great deal and it is expected that every year two Doctors will be sent for training.

Secondly, an Advisory Committee consisting of the members of the the Council, besides the Officers, has been formed to study the various problems of the I.D. Hospital and advise ways and means as to how to improve the hospital since it has become an International Centre for training in Diagnosis and Treatment of Small-pox.

With a view to improve the hospital, the Superintendent put up an exhaustive list of improvements to be carried out in a period of 5 years and estimates were furnished for immediate improvements which amount to Rs. 2 lakhs. The Council was requested to address Government to divert the loan of Rs. 2 lakhs granted for the construction of another I.D. Hospital in the South, for the improvements, to the existing hospital at Tondiarpet. Meanwhile, the Hon'ble Minister of Health and the Director of Medical Services,

# INFECTIOUS DISEASES HOSPITAL, TONDIARPET.

INCIDENCE OF CHOLERA AND DEATHS

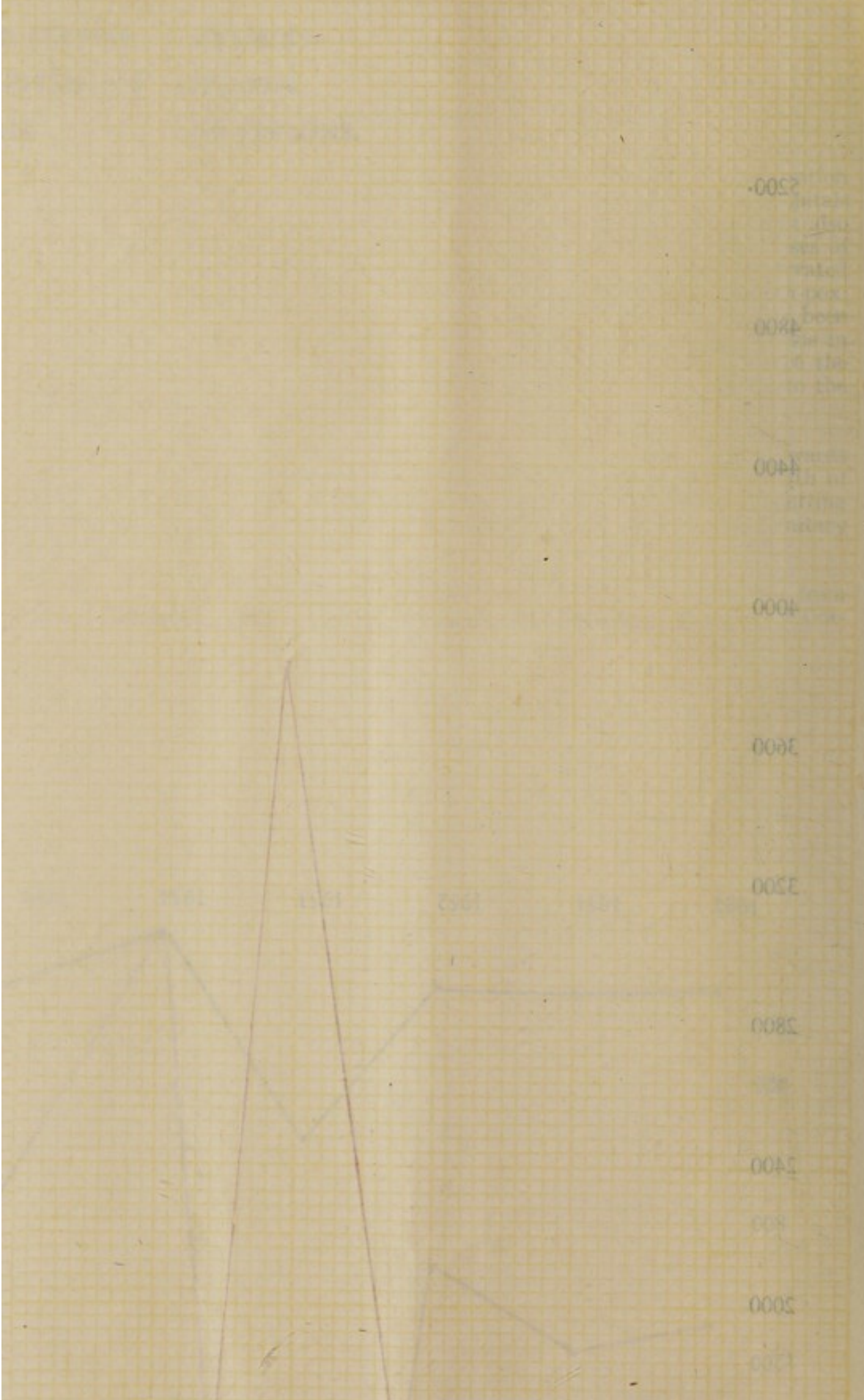
RED COLOUR - ATTACKS.

BLUE COLOUR - DEATHS.

SCALE 1" = 400 PERSONS.



INFECTION DISEASES HOSPITAL  
INCIDENCE OF CHOLERA



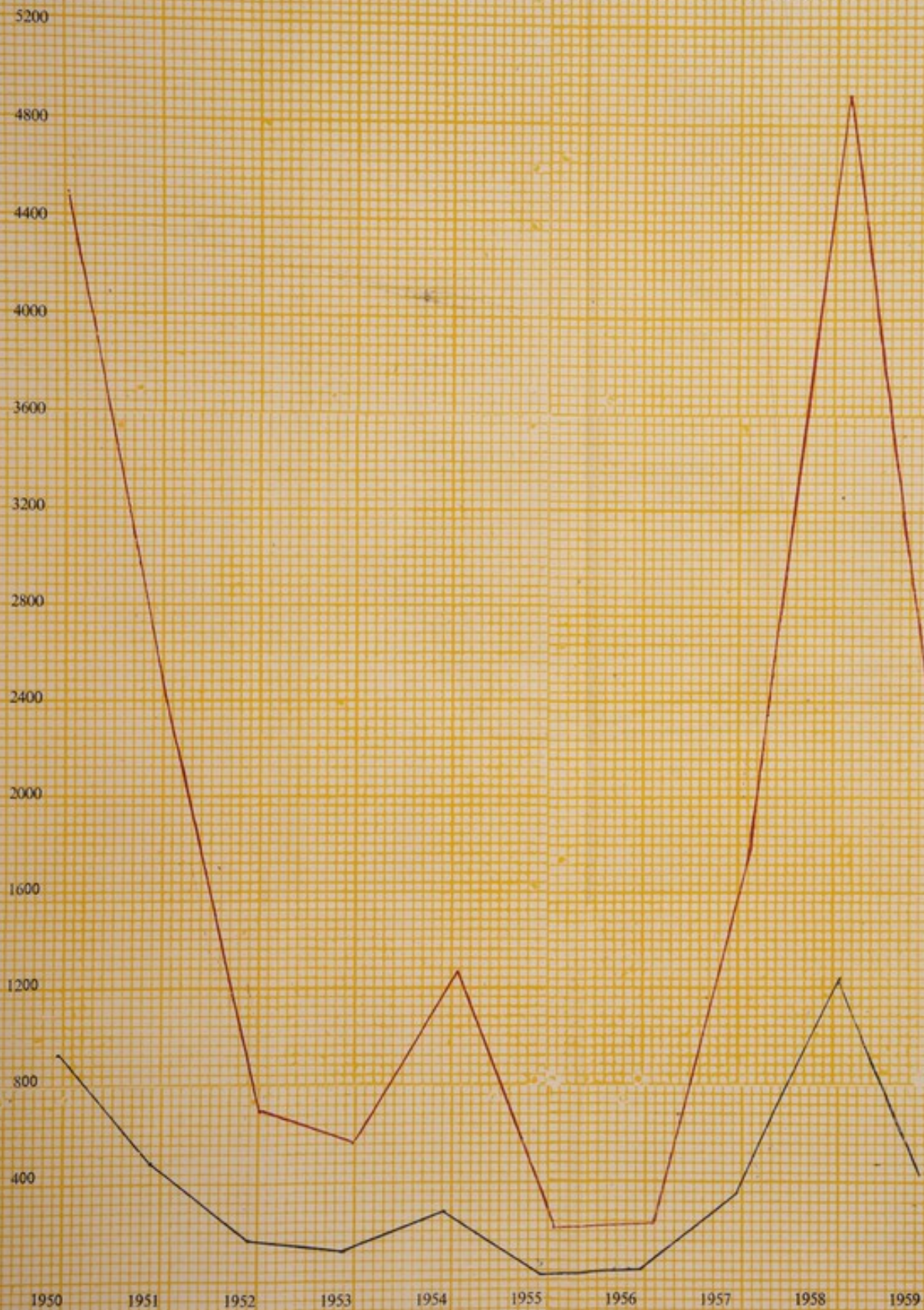
# INFECTIOUS DISEASES HOSPITAL, TONDIARPET.

INCIDENCE OF SMALL-POX AND DEATHS

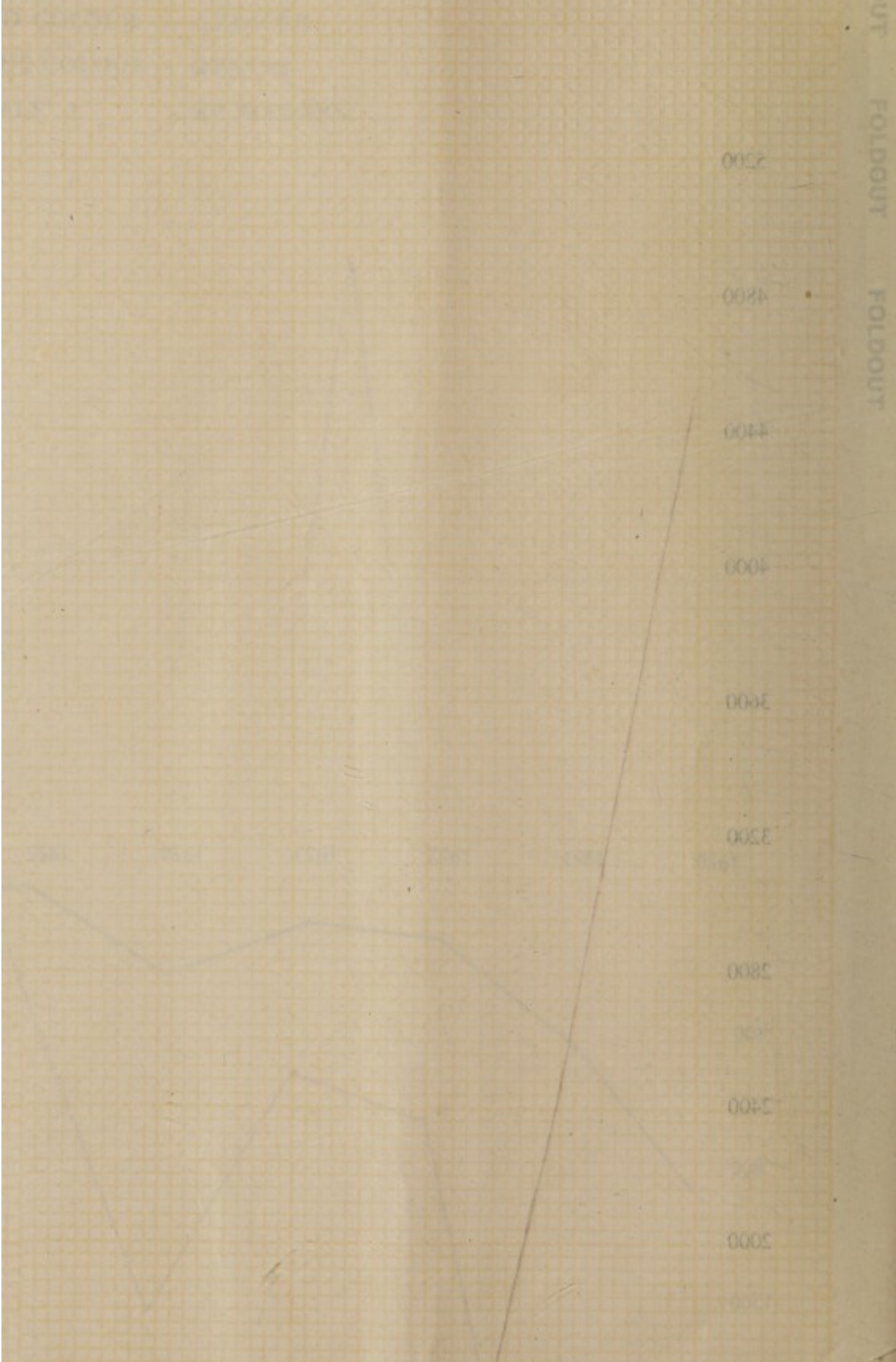
RED COLOUR - ATTACKS.

BLUE COLOUR - DEATHS.

SCALE 1" = 400 PERSONS.



INFECTION DISEASES - HOSPITALS  
INCIDENCE OF SMALLPOX



FOLDOUT FOLDOUT FOLDOUT FOLDOUT

DISPENSARIES

During the year 1952, 25 new dispensaries were opened... The total number of dispensaries maintained by the Government during the year was 41, as against 40 in 1951. In addition to the 25 new dispensaries opened during the year, 16 were closed down. A total of 10,000 patients were treated at these dispensaries during the year.

Mobile Dispensaries

The Mobile Dispensaries were inaugurated during 1952 and 1953. A total of 12 mobile dispensaries were opened during the year 1952. These were manned by the staff of the Government Medical College, Mysore. A total of 10,000 patients were treated at these mobile dispensaries during the year.

The work of the two Mobile Dispensaries was attended by the staff of the Government Medical College, Mysore. A total of 10,000 patients were treated at these mobile dispensaries during the year. The staff of the Government Medical College, Mysore, were also engaged in the treatment of patients at the Government Dispensaries during the year.

Special Clinics

At the Government Medical College, Mysore, the following special clinics were conducted during the year 1952: (1) Dermatology, (2) Ophthalmology, (3) Radiology, (4) Physiotherapy, (5) Speech Therapy, (6) X-ray, (7) Pathology, (8) Microbiology, (9) Biochemistry, (10) Haematology, (11) Immunology, (12) Endocrinology, (13) Nephrology, (14) Cardiology, (15) Neurology, (16) Psychiatry, (17) Gynaecology, (18) Paediatrics, (19) Geriatrics, (20) Palliative Care.

- (1) Pathology
- (2) Government General Hospital
- (3) Government Hospital, Mysore
- (4) Government Hospital, Bangalore
- (5) Government Hospital, Coimbatore

## 2. DISPENSARIES.

During the year under review, 2 new dispensaries were opened—one at Chetput and the other in North Mylapore. Besides this, the Unani Dispensaries at Pudupet and Mannady were converted into Allopathic Dispensaries. The total No. of dispensaries maintained by the Corporation during the year were, 45 as against 43 in 1958. In addition to these dispensaries, 8 special clinics to deal with specific diseases like Leprosy, Venereal diseases and Tuberculosis continued to serve the public.

### Mobile Dispensaries.

The two Mobile Dispensaries which were inaugurated during 1953 and 1954 continued to serve the needs of the poor people residing in the out-lying areas of the City far away from the Dispensaries at Kodambakkam, Adayar, Perambur, Sembium and Ayanavaram.

The working of the two Mobile dispensaries was regulated by drawing a programme in advance and the Medical Officers of Kodambakkam and Adyar Dispensaries were in-charge of one van and the Medical Officers of Perambur and Sembium Dispensaries were in-charge of the other van. The Medical Officers accompanied the vans by turns and rendered medical aid to the people residing far away from their dispensaries.

### Special Clinics.

Of the 8 special clinics, maintained by the Corporation, 2 are for Leprosy, 1 for Venereal Diseases and the other 5 for Tuberculosis. The five tuberculosis clinics are situated at the following places :—

- (1) Pulianthope,
- (2) Government General Hospital,
- (3) Government Stanley Hospital,
- (4) Government Royapettah Hospital,
- (5) Kasturba Gandhi Hospital for Women and Children.

visited the hospital. The Minister was shown the estimates prepared for the improvement of the hospital and he agreed to consider the request of the Corporation to divert the loan of Rs. 21 lakhs.

Lastly, the Advisory Committee formed for the Improvement of the I.D. Hospital consisting of the Worshipful Mayor, the Deputy Mayor, Chairman of the S.C. (H.), S.C. (T. & F.), Leader of the Congress Municipal Party, Leader of the D.M.K. Municipal Party, Leader of the Communist Municipal Party, Leader of the Municipal Welfare Front, the Commissioner, the Deputy Commissioner, the Director of Public Health Madras, and the Health Officer as the Secretary, to convene and conduct the affairs of the Advisory Committee, met twice and discussed and approved plans and estimates. The diversion of the loan of Rs. 2 lakhs for the improvements to this hospital has since been sanctioned by the Government. The relevant estimates connected with the improvements of the hospital with the several Departments are under active consideration to take up the works shortly.

Statement I in the Appendix shows the monthly average in-patient attendance in the hospital. From this, it is clear, that except for 2 months the hospital never had less than 200 cases. Statement II shows the number of cases and contacts admitted and treated during the year 1959 with case fatality rate.

Statement showing the daily average number of cases (including contacts) treated during the year 1959 for 12 months January 1959 to December 1959.

January 1959	...	488	July 1959	...	139
February "	...	378	August "	...	216
March "	...	390	September "	...	198
April "	...	416	October "	...	252
May "	...	222	November "	...	135
June "	...	105	December "	...	147

#### **Leprosy Clinics at Ice House Road and Vyasarpady**

There are two Leprosy Clinics situated one at Dr. Besant Road, Triplicane, and the other at Gantz Road, Vyasarpady. These serve the Southern and Northern parts of the City. These clinics are situated in the particular localities on account of the prevalence of slums in these areas. Each clinic is in charge of the Medical Officer, specialised in Leprosy Work and is assisted by the Health Visitor and an injector.

#### **Preventive and Control Activities.**

For the new patients attending the clinics the nature of the illness and hazards to them and to their environments were explained and they were instructed to observe certain practical preventive measures as follows. Infective cases were advised to avoid close contact with young children by not sleeping in the same bed with such children and keeping their dress and utensils beyond their reach.

The hazard and danger of ulceration and deformity from being careless in carrying out manual work, and involving contact with fire, and hot objects has been brought home to the patients. The importance of massaging hands and feet and attending promptly to minor injuries in these situations have been impressed on non-infective cases of Leprosy who are likely to suffer from disabilities from deformity and ulceration.

### Survey.

A good deal of Survey was done in the past years and a number of Leprosy cases were detected. Apart from this, over 400 Leprosy cases were registered in each Clinic. But the percentage of cases attending regularly every week for treatment is less. Hence the homes of the patients registered during the previous years were visited and the patients were advised on the necessity of regular treatment. A great difficulty was experienced in tracing their homes as invariably the addresses given in the clinics did not tally with the actual addresses of the premises by the parties.

### Laboratory Investigation.

Examinations of skin smears of new and old Leprosy cases have been carried out to detect infective cases. Haemoglobin estimation has been done to control treatment. These have been helpful in concentrating attention on cases at the earliest opportunity.

Hospitalization facilities available at present are found to be inadequate in consideration of the demand for them.

### Details of Hospital Work done in 1959.

	<i>At Ice House Road Clinic</i>	<i>At Vya- sarpady Clinic</i>
1. No. of New cases registered in the Clinic—Men	... 1,121	973
Women	... 992	718
Children	... 2,259	1,584
2. No. of Infective cases of Leprosy	... 93	52
3. No. of Non-infective cases of Leprosy	... 299	344
4. Total No. of Leprosy Cases	... 392	396
5. No. of Non-Leprosy Cases (Skin Cases)	... 3,980	2,625
6. No. of New and Old Cases	... 30,046	19,540

### Corporation Tuberculosis Clinic, Pulianthope.

The clinic situated at No. 13, Pulianthope High Road, Pulianthope was in its 17th year of activity during the year under review. It continued to meet the demands on its services particularly from its preventive control area comprising Pulianthope, Choolai, Perambur, Sembium, Kosapet, Vyasarpady, Ottery and Ayanavaram.

9,064 new patients sought the opinion and advice of the clinic during the year 1959.

Clinical and Fluoroscopic Examination were done as a routine in every case. Radiographic and Laboratory Examinations were done as and when they were required for diagnostic treatment and aftercare check-up purposes. The services of the Corporation Public Health Laboratory were utilised whenever required.

References from the private Medical Practitioners and Social and Medical Centres in the City were attended to as in the previous years.

Sorting and disposal of cases after diagnosis are detailed in the statements appended.

A waiting list of patients suitable for Hospital treatment was maintained as in the previous years. Each case in the list was considered on its merits and urgency in the matter of admission to the Government Sri Tiruvoteeswarar Tuberculosis Hospital, Ottery.

*Contact Examination and Home Visiting:*—This was possible through the medium of the Health Visitors. It was noticed that a good number of Tuberculosis cases were coming from outside the City and staying with their relatives in the control areas.

Advice on the method of prophylaxis by the Medical Officer at the Clinic and in the houses by the Health Visitor formed a regular feature of the activity of the Clinic.

The Corporation B.C.G. Team visited the Clinic on two days in a week and the opportunity was availed of by the Clinic for examination.

The Clinic worked in co-operation with the Tuberculosis Chemotherapy Centre, Chetput, Madras. During the year, ten patients referred from this clinic were accepted by that Centre for purposes of Research work and Domiciliary service.

#### Annual Statement for the Year, 1959.

9,064 patients sought the opinion and advice of the Clinic during the year 1959.

9,064 new cases was examined at the Clinic. Out of this, 1,421 were found to be Pulmonary Tuberculosis cases, and 149 were found to be Non-Pulmonary Tuberculosis cases. The total number of Tuberculosis cases diagnosed was 1,570.

30,400 old cases were attended to. The grand total of patients who attended the Clinic was 39,464. The daily average attendance was 108.6.

TABLE—A.

Showing the number of Cases Examined and the number of Tuberculosis cases among them during the year 1959.

Year	No. of cases examined	No. of cases diagnosed as Pulmonary Tuberculosis	No. of cases diagnosed as Tuberculosis non-pulmonary	Total No. of cases dignosed as Tuberculosis	Percentage of Tuberculosis cases examined
1958 ...	9,069	1,397	131	1,528	16.8
1959 ...	9,064	1,421	149	1,570	17.3

TABLE—B.

Showing the Daily Average Attendance during the year 1959.

Year	Daily Average
1958	113
1959	108.6

TABLE—C.

Year	No. of sputum examined	No. of aspirations	No. of A.P.	No. of P.P. Refills	No. of contract examination done	Remarks in Contract			Visits of Health Visitors					Radiography	Fluoroscopy
						P.T. I	P.T. II	P.T. III	Nil Ab-normal	new	Old	Hospital discharged patients	Total		
1959	4758	...	...	106	964	13	...	7	944	610	233	304	1353	1031	10,697

TABLE—D

Out-Patient Statement for 1959

Attendance at the Clinic								Total New	Total Old	Grand Total	Daily average
Male		Female		Male child		Female child					
New	Old	New	Old	New	Old	New	Old				
3,994	13,918	3,064	12,598	1,020	2,038	986	1,846	9,064	30,400	39,464	108.6

TABLE—E

Diseases Treated for the year 1959

P.T. I	P.T. II	P.T. III	Total No. of P. T. cases.	Non-pulmonary T.B.	Coryza	Influenza	Bronchitis	A.C. Bronchitis	Br. Asthma	Bronchectasis	Eosnophil Lung	Tonsilitis
19	73	1329	1421	149	11	15	3,559	...	972	79	27	147

TABLE—E.  
Diseases Treated for the year 1959—*contd.*

Heart diseases	Diabetes	Malaria	Kala-Azar	Filariasis	Bronchitis	Pneumonia	Pleurisy	Whooping Cough	Emphysema	Other diseases	Nil abnormal	Total
73	1	4	5	8	...	33	83	9	1	890	1,577	9,064

TABLE—F.  
Positive Cases according to Places for the year 1959

Year	Pulianthope	Choolai	Kosapet	Perambur	Vyasarpady	Sembiam	Iyanavaram	Total	Cases Referred to T.B.I., Egmore	Referred to T.B.C., Govt. General Hospital.
1959	251	251	53	46	44	25	55	725	248	66

Positive Cases according to Places for the year 1959—(*contd.*)

Referred to T.B.C., Government Stanley Hospital	Referred to T.B.C., Government Royapettah Hospital	Referred to Government K.G. Hospital	Cases from Mofussil	Grand Total
71	21	11	279	1,421

TABLE—G.  
Positive Cases according to Ages for the year 1959

Year	Years 0-5	Years 6-10	Years 11-15	Years 16-20	Years 21-25	Years 26-30	Years 31-35	Years 36-40	Years 41-45	Years 46-50	Years 51-55	Years 56-60	Years 60 and above.	Total
1959	48	38	71	248	284	298	218	80	45	45	23	14	9	1,421

TABLE—H

## Nationality and Sex of the Positive Cases

Year	Hindus	Muslims	Christians	Total	Male	Female	Children	Total
1959	1,245	121	55	1,421	913	455	53	1,421

TABLE—I

## Classification of Positive Cases according to Occupation for 1959

Total	Attenders	Peons	Watchmen	Time Keepers	Barbers	Beedi Workers	Businessmen	Electricians	Mechanics	Butter and Baker	Printing	Clerks	Conductors	Coolies	Ryots
1421	7	11	12	3	14	31	30	8	5	4	16	35	2	366	152

TABLE—I—contd.

Mill Worker	Driver	Dhobies	M.F.S.	Fishermen	Police	Weavers	Goldsmiths	Teachers	Priest	Tailors	Merchants	Milkmen	Painters	Plumbers	Cobblers	Students	Sweepers	Doctors	Destitutes	House Wives	Unemployed
2	9	7	1	...	8	10	5	5	...	10	10	8	6	7	25	4	15	...	10	220	363

TABLE—J

## Returns and Statements for 1959

No. of New Cases	No. of Open Cases	No. of Non-Pulmonary P.T.	Old Cases	A.P. Initials	A.P. Refills	Patients attending for A.P. Refills	No. of P.P. Initials	P.P. Refills	Patients attending P.P. Refills	Injection	No. of Cases visited in their houses by H.V.	No. of cases visited in their houses by Medical Officer	No. of contacts examined in the houses	No. of contacts examined in the Clinic
9064	1421	149	30400	...	...	...	3	106	37	4793	1353	...	...	964

TABLE—K

## Type of Tuberculosis Diseases treated for the year 1959

Pulmonary Tuberculosis	Tuberculosis of Glands	Osteo-Articular	Abdominal Enteritis	Abdominal Intestines	Meningeal	Tuberculosis Skin	Genito-Urinary Tuberculosis	Pleural without lung affection dry	Pleural without lung affection with Effusion	Other Forms	Total
1421	114	10	17	8	3	..	..	55	25	..	1653

TABLE—L

## Classification of Patients according to Income, 1959

Rs. 5-10	Rs. 11-15	Rs. 16-20	Rs. 21-25	Rs. 26-30	Rs. 31-35	Rs. 36-40	Rs. 41-45	Rs. 46-50	Rs. 51-55	Rs. 56-60
29	67	149	115	240	180	137	103	82	77	53

TABLE—L—contd.

Rs. 61-65	Rs. 66-70	Rs. 71-75	Rs. 76-80	Rs. 81-85	Rs. 86-90	Rs. 91-95	Rs. 96-100	Rs. 100 and above	Total
59	35	34	21	14	15	8	3	—	1421

TABLE—M

## Home Visits by the Health Visitors and Contact Examination during the year 1959

Year	Cases
1959	1,147

TABLE—N

## Number of Contacts Examined at the Clinic at the instance of the Health Visitors during the year 1959

Year	Cases
1959	964

TABLE—O.

**No. of Persons Mantase Tested and B.C.G. Vaccinated**

1. Total No. of Mantase Tested	...	...	2,732
No. of Positive Reactions	...	...	918
No. of B.C.G. given	...	...	518
No. not vaccinated	...	...	66
2. No. not presented for Mantase Reading	...	...	1,230

**Tuberculosis Clinic at Government General Hospital, Madras**

Tuberculosis Clinic at Government General Hospital, Madras, functioned daily between 2 and 5 p.m. except on Sundays at the Out-Patient Department.

**STAFF :**

- Medical Officer-in-Charge, Tuberculosis Clinic.
- Two House Physicians (change every month).
- Two Health Visitors.
- One Staff Nurse.
- One Clerk.

The Director, Government Tuberculosis Institute and Clinics as usual supervised the work in the Clinic once a week.

**Facilities available :**

Facilities for screening the patients, taking X-Ray photos, Laboratory Test, etc., are available at the Clinic.

There are two emergency wards with 18 beds (12 for males and 6 for females) attached to the Clinic. Emergency cases of Pulmonary Tuberculosis like Haemoptysis, Spontaneous Pnenmothroax, etc., are admitted into these wards.

**Hours of Work—Daily Routine :**

- 8 to 11 a.m. House visiting done by the Medical Officer and Health Visitors.
- 11 to 1 p.m. Ward work by the Medical Officer and House Physicians.
- 2 to 5 p.m. Out-patient work by Medical Officer and House Physicians.

The two Health Visitors also attended to all cases who came to the Out-patient Department (Clinic) for treatment. Patients' names were registered, their addresses noted correctly and they were examined thoroughly and screened. X-ray and Laboratory investigation were done the next day. Diagnosis of Pulmonary Tuberculosis was noted in the register concerned. All cases fit for admission at the Tuberculosis Sanatorium, Tambaram were selected every week and their names put in the waiting list. Intimations for admissions were as usual sent direct to the patients by the Superintendent, Government Tuberculosis Sanatorium, Tambaram, as and when vacancies arose.

### Treatment

#### 1. Antibiotics :

- (a) Streptomycin.
- (b) P.A.S.
- (c) I.N.H.

#### 2. Collapse Therapy :

- (a) A.P.
- (b) P.P.

The drugs were widely administered free to the poor and deserving persons who attended the clinic as out-patients.

#### Contact Examination :

Medical Officer and Health Visitors visited the houses of patients in the following divisions of the City :—

- |                       |                 |
|-----------------------|-----------------|
| 1. Kachaleswarar Koil | 6. Edapalayam   |
| 2. Kothawal Bazaar    | 7. Park Town    |
| 3. Sowcarpet          | 8. Napier Park  |
| 4. Trevelyan Basin    | 9. Chintadripet |
| 5. Periamet           |                 |

Advice was given regarding isolation of patients and disposal of sputum. The contacts were examined, screened and also X-rayed when considered necessary.

Daily average attendance : New cases—25 and Old cases—100.

Number of in-patients treated during 1959—	Males	...	380
	Females	...	176
	Total	...	556

Percentage of Tuberculosis among contacts—18%.

#### 1. Number of new cases, who attended the Clinic during the year (including contacts)—

Males	...	3,307
Females	...	1,783
Children	...	208
Total	...	5,298

#### 2. Numbers of Pulmonary Tuberculosis cases treated—

	P.T. I	P.T. II	P.T. III	Total
Males	44	37	1,698	1,779
Females	22	23	742	787
Children	1	...	55	56
Total	67	60	2,495	2,622

3. Number of open cases in the above—2,495.

4. Number of Non-Pulmonary Tuberculosis Cases—

Cervical adenitis	...	57
Bone-joint T.B.	...	26
T.B. Larynx	...	9
Pleurisy with effusion	...	52
Total	...	144

5. Number of Non-tuberculosis Cases—2,482.

6. Number of Old Cases treated—

Males	...	13,165
Females	...	9,950
Children	...	545
Total	...	23,660

7. Number of A.P. initials	...	1
8. Number of A.P. refills	...	...
9. Number of patients attending A.P. refills	...	...
10. Number of P.P. initials	...	1
11. Number of patients attending P.P. refills	...	111
12. Number of injections given (S.M. and calcium).	...	7,918
13. Number of P.P. refills	...	173
14. Number of Screenings done	...	4,133
15. Number of aspirations done	...	11
16. Number of deflations done	...	7

*Tuberculosis cases according to age :*

1 to 5 years	...	29
6 to 10 years	...	18
11 to 15 years	...	234
16 to 25 years	...	586
26 to 35 years	...	619
36 to 45 years	...	685
46 and above	...	324
Total	...	2,495

*T.B. Patients according to Income Groups :*

Nil	...	189
Rs. 10 to 20	...	580
Rs. 21 to 40	...	799
Rs. 41 to 76	...	654
Rs. 75 to 100	...	199
Rs. 100 and above	...	74
Total	...	2,495

## Preventive

	<i>New</i>	<i>Old</i>	<i>Total</i>
1. Number of houses visited by the Health Visitors ...	747	1,811	2,558
By Medical Officer ...	330	...	330
2. Number of contacts examined in the Clinic—			
Men ...	562		
Women ...	290		
Children ...	23		
Total ...	875		

## 3. Number of P.T. Cases found among contacts—

	<i>P.T. I</i>	<i>P.T. II</i>	<i>P.T. III</i>	<i>Total</i>
Men ...	46	20	18	84
Women ...	32	12	14	58
Children ...	6	3	5	14
Total ...	84	35	37	156

## 4. Number of family planning given—92.

*Patients according to Occupation Groups :*

Unemployed	...	189
Coolies	...	862
Ryots	...	253
Clerks and Typists	...	98
Weavers	...	350
Peons and Attendants	...	275
Petty Business	...	15
Police (P.C.)	...	50
Tailors	...	27
Electricians	...	43
Watchmen	...	79
Teachers	...	30
Pensioners	...	12
Mechanics	...	84
Milkmen	...	56
Dhobies	...	13
Drivers	...	10
Barbers	...	25
Carpenters	...	15
Goldsmiths	...	9
Total ...		2,495

### T.B. Clinic at Government Stanley Hospital, Madras

Tuberculosis Clinic attached to Government Stanley Hospital functions between 1-30 and 5 p.m. on all days except Sundays.

The staff consists of—

- (1) One Medical Officer (Corporation Medical Staff).
- (2) Two House Physicians (Government Staff).
- (3) Two Health Visitors (Corporation Staff).
- (4) One Staff Nurse (Government).
- (5) One clerk (Government).
- (6) A Female Nursing Orderly (Government).
- (7) A Male Nursing Orderly (Government).

Two House Physicians work in the Clinic for one month and are changed every month and thus get training under the Medical Officer. The Dean of the Hospital has the administrative control over the clinic. Director, T.B. Institute and Clinics supervises the Clinics and visited every Thursday afternoon.

About 30 to 40 new cases and 200 to 300 old cases attended the Clinic every day during the year under review. All new cases were registered, examined and screened the same day. Sputum examination and other laboratory examinations were done. All Pulmonary Tuberculosis cases suitable for Sanatorium treatment were put in the waiting list for admission to Government Tuberculosis Sanatorium, Tambaram, by the Director every Thursday afternoon and a register is maintained. State Government Servants are placed in separate waiting lists and are given priority. Convicts, Police Constables, pregnant women patients and cases requiring surgery are also given special priority for admission. Bilateral Tuberculosis cases, which are not put in the waiting list are given domiciliary treatment. Cases waiting for admission by W/L are also given treatment as Out-patients till they get admission to the Sanatorium. As far as possible cases are isolated in their homes and they are looked after by the Medical Officer and Health Visitors periodically.

Medical Officer and Health Visitors visited houses of patients on every working day between 8—11 a.m. and advice was given regarding isolation, disposal of sputum, general hygiene, etc. Contacts of patients were advised to come to the Clinic for examination and they were screened and checked up and advice given regarding sanitation and hygiene. Contacts of cases who showed active lesion were put in the Waiting List and treatment started in the Clinic as out patients.

In the clinic Collapse therapy like A.P. & P.P. were done on suitable cases. Streptomycin Injections P.A.S. & I.N.H. tablets were given free to all poor patients. These medicines were supplied from the hospital. Streptomycin injections were given on alternate days along with I.N.H. 200 m.gms. daily by mouth. P.A.S. was given daily—10 gms. P.A.S. 10 gms. daily along with I.N.H. 200 m.gms. daily (Chemotherapy) was the ideal combination for treatment and patients improved wonderfully well. Prolonged Chemotherapy and Surgical treatment are the latest trend in the treatment of Pulmonary Tuberculosis. Emergency cases of Pulmonary Tuberculosis like Haemoptysis, Spontaneous Pneumothorax, heart failure, etc., were admitted to Tuberculosis emergency ward attached to the Clinic where 3 beds for males and 3 beds for females are provided.

A sum of Rs. 10 per month from Bhavanagar Kshayarog fund is given to poor patients by the Government. Eight patients have been given help from this fund this year.

Family Planning advice was given by the Health Visitor to female patients and they were asked to attend the family planning Clinic for further advice. Necessary appliances were also given to them.

Free supply of milk powder from "CARE—India Organisation" was given to T.B. patients and their families. About 900 patients got the benefit. Milk powder was distributed to the patients on every Saturday afternoon.

*Statistics :*

No. of new cases registered during 1959	...	6,064
No. of Pulmonary Tuberculosis cases from the above	...	2,094
No. of Non-Pulmonary Tuberculosis Cases	...	114
Total No. of cases attended the Clinic in 1959...		46,291
No. of P.T. Cases detected among 1,251 contacts examined	...	148

**Curative Side**

*Yearly Report of the Tuberculosis Clinic at Government Stanley Hospital, for the Annual Year 1959 :*

1. Number of New Cases (including contacts)—

	Male	Female	Children	Total
	3,098	1,956	1,010	6,064

2. Number of Pulmonary Tuberculosis Cases :

	P.T. I	P.T. II	P.T. III	Total
	224	2	1,868	2,094

3. Number of open cases in the above	...	...	...	1,868
4. Number of Non-pulmonary Tuberculosis	...	...	...	114
5. Number of Non-Tuberculosis Cases	...	...	...	3,819
6. Number of old cases—				
Men			...	24,149
Women			...	18,068
Children			...	4,074
			Total	46,291
7. Number of A.P. Initials			...	Nil
8. Number of A.P. Refills			...	Nil
9. Number of P.P. Initials			...	23
10. Number of Patients who attended for A.P. Refills			...	Nil
11. Number of P.P. Refills			...	136
12. Number of Patients attending			...	77
13. Number of Injections given			...	8,918
14. Number of Screenings done			...	5,669
15. Number of Aspirations done			...	12
16. Number of cases referred from other Clinics				64

*Age and Sex Group of cases diagnosed to suffering from Pulmonary Tuberculosis (including contacts), during the year 1959 :*

Age	P.T. I		P.T. II		P.T. III		Total
	Male	Female	Male	Female	Male	Female	
1 to 6 ...	12	10	...	...	8	6	36
7 to 10 ...	6	6	...	...	8	7	27
11 to 15 ...	8	10	...	...	25	24	67
16 to 25 ...	27	26	...	...	330	198	581
26 to 35 ...	27	20	...	...	408	185	640
36 to 45 ...	16	10	...	...	259	116	401
46 and above.	17	11	...	...	238	52	318
Total ...	113	93	...	...	1,276	588	2,070

*Income Group :*

Rupees	Number of Cases
10 to 20 ...	328
21 to 40 ...	1,200
41 to 75 ...	225
76 to 100 ...	75
100 and above ...	40
Total ...	1,868

*Occupation group :—*

Occupation	Number of Cases
Cooly ...	760
Ryot ...	160
Beedi Rollers ...	154
Clerical ...	124
Private ...	76
Business ...	72
Tailors ...	89
Weavers ...	109
N.G.Os. ...	89
C.G. ...	28
No income ...	207
Total ...	1,868

*Yearly Report of the Tuberculosis Clinic at the Government Stanley Hospital for the Annual Year 1959 :*

<i>Preventive Side :</i>	<i>First visit</i>	<i>Re-visit</i>	<i>Total</i>	
1. Number of houses visited—				
By Health Visitor ...	841	1,207	2,048	
By Medical Officer ...	...	...	458	
2. Number of contacts examined in the Clinic—				
Men ...	...	436		
Women ...	...	406		
Children ...	...	409		
	Total ...	1,251		
	<i>P.T. I</i>	<i>P.T. II</i>	<i>P.T. III</i>	<i>Total</i>
3. Number of P.T. Cases found among the contacts ...	47	Nil	101	148
4. Number of cases Tuberculin treated ...	...	...	...	Nil
Tuberculin Positive ...	...	...	...	Nil
Tuberculin Negative ...	...	...	...	Nil
B.C.G. given ...	...	...	...	Nil
5. Coverage so far in the current year ...	...	...	...	...
Coverage so far from 1950 ...	...	...	...	...
6. Family Planning ...	...	...	...	28

**The Tuberculosis Clinic, Government Royapettah Hospital, Madras, 1959.**

Tuberculosis Clinic work covers an area of 15.2494 square miles (Eight Corporation Divisions).

Population catered to—2,23,489.

*Staff attached to the Clinic :*

1. Full time paid Medical Officer—One.
2. Qualified Health Visitors—Two (one male and one female).
3. Registration Clerk (Part-time)—One.
4. The Tuberculosis Clinic availed the services of the staff attached to Government Royapettah Hospital, Madras—X-ray Department and Clinical Laboratory, for X-ray and Laboratory examination respectively.
5. The Staff Nurse posted to the Tuberculosis Ward in the Clinic also attended to the work of giving injections during the afternoons.
6. The Male Nursing Orderly and Female Nursing Orderly of the hospital posted to the Clinic were part-time workers at the Clinic.

*Main Items of Work :*

1. Contact work.
2. Tuberculosis Ward Work (Emergency Ward for males).
3. Tuberculosis Clinic Out-patient Department.
4. Clinical Conference on every Wednesday at Government Tuberculosis Institute between 10-30 a.m. and 12 noon to discuss cases with the Director, Government Tuberculosis Institute.

*Contact Work :*

All contacts of open cases were queried at their houses and a thorough check up done at the Clinic, regularly by the Health Visitors, and the Medical Officers attached to the Clinic.

*Tuberculosis Ward work :*

All cases of emergency such as haemoptysis, spontaneous pneumothorax and cases with poor general condition, with dyspnoea and oedema were, as usual, admitted by the Director, Government Tuberculosis Institute as well as the Medical Officer at the Clinic and also by the Medical Officer attached to the Casualty Department of Government Royapettah Hospital. They were attended to and given treatment for a few days till the emergency was over.

*Bed Strength :*

18 beds allotted only for males.

*Working hours :*

12 noon to 2 p.m. daily except Sundays.

Number of emergency cases admitted in 1959	481
Number of cases expired	48

*Tuberculosis Clinic (Out-patient Department) :**Working hours :*

Between 1-30 p.m. and 5 p.m. daily except Sundays.

Though the Clinic is intended to cater to 8 Divisions (Mylapore North, Mylapore South, Adyar, Guindy, Saidapet, T.Nagar North and South, Teynampet and Royapettah), patients who came from Triplicane area were also examined and treated.

It also helped the patients who came from other localities for examination. They were examined and referred to the respective Tuberculosis Clinic, in their areas.

In addition, cases referred for opinion by the other departments of Government Royapettah Hospital were also examined at the Clinic.

Screening was done at the Clinic on four days in a week except Government holidays and opinion was given to all who attended the Clinic as it is a diagnostic centre. 2,405 screenings were done during 1959, out of which 846 cases were diagnosed as Pulmonary and 62 as non-Pulmonary cases.

Cases diagnosed as P.T. III, i.e., sputum positive for A.F.B. in the respective areas covered by the City Clinics were given free supply of Streptomycin, I.N.H. and Neo P.A.C. tablets in continuation of two drugs at a time. The Non-Gazetted Officers got their quota in the hospital given free to them and a register maintained for the supply was supervised by the Superintendent of Government Royapettah Hospital.

Collapse therapy such as Pneumo-peritoneum were given for a few cases which were started and continued at the Clinic or started at Tambaram Sanatorium and continued at the Clinics. Further details are furnished below :—

(1) Number of cases registered in the year 1959	...	3,689
(2) Number of P.T. among the new cases registered	...	846
(3) Number of Non-Pulmonary Tuberculosis cases	...	62
(4) Number of Non-Tuberculosis cases	...	2,684
(5) Number of old cases who attended the Clinic	...	22,447
(6) Number of daily average attendance of old cases	...	71
(7) Total daily average (new and old cases)	...	82

For the year 1959 :

(a) A.P. Initials given	...	Nil
(b) A.P. Refills given	...	Nil
(c) Number of patients attended for A.P.	...	Nil
(d) P.P. Initials	...	3
(e) P.P. Refills	...	309
(f) Number of patients attended for P.P.	...	13
(g) Number of aspirations done	...	30
(h) Number of screenings done	...	2,405
(i) Number of injections done (Streptomycin, etc.)	...	7,074

The incidence of the disease is highest among poorer classes of people between the age groups 16 to 40 and also in low income groups, and it is all due to poor housing conditions and also due to low economical condition. The cost of living is too high and people are not able to make both the ends meet. So in the control programme, it is better to pay attention to good housing condition and also raise the standard of living at least to a little extent, so that people can eat well to avoid the disease from contacting them.

Deserving cases were seen by the Director, Government Tuberculosis Institute once a week and put in the waiting list for admission to Tambaram Sanatorium according to their turn.

1. Area covered and the number of Divisions catered	...	15,2494 square miles (8 Divisions).
2. Population catered	...	2,23,489

	Men	Women	Children	Total
3. (a) No. of new cases registered.	2,153	1,160	376	3,689
(b) No. of daily average attendance of new cases	...	...	...	11
4. No. of Pulmonary Tuberculosis cases (new)	...	...	...	846
{ Sputum positive for A.F.B.	...	...	...	611
{ Sputum negative for A.F.B.	...	...	...	235

	P.T. I			P.T. II			P.T. III			
	Men	Women	Children	Men	Women	Children	Men	Women	Children	
	56	12	10	73	13	9	521	146	6	
5. No. of Non-pulmonary Tuberculosis cases	...						62			
6. No. of Non-tuberculosis cases	...						2,684			
							<i>Men</i>	<i>Women</i>	<i>Children</i>	<i>Total</i>
7. (a) No. of old cases attended ...							14,622	6,581	1,244	22,447
(b) Daily average attendance of old cases							...	...	...	71
8. Total daily average (new and old cases)							...	...	...	82

*Contact Coverage for the year 1959 :*

1. Patients picked up (open cases)	...	673
2. Houses visited	...	513
3. No. queried at home	...	2,052
4. No. examined at the Clinic	...	359
5. No. of cases found at the clinic :		*

*Men	P.T. I			P.T. II			P.T. III		
	Men	Women	Children	Men	Women	Children	Men	Women	Children
2	1	8	2	...	2	15	8	3	

6. Total No. of P.T. cases found among contacts—40.

*Age Groups of cases diagnosed to be suffering from Pulmonary Tuberculosis :—*

Age group	P.T. I		P.T. II		P.T. III		
	Men	Women	Men	Women	Men	Women	
1 to 5 years	...	6	2	4	6	2	2
6 to 10 years	...	4	4	5	7	4	2
11 to 15 years	...	2	3	4	1	25	10
16 to 25 years	...	20	5	22	1	127	37
26 to 35 years	...	11	3	17	7	157	55
36 to 45 years	...	7	3	10	1	120	15
Above 45 years	...	7	1	10	...	104	13
Total	...	57	21	72	23	539	134

*Income Groups of cases diagnosed to be suffering from Pulmonary Tuberculosis :*

Income Rupees :	No. of Cases
1 to 9	24
10 to 20	84
21 to 40	314
41 to 75	167
76 to 100	28
Above 100	1
Unemployed	55
Total	673

**Occupation Groups**

Milkmen	17	Musician	2
Pensioners	6	Pressmen	2
Painters	6	Barbers	7
Messengers	2	Gardeners	6
Clerks	29	Business	12
Carpenters	15	Beedi Rollers	42
Landlords	2	Cooks	3
Police Constables	5	Astrolegers	Nil
Tailors	28	Salesmen	4
Sweepers	6	Mechanics	18
Goldsmiths	4	Artists	Nil
Housewives	2	Drivers	17
Coolies	217	Weavers	35
Stage actors	Nil	Masons	17
Cashier	Nil	Ryots	40
Fishermen	4	Peons	33
Dhobies	9	Teachers	21
Post Man	1	Unemployed	55
Sub-Inspector	1		
		Grand Total	673

**Annual Statistics of the T.B. Clinic at Kasturba Gandhi Hospital for Women and Children, Triplicane, Madras for the year 1959**

The T.B. Clinic attached to the above hospital functioned on all days except Sundays from 2 p.m. to 5 p.m.. Triplicane, Zam Bazar, Pudupakkam, Thiruvateeswaranpet, Mount Road, Chepauk, Mirsahibpet and Krishnampet are under the jurisdiction of this Clinic. Only women and children are treated and contact cases are examined. Male contacts are screened and if found positive are referred to General or Royapettah Hospitals.

The Director, Tuberculosis Institute supervised the Clinic every Saturday and put deserving patients suffering from Pulmonary Tuberculosis in the waiting list for admission into the Government Tuberculosis Sanatorium, Tambaram. A specially trained doctor and a house surgeon attended on the patients and also examined the in-patients when requested by the ward doctor

and gave necessary advice. The Doctor and a Health Visitor visited the patients in their homes and gave them the necessary advice regarding disposal of the sputum, contact examination, attending the hospital regularly, health, etc. The Health Visitor visited the patients and advised them to visit the clinic. The clinic functions only as an out-patient department.

During the year under review, 2,129 patients attended the Clinic. 356 cases were diagnosed to be suffering from Pulmonary Tuberculosis, out of which 86 cases were put in the waiting list for admission into the Sanatorium, Tambaram. All clinical examinations were done in the hospital, and the clinical laboratory, and X-ray apparatus were made use of. Most of the patients who attended the Clinic were found to be P.T. III cases, majority of them being between the ages of 16 and 25 years, their income being between Rs. 21 and Rs. 40 and their occupation—housewives.

Two patients were receiving money from the Bhavanagar Fund. They were paid Rs. 10 per month for a period of 6 months.

**Age, Sex, Income and Occupation groups among patients suffering from Pulmonary Tuberculosis for the year 1959.**

*Age and Sex Group :*

Age	Females			
	P.T. I	P.T. II	P.T. III	Total
1 to 5 years	32	7	13	52
6 to 10 years	10	2	6	18
11 to 15 years	1	1	5	7
16 to 25 years	7	10	103	120
26 to 35 years	6	7	83	96
36 to 45 years	3	3	30	36
46 years and above	2	2	23	27
Total	61	32	263	356

*Income and Occupation Group :*

Income		Occupation	
Rupees	Number of cases	Type	Number of cases
10 to 20	27	Housewife	248
21 to 40	169	Nil—Occupation	57
41 to 75	103	Student	37
76 to 100	18	Ryot-cooly	...
100 and above	20	Servant	11
Nil—Income	19	Weaver	...
		Beedi Maker	...
		Petty Business	...
		Nurse	1
		Teacher	2
Total	356	Total	356

*Curative Side—Statistics :*

	Men	Women	Children	Total
1. No. of new cases (including contacts) ...	19	1,511	599	2,129
	<i>P.T. I</i>	<i>P.T. II</i>	<i>P.T. III</i>	<i>Total</i>
2. (i) No. of Pulmonary Tuberculosis cases:				
Women ...	19	23	244	286
Children ...	40	9	21	70
Total ...	59	32	265	356
No. of cases belonging to this area ...	241			
No. of cases belonging to other areas ...	99			
No. of cases from moffusal ...	16			
(ii) Pleurisy—				
Dry ...	Nil			
With effusion ...	9			
(iii) Others—Tuberculosis—				
Laryngitis ...	1			
3. No. of open cases in the above ...	115			
4. No. of Non-Pulmonary Tuberculosis cases ...	129			
(i) Glands (Lymphatic) ...	113			
(ii) Osteoarticular (excluding late affection) ...	2			
(iii) Meningeal (including central nervous system) ...	4			
(iv) Abdominal ...	10			
(v) Skin (including subcutaneous cellular tissue) ...	...			
(vi) Of genito urinary system ...	...			
(vii) Others ...	...			
*5. No. of Non-Tubercular cases ...	1,632			
		<i>Women</i>	<i>Children</i>	<i>Total</i>
6. No. of old cases ...		15,148	3,718	18,866
7. No. of A.P. initial ...		Nil		
8. No. of A.P. refills ...		Nil		
Total ...				

			Women	Children	Total
9. No. of patients attending for A.P. refills	...		Nil		
10. No. of P.P. initials	...		Nil		
11. No. of P.P. refills	...		Nil		
12. No. of patients attending for P.P. refills	...		Nil		
13. No. of injections given—					
Streptomycin	...		3,469		
Other injections	...		3,519		
14. No. of screenings done	...		1,057		
15. No. of aspirations done	...		3		
<i>*Respiratory System</i>			<i>Digestive System</i>		
Influenza	... 2		Pharyngitis	... ..	
Upper respiratory catarrh	1		Dysentery	... ..	2
Laryngitis	... 5		Diarrhoea	... ..	35
Tonsillitis	... 55		Chronic diarrhoea	... ..	3
Bronchitis	... 419		Constipation	... ..	...
Chronic bronchitis	... 13		Nut. Oedema	... ..	9
Bronchial Asthma	... 116		Rickets	... ..	1
Eosinophiles	... 16		Dyspepsia	... ..	67
Bronchiectasis	... 34		<i>Other diseases:</i>		
Cystic lung	... 9		P.U.O.	... ..	108
Broncho pneumonia	... ..		Pyelitis	... ..	4
Pneumonitis	... 6		Debility	... ..	102
Lung abscess	... 2		Myalgia	... ..	74
Fibrositis	... ..		Surgical	... ..	34
<i>Cardiovascular System.</i>			Gynaeco	... ..	45
Valvular disease of the heart	... 19		<hr/>		
Hypertension	... 2		1,231		
Anaemia	... 47		Contacts	... ..	400
			Total	... ..	<hr/> 1,631 <hr/>

*Preventive Side—Statistics :*

16. No. of cases referred from other Clinics	...	209		
			<i>First visit</i>	<i>Re-visit</i>
17. No. of houses visited—				<i>Total</i>
By the Health Visitor	...	811	608	1,419
By the Medical Officer	...	450	...	450
			<i>Men</i>	<i>Women</i>
18. No. of contacts examined in the Clinic	...	19	175	206
19. Family Planing—Number advised.	...		66	...

*Contact Work :*

1. Patients picked up	...	403			
2. Houses visited	...	403			
3. No. queried at their homes		1,227			
4. No. of contacts totally examined in the Clinic.		400			
			<i>P.T. I</i>	<i>P.T. II</i>	<i>P.T. III</i>
5. No. found to be suffering from P.T. among the contacts—					<i>Total</i>
Women	...	3	2	12	17
Children	...	12	3	4	19
Men	...	1	...	...	1
6. Total No. of P.T. cases found among the contacts	...	16	5	16	37

1. Area covered by 6 divisions	...	2,885 sq. miles
2. Population catered to	...	1,79,303
3. (a) No. of new cases registered—		
Males	...	19
Females	...	1,511
Children	...	599
(b) Daily average attendance of new cases	...	6

		<i>P.T. I</i>	<i>P.T. II</i>	<i>P.T. III</i>	<i>Total</i>
4. No. of P.T. cases—					
Women	...	19	23	244	286
Children	...	40	9	21	70
		59	32	265	356
Positive	...	115			
Negative	...	200			
Not examined	...	41			

5. No. of Non-Pulmonary Tuberculosis cases ...	129
6. No. of Non-Tubercular cases ...	1,632

	Women	Children	Total
7. (a) No. of old cases attended ...	15,148	3,718	18,866
(b) Daily average attendance of old cases ...			52
8. Total daily average attendance ...			58

Area covered by the clinic showing the number, names of the divisions, population of each division and total population—

Division	Area in sq. miles	Population
1. Pudupakkam ...	0.2238	28,672
2. Thiruvateeswaranpet ...	1.0499	30,363
3. Chepauk ...	0.2997	24,267
4. Triplicane ...	0.1760	26,777
5. Zambazaar ...	0.1391	25,044
6. Mirsahibpet ...	0.7000	44,180
Total ...	2.5885	1,79,303

### MEDICAL INSPECTION.

During the year under review five Medical Inspectors and three Medical Inspectresses continued to attend to the School Medical Inspection of Children in the Corporation Schools. Out of five Inspectors, one retired, two are allopathic and the other two are Unani Doctors. Out of 296 schools children only 84 schools were examined as the complement of the staff was not sufficient to cope up with the increase in work and further due to dearth of doctors in the Dispensaries, the Medical Inspectors had to work as Medical Officers of Dispensaries. Hence the out-turn of work is low for the period 1959-60. The number of pupils on roll was about one lakh and ten thousand and the average daily attendance being 99,500 out of which 54,606 were boys and 46,564 were girls.

Details of 296 Elementary Schools run by the Corporation are as follows :—

1. Higher Elementary Schools	...	70
2. Elementary Schools	...	148
3. Slum Schools	...	23
4. Feeder Schools	...	8
5. Basic Schools	...	8
6. Urdu Boys' Schools	...	21
7. Urdu Girls' Schools	...	18
Total	...	296

In addition to these schools, the Medical Inspectors and Inspectresses have examined the students of the two High Schools, maintained by the Corporation of Madras one at Saidapet and the other at Nungambakkam.

Two School Medical Ambulance Vans were under the control of the Chief Medical Inspector, and they were used to transport children to skin clinics, to attend to all other functions, and also for B.C.G. work. The following statement shows the number of entrants and regulars medically examined and the number of defectives found during the Medical Inspection :—

Groups	Boys			Girls		
	Number examined	Number found defective	Per cent	Number examined	Number found defective	Per cent
Entrants	2,667	1,421	53.24	5,296	2,457	46.39
Regulars	6,844	3,505	51.19	8,774	4,250	48.41
Total	9,511	4,926	51.79	14,070	6,707	47.66

*Malnutrition.*—1,184 boys (12.5118%) and 2,274 girls (16.1620%) were found under-nourished as against 1,386 boys (9.5589%) and 1,399 girls (9.4539%) respectively in the previous year. 5,836 children were given shark liver oil and calcium lactate for malnutrition and rickety chest and 3,830 children were given yeast and vitamin 'C' for various forms of stomatitis of nutritional origin and other forms of vitamin 'B' deficiency.

*Medical Treatment.*—197 boys and 537 girls were treated at the Corporation dispensaries for ailments that could not be attended to at the school. 954 children were sent to various City hospitals for operation and specialised treatment. 59 children were sent to Government Ophthalmic Hospital and 7,225 children were treated at the school for minor ailments, malnutrition and stomatitis and 1,016 children were sent to various City hospitals for investigation and treatment.

*Re-inspection.*—121 re-visits to the schools were paid after the routine inspection for the treatment of the defects. 5,805 boys and 8,138 girls were re-examined during these re-visits and 601 parents were met.

*Personal Hygiene.*—276 boys (2.9090%) and 54 girls (0.3127%) were found unhygienic with reference to their dress as well as body. Instruction were also imparted to students in the presence of their parents. Personal hygiene was also taught to them in the classes on the advice of the Medical inspectors.

*Diseases of Bones and Joints.*—778 children having deformities of chest were suitably treated.

*Inspections and Contagious.*—706 boys (7.4230%) and 950 girls (6.77520%) had contagious and infectious diseases. The children were segregated and were given separate seats. 526 boys and 674 girls were having scabies and were suitably treated at the school. About 164 children having Hansens' disease in the early stages, were treated at the skin and Leprosy Clinics at Ice House, Triplicane. Improvements were noticed in them. Out of 164 cases 31 are definite cases and the others are in the non-infective stage.

*Other Diseases and Defects.*—246 boys (2.5865%) and 363 girls (1.1585%) having defects not mentioned under the above headings were treated both at the City hospitals and at schools.

*Minor Ailments.*—62 boys and 142 girls had dental and oral defects and were treated at the City hospitals with benefit. 42 children had their carious teeth extracted. 1,311 children had enlarged tonsils and 123 children had their tonsils removed at the City hospitals. 7,810 children having ear diseases had their treatment at the school. 11 boys and 15 girls were defective in hearing and were provided with seats near the teachers so as to be within the range of their hearing.

*Circulatory System.*—185 boys (1.9450%) and 214 girls (1.5210%) had defects relating to heart and blood. 304 children having anaemia improved by treatment.

*Co-operation of teachers.*—601 parents of children were present in the school at the time of inspection. They were given full advice about cleanliness and the importance of getting their children treated at the earliest stages. The Headmasters and the teachers trained in Junior Red Cross Work were instructed to give medicines to defective children having malnutrition, minor ailments, rickety chest and stomatitis for 90 working days.

*School Sanitation.*—Defects in the school building with particular references to latrines, playgrounds facilities and water supply were noticed, and suggestions were made to the concerned departments for remedying the defects.

*Health Education.*—48 talks and lectures were arranged in the schools for the benefit of the children. The total attendance was 71,236.

*Medical Examination of Corporation Thozhilalies.*—1,070 men, 112 women workers of all the departments were examined for physical fitness or invalidation during the year and duly certified.

*General Preventive Work.*—The Medical Inspection Staff and Health Staff with the help of the students undergoing Sanitary Inspector's training re-vaccinated 89,100 Corporation Children from 24th March 1960 to 10th April 1960 under the National Small Pox Eradication Scheme.

*Other Activities in connection with the schools.*—With reference to letter No. P.N.O. 27-N, 55-G.H., dated 9th September 1959 from Dean, Government General Hospital. Kumari A. C. Chakrapani, Public Health Nursing Tutor, Government General Hospital, Madras, has been visiting Moore Market Corporation Elementary School and the Jutkapuram Elementary School in batches of two along with the tutor since October 1959 to April 1960. The number of visits made to each school was 31 making a total of 62 visits. 62 home visits were also made.

During the school visits students nurses surveyed the sanitation of the school and its surroundings, drinking and washing facilities and did complete inspection of one or two pupils houses.

During the home visits the children and their mothers were given talks on personal hygiene, domestic hygiene, care of food and water, choice of food within their means, method of cooking, etc. Practical demonstrations were also given on periodical treatment and in the treatment of scabies, etc.

School children and their parents responded fairly well and followed the suggestions given. Children with acute illness were referred to the hospital and follow up was made in about six cases.

During the first week of November the Chief Medical Inspector of the Corporation schools visited both the Schools and supplied the following articles :—

- Portable Weighing Machine.
- Material for dressing and basins.
- Drugs for minor ailments.
- Vitamin tablets.

Since these children were weighed monthly and the weight record maintained at both the schools, Yeast and Vitamin tablets were distributed to the deserving pupils. Soap was supplied which was used for washing hands before school meals.

The same tutor continued the work since the re-opening of the schools in the same schools selected last year.

*Supply of Spectacles to the Poor Boys.*—A donation of Rs. 1,000 for the provision of spectacles to poor school children so kindly made by Sri C. Rajagopalachari, ex-Governor-General of India was accepted and necessary action was taken to get deserving Corporation school children with defective vision examined in Government Ophthalmic Hospital and also other Government hospitals.

#### MID-DAY MEALS

The three Corporation Mid-day Meal Centres in the City which are located at Gopalapuram in the South, Chintadripet in the Centre and Basin Bridge in the North continued to supply mid-day meals to the poor children attending the Corporation schools in the City. During the year 1959 mid-day meals were supplied to 28,730 school children. Besides this, milk powder was supplied to 211 Corporation schools (mostly slum schools) in the City during April 1959, and 23,570 pupils were given milk for 27 days. Due to short supply of milk powder, only feeder schools and creches were selected as continuous beneficiaries during this year.

During the year under review, due to continued efforts and influence of the ex-Mayor, Sri K. Kamalakannan and with the moral support of Mrs. Tara Cherian, another ex-Mayor, a Drama 'VEERAPANDIYA KATTA-BOMMEN,' was staged by Sri Shivaji Ganesan and party in aid of the Mayor's Mid-day Meals and Clothing Fund on 30th March 1959 at Raja Annamalai Manram and a sum of Rupees One Lakh realised by the performance was donated to the Fund by Sri Shivaji Ganesan..

The Mid-day Meal Centres were visited by Sri P. M. Joseph, Principal, Lakshmi Bai College of Physical Education, Gwalior, Mr. Elisworth Bunker, American Ambassador in India, New Delhi, Mr. Richard E. Paulson, UNICEF representative, U.S.A., Sri Brijon, W.H.O., Nutrition Section, Geneva and Sri S. S. Mirajakar, Mayor of Bombay, during the year 1959. They appreciated the efforts of the Madras Corporation in this direction and recorded their observations in the visitors' books maintained at the centres.

#### PUBLIC HEALTH LABORATORY.

The Laboratory was started in the year 1946 with the aim of providing laboratory facilities to the Medical Institutions run by the Corporation, so as to make the diagnosis and treatment of diseases more scientific. Incidentally we started catering to the needs of the Private Practitioners of the City and their clientele. The charges levied for testing the samples of blood, urines, motion, smears, etc., are very nominal so as to be within the reach of even a poor man. This laboratory is intended for service and not for profit making.

#### STATEMENT No. I.

#### Showing the Progress of the Laboratory

Year	Number of samples tested	Receipts	
		Rs.	nP.
1946	311	215	00
1947	1,492	647	50
1948	5,642	1,635	00
1949	12,266	4,766	00
1950	16,346	10,939	00
1951	19,005	11,234	00
1952	33,089	11,560	75
1953	34,310	18,649	75
1954	3,072	22,336	50
1955	43,955	24,118	50
1956	44,569	24,334	50
1957	47,368	22,409	25
1958	44,337	24,304	50
1959	46,183	27,251	50

As can be seen from the above statement year after year the laboratory is becoming increasingly popular and the number of samples tested are steadily on the increase. It is gratifying to note that the staff of various Corporation Medical Institutions are evincing great interest and are taking full advantage of the facilities provided and thereby treating their patients more scientifically. About 50% of the specimens tested are from the Corporation Institutions. Once again the public and private Medical Practitioners are informed that this laboratory undertakes almost all examinations; Clinico-pathological, Bacteriological, Serological and Bio-Chemical tests, etc., and the rates are very competitive. The examination of sputum for A.F.B. and the throat swabs for C. Diphtheria are done free and the Medical Practitioners are requested to avail of these laboratory facilities provided by the Corporation of Madras.,

STATEMENT No. II

Showing the details of specimens received from the Private Practitioners, various Clinics, Dispensaries, C.W.C., Corporation of Madras during the year under review

<i>Private Practitioners</i>	<i>C.W.C.</i>	<i>Dispensaries</i>	<i>Clinics</i>	<i>Others</i>	<i>Total</i>
23,989	16,068	3,051	1,595	1,480	46,183

The laboratory is run under the efficient care of Kumari Dr. S. Arogyadoss, M.D., D.G.O., who had post-graduate training in U.S.A. where she studied the laboratory service and some of the technique in blood pathology. She is ably assisted by Dr. M. Anantharam, M.B.B.S., and Dr. Mrs. Sarada Bai, M.B.B.S. and Mr. T. Srinivasan, Chief Technician. From the day she returned from the States, she has been improving the Laboratory Technique to place the laboratory on par with the foreign laboratories.

STATEMENT No. III

Showing the total number of various specimens received during the year

<i>Blood</i>	<i>Sputum</i>	<i>Urine</i>	<i>Motion</i>	<i>Others</i>	<i>Total</i>
36,206	1,870	2,969	4,844	294	46,183

During the year under review, the laboratory handled 46,183 specimens. Statement above shows the nature of specimens and number of each kind of specimen. Of special interest of medico-social aspect is the samples of blood received for examination for syphilis.

During the year Dr. Downie, Professor of Bacteriology, Liverpool University, Dr. McArthur, Commonwealth Director, Health Laboratory, Tasmania and Dr. Patnaick, A.D., D.G.M.S., Calcutta, visited the laboratory and were quite impressed with the work done in the laboratory. They were unanimous in their opinion that the Medical Officers and Technicians were inadequate considering the number of samples that are examined monthly.

The Corporation has undertaken routine screening of blood of pregnant women who attend the ante-natal clinics of the Child Welfare Scheme. For

want of enough laboratory facilities, etc., only in 18 centres such a scheme is put up into effect at present as against 15 centres during 1959. During the year, in all 16,068 mothers had their bloods tested and of whom 368 were Positive. Syphilis not only affects the termination of pregnancy, but the child born of syphilitic parents will congenitally acquire the disease and it will be a great thing if this is detected before the child is born and the mother treated to prevent the child from acquiring the disease. With this idea this scheme is put into operation and the laboratory is equipped with latest field survey unit, donated by UNICEF in the year 1957 which is of great use in working out the scheme.

## STATEMENT No. IV

**Shows the details of Serology Survey conducted during the year for Private Practitioners and C.W.S., Corporation of Madras in detail**

No.	Sources	Number of Positive cases	Number of Negative cases	Number of Quantities	Total
1	C.W.S.	368	15,700	268	16,068
2	Private Practitioners	867	17,652	60	18,519

## STATEMENT No. V

**Showing the details of Pregnant Women examined, diagnosed and treated and the infants examined at the Child Welfare Centres for which Serological testing is carried out at the Laboratory**

Pregnant Women Examined	Diagnosed	Treated	Infants Examined
16,068	368	215	8,676

665 c.c. of Penicillin has been used during this year for treatment.

## STATEMENT No. VI

**Showing the Penicillin (P.A.M.) purchased from local market, received and issued to the Centres and closing Balance during the year**

Opening Balance	Receipts	Total	Issued to the Centres	Closing Balance
221 vials	1,000 vials	1,221 vials	655 vials	566 vials

The Bio-Chemistry Section of the laboratory started functioning from May 1958. Details of Bio-Chemical tests done in the laboratory from 1st January 1959 to 31st December 1959 are furnished below as per the Statement.

1.	Blood Sugar	...	159
2.	G.T.T.	...	56
3.	Blood Urea	...	68
4.	F.T.M.	...	13
5.	Icteric Index	...	5
6.	Prothrombin Time	...	9
7.	Vanden Burgh Test	...	3
8.	Urine Urea	...	2
9.	Urine Ammonia	...	2
10.	Urine Urea and Urine Ammonia Ratio	...	1
11.	Urea Clearance Test	...	7
12.	Serum Calcium	...	10
13.	Liver Function Test	...	54
14.	Serum Cholesterol	...	32
15.	Cerebro Spinal Fluid Analysis	...	52
16.	Acid Phosphatase	...	1
17.	Serum Proteins	...	6
18.	Thymol Turbidity	...	2
19.	Urine Total Nitrogen	...	1
20.	Urine Chlorides	...	1
	<b>Total</b>	<b>...</b>	<b>484</b>

Scheduled rates for examination of specimens for the Clinical Tests, Serological and Bacteriological Tests.

#### SCHEDULED RATES

	Rs.	nP.
1. Blood ordinary examination counts, etc.	...	1 00
2. Blood Agglutination Test (Widal)	...	2 00
3. Blood Culture for bacillus typhus	...	2 00
4. Blood V.D.R.L. Test	...	2 00
5. Blood Kahn Test	...	2 00

SCHEDULED RATES—*contd.*

	Rs.	nP.
6. Blood quantitation V.D.R.L. Test	...	2 00
7. Blood Sedimentation Test	...	1 00
8. Motion culture	...	2 00
9. Motion Microscope examination	...	1 00
10. Urine for quantitative examination	...	1 50
11. Urine for quantitative examination	...	1 00
12. Other Smear for G.C. Examination, etc.	...	1 00
13. Skin Smear for Hansens examination	...	1 00
14. Semen Examination Volume	...	1 00
15. Blood Vandenberg Test	...	1 00
16. Blood for Gel Tests	...	1 00
17. Blood for Chopra Tests	...	1 00
18. Bleeding time in blood	...	1 00
19. Coagulation time in blood	...	1 00
20. Semen Examination : Counts	...	1 00
21. Do. Reaction	...	1 00
22. Do. Motility	...	1 00
23. Other materials sent by the Private Doctors	...	1 00 each

Schedule of proposed fees for the Bio-Chemical Analysis is as follows :—

	Rs.	nP.
1. Blood Sugar Random	...	3 00
2. Blood Glucose Tolerance Test	...	12 00
3. Fractional Test Meal Analysis	...	20 00
4 C.S.F. for Protein	} for all the three tests	...
Sugar		
Chloride		
5. C.S.F. for Globulin	...	2 00
6. Vandenberg Quantitative	...	6 00
7. Icteric Index	...	2 50
8. Serum Total Protein, Albumen, Globulin	...	12 00

SCHEDULED RATES—*contd.*

	Rs.	nP.
9. Serum Alkaline phosphatase	...	8 00
10. Serum Acid phosphatase	...	8 00
11. Serum Calcium	...	6 00
12. Serum Phosphorus	...	6 00
13. Serum Amylase	...	6 00
14. Thymol Turbidity	...	5 00
15. Prothromin Time	...	5 00
16. Blood Chloride	...	6 00
17. Urine Chloride	...	6 00
18. Serum Cholestrol	...	6 00
19. Serum Sodium	...	8 00
20. Serum Potassium	...	8 00
21. Urea Clearance Test	...	11 00
22. Blood Urea	...	6 00
23. B.M.R.	...	10 00
24. Uric Acid (Serum)	...	8 00
25. Blood Pubrinogen	...	8 00
26. Quantitative estimation of any other content not mentioned above except 17 keto steroids	...	8 00

However, samples received from Corporation employees drawing a salary less than Rs. 300 are taken for analysis free of charges.

For the present tests are being done for which accommodation, chemicals, apparatus and appliances are available.

Specimens received from Corporation Institutions also are charged at the scheduled rate for bio-chemical analysis only.

During the year it was proposed to construct a separate block to house the Bio-Chemistry Section as there is not enough room in the existing building and proposal has been postponed due to financial stringency.

REPORT OF THE PUBLIC ANALYST FOR THE CITY OF  
MADRAS FOR 1959.

During the year 1959 the number of samples analysed in the Public Analyst's Laboratory was 8,740 as against 9,170 in 1958. Among the samples analysed, the samples taken under the Prevention of Food Adulteration Act, 1954, numbered 8,123 as against 8,302 in 1958.

Of the 8,123 samples analysed under the Prevention of Food Adulteration Act, 1954, 5,862 samples were genuine and the remaining 2,261 samples were found to be adulterated. The percentage of adulterated samples for the year 1959 was 27.8 against 28.5 in 1958.

The samples consisted of milk, butter, ghee, gingelly oil, groundnut oil, cocoanut oil, coffee powder, tea, ghee substitutes, turmeric, arrowroot, honey, chilli powder, Dhalls, confectionery and other articles. A statement of the samples analysed in 1959 and in the five previous years is given in the Appendix (Food Analysis—Statement No. 1). A graph showing the number of samples analysed and the number of samples found adulterated each year beginning from 1931 is also appended to this report.

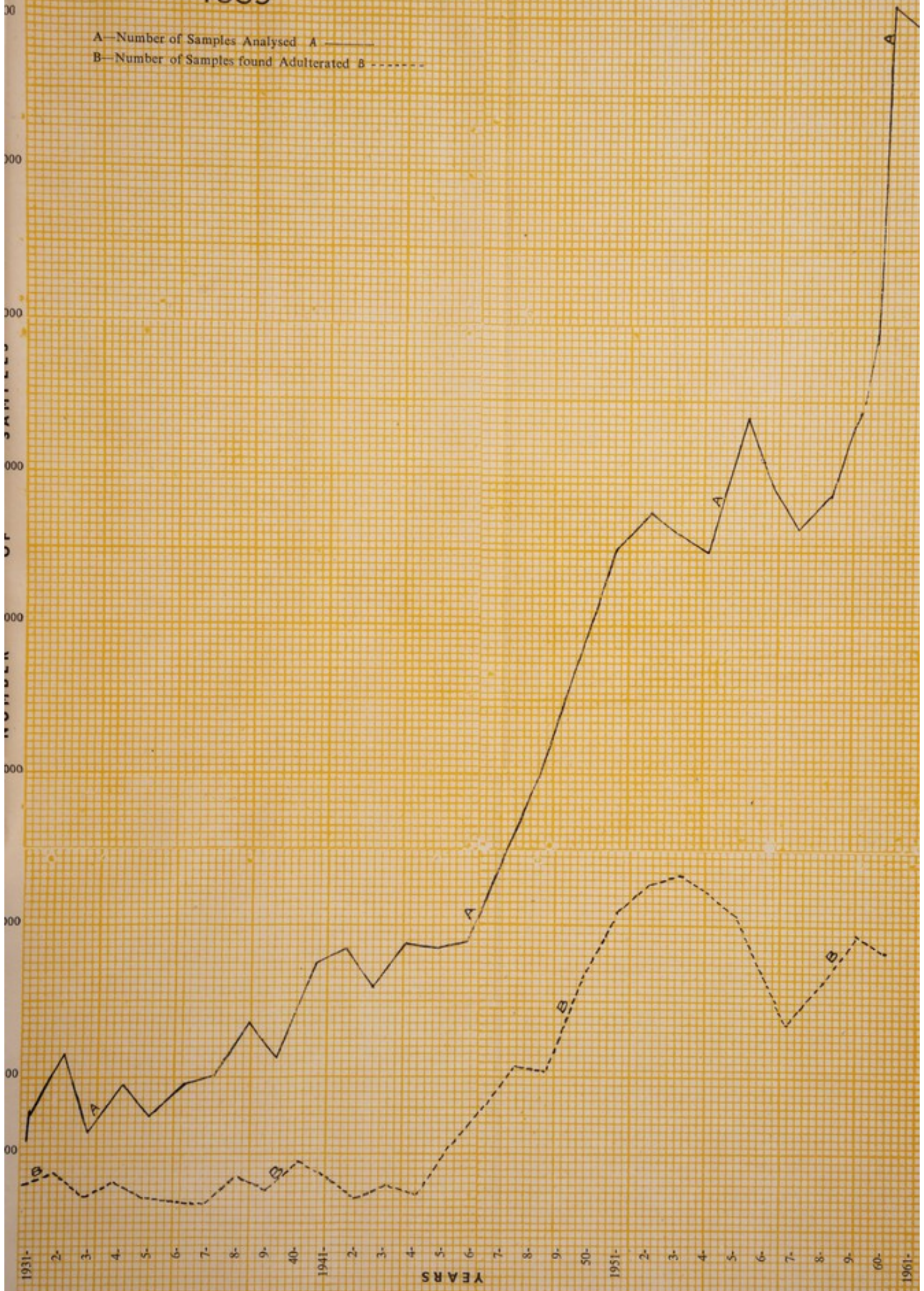
Substantial improvement in checking the sale of adulterated foods has been expected ever since the deterrent punishments, prescribed under the new Act, came into force from 1st June, 1955. The expectation is being fully justified year after year as may be seen from the progressive fall in the percentages of adulteration touching the figure of 27.8 per cent, the lowest during the period 1945-59.

It would be seen from Statement No. 1 that the steady decline in the percentage of adulterated samples has been maintained year after year, the figures being 40.7%, 32.7%, 32.5% and 28.5% during the years 1955, 1956, 1957 and 1958 respectively as against 45.5 in 1954 prior to the enforcement of the Central Act. This improvement can be attributed to both the deterrent punishments prescribed under the new Act and to the large increase in the number of samples handled by the laboratory at present.

Milk is the most perfect of foods, and lends itself to be adulterated very much easily. The prevention of adulteration of milk is, therefore, one of the important duties of the Government and the Local Authorities. As has been pointed out in previous reports, the elimination of the individual itinerant milk vendors should be the first step in any scheme for the effective prevention of milk adulteration. Milk supply co-operatives are the only solution to the problem, as such organized institutions would pay greater attention to the interests of the public. It would also be easier for the Corporation to successfully control such societies or distributing agencies. A very important and timely step in this direction has since been taken by the Government in starting the milk colony at Madhavaram. 42.2 per cent of the milk samples were adulterated in 1959 as against 41.6 in 1958. The percentage of adulteration of butter in 1959 was slightly lower than in 1958, the respective figures being 16.2 and 17.1. The percentage of adulteration of ghee has recorded a slight rise, being 7.7 and 5.3 in 1959 and 1958 respectively. There has been an appreciable decrease in the adulteration of the three varieties of edible oils. During 1959, the percentage of adulteration of Gingelly oil was 9.3 against 14.7 in 1958, of Groundnut oil 4.6 against 10.4 in 1958, and of cocoanut oil 2.9 against 5.3 in 1958. Adulteration of coffee powder continued to be low, the percentage of adulteration of coffee powder in 1959 and 1958 being 8.0 and 11.8 respectively. There was no adulteration of tea with foreign leaf or other foreign material during the year under report, but the practice of colouring of tea with an orange-red coal-tar colour continued during 1959, such coloured samples being only 7.9 per cent in 1959 against 15.1 per cent in 1958. The colouring of Turmeric

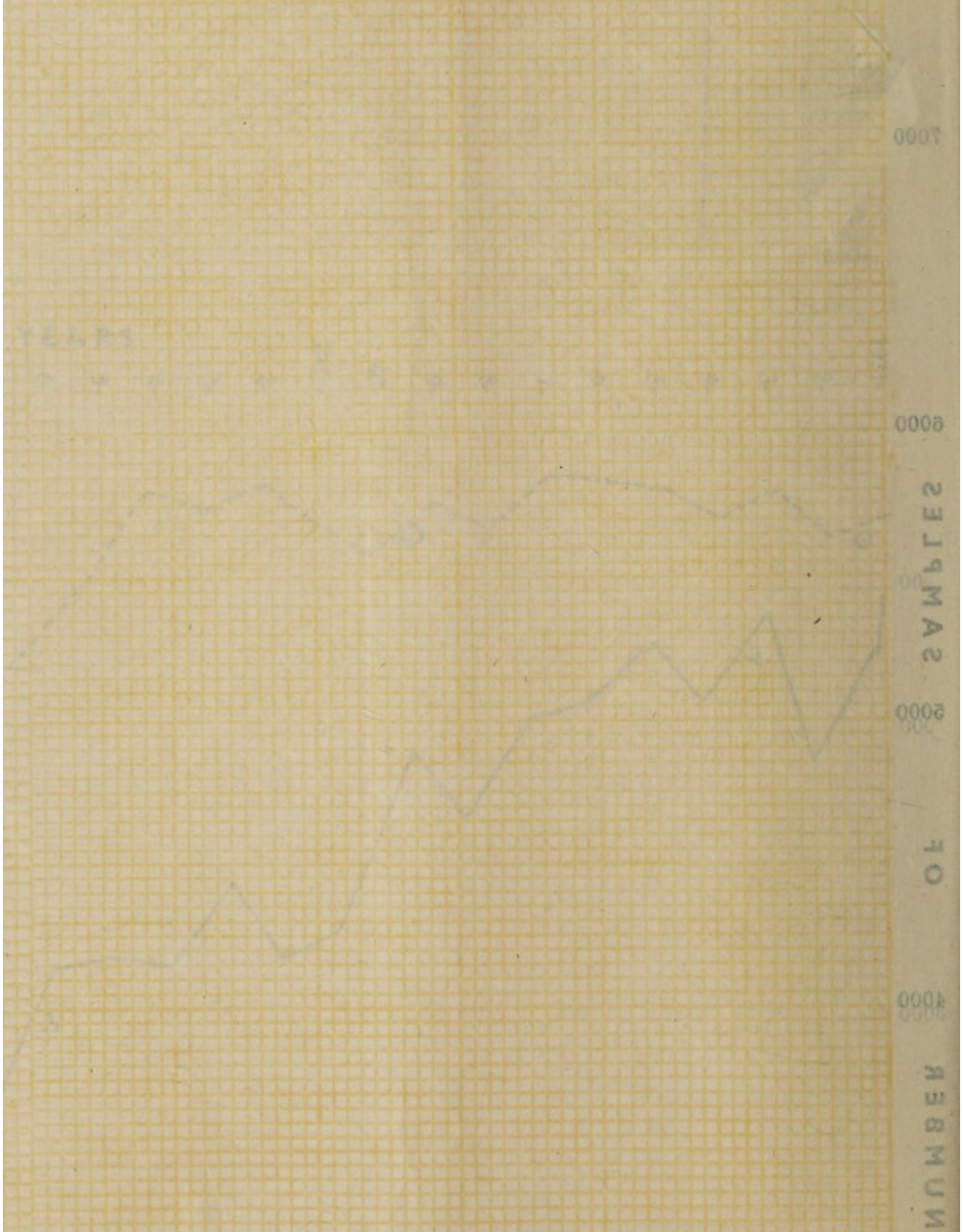
**PUBLIC ANALYST  
LABORATORY.  
MADRAS CITY.  
1959**

A—Number of Samples Analysed A ———  
B—Number of Samples found Adulterated B - - - - -



PUBLIC ANALYST  
LABORATORY.  
MADRAS CITY.  
1959

A—Number of Samples Analysed A ———  
B—Number of Samples found Adulterated B - - - - -



with lead chromate has registered a considerable increase during 1959 as evidenced by the fact that 11 out of 40 samples of Turmeric contained lead in excess of the prescribed limit 2.5 parts per million as against 2 out of 38 samples in 1958. Out of 25 Arrowroot samples, 22 were genuine during 1959. Adulteration of Honey has gone down during the year under report, as only 2 out of the 7 samples analysed proved to be adulterated.

The details regarding the various articles of food analysed during the year under report are given below.

*Milk.*—4,496 samples of milk were analysed. Of these, 2,160 samples were cow's milk, 1,585 samples were buffalo's milk and 682 samples were sold under the description of Mixture of Cow's and Buffalo's milk; 61 samples were described as milk without any description as cow's or buffalo's, 2 samples were described as powder milk, 4 samples were described as Toned Milk, 1 sample was described as Kaipal and one sample as Goat's Milk.

Of the 2,160 samples of Cow's milk 1,163 were genuine and 997 were adulterated. Among the adulterated samples, 793 contained added water ranging from 4 to 69 per cent. There was deficiency in fat in 66 samples to the extent of 20 to 100 per cent and 138 samples were deficient in fat in addition to containing added water. The average values of fat and solids-not-fat for the 1,163 genuine samples of cow's milk were 5.1 per cent and 9.1 per cent respectively which were the same as those in 1958.

Of the 1,585 samples of buffalo's milk, 1,049 were genuine and 536 were adulterated. Among the adulterated samples, 429 contained added water ranging from 3 to 61 per cent, 52 samples were deficient in fat to the extent of 22 to 100 per cent and 55 samples were deficient in fat besides containing added water. The average values of fat and solids-not-fat for 1,049 genuine samples of buffalo's milk were 7.3 and 9.8 per cent respectively as against average values of 7.2 per cent fat and 9.8 per cent solids-not-fat in 1958.

Among the 682 samples of mixture of cow's and buffalo's milk, 366 were genuine and 316 were adulterated. Among the adulterated samples, 282 contained added water ranging from 4 to 68 per cent. 16 samples were deficient in fat to the extent of 23 to 100 per cent and 18 samples were deficient in fat besides containing added water.

Sixty-one samples were described as milk without any indication as to whether they have been derived from cow, buffalo, or goat. Under the prevention of Food Adulteration Rules, 1955, the standards of Buffalo's milk are applicable to such samples. 18 samples were genuine and 43 were adulterated. 30 of the adulterated samples contained added water ranging from 3 to 50 per cent, 2 samples were deficient in fat to the extent of 32 to 62 per cent and 11 samples were deficient in fat besides containing added water.

Two samples were described as powder milk, 4 as toned milk, one as Kaipal and 1 as Goat's milk. Of these, six samples were adulterated, 4 were deficient in milk-fat and the other 2 contained 14 and 60 per cent of added water.

Among the 4,490 milk samples of all categories except the Toned milk and powder milk dealt with in the previous paragraph, 1,758 samples contained added water and the average content of added water in these 1,758 samples was 20 per cent, against 19 per cent in 1958.

*Butter.*—567 samples were analysed, of which 475 samples were genuine and 92 were adulterated. In 80 of the adulterated samples, the water content ranged from 17.5 to 73.7 per cent, the prescribed maximum limit for water being 16 per cent under the provisions of the Prevention of Food Adulteration Rules, 1955. 38 of these 80 adulterated samples also contained fat other than

milk-fat besides containing excess water. The remaining 12 adulterated samples of butter had a water content within the prescribed maximum limit, but contained fat other than milk-fat. The extent of adulteration with foreign fat among the 50 samples of butter which contained foreign fat ranged from 5 to 46 per cent, the average extent of adulteration being 21 per cent in 1959 against 24 per cent in 1958.

*Ghee.*—854 samples were analysed. Of these, 66 samples were adulterated with fat other than milk-fat, the common foreign fat used for the adulteration of these samples being Vanaspati (mostly hydrogenated groundnut oil). The extent of adulteration ranged from 11 to 98 per cent. The average admixture of foreign fat in the adulterated samples in 1959 was 45 per cent as against 42 per cent in 1958. 9 samples contained excess of Free Fatty Acids calculated as Oleic Acid (maximum prescribed limit—3 per cent). The presence of excess free fatty acids is due to a deterioration in quality of the article.

*Gingelly Oil.*—1,140 samples were analysed, of which 95 were adulterated with groundnut oil to the extent of 10 to 100 per cent, and 1 sample was declared as adulterated as it contained both groundnut oil and excess Free Fatty Acids. 10 samples of gingelly oil which did not contain any admixture of foreign oil were certified adulterated due to the presence of excess Free Fatty Acids, ranging from 2.1 per cent to 10.2 per cent calculated as Oleic Acid, which indicated that the oil had deteriorated in quality (Maximum limit for Free Fatty Acids—3 per cent).

*Groundnut Oil.*—109 samples were analysed, of which 5 samples were reported as adulterated and they contained Gingelly Oil to the extent of 5 to 100 per cent.

*Cocoanut Oil.*—273 samples were analysed and 8 samples were adulterated with Groundnut Oil to the extent of 10 per cent to 50 per cent.

*Coffee Powder.*—452 samples were analysed. Of the 452 samples of coffee powder, 36 were adulterated. Of the 36 adulterated samples, 9 samples contained preparation of Bengalgram to the extent of 10 to 40 per cent, 3 samples contained preparation of Date seed to the extent of 15 to 80 per cent, 23 samples contained preparation of mixture of Bengal gram and Date seed to the extent of 10 to 85 per cent, one sample contained 65 per cent of Pea.

*Tea.*—63 samples were analysed and 5 of them were reported as adulterated as they contained an orange-red coal-tar dye as mentioned earlier in this report.

*Ghee Substitutes.*—Of the 3 samples analysed, one was reported as adulterated as it consisted of mixture of ghee and Vanaspati.

*Other Articles.*—There were 166 samples, under this head. These consisted of 72 samples of Thoovar Dhall, 40 samples of Turmeric, 25 samples of Arrowroot, 7 samples of Honey, 13 samples of Maida, one sample of Chilli powder and 8 samples of Lozenges.

Out of the 72 samples of Thoovar Dhall, 24 samples were reported as adulterated as they contained a yellow coal-tar colour.

Of the 40 samples of Turmeric, 11 were reported as adulterated as they contained lead to the extent of 20 to 200 parts per million parts of the samples (Maximum limit—2.5 parts per million).

Of the 25 samples of Arrowroot analysed, 22 were reported as genuine, as the Starch derived from either *Maranta arundinacea* or *Curcuma, angustifolia* may both be sold as Arrowroot. 13 of the samples consisted of Maranta Starch and 9 of Curcuma Starch. 3 samples, which consisted of 100 per cent Tapioca starch (*Manihot utilissima*) were certified as adulterated.

The 13 samples of Maida consisted entirely of wheat flour and were reported genuine.

7 samples of honey were analysed, of which 2 were reported as adulterated. Of the 2 adulterated samples, one contained excess canesugar and the other contained a yellow coal-tar colour. The only sample of chilli powder analysed was adulterated.

With the enforcement of Part VI (Colouring matter), and Part VII (packing and labelling of food) of the Prevention of Food Adulteration Rules, 1955, an important step was taken by the laboratory in adding coloured foodstuffs to the list of numerous varieties of articles analysed here. Under the above rules, only certain classes of food can be artificially coloured with coal-tar colours, and those, too, with the eleven permitted colours enumerated under rules 28. The addition of saccharin, preservatives and colouring matter, natural or artificial, should be declared clearly on the labels of the containers.

After a preliminary survey, the attention of the public was drawn through the press to the rules prohibiting the use of the harmful unlisted artificial colours in foodstuffs. Then regular sampling began towards the end of the year. Three of the eight formal samples examined were found to contain prohibited colour and the vendors were prosecuted.

Besides the formal samples dealt with above which were taken under the Prevention of Food Adulteration Act, 1954, 617 miscellaneous samples were examined in the laboratory during the year under report. Of these, 353 were samples of milk taken informally from the Madras Co-operative Milk Supply Union in order to check the purity of their milk supply before the milk was released for distribution in the City. These were in addition to the formal samples taken regularly from the sales depots and delivery boys of the Union, which are included among the formal samples dealt with in the earlier part of this report.

A Statement of the miscellaneous samples is given below :—

<i>Source.</i>	<i>Nature of Samples.</i>	<i>Results of Analysis.</i>
Madras Co-operative Milk Supply Union, Ayanavaram.	353 samples of milk ...	339 samples were genuine, 9 samples were deficient in S.N.F. (2% to 5%) and 5 samples were adulterated (6%, 3%, 3%, 13% & 3%).
Health Department ...	4 samples of coffee powder.	Genuine.
Do. ...	9 samples of Boiled Rice.	Relative qualities were reported upon.
Do. ...	6 samples of Thoovar Dhall.	Relative qualities were reported upon.
Mid-day Meals Centre ...	2 samples of milk powder.	Unfit for human consumption.
Education Department.	2 samples of milk powder	Unfit for human consumption.
Infectious Diseases Hospital, Tondiarpet.	4 samples of coffee powder.	Genuine.
Do.	1 sample of Curry powder.	Do.
Divisional Sanitary Inspectors.	35 samples of washed water (Kazhu neer).	Lime absent.

Divisional Sanitary Inspectors.	39 samples of Kanji water.	Lime absent.
Do.	50 samples of cooked rice.	Do.
Do.	1 sample of Assorted cake.	Found to be free from any colouring matter.
Food Inspectors	14 samples of Lozenges.	5 samples contained artificial colours not listed in the rules. 9 samples contained permitted colours.
Do.	5 samples of Jangri and Jilebi.	3 were artificially coloured with a prohibited coal-tar colouring matter.
Electrical Department.	81 samples of Transformer oil.	Reports on the inorganic and organic acidities were made.
Social Service Centre	1 sample of Milk powder.	Unfit for human consumption.
Assistant Collector, Customs.	3 samples of chicory powder.	Genuine.
Private parties	5 samples of Milk	1 genuine and 4 adulterated (4%, 5%, 14% and 10%).
Private party	1 sample of Butter	Genuine.
Do.	1 sample of Ghee	Do.

A tabular statement of the action taken on the adulterated samples of 1959 and those of 1958 pending disposal on 1st January, 1959 is given in the Appendix (Food Analysis—Statement No. II).

The number of samples reported as adulterated during the year under report was 2,261. Out of these, 76 samples were only very slightly adulterated and no prosecutions were instituted in these cases. Prosecutions of vendors were instituted in respect of the remaining 2,185 adulterated samples.

Of the 2,185 prosecutions instituted, convictions were obtained in 985 cases. There were 15 acquittals and one withdrawal and the remaining 1,184 cases were pending disposal on 31st December, 1959. 673 convictions and 20 acquittals and 1 withdrawal were obtained among the cases relating to samples taken prior to 1st January, 1958.

The total number of convictions for the sale of adulterated articles of food in 1959 was 1,658 as against 1,713 in 1958. The amount of fines imposed in 1959 was Rs. 77,045 against Rs. 78,898 in 1958. The average fine per conviction in 1959 was Rs. 46 the same as in 1958. The maximum and the minimum fines imposed in the year 1959 were Rs. 200 and Rs. 10 respectively. Among the convictions of the year 1959, in one case no fines were imposed but the vendor was sentenced to undergo Rigorous Imprisonment for one year and in another case the vendor concerned was fined Rs. 25, and also sentenced to undergo 3 months rigorous imprisonment.

Sri S. Sundaram, M.A., succeeded Sri V. Venkatachalam as Public Analyst for the City of Madras on 26-11-1959 when the latter proceeded on leave for four months preparatory to retirement.

Sri V. Venkatachalam served the Corporation for more than twenty five years ever since his appointment on 25-7-1930 as the First Public Analyst of the City under the Madras Prevention of Adulteration Act, 1918, then in force. With his indefatigable industry and incessant drive, within barely six years of its very humble start at Kilpauk, the laboratory could shift in 1939 into a fine well-planned and well-equipped building of its own immediately behind the Ripon Buildings. His mature experience and thorough knowledge of the various problems connected with the prevention of adulteration have largely been responsible for the Laboratory acquiring a legitimate reputation as one of the best of its class maintained by any Municipality in India.

During the year 1959, the staff of the laboratory were as follows :

*Senior Assistants—*

1. Sri R. Ramalingam, M.Sc.
2. Sri V. V. Ramana Rao, M.Sc. (from 26-11-1959).

*Grade I Junior Assistants -*

1. Sri V. V. Ramana Rao, M.Sc. (till 25-11-1959).
2. Sri C. Rajaganapathy, B.Sc.
3. Sri R. Mohan Rajan, B.Sc. (from 26-11-1959).

*Grade II Junior Assistants—*

1. Sri R. Mohan Rajan, B.Sc. (till 25-11-1959).
2. Sri C. Sambandam, B.Sc.
3. Srimathi Rani Basker Rao, B.Sc. (Hons.).

It has to be mentioned here that though the percentage of adulteration has recorded a further fall during this year, the figure of 27.8% should still be considered as too high for a highly developed city like Madras. A further improvement in the situation may be expected if the fines levied prove more deterrent. Even for the first offence, a minimum fine of Rs. 50 should be prescribed as a penalty under the Act.

## WATER ANALYST'S LABORATORY.

### Introduction.

This is the 37th Annual Report on the working of the Water Analyst's Laboratory. During the year under report, the watersupply to the City continued to be a chlorinated mixture of filtrates from the slow sand filters and the Rapid Mechanical filters. On an average, 30 to 33 million gallons of raw water were pre-chlorinated with a dose of 1.7 to 2.39 p.p.m. a day. About 25 million gallons of chlorinated raw water were strained through sand filters with 6" of fine sand worked without any fixed rate, while the rest were treated with alum (3.5 to 6.5 g.p.g.) flocculated, clarified and filtered through Rapid Mechanical filters.

Thus 24 to 25 million gallons of filtrates of indifferent quality, as obtained from the slow sand filters, were mixed with 5 to 9 million gallons of filtrates of good quality as obtained from the Rapid Mechanical Filters, chlorinated to a dose of 2.40 to 4.00 p.p.m. and supplied to the City.

The distributed water deteriorated to a slight extent bacteriologically during its transit through hundreds of miles of distribution system. Smell of Sulphurated Hydrogen was generally absent in the distribution system, while a few blood worms and fresh water leeches sometimes alarmed the public. Such deteriorations, in the quality of the distributed water, were more pronounced in low pressured areas and in some of the defective areas. Systematic sterilisation and intense scouring of the mains had brought about the eradication of the worms.

### Scientific.

Water for the City is drawn from three main systems :—(A) The Kortalayar River System, (B) The Infiltration Gallery wells at Saidapet and Sembium, (C) The Shallow Wells at Adayar, Kodambakkam, Saidapet, Triplicane, Guindy and on the shores of Marina. The physical, chemical and bacteriological character of the water in each of these three systems during the year are briefly recorded below :—

(A) *The Kortalayar River System.*—The river Kortalayar is dammed at Poondi, about 32 miles away from the City and Sathyamoorthy Sagar has been formed for storing the flood discharges. The stored water is let down through the river bed and another channel (called the upper supply channel) into the Sholavaram Reservoir and from the latter water is let down through the lower supply channel into the Red Hills Reservoir which serves as the chief source of raw water supply to the water works at Kilpauk. The above sources were visited periodically during the year and samples were collected for analysis. The results of analysis are shown in the Water Analysis Statements Nos. III, IV and V.

*Sathyamoorthy Sagar (vide Statement No. II).*—The total yearly rainfall recorded at Poondi was 39.72" as against 42.75" recorded during last year. The highest rainfall of 11.44" was recorded in November. The average reservoir level decreased from 137.66' in January to 127.21' in November.

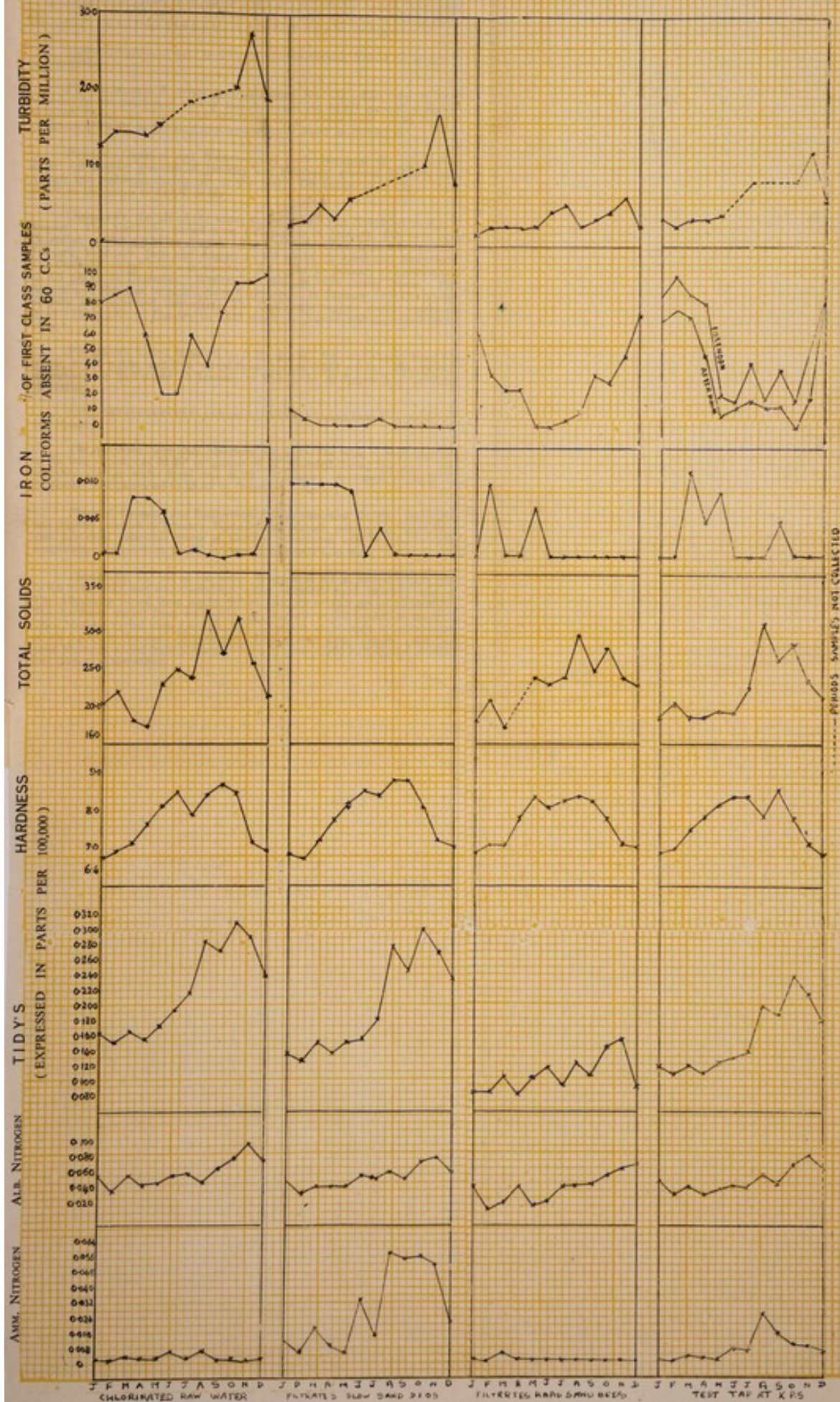
*Physical, Chemical and Bacteriological (vide Statement No. III).*—The water was slightly greenish during the major part of the year and greenish in August and December. The temperature of the water varied from 26°C to 35°C.

Chemically, the pH varied from 8.2 to 8.3 in January, July and November to 9.1 in April, May and August. The Alkalinity varied from a minimum of 15.4 p.p.ht. in February to a maximum of 18.8 p.p.ht. in August. The

# SHOWING CITY WATER SUPPLY : HEAD WORKS

(PHYSICO-CHEMICAL & BACTERIOLOGICAL CONDITIONS)

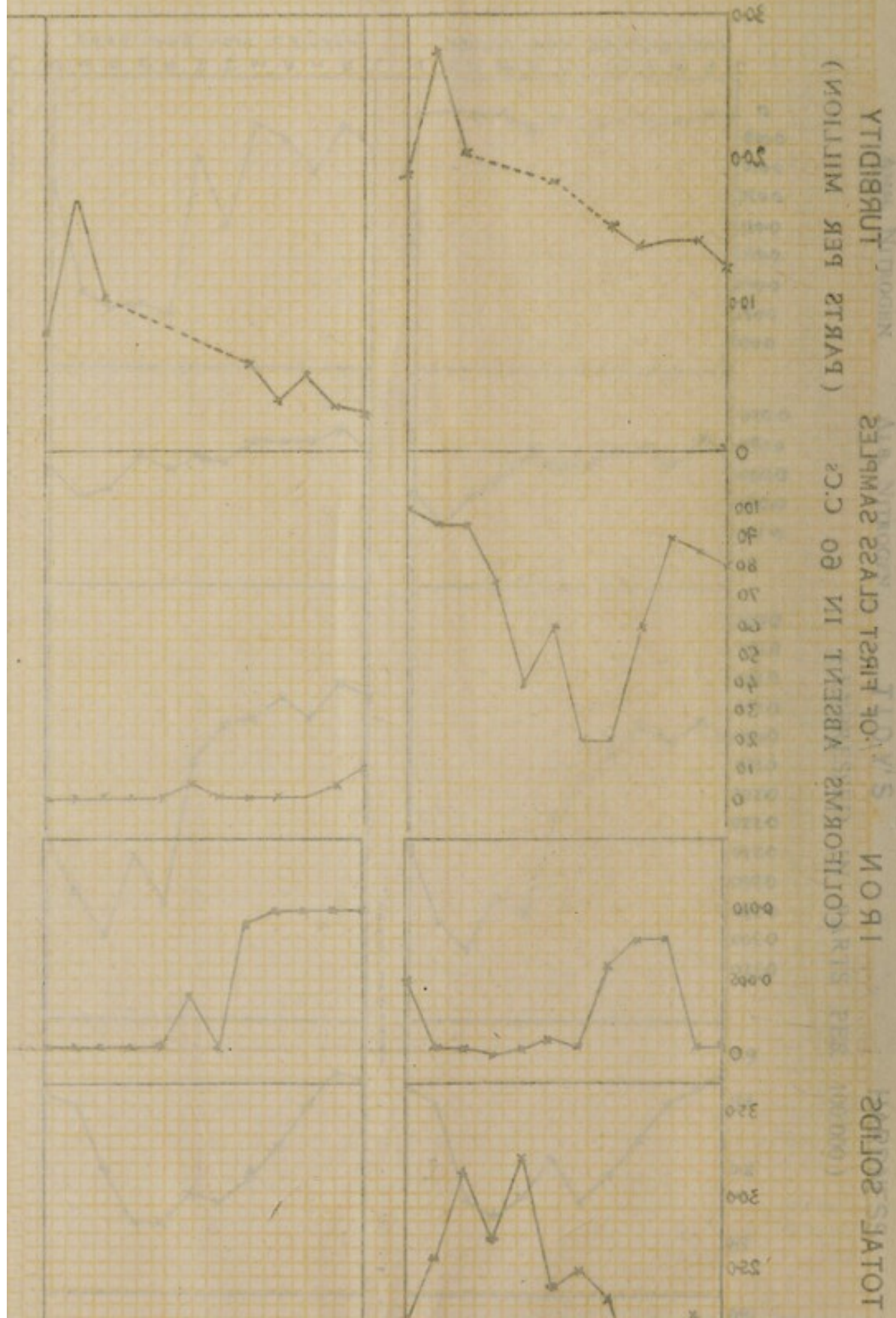
1959



# SHOWING CITY WATER

(PHYSICO-CHEMICAL & BACTERIOLOGICAL)

1952



hardness varied from a minimum of 6.2 p.p.ht. in August to a maximum of 9.0 p.p.ht. in January. The chlorides varied from 2.5 p.p.ht. in January to 4.9 p.p.ht. in August. Nitrates and Nitrites were almost absent, throughout the year. Albuminoid Nitrogen varied from a minimum of 0.032 p.p.ht. in January and April to a maximum of 0.120 p.p.ht. in July. The Oxidisable organic matter varied from a minimum of 0.136 p.p.ht. in January to a maximum of 0.412 p.p.ht. in August.

Phosphates varied from nil to 0.001 p.p.ht. Silicate varied from 0.40 p.p.ht. in July to 1.20 p.p.ht. in May and Iron varied from trace to 0.015 p.p.ht. The salinity varied from 25.6 p.p.ht. in July to 36.6 p.p.ht. in August.

Coliform organisms were present in volumes varying from 1 c.c. to 5 c.c. and upwards.

*The Sholavaram Reservoir (vide Statement No. 11).*—The total rainfall recorded in the catchment area of this reservoir was 44.17" as against 61.00" recorded during last year. The monthly average water level varied from a minimum of 61.82' in January to a maximum of 50.02' in November.

*Physical, Chemical and Bacteriological (vide Statement No. IV).*—The water was slightly greenish in January and February, greenish in April and August and yellowish during rest of the year. The temperature varied from 24.5°C in December to 35.5°C in May.

Chemically, the pH of the water varied from 8.2 in November to 8.9 in August. The Alkalinity varied from 10.7 p.p.ht. in January, February and December to 16.5 p.p.ht. in August. The hardness varied from 8.0 p.p.ht. in January, February, July and August to 9.2 p.p.ht. in April and November. The Chlorides varied from a minimum of 3.2 p.p.ht. in January to a maximum of 5.0 p.p.ht. in December. Nitrites and Nitrates were almost absent. The Albuminoid Nitrogen increased from 0.040 p.p.ht. in January to 0.120 p.p.ht. in July and decreased thereafter. The Oxidisable organic matter increased from 0.154 p.p.ht. in January to 0.415 p.p.ht. in August and decreased thereafter.

Phosphates varied from nil to 0.001 p.p.ht., Silicates varied from 0.4 p.p.ht. to 0.8 p.p.ht. and iron varied from trace to 0.001 p.p.ht. The Salinity increased from 23.2 p.p.ht. in January to 32.4 p.p.ht. in August and decreased thereafter.

Coliform organisms were present in volumes varying from 1 c.c. to 20 c.c. and upwards.

*The Red Hills Lake (vide Statement No. II).*—The total rainfall recorded in the lake region was 38.83" as against 51.43" recorded during last year. The monthly average water level was 45.29' in January, decreased to 36.97' in September and increased to 45.53' in December.

*Physical, Chemical and Bacteriological (vide Statement No. V).*—The water was slightly greenish in January, February and August, yellowish in April, May and July and yellowish green in October, November and December. The temperature varied from 25.0°C in December to 34.0°C in May.

Chemically, the pH of the water varied from 8.1 in February and July to 8.9 in October, and was around 8.5 during January, April, May and August. The Alkalinity varied from p.p.ht. 9.0 in January to 15.5 p.p.ht. in October. The hardness varied from 6.6 p.p.ht. in January to 8.2 p.p.ht. in October. The Chlorides varied from a minimum of 2.8 p.p.ht. in January to a maximum of 4.8 p.p.ht. in October. Nitrites and Nitrates were almost absent. Albuminoid Nitrogen varied from 0.040 p.p.ht. in April to 0.096 in July and October and decreased thereafter.

Phosphates varied from nil to 0.020 p.p.ht. Silicates varied from 0.4 p.p.ht. in January to 1.0 p.p.ht. in October. Iron varied from nil to Traces. The Salinity varied from 15.6 p.p.ht. in July to 28.0 p.p.ht. in October.

Coliform organisms were present in volumes varying from 1 c.c. to 5 c.c. and upwards.

*Chlorinated Raw Water (vide Statement No. VI).*—The raw water reaching the Kilpauk Water Works was chlorinated with gaseous chlorine just a few minutes before reaching the sand filters and the flocculators. The dose of chlorine applied to the raw water varied from a minimum of 0.5 p.p.m. to a maximum of 4.4 p.p.m. The percentage of samples showing absence of coliform organisms in 60 c.c. volumes varied from 17 to 100%.

The monthly variations in the concentration of some of the salient constituents of the chlorinated raw water were as given below.

	Yearly range	
	parts per 100,000.	
pH	8.0	to 8.4
Chlorides	2.9	to 4.8
Hardness	6.7	to 8.7
Ammonical Nitrogen	0.001	to 0.007
Albuminoid Nitrogen	0.036	to 0.098
Oxygen Absorbed	0.146	to 0.312
Iron	Nil	to 0.008

*Sand Filters and Filtration (vide Statement No. VII).*—There are seventeen sand filters with six inches of fine sand as the filtering medium and are worked without any fixed rate of filtration. The filtrates are therefore of indifferent quality. During the year under review 10 to 13 beds were in commission every day and the quantity of water strained varied from a minimum of 24 m.g.d. to a maximum of 25 m.g.d.

On the chemical side, the quality of the filtrates were almost of the same quality as that of the chlorinated raw water. The percentage of reduction in the Tidy's figure over the corresponding figure for the chlorinated raw water varied from 3.0 to 19.7%.

Bacteriologically 0 to 10% of the samples examined showed the absence of Coliform organisms in volumes of 60 c.c. and upwards.

The monthly variation in the concentration of the important constituents of the filtrates from the sand filters were as given below:—

	Yearly range	
	parts per 100,000.	
pH	7.4	to 8.1
Chlorides	2.9	to 4.9
Hardness	6.7	to 8.8
Ammonical Nitrogen	0.005	to 0.058
Albuminoid Nitrogen	0.031	to 0.078
Oxygen Absorbed	0.123	to 0.303
Iron	Trace	to 0.010

It is seen that in spite of the application of a fairly high dose of chlorine to the raw water feeding the sand filters, the filtrates from the beds were of poor bacteriological quality.

# CHART II

## MADRAS CITY WATER SUPPLY : DISTRIBUTION SYSTEM

### CHEMICAL & BACTERIOLOGICAL CONDITIONS

#### 1959

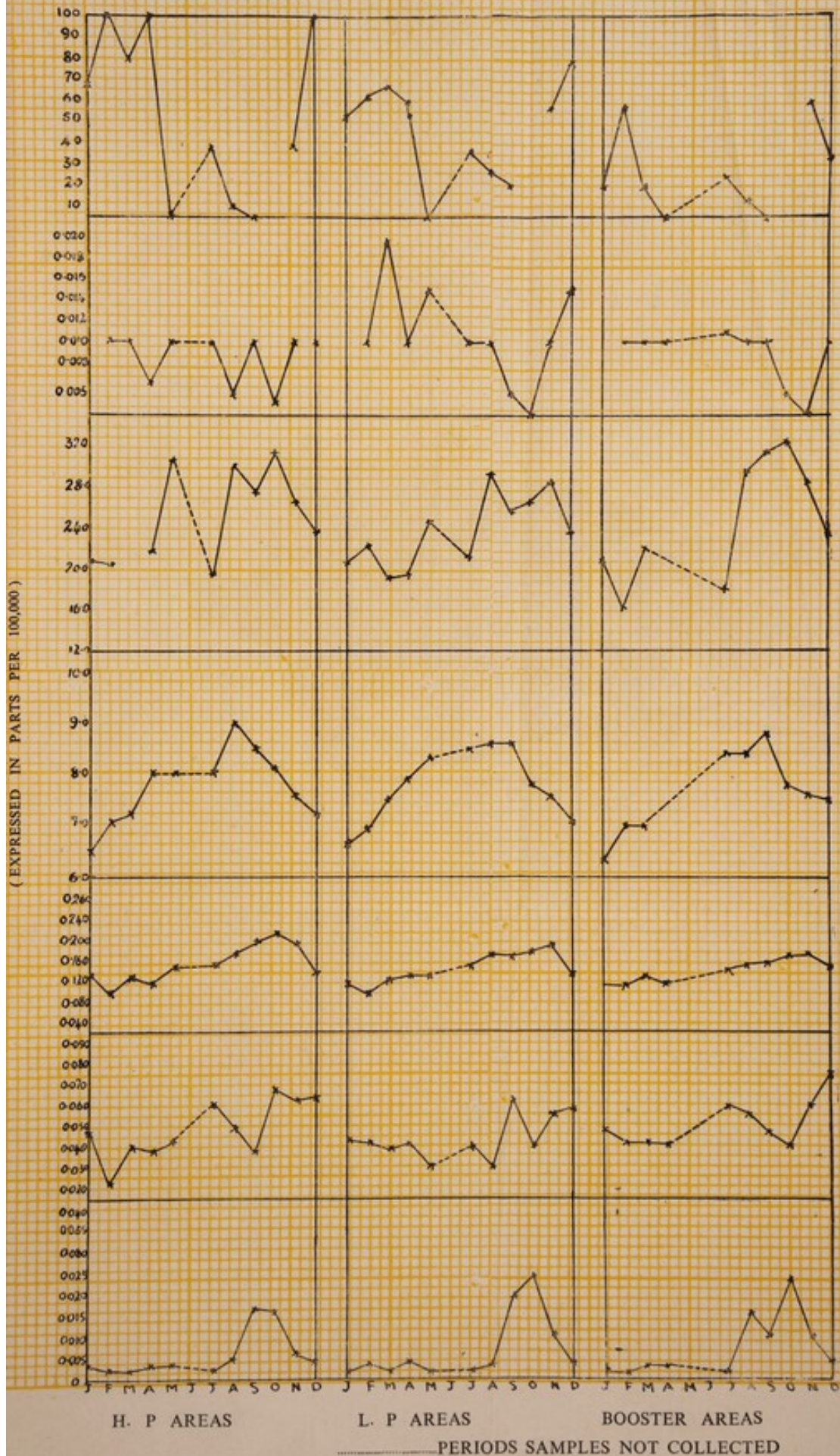


CHART II  
 MADRAS CITY WATER SUPPLY :  
 CHEMICAL & BACTERIOLOGIC  
 1959

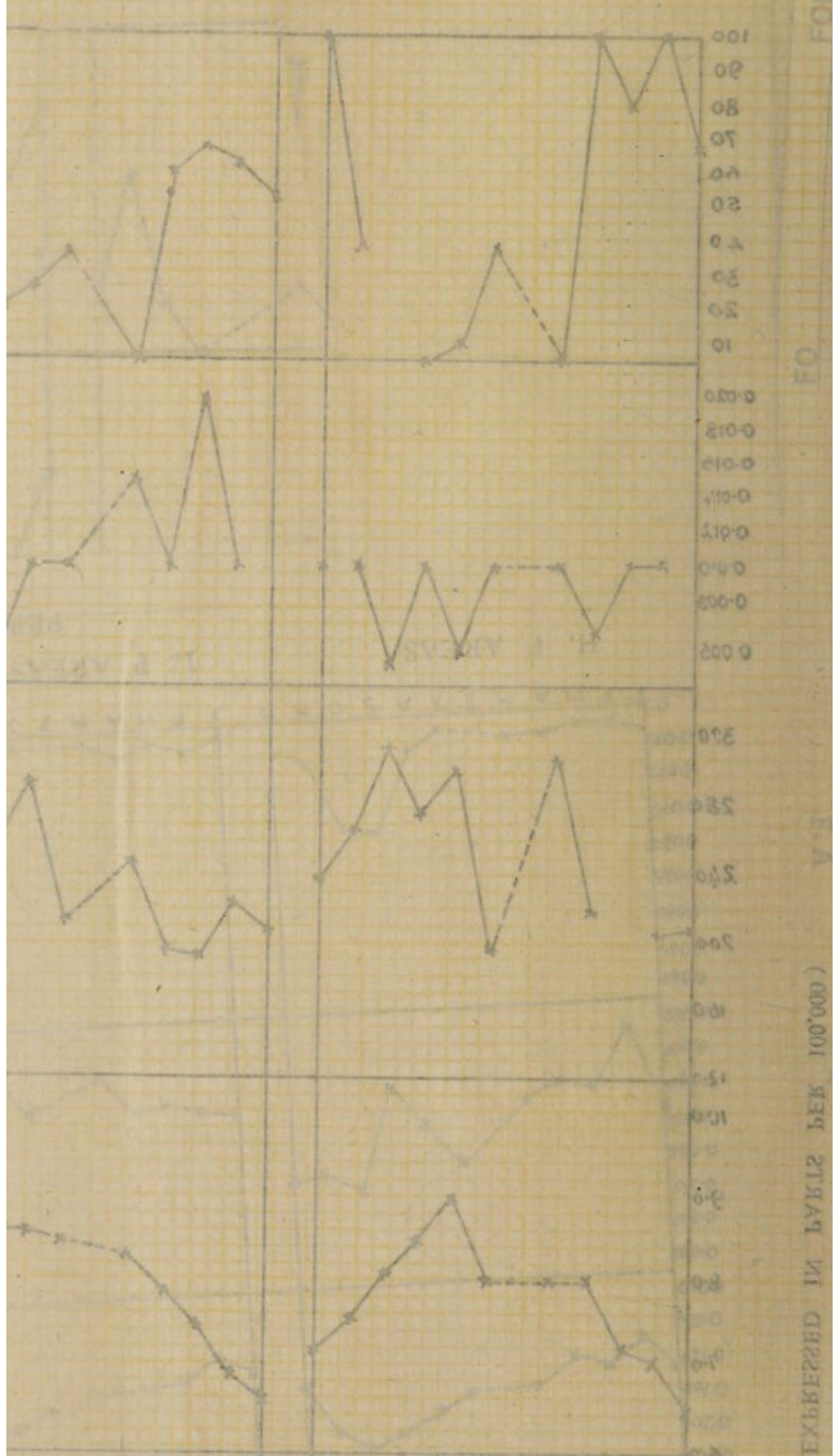
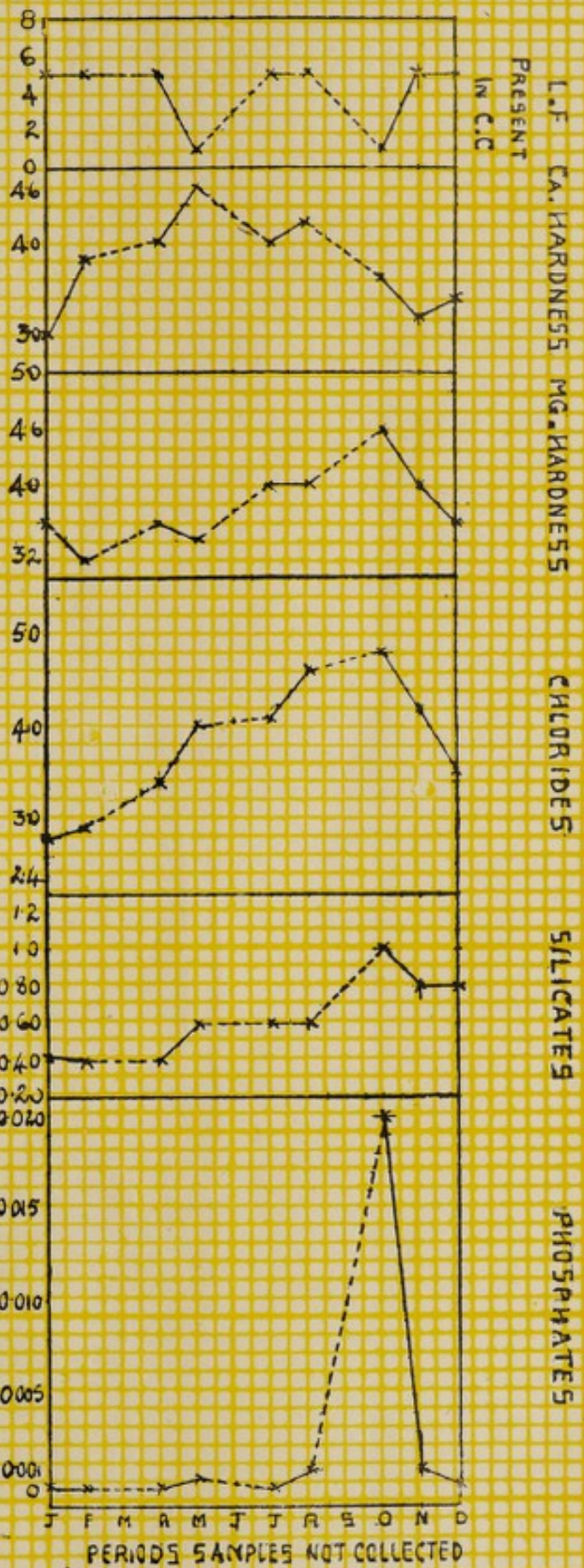
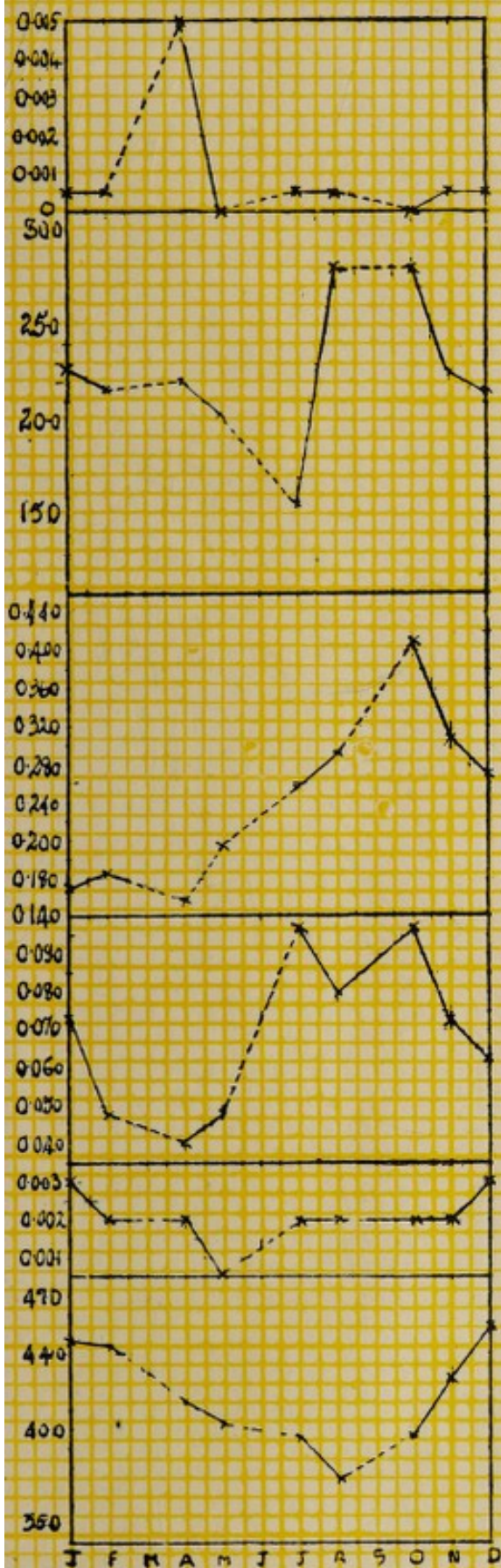


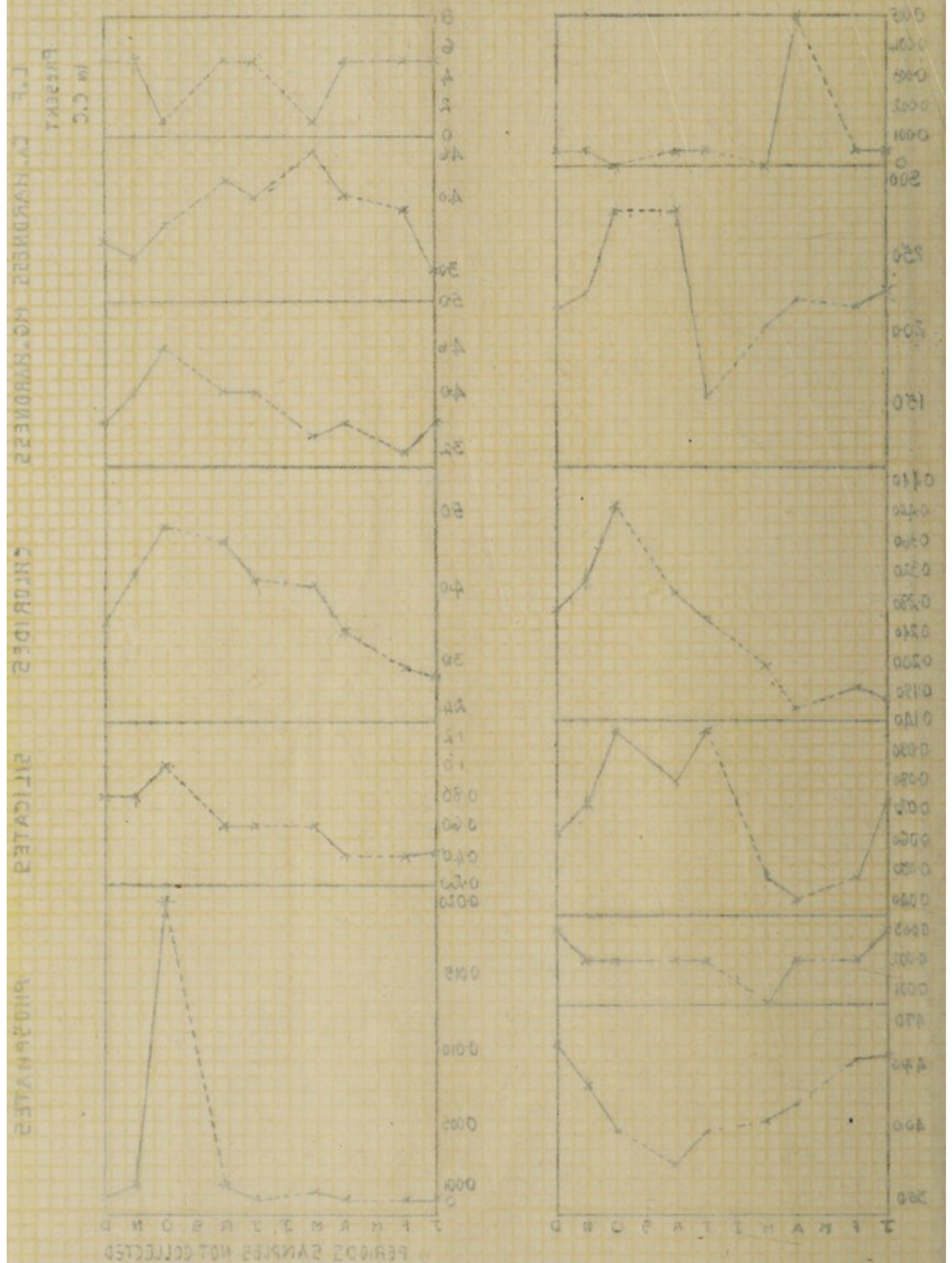
CHART III  
 SHOWING PHYSICO-CHEMICAL & BACTERIOLOGICAL CONDITIONS  
 OF  
 RED HILLS RESERVOIR  
 1959



PERIODS SAMPLES NOT COLLECTED

OF  
RED HILLS RESERVOIR

1929



*The Rapid Mechanical filters (vide Statement No. VIII).*—About 5 to 9 million gallons of chlorinated raw water was rechlorinated with a dose of 1.2 p.p.m. to 1.8 p.p.m. to bring down the algal load prior to alum treatment. The dose of alum applied varied from 3.5 g.p.g. to 6.5 g.p.g., flocculated, clarified and filtered through Rapid Mechanical filters. The quantity of filtrates varied from 5 m.g.d. to 9 m.g.d.

Chemically, the quality of the filtrates from the rapid mechanical filters was far better than that from the slow sand filters. The percentage of reduction in the Tidy's figure over that for the chlorinated raw water varied from 36.3% to 60.0%.

On the bacteriological side 0 to 72% of the samples, examined, showed the absence of coliform organisms in volumes of 60 c.c. and upwards.

The variations in the concentration of some of the salient constituents were as given below :—

	Yearly range parts per 100,000.	
pH	6.9	to 7.2
Chlorides	3.1	to 4.9
Hardness	6.9	to 8.4
Ammonical Nitrogen	0.001	to 0.005
Albuminoid Nitrogen	0.010	to 0.060
Oxygen Absorbed	0.081	to 0.156
Iron	Trace	to 0.010

*Test Tap at Kilpuk Pumping Station (vide Statement No. IX).*—Samples of water collected from the test tap at Kilpuk Pumping Station represented the mixture of chlorinated filtrates from the sand filters and rapid mechanical filters. On the chemical side the quality of the samples was the resultant of the individual quality of the filtrates from the mechanical filters and the sand filters owing to the blending effect.

On the bacteriological side 18 to 100% of the samples collected at 11 a.m. and 0 to 80% of the samples collected at 4 p.m. showed the absence of Coliform organisms in volumes of 60 c.c. and upwards. From the above it can be seen that the quality of the samples collected at 11 a.m. was better than those of the samples collected at 4 p.m. The causes responsible for the poor bacteriological quality of the test tap samples collected at 4 p.m. are under investigation. A residual of 0.2 to 0.4 p.p.m. of chlorine was generally maintained at the test-tap.

The variations in the concentration of some of the salient constituents were as given below :—

	Yearly range parts per 100,000.	
pH	7.2	to 7.5
Chlorides	3.2	to 5.0
Hardness	6.7	to 8.8
Ammonical Nitrogen	0.001	to 0.027
Albuminoid Nitrogen	0.029	to 0.082
Oxygen Absorbed	0.107	to 0.238
Iron	Trace	to 0.012

*The City Distribution System (vide Statement Nos. XI and XII).*—The water distributed, deteriorated to a certain extent during transit through

lengths of mains. Such deteriorations were more marked in low pressure areas. Bacteriologically, 0-100%, 0-78% and 0-60% of the samples were collected from the high pressure, low pressure and Booster areas respectively and on examination showed the absence of coliform organisms in volumes of 60 c.c. and upwards.

The variations in the concentration of some of the salient constituents of the samples of water distributed were as given below :—

				Samples collected from : Yearly range in parts per 100,000.					
				H.P. areas.		L.P. areas.		Booster areas.	
pH	...	...	...	7.3	—7.4	7.3	—7.5	7.2	—7.5
Chlorides	...	...	...	3.2	—5.1	3.2	—5.1	3.3	—5.1
Hardness	...	...	...	6.5	—9.0	6.6	—8.6	6.3	—8.8
Ammonical Nitrogen	...	...	...	0.002—0.017		0.002—0.024		0.002—0.024	
Albuminoid Nitrogen	...	...	...	0.023—0.066		0.030—0.064		0.040—0.075	
Oxygen Absorbed	...	...	...	0.098—0.204		0.099—0.188		0.107—0.177	
Iron	...	...	...	Tr.	—0.010	Nil	—0.020	Nil	—0.012
% of samples showing absence of coliform organisms in 60 c.c. and upwards				...	0%—100%	...	0%—78%	...	0%—60%

*The Infiltration Gallery Wells at Sembium and Saidapet (vide Statement Nos. XIII and XIV).*—Sembium and Saidapet areas of the City are being supplied with chlorinated water from the two infiltration galleries. The water from the infiltration gallery at Sembium contained iron in suspension and as such the water was chlorinated at the Head works and lime treated at the Over-head tank and distributed. However, it would be better if the water is filtered to hold back the precipitated iron prior to distribution.

In case of Saidapet, the water from the Infiltration gallery was of satisfactory chemical quality and as such the water was just chlorinated and distributed. The salient chemical characteristics of both the waters were, as given below :—

				Yearly range in parts per 100,000.			
				Sembium.		Saidapet.	
pH	...	...	...	...	6.9—7.2	...	7.1—7.5
Chlorides	...	...	...	...	10—32	...	11—16
Hardness	...	...	...	...	12—30	...	16—66.8
Ammonical Nitrogen	...	...	...	...	Nil—0.005	...	Nil—0.003
Albuminoid Nitrogen	...	...	...	...	Nil—0.003	...	Nil—0.004
Oxygen absorbed	...	...	...	...	0.010—0.183	...	0.009—0.086
Iron	...	...	...	...	0.020—0.100	...	Tr.—0.010

The bacteriological quality of the distributed water in both the areas were quite satisfactory. The percentage of samples showing absence of coliform organisms in volumes of 60 c.c. and upwards varied from 25—100% in Sembium and 0—80% in Saidapet.

*The Shallow Wells Supply in the out-lying areas of the City (vide Statement No. XV (a) and (b)).*—The shallow wells located at Richard Park (Saidapet) and

at Ganapathy Colony, Guindy, served as a source of water supply to Guindy. The water pumped from the above wells was chlorinated and distributed. The wells located at Urur Village (Adayar) served as sources of water supply for the Adayar area. The wells in the United India Colony, Puliur, Kodambakkam, Nagappier Street (Triplicane) and on the Marina served as sources of water supply to augment the water supply in Kodambakkam and Triplicane.

All the shallow wells with the exception of one at United India Colony, Kodambakkam, yielded water of satisfactory quality.

### **Sterilisation of Water Mains.**

The sterilisation of water mains was continued during the year under review also. During the year a systematic programme was drawn and followed up with the aid of two chlorine injecting plants. 22 miles and 2 furlongs of mains were sterilised. In all 3,162 pounds of chlorine were used during the course of 191 days with the plant No. 1 and 185 days with the plant No. 2. Samples were collected before and after treatment and were examined 0.47% of the samples collected before sterilisation and 72% of the samples collected after sterilisation showed absence of coliform organisms in volumes of 60 c.c. and upwards.

### **Effects of Sterilisation.**

Brownish flocculent soft deposits were dislodged from the sterilised portions of mains when scoured the following day. These deposits consisted mainly of ferric oxide, organic matter and iron bacterium, *Siderocapsa* Sp. and *Leptothrix* Ochraceae. There was an increase in the iron content immediately after sterilisation, followed by a reduction thereafter. Leeches and worms if present, were eradicated. An improvement in the bacteriological quality of the water distributed was generally noticed.

From the above, it is evident that the injection of chlorine into the mains has improved the condition of the mains and the general quality of the water distributed. Sterilisation is now considered as a positive and effective measure against the infestation of the mains by leeches and blood worms. Sterilisation of the mains has also served as a precautionary measure against the prevalence of cholera and enteric fever in the City. But the incrustations in the pipe lines being several years old, repeated treatment is necessary to bring about an appreciable effect.

During the year under report, a sum of Rs. 260 was realised by way of fees for analysis of samples from private parties.

### **Staff.**

Sri G. Devadoss, B.Sc., B.Sc. (Tech.) continued to act as the Water Analyst until 28th October 1959 when the permanent incumbent Sri V. Kripakaran who had gone on foreign service to Geological Survey of India as their Assistant Chemist from 8th January 1956 to 27th October 1959 reverted to the Corporation on relief. Sri G. Devadoss availed himself of earned leave for a period of 56 days from 29th October and thereafter resigned for bettering his prospectes. Sri S. Nagarajan, B.Sc., Sri C. N. Muruganathan, B.Sc., and Sri K. Sathya Jagannatha Rao, B.Sc., assisted the Water Analyst.

## ASHOK VIHAR.

### Health and Recreation Centre.

The primary object of the Ashok Vihar, Health and Recreation Centre is to maintain optimum standard of health among its member families through measures which would not only promote health but also prevent diseases. It aims at serving the poor by providing them health services and leisure time activities, which would give joy and happiness to the individual and enable him to promote health and cultivate a more responsible and positive attitude towards the family and the community.

Being a pioneer socio medical centre it serves also as a teaching and training centre for personnel in both social and medical fields.

From 1957 it has taken up additional task of providing maternity and dispensary services to the residents of Periamet, Choolai, Chinthadripet, Park Town and Elephant Gate. Though there has been a tremendous increase in work, correspondingly there has been no increase in the strength of the staff and hence the medical staff are working under a severe strain of heavy work. Due to this extra work the staff had to undertake, the attention given to member families suffered a little setback. The daily visits to the houses of the member families and family counselling at the centre in the afternoons by the doctors which formed one of the very important activities of the centre, had to be curtailed. Again a few amenities which the member families looked forward have been denied to them during the recent years, *viz.*, (a) unemployed members were given jobs in the Corporation of Madras in the early years, but during the later years it was difficult to secure even a single job, (b) free transport was provided for the members to be taken out on excursions periodically to places of education and interest in and around Madras. This activity has been again denied due to shortage of transport, (c) a book binding-section was started as early as 1951, when quite a few members were trained to make note books, envelopes, file pads, etc. Health Department used to place order for the supply of pads. When members prepared these file pads, they got a remuneration which enhanced their family income. For the last 2 or 3 years, the centre has not been given any orders for manufacturing file pads from the department, inspite of the fact that the price of those manufacture here was the same as that of the scheduled contractors, (d) a few women were trained to prepare Badminton nets. The Education Department of the Corporation of Madras placed orders for the supply of nets for use in their playgrounds, and in 1957 and 1958, 37 nets were supplied to them, but in 1959 no orders were placed for the supply.

It is hoped that better encouragement would be shown to the member families atleast in the years to come to sustain interest in the centre, for without these amenities it would be a difficult task to inculcate preventive measures in the member families especially when the centre is deviating from its original aims of preventive measures to providing daily 5 hours of curative dispensary work to the people in the locality. Surely to the ignorant low income group, curative medicine is more appealing as it is easier to practice, but in doing so the centre's aim in promoting health through preventive measures is gradually getting defeated.

*The work of the centre comprises of—*

1. Service to member families,
2. Service to people in the locality, and
3. Service to personnel in the Social, Nursing and Medical fields..

1. *Service to Member Families*—

Families of low income groups residing in and around the slums in close vicinity of the centre enroll as members on payment of token membership fee of 0.06 nP. per month.

Total No. of families on rolls on 1st January, 1959	...	364
Total No. of families enrolled during the year	...	35
Total No. of families removed during the year	...	85
Total No. of families on rolls on 31st December, 1959	...	314

Particulars of Families ... Total 314.

**Classification of Families as per Income per Month**

Income	Nil	Under Rs. 50	Rs. 51-100	Rs. 101-150	Rs. 151 and above
No. of families.	25	126	127	23	13

**Classification as per caste.**

Caste	Harijans	Harijan converts	Hindus	Muslims	Anglo Indians	Indian Christians.
No. of families	101	39	118	23	22	11

**Classification as per Residence.**

Residence	Periamet.	Periamet slums	Chintadripet.	Chintadripet slums.	Choolai.	Choolai slums	Other areas.	Other area slums.
No. of families	45	113	8	51	46	17	21	13

Slum families ... 194

Non slum families } ... 120

**Classification as per of Children Per Family.**

No. of children ...	Nil	1	2	3	4	5	6	7	8	9	10	11
No. of families ...	20	60	70	52	42	34	25	5	2	3	—	1
Average per family	... 3											

The following services were rendered to the member families—

(a) *Periodic Health Check-up*—

Every member of the family was given a health check-up at an interval of one year. The object being, to assess the health of the individual, to diagnose diseases at their earliest stages, and get them treated, immediately. This health check up is particularly important to the low income group as they cannot afford to lose their daily wages while they were absent from work due to illness.

716 general, 163 eye, 133 dental and 88 E.N.T. check-ups were done during the year. About 7% of the total individuals showed no apparent defects, of the 578 persons re-examined, 421 recorded increase in weight, 115 reduction and 42 stationary weight.

*The following diseases were noted during the check-up and prompt measures were taken to treat them :—*

Pulmonary Tuberculosis	...	19
Leprosy	...	2
Anaemia	...	22
High Blood Pressure	...	5
Heart Diseases	...	11
Filariasis	...	8
Hernia	...	3
Hydrocele	...	4
Infective Hepatitis	...	1
Venereal Diseases	...	2
Deficiency diseases	...	94
Scabies	...	5
Helmenthic Infections	...	62
Dysentry and Diarrhoea	...	22

Nutritional deficiencies still predominant. Worm infestation was prominent among children. 19 cases of Pulmonary tuberculosis have been receiving treatment from one or the other T. B. Clinics. Two typhoid cases have been admitted in the General Hospital and discharged when cured.

337 pathological investigations were done. 52 persons were referred to T. B. Clinics for investigation for pulmonary tuberculosis. 19 were found to be suffering from this disease. 165 members were referred to various Government Hospitals for expert opinion or admission.

*The following operations were arranged at Government Hospitals :—*

Tonsilectomy	...	4
Mastoidectomy	...	1
Filarial Scrotum	...	1
Hydrocele	...	2
Amputation Finger	...	1
Herniotomy	...	1
Salpingectomy	...	2
Vasectomy	...	1

In general the health of the members have been fairly satisfactory. Serious illnesses were kept down as far as possible. The high prices of essential food commodities prevented quite a number of families in not providing essential food factors to their children ; with the result malnutrition and lack of resistance to other diseases have been frequently met with. Again quite a number of families live in congested, ill-ventilated and dilapidated houses. The unhygienic home condition has been responsible for quite a number of respiratory and gastro intestinal disorders.

The environmental hygiene though a little better than what it used to be, still has to be improved.

The members are more conscious of their health and at least they want their children to be free from disease.

Parents bringing their children for periodic health check up and immunization is a common feature now-a-days, though a few years back, people were afraid of immunization and more sceptical about health check up. One more observation that was made is that members do not delay their coming to the centre when there is illness, neither do they take the advise of their neighbours, who more often had the tendency to give wrong advice thereby worsening the disease.

(b) *Periodic Immunization—*

The members were frequently advised on the importance of taking preventive inoculations against common infectious diseases. The vaccinator was requisitioned at the centre and members were inoculated against small-pox and typhoid. Children members were tuberculin tested and those found to be negative were given B. C. G. as preventive for tuberculosis. They were also given triple immunogen to prevent Diptheria, Whooping cough and Tetanus. During the recent years the parents have been keen in getting their children inoculated against these diseases.

(c) *Health Education—*

Health Education has been the very foundation of all preventive health measures. It is imparted through talks to individuals and groups and through demonstrations, film shows and health plays also. Though the imparting of health education is easy but to make them practice what they were taught is an uphill task. The constant effort in this direction has yielded results, though not tangible, for it is found quite a number try to practice what they are taught. During the year there were 9 film shows and 49 films were screened.

(d) *Recreation—*

Recreation is a body and mind building activity and as such it is important as a preventive health measure.

Recreation is provided to both sexes and all age groups. It comprises both mental and physical. It is also intended to bring out latent talents from members like leadership qualities, comradeship, etc., occupies the idle ones with useful recreation and prevents them from associating with anti-social groups. Thus it is one of the measures of social defence. As a part of the recreation programme vocational recreation has been introduced, where they are taught sewing, tailoring, Badminton nets making, Book-binding, file making, doll making etc. *Indoor Recreation* provided are Carroms, table tennis, weight lifting, boxing, chess and draughts, snakes and ladders and palanguzhi.

For such of those interested in music and histrionics facilities have been provided at the centre to recreate themselves.

*Out-door Recreation*: Boys and men have been provided with volley ball, Badminton and foot-ball. Group games are conducted periodically. For women and girls badminton, throw ball, tenniquits and skipping were provided. Group games were also conducted.

Some of the members have received trophies in open tournaments. Sri Kanaga Rao, F.R. No. 183, has had recognition as a good boxer, Sri S. Harry, F. R. No. 110, as a carrom champion. Of late there has been a keen interest in table tennis and about 6 members took part in open tournaments. They have to train further to receive trophies in tournaments.

The Ashok Vihar Dramatic Association was very active. Plays were enacted at the S.I.A.A. Exhibition and in certain villages close to Madras.

Annual sports were held in June, 1959 in which members of both sexes and all age groups participated.

#### *Handicrafts—*

1. For one more year the binding section had to be idle for want of orders from the department.
2. Ten more women were taught the use of the sewing machine.

One woman bought a sewing machine and she is earning her livelihood by tailoring work. Three others are using the centre's machine and earning money for their families. Over 20 other women used the machine for preparing domestic garments. In all 475 different articles were stitched at the centre.

#### *Badminton net making—*

As there was no order from the Education Department, Corporation of Madras, for their playgrounds, nets were not prepared.

#### *Garments Mending—*

Two hundred and thirty-six garments belonging to the various sections were mended by the members.

Other handicrafts that were taught were embroidery, crochet work, lace making, dress cutting, rag doll making, paper flower making, card and clay work.

#### *Cultural :*

Social and health education were given to the members daily at the centre. Library books were issued to boys and girls. New books were not added to the Library during the year.

Excursions could not be arranged due to want of free transport.

#### *Home Visits—*

153 visits were made by each of the social workers to the homes of member families. These visits enabled the staff to (1) develop a genuine friendship and to give a helping hand in their day-to-day problems; (2) to study the socio economic and environmental conditions; and (3) to follow expectant mothers, infants, the pre-school children, the sick and the convalescing.

The doctors also in turns made visits to the homes of these member families with same purpose.

#### *Creche or day nursing—*

No. of rolls on 1-1-'59	...	66
New admissions during the year	...	31
Removals during the year	...	35
No. of rolls on 31-12-'59	...	62
Average daily attendance	...	53

This section has been of great service to the low income group working mothers and much more so to the widowers who have no women in the house

to take care of children. Children between 3 months and 5 years are admitted, and at the end of the 6th year they are admitted in day or boarding elementary schools.

The daily nature of work is that these children are received at the centre from 7-30 to 9 a.m., bathed and given a clean set of dress; after which a small mug of skimmed milk is given to every child. Children who look or feel ill are examined every day by the doctor and necessary action taken to treat them. A trained nursery teacher teaches the pre-school children. Mid-day meal of rice, vegetables, dhal, curd rice, lemon rice, etc., supplied by the mid-day meals centre are given to the children. Between 12-30 p.m. and 3 p.m. children rest. When they get up, their faces are washed, hair combed and they have their last meal of a slice of bread and 6 oz. of cow's milk. After 4 p.m. the children enjoy free play and their parents take them back home. In addition to the food supplied they receive an egg and plantain per child once a week.

#### *Health Check-up—*

Every month there is a periodic health check-up. Heights and weights are noted and early diseases are diagnosed and treated. 705 general, 56 E.N.T., 58 eye and 37 dental check-ups were done.

Newly admitted children between the ages of 1 and 3 who have had very little care with regard to their diet on admission look so miserable, but during the period of a few months' stay at the centre they recover their health. To such of the undernourished children, extra diet and tonics are given.

The principle diseases that one meets with in this age group are :

1. Respiratory infection.
2. Gastro intestinal infection.
3. Skin intestinal.
4. Middle ear disease.
5. Conjunctivitis.
6. Infectious diseases like measles, mumps, chicken pox, etc.,
7. Helminthic infestation.
8. Nutritional deficiencies.

The parents are contacted both at home and at the centre and given advice on the care of children.

#### *Laboratory Investigations—*

11 blood and 44 motion examinations were done.

#### *Findings—Blood—*

Low H. B%	...	2
Eosinophilia	...	7
Lympho cytosis	...	7

#### *Motion—*

Round worm ova	...	25
Entamoeba-Histolytica	...	2
Giardiasis Lamblis	...	7
Pus cells and mucous	...	3

*Immunization—*

1. Vaccination against small-posx—	
(a) Primary	... 6
(b) Secondary	... 50
2. T.A.B.	... 72
3. Triple antigen	... 27
4. Manteaux test	... 15
Positive	... 2
B.C.G. inoculation	... 13

*Round Worm treatment* was given to 29 children and 20 passed worms. *Entamoeba Histolytica*.

Two children who had Ent. Histolytica in their motion were treated.

Sixteen children at the completion of the 6th year were admitted in elementary schools and one child died of chronic diarrhoea.

*Maternity section—*

36 members received ante-natal care at the centre's maternity home and 29 of them delivered normal babies. Mothers and babies received post natal care. Two members delivered twins and all the babies are progressing well.

*Curative Health Service—*

Both in the mornings and afternoons the out patients department is open and members with minor ailments and injuries are treated. Major ailments are referred to the various Government Hospitals. The patients are followed up at the hospitals by both the doctors and social workers and the follow up work is continued at home after the patients are discharged from the hospital.

*General—*

All festive occasions were suitably celebrated. More milk day was celebrated on 14th April, 1959 when about 2,000 children were given a glass of milk each. The Worshipful Mayor Sri Kamalakanna Mudaliar presided over the function.

Twenty men members and one girl member were secured temporarily jobs at the Red Cross Centenary Exhibition.

Another member who had failed in S.S.L.C. was given a temporary job in the Election Department.

During the month of May members both adults and children took part in Social Work at Chetput Thangal. The Health Propaganda Staff of the Corporation of Madras also assisted in the work.

On 29th September, 1959, the Corporation Inaguration Day, a decorated lorry with a tableau depicting the various activities of Ashok Vihar also participated in the procession.

The Republic Day and the Independence Day were celebrated with the hoisting of the National Flag and distribution of sweets to children.

The Navarathri week was celebrated with exhibition of dolls, and handicrafts of the members, and in the evenings the children took part in music and dancing.

*Marriages—*

Seven Members got married.

*Deaths—*

There were 9 deaths.

<i>Age Group</i>	M.	F.	Total.
Under 1 year	1	1	2
Between 1 & 6 years	1	1	2
Adults	5	—	5

*Causes of Death—*

*Children—*

Meningitis	...	1
Nephritis	...	1
Post measles complications	...	2

*Adults—*

Rhematic heart diseases	...	1
Heart failure	...	1
Pulmonary tuberculosis	...	1
Acute abdomea	...	1
Cancer	...	1

*Institutional Admissions—*

Two boys belonging to a family No. 94 who died suddenly were admitted in Wallahjabad High School. One girl belonging to F.R. No. 302 was admitted in Mylapore Convent Orphanage.

F.R. No. 302, Malliga who was admitted as a boarder in the Lady Willingdon High School last year is still continuing. She was provided with free books and special fees by members' contribution.

*Milk Distribution—*

The following persons received skimmed milk daily for varying periods during the year:—

Infants	...	48
Children under 6 years	...	51
Children between 6 and 12 years	...	54
Expectant Mothers	...	14
Nursing Mothers	...	10
Sick and convalescing persons	...	25
...	Total	202

A total of 1,392½ lbs. of milk powder was used for distribution to the above. During the months of July, August and September, 1959 milk was not distributed due to shortage of Milk Powder.

*Deaths among the Staff—*

(1) Sri Nellooran Naicker, one of the gardeners who was of indifferent health died during recent years.

(2) S. S. Vicco, hon. music and dancing instructor, who was suffering from chronic asthma died after protracted illness. The centre lost a good friend and a talented man.

*II. Service to people in the Locality—*

(a) Ashok Vihar's dispensary has been in great demand with people in the locality. A total of 48,467 prescriptions were dispensed—29,331 from outpatient department of Ashok Vihar, 11,941 from maternity home and 7,195 from peripheral pediatric clinic.

(b) The peripheral wing of the Pediatric Department of the General Hospital, attached to Ashok Vihar continued to do positive health work among the children of the locality. On three days in a week the outpatient department worked in the mornings, on two days laboratory work and on the 6th day nutrition classes were held. The staff made frequent visits to homes to follow the sick children and to advise the parents.

*(c) Maternity Home—*

No. of ante-natal examinations done at Ashok Vihar ...	640
No of ante-natal examinations done at other centres ...	135
No. of deliveries conducted at Ashok Vihar ...	731
No. of deliveries conducted at hospitals ...	21

Ante natal examinations revealed a greater incidence of general nutritional deficiencies especially Vit B deficiency and nutritional anaemia. Pre-eclamptic toxæmia was the next predominant ailment noted.

*Complications of deliveries conducted at the centre—*

Breach presentation ...	7
Twins ...	8
Prematurity ...	5
Still born ...	6
Macerated ...	8

Of the delivered infants, one had harelip and the other died soon after delivery.

*Complications of Deliveries of cases sent to Hospitals—*

Forceps delivery due to delayed 2nd stage ...	6
Caesarian section with Salpingectomy ...	1
Caesarian section only ...	1
Transverse presentation ...	1
Breech ...	2
Prematurity ...	1
Dead born ...	1

Ante-natal, post natal and infant clinics were held every week, when patients were examined, treated for ailments and advices given to prevent serious ailments.

*Family Planning—*

A Family Planning clinic was opened again in June, 1959 and attached to this clinic is a lady doctor and lady social worker.

No. of persons contacted at the centre	...	1,115
No. of persons received the contraception	...	105
No. of persons who were irregular	...	16
No. of home visits	...	1,032
No. of mothers contacted	...	1,172

Arrangements were made to get the following sterilizing operations performed at the Government Hospitals:—

Salpingectomy	...	3
Vasectomy	...	2

### III. *Service to personnel in the Medical Nursing and Social Fields—*

Students of the department of Social and Preventive Medicine of the Madras Medical College were allotted families to study the Socio economic and health conditions of the members of the families. The students were guided from time to time on the procedure of their work.

Training was given to internees posted to the centre from the Stanley Medical College and the College of Integrated Medicine.

A fresh batch of 3 students from the School of Social Work were given training in Social and Recreation Work.

Four batches of Public Health Nurses Trainees were given lectures on Orientation to Administration of Urban Health Services. Training was given at the centre and in the slums.

Lectures on Positive Health was given to six new batches of Community Project Health Service Personnel who underwent training in the Orientation Training Centre, Poonamalle. Another set of VIth Form girls from Chintadripet Girls' High School were taught and trained in mother craft.

#### *Others who benefitted by their visits to the Centre were—*

1. Students of Madras Medical College.
2. Students of Stanley Medical College.
3. Students of College of Integrated Medicine.
4. Student Nurses from Government General Hospital and Christian Mission Hospital, Vellore.
5. Students from the School of Social Work, Madras.
6. Student teachers of the Teachers' College, Saidapet.
7. B.Sc. and L.P.H. Students from Madras Medical College.
8. Home Science Students from Lady Willingdon Training College.

### *Gifts, Grants and Donations—*

1. The State Government was pleased to sanction a grant of Rs. 10,000 for the year.

2. Out of the interest accrued on the donation of Rs. 1,000 made by Sow. Neelambal Sisu Samrakshana Kshera Dharma Endowment, milk was supplied to the creche children.

3. Padma Sri Srimathi M. C. Jadhav, Hon. Secretary, Guild of Service, Central, was kind enough to send 100 cases of milk powder.

4. Through the kind offices of the Nutritional Adviser to the Government of India, New Delhi, the Britinnia Biscuit Factory sent one case of Vitaminised biscuits made out of multipurpose food. The biscuits were distributed to the creche children.

5. Srimathy Kandaswamy of Vepery, distributed buns and plantains on 24th December, 1959 to the creche children and also presented 6 pairs of half pants and 6 shirts to 6 deserving creche children.

6. The U.S.I.S., B.I.S. and the British Council were gracious enough to lend us films and back number journals periodically.

The Corporation of Madras is grateful to the above organisations and individuals for the gifts sent. They were duly distributed to the deserving and needy members.

### *Visits—*

2-4-'59 Minister of Health, Federation of Malaya, Sri V.T. Sambandam.

4-6-'59 Corporator, Bombay City, Sri A. D. Nardo.

16-7-'59 Harvard School of Public Health, Carl E. Taylor

17-11-'59 Mayor, City Council, Penang, Sri D. S. Ramanathan.

In conclusion, the centre has done one more year of service to the people in the locality and trained persons who are in medical and social fields. It is striving to make people take a more positive outlook on health so as to make life cheerful and worth living. The centre has done 11½ years of useful work recognised by eminent persons in the national and International sphere.

## CHILD WELFARE SCHEME.

A Child Welfare Centre was opened in Basin Bridge during the year 1959. By the end of the year there were 44 Child Welfare Centres, 20 of which had maternity wards with a total bed strength of 299. There was considerable reduction in maternal and infantile mortality for the year—the rates being 0.64 and 99.40 per mille respectively—against 1.01 and 104.32 per mille for the previous year.

*Staff.*—Captain (Kumari) C. N. Rukmini, M.B.B.S., Lady Superintendent was in charge of the Scheme during the year. There were 31 Assistant Surgeons, 27 Health Visitors, 8 General Trained Nurses, 241 Midwives and 30 Compounders.

*Pre-natal Clinics* were conducted in all the centres regularly twice a week. At these clinics the expectant mothers were given a thorough medical check-up on their first visit and thereafter examined once a week or a fortnight as the individual cases required. Expectant mothers numbering 39,893 attended the clinics and were given medical advice and treatment by the Assistant Surgeons—the number for the previous year 39,577. These cases derived immense benefit from the advice, treatment and instructions given.

*Serological Examination* of blood of ante-natal cases was conducted at 15 of the warded centres and the positive cases were treated with penicillin free of charge. A statement showing the number of blood samples examined and the number of positive cases treated, etc., during the year given is below.

Total number of blood samples examined	Total number of Positive cases	Total No. of positive cases that took full course of treatment	Total No. of positive cases that took partial treatment	No. of positive cases that did not turn up inspite of persuasion by staff.
16,315	758	247	133	378

*Maternity Service* : Out of the total number of 70,155 city births 29,709 labour cases came under the care and observation of the Scheme during the year as against 30,671 of the previous year. 16,502 births were conducted in the maternity wards against 15,953 of the previous year. The number of home visits made by midwives was 2,14,432 by the Health Visitors 1,42,425 and by Assistant Surgeons 20,433. Among the births that came under the care of the Child Welfare Scheme there were 213 twins and 644 still births.

*Ambulance Service* : Four ambulance vans were in service. During the year under report 1,496 cases requiring hospitalisation were transported in these vans to the various maternity hospitals in the City.

*Vaccination* of new born babies was started in the Choolai Maternity Home on 19-10-1959 as an experimental measure and 498 babies were vaccinated by the end of the year. Results are under observation.

*Immunisation* with triple antigen was also undertaken as an experiment at Ashok Vihar on 12-11-59. By the end of the year 204 children received the first dose and 85 the second dose. The third dose was yet to be given and results observed.

*Out-Patient Clinics* : The Assistant Surgeons conducted out-patient clinics in all the centres. At these clinics infants pre-school children, expectant

mothers and nursing mothers were examined advised and treated for minor ailments-55,166 infants, 15,812 pre-school children, 39,893 expectant mothers and 66,828 nursing mothers represent the new cases that were treated and advised. The total number of cases that attended was 4,97,605 inclusive of 3,19,906 old cases.

*Free milk distribution*: Cows milk was supplied to illnourished infants free of charge. The total number of infants benefitted was 4,154. Skimmed milk powder received as gift from UNICEF was reconstituted and supplied to mothers in the wards.

*Maternal Mortality*.—Out of 29,701 labour cases that came under the care and observation of the Child Welfare Scheme there were 19 cases of mortality as shown below. There were 31 cases of mortality among 30,671 cases of labour conducted during the year 1958.

Name of Institution	Death during	
	1958	1959
Child Welfare Scheme	8	2
Hospitals	20	16
Private Doctors	2	...
Vaidyans	1	1

The rate of maternal mortality worked out to 0.64 per mille against 1.01 per mille of the previous year.

*Infantile Mortality*.—The number of still-births during the year 1959 was 699 as against 783 for the year 1958 while the total number of births for these years were 30,671 and 31,955 respectively. The number of infants kept under observation during the first year of life in 1959 was 29,972 against 31,172 of the previous year. The mortality among live births was 29,790 against 3,234 of the previous year. The whereabouts of 2,252 children could not be traced. The infant mortality rate worked out to 99.40 per mille for the year 1959 against 104.32 per mille of the previous year.

*Maintenance of Creches*.—For the benefit of working class parents with a combined income of less than Rs. 50 three creches are maintained. The working mothers leave their children at the creches in the morning and go for work and take them back on their return. During their stay at the creches the children are given bath, fresh and clean clothing and nourishing food. They attend nursery classes where action songs, story-telling and prayer form part of the programme. They play in-door and out-door games. Their minor ailments were attended to by the Assistant Surgeons then and there. The average daily attendance of the children at Royapuram, Broadway and Chetpet creches was 19, 29 and 14 respectively.

#### FAMILY PLANNING SCHEME.

All the Family Planning Activities of the Madras Corporation were completely brought under the Family Planning Scheme, reorganised and financed by the Government of Madras, for all extra expenditure involved in implementing the Scheme. During this year Govt. order on intensive scheme for the popularisation of the surgical methods for both Government and Non-Government employees was passed wherein all fathers and mothers who are having three children are offered a compensatory allowance if either undergo sterilisation. All the Mother Information Centres which were not started for

want of Staff Nurses or Social Workers started functioning with the appointment of Social Workers after training in Family Planning in the Family Planning Institute, Government Hospital for Women and Children, Egmore.

All the 32 Father Information Centres started functioning in 1959. In 2 centres for want of trained tutors, they could not work for some months. In some centres, the fathers instructed were less due to the epidemic of small-pox which prevented the canvassers from paying more attention in getting fathers.

Dr. N. Natarajan, continued to work as Medical Officer, Family Planning Scheme during the whole of 1959.

The following table gives the number of fathers instructed and Vasectomy done through Father Information Centres in 1959.

<i>I Quarter.</i>		<i>II Quarter.</i>		<i>III Quarter.</i>		<i>IV Quarter.</i>	
T	V	T	V	T	V	T	V
7,217	43	6,317	30	5,608	35	4,185	32
		Total		Vasectomy			
		T		V			
		23,381		140			

T—Indicates Total. V—Indicates Vasectomy.

All the 43 Mother Information Centres were sanctioned by Government by the end of 1958. But due to the non-availability of trained Staff Nurses and Social Workers, the opening of these centres was delayed. Social Workers were appointed as tutors in these centres after training in Family Planning in the Family Planning Institute, Government Hospital for Women and Children, Egmore. There are at present six clinics to each of which 6 or 7 Mother Information Centres are attached. Each of these mother Clinics is in charge of one Woman Medical Officer and each Mother Information Centre is provided with one Social Worker or a Staff Nurse or Medico Social Worker and one Ayah.

The following table gives the number of mothers instructed and Salpingectomy done through the agency of the Mother Information Centres.

<i>Name of the Clinics.</i>	<i>No. of Mothers instructed.</i>	<i>Salpingectomy</i>	<i>Vasectomy.</i>
Pudupakkam F.P. Clinic...	7,064	121	10
Choolai F.P. Clinic ...	7,712	91	8
Vyasarpady F.P. Clinic ...	3,038	14	...
George Town F.P. Clinic...	11,534	71	10
Jagannathapuram F.P. Clinic ...	15,911	68	4
Saidapet F.P. Clinic ...	4,973	102	7
Total ...	50,232	467	39

**FAMILY PLANNING.****I. Fathers' Information Centres in the City—**

S. No.	Address.
1.	369, Pycrofts Road, Pudupakkam.
2.	25, Pycrofts Road, Triplicane.
3.	25, Hamilton Bridge Road, Krishnampet.
4.	55, Royapettah High Road.
5.	63, Kutcheri Road, Mylapore.
6.	65, Poonamallee High Road, (near the Spurtank).
7.	Shenoy Nagar.
8.	3/61, Arunachala Naicken St., Chintadripet.
9.	34, Poosala Gengu Reddy St., Egmore.
10.	15, Noor Veeraswamy Iyer St., Nungambakkam.
11.	107, Arcot Road, Kodambakkam.
12.	1, Theagaraya Road, Theagarayanagar.
13.	3, Sivagnanam Road, Theagarayanagar.
14.	87, Suryanarayana Chetty St., Royapuram.
15.	86, Thiruvottiyur High Road, Washermentpet.
16.	244, Mint St.
17.	47, Linghi Chetty St.
18.	161, Govindappa Naicken Street.
19.	17, Basin Water Works Road.
20.	Rottlers St., Vepery.
21.	55, Pulianthope High Road.
22.	6, Gangadareeswarar Koil St., Purasawalkam.
23.	22, Gantz Road.
24.	55, Madavaram High Road, Perambur.
25.	23, Paper Mills Road, Sembium.
26.	127, Konnur High Road, Ayanavaram.
27.	Old Arbitrator's Office, Opposite Zoo.
28.	23, Kolandai St., Park Town.
29.	2/64, Mount Road, Teynampet.
30.	1, Karneswarar Koil St., Saidapet.
31.	3/25, Velachery Road, Guindy.
32.	13, Greenways Road, Adayar.

**II. Mothers' Information centres in the City—**

- 84, Lloyds Road, Royapettah.
- 8, Nyniappa Maistry St., Pudupakkam, Triplicane.
- 32, Brodies Road, Mandavalli.
- 43, Market St., Mylapore.
- 24/25, Surappa Mudali St., Zam Bazaar.

## FAMILY PLANNING—contd.

S. No.	Address.
6.	Dr. Besant Road, Mirsahibpet.
7.	9, Halls Road, Kilpauk.
8.	1/6, Arunachala Naicken St., Chintadripet.
9.	37, Lloyds Garden, Pudupet.
10.	27, Jagannathapuram 2nd St., Chetput.
11.	15, Noor Veeraswami Iyer St., Nungambakkam.
12.	68, Arcot Road, Kodambakkam.
13.	3, Sivagnanam Road, Theagarayanagar.
14.	385, Thiruvottiyur High Road, Tondiarpet.
15.	Corporation Model Lines, Palmirakuppam.
16.	23, Suryanarayana Chetty St., Royapuram.
17.	21/22, Kappal Polu Chetty St., Royapuram.
18.	36, Thiruvottiyur High Road, Washermenpet.
19.	18, Jinda Sahib St., Peddunaickenpet.
20.	44, Amman Koil St., George Town.
21.	1/2, Abbu Maistry St., George Town.
22.	175, Thambu Chetty St., George Town.
23.	Trevellyan Basin St., Sowcarpet.
24.	Vijaya Vigneswarar Koil St., Choolai.
25.	1/33, Gantz Road, Pulianthope.
26.	51, Perambur High Road, Perambur.
27.	14, Subbaraya Chetty St., Nammalvarpet.
28.	8, Chellappa Mudali St., Kosapet.
29.	Bharathi Road, Perambur.
30.	Paper Mills Road, Sembium.
31.	United India Colony, Ayanavaram.
32.	109, Purasawalkam High Road, Purasawalkam.
33.	Ashok Vihar.
34.	4/8, Naval Hospital Road, Periamet.
35.	Malliah Market, Othavadai Road.
36.	2/3, Periaras St., Park Town.
37.	104, Mount Road, Corporation Dispensary.
38.	2, Jeenis Road, Saidapet.
39.	24, Danapal Chetty St., Saidapet.
40.	44, Vasantha Press Road, Arunachalapuram, Adayar.
41.	46, Azees Mulk 3rd St., Thousand Lights.
42.	16, Dr. Sadasivam Road, Theagarayanagar.
43.	6, Perumal Koil St., Guindy.

## SPECIAL HOME.

The year began with a strength of 226 inmates on 1-4-'59 and ended with a strength of 235 inmates on 31-3-'60. Below are given the various figures in Table I.

TABLE I.

Particulars.	Males	Females	Total	Remarks.
Strength on 1—4—59	182	44	226	
Admissions	241	85	326	
Discharges	130	46	176	
Releases	51	7	58	
Escapes	9	...	9	
Deaths	22	10	32	
Admissions to city hospitals	43	16	59	
Return from hospitals	15	18	33	
Transfer to Dayasadhan	16	...	16	
Strength on 31—3—60	167	68	235	

There has been a notable increase in all the figures as compared with previous year except regarding escapes. The escapes for the year 1958-59 were 32 as compared with 9 for this year.

Admissions according to ages are given below :—

10 to 20 years	...	...	...	29
21 to 30 years	...	...	...	101
31 to 40 years	...	...	...	85
41 to 50 years	...	...	...	64
51 to 60 years	...	...	...	35
61 to 70 years	...	...	...	11
71 to 80 years	...	...	...	1
			Total	326

Admissions to various City hospitals for treatment are given below:—

I.D. Hospital	...	...	16
Government General Hospital	...	...	15
Government Stanley Hospital	...	...	5
Government Royapettah Hospital	...	...	19
Kasturbha Gandhi Hospital	...	...	4
		Total	59

There were more number of admissions during this year than in the last year, but the number of admissions does not give a true picture of the situation. Though 59 cases were admitted the number of cases referred for admission were about 150 and a few more cases were also referred for opinion. Practically all the cases referred to City hospital were leprosy cases. The reason for referring them for treatment outside is that the disease has been present for a number of years and the inmates even at the time of committal are not likely to respond to treatment. Further by their obstinacy and stupidity they nullify even the little benefit that could be derived from the active and energetic treatments.

#### *Discharge, Release and Escape—*

There were more cases discharged than in the previous year. The number of cases released was also higher because more member of non-infective cases were put up for release and they satisfied the conditions for release.

There was a satisfactory decrease in the number of escapes. The following reasons may be ascribed to it :—

- (1) The improvement in the type of medical treatment.
- (2) Leniency to the inmates in general.
- (3) The more frequent reference to City hospitals for opinion and for treatment.

*Deaths.*—There are some increase under this head:—

(1) As the strength was higher, (2) the condition of those inmates even on admission was bad and (3) there was poor response to the treatment.

The cause of death is given below :—

<i>Cause of deaths.</i>	<i>Males.</i>	<i>Females.</i>
Chronic Exteritis ... ..	9	5
Heart failure ... ..	2	...
Septicaemia ... ..	4	2
Tuberculosis ... ..	4	...
Old age and debility ... ..	1	3
Gastro exteritis and dysentery ... ..	2	...
Total ... ..	22	10

Practically all the deaths were only among leprosy cases.

#### *Visitors—*

The following visitors inspected the Home on the dates noted against them :—

- (1) Inspector-General of Prisons ... .. 8-3-59 ; 29-9-59.
- (2) Commissioner of Police ... .. 10-6-59
- (3) Chief Presidency Magistrate ... .. 13-4-59 ; 26-11-59.
- (4) Director of Public Health ... .. 4-3-59 ; 26-12-59.

#### *Occupational Therapy—*

Though there are few occupations for the inmates to be engaged, there has been a general disinclination for them to do any work on the plea that they

are not paid any remuneration. They do not co-operate even to the extent of producing bandage in the weaving section which is only used to dress their ulcers.

*Weaving Section—*

Though there are five looms only 3 are in use for lack of hands to work them. Below are given the figures of production in the weaving section.

<i>Bandage cloth.</i>	<i>Cost of raw materials.</i>	<i>Cost of finished products.</i>
2,400 yards ...	Rs. 312-55 nP.	Rs. 600

With co-operation from the inmates these figures could have been doubled or trebled.

*Gardening—*

Vegetables weighing 810 lbs. replaced contractor vegetables. This works out to less than a third of the previous years' production. The value at contract rate of 0-08 $\frac{3}{4}$  nP. works out to Rs. 70-87 nP.

*Staff—*

The following staff worked during the year 1959-60 :—

1. Superintendent-cum-Medical Officer ...	1 No.
2. Nurses ... ..	3 Nos.
3. Clerk ... ..	1 No.
4. Compounder ... ..	1 "
5. I Grade Warden ... ..	1 "
6. II Grade Warden... ..	10 Nos.
7. Male Ward Attendant ... ..	4 "
8. Female Ward Attendant ... ..	4 "
9. Peons ... ..	3 "
10. Cooks ... ..	3 "
11. Male Thotties ... ..	7 "
12. Female Thotties ... ..	5 "
13. Dhobies ... ..	3 "
14. Barbers ... ..	2 "
15. Gardener ... ..	1 No.

*General—*

The following repairs were carried out during the year under report :—

1. Retiling of the entire premises.
2. White washing of the whole premises.
3. Painting of doors, rafters, and wooden posts wherever necessary.
4. Repair of the floors of the healthy dining hall and rear verandah of the kitchen.

Jubbas and blouses were issued to inmates after a lapse of 5 years.

**Conditions of inmates on admission.**

<i>Conditions.</i>				<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
Admissions during the year	...	...	...	241	83	326
Healthy	...	...	...	28	63	91
Leprosy	...	...	...	213	22	235
A. Neutral	...	...	...	95	15	110
B. Infective	...	...	...	118	7	125
Conditions found in leprosy cases—						
1. Skin diseases	...	...	...	80	4	84
2. Blindness	...	...	...	10	...	10
3. Tropic ulcers	...	...	...	100	6	106
4. Deafness	...	...	...	2	...	2
5. Paralysis of linous	...	...	...	10	2	12
6. Tuberculosis	...	...	...	4	...	4
7. Cardio vascular complications	...	...	...	10	...	10
8. Respiratory complications	...	...	...	4	2	6
Conditions found in healthy cases—						
1. Mental	...	...	...	4	10	14
2. Cardio Vascular Conditions	...	...	...	4	3	7
3. Respiratory	...	...	...	2	2	4
4. Blindness	...	...	...	2	2	4
5. Paralysis	...	...	...	1	2	3

**CATTLE YARDS AND VETERINARY DISPENSARIES.****Details of licensing of Private Cattle Yards in the City.**

1. No. of renewal applications received	...	1,504
2. No. of applications recommended	...	914
3. No. refused	...	590
4. No. of new applications received	...	285
5. No. recommended	...	109
6. No. refused	...	166
7. No. of unlicensed Cattle Yards	...	627
8. No. of notices issued in respect of Item 7	...	626
9. No. prosecuted for non-compliance	...	628
10. No. prosecuted for more than once	...	216
11. No. improved and found fit for licence as a result of action taken	...	141
12. No. evacuated in pursuance of action taken	...	82

**PUBLIC CATTLE YARDS.**

The Corporation continued to maintain the below mentioned Public Cattle Yards in the City during 1959 :—

1. 41, Basin Bridge Road.
2. 75, Venkatesa Naicken Street.
3. 53, Singanna Chetty Street.
4. Arimuthu Maistry Street.

## VETERINARY DISPENSARIES.

Veterinary Dispensaries are run by the Corporation of Madras. These institutions are catering the needs of public as in the previous year. They are located in the Madras City as stated below :—

1. Veterinary Dispensary ' B ' Cattle Depot at Basin Bridge Road.
2. Veterinary Dispensary ' D ' Cattle Depot, Pudupet.
3. Veterinary Dispensary ' F ' Cattle Depot, Mylapore.
4. Veterinary Dispensary ' G ' Cattle Depot, Perambur.
5. Veterinary Dispensary ' H ' Cattle Depot, Thirumalai Pillai Road, Nungambakkam.

Veterinary Dispensaries.							Boin.	Equi.	Other.	Total.
	New.	Old.	New.	Old.	New.	Old.				
' B ' ...	2,807	1,964	13	2	2,392	1,321	...	...	...	8,499
' D ' ...	1,916	4,163	10	5	1,833	3,630	...	...	...	11,557
' F ' ...	3,144	4,164	14	13	2,458	3,300	4	...	34	13,131
' G ' ...	335	1,852	...	...	224	975	...	...	...	3,386
' H ' ...	1,616	4,258	15	52	1,713	4,638	...	...	...	12,292
Total ...	9,818	16,401	52	72	8,620	13,864	4	...	34	48,865

- (1) Specimen sent to Madras Veterinary College ... 4.
- (2) No. of Artificial insemination done during 1959 ... 2,713
- (3) Amount collected during 1959 ... .. Rs. 818-50

## ZOOLOGICAL GARDENS.

Zoo attracted about 7 lakhs of visitors during the year. The rate of admission continued to be the same. Except Government grant of Rs. 10,000 this year also, all the expenses of the Zoo are met by the Madras Corporation only.

*Distinguished visitors of our Zoo—*

Sri R. Das, Minister for Education, Assam, Sri Liladhar Kotoki, M.P., Sri M. Bhakthavatsalam, the State Minister for Agriculture and Mrs. Lourdamal Simon, Minister for Local Administration visited the Zoo during the year. The other distinguished visitors were Mr. and Mrs. Tenny of the American Consulate, Madras, Mr. C. A. R. Bhadrans, Chief Conservator of Forests, Madras, etc.

Sri T. S. Ramaswamy, M.A., M.Sc., continued to be the Zoo Superintendent.

*Live Stock—*

At the beginning of the year the total number of animals was 579 to which were added 88 animals while reduction due to sale, exchange, gift, death, etc., amounted to 81.

Class.	Stock on 1-4-59.	Gift received.	Birth.	Purchase.	Received on exchange.	Death.	Gifted way.	Exchanged.	Sale.	Liberated	Stock on 31-3-1960.
Mammalia ...	221	6	26	1	2	9	...	6	7	5	229
Aves ...	330	2	18	5	27	45	...	4	...	...	333
Reptilia ...	28	1	...	...	...	5	...	...	...	...	24
Total ...	579	9	44	6	29	59	...	10	7	5	586

*Additions.*—(a) *Free gifts*—Out of the nine free gifts received by the Madras Zoo the free gift of a female elephant calf, 'Kamala' by the State Government is worth mentioning. The others were one white buck by the Rector of Loyola College, Madras, a striped Hyana by Miss Urmila Rao of Poona Virus Research Institute, a palm Cinet by Mr. Pattabhi of Madras, a tamed leopard "Spotty" by Sri N. S. Lakshmanan Chettiar of Mambalam and a rare specimen of Lion-tailed monkey by Mr. Srinivasan of Vepery.

(b) *Births.*—Out of a total of 44 births, mammals alone accounted for 26 numbers. The birth of a valuable young South American Lama is an important event as it shows the adaptability of this exotic species to our climatic conditions. The pair of mouse deer presented by the State Agricultural Minister has successfully bred and there are three more young ones now. The birth of a female African yellow baboon after many years shows the improved condition of the monkey population. The African Gnu have again successfully added one more to their number. The other births were mostly in the deer family, goats, pigs, etc. The increase in the number of birds was only due to the births among the pigeons.

(c) *Purchase.*—Apart from a few local purchase no major purchase was made during this year.

(d) *Exchange.*—Two rare lion-tailed monkeys were received in exchange for two leopards. A pair of this and a pair of the pies from Delhi Zoological Park were also added to our collection. The rest of the lot of addition among the birds is only domestic fowls of sorts received from the Rector of the Loyola College, Madras.

*Disposals.*—(a) A pair of Guineapigs and five spotted deers were sold at the scheduled rates.

(b) Two tiger cubs were given away to Germany in exchange for the South American and New Zealand animals already supplied to the Zoo. The

other animals disposed of were two leopards and a pair of white bucks for the Calcutta Zoo and four rose faced love birds for the Delhi Zoological Gardens.

(c) No free gifts were given by the Corporation during the year.

(d) *Death and Destroyed.*—There were five deaths among the reptiles, forty-five among the birds and nine among the mammals. Among this, the loss of the chimpanzee is very much regretted. In spite of the best medical attention the polar bear did not survive.

Some of the animals from the Zoo were taken out in a procession during the Inauguration Day Celebrations. A lion, a tiger, a leopard, a cheetah, a pair of chimpanzees and some birds from the Zoo formed a long and attractive procession on the occasion of the Wild Life Celebration on 2-10-1959. The chief attraction was the pair of chimpanzees dressed like human beings. The procession went round the southern part of the City and marched past the Home Minister at the Zoo main gate.

*Revenue.*—The following is the Statement of receipts during the year under report :—

	Rs.	nP.
1. Hire of animals ... ..	400	00
2. Sale of animals ... ..	256	00
3. Zoo entrance fees ... ..	1,40,010	00
4. Cafe (Canteen) ... ..	14,000	00
5. Boat ... ..	6,750	00
6. Miscellaneous ... ..	986	50
<b>Total ...</b>	<b>1,62,402</b>	<b>50</b>

Office of Sanitary Inspectors

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INSTITUTIONS UNDER THE HEALTH DEPARTMENT.

**Offices of Registrar of Births and Deaths and Vaccination Depots.**

Office Hours—7-30 to 10 a.m. and 3-30 to 5-30 p.m.  
except Sundays.

<i>Serial No.</i>	<i>Divisions served.</i>	<i>Location.</i>
1	1, 2, 3, 7, 8 & 9.	87, Suryanarayana Chetty Street, Royapuram.
2	4, 5, 6, 10, 21, 22 & 23.	546, Thiruvottiyur High Road, Washermanpet.
3	31 ...	22, Gantz Road (mornings).
4	32 ...	55, Madavaram High Road, Perambur (evenings).
5	11, 12, 16, 17, 24, 25 & 26.	244, Mint Street.
6	13, 14, 15 & 20 ...	47, Linghi Chetty Street.
7	18 & 19 ...	161, Govindappa Naicken Street.
8	27, 28 & 29 ...	17, Basin Water Works Street.
9	36 & 37 ...	Rotler Street, Vepery.
10	33, 34, 35 & 38 ...	55, Pulianthope High Road.
11	41, 42 & 43 ...	23, Paper Mills Road, Sembium.
12	44 & 45 ...	127, Konnur High Road, Ayanavaram.
13	52 ...	65, Poonamallee High Road, near Spur Tank.
14	51 & 91 ...	Shenoy Nagar.
15	46, 47, 48, 49, 50 & 61.	6, Gangadareswarar Koil Street.
16	62 & 63 ...	Zoo Compound.
17	30 & 64 ...	23, Kolandai Street, Park Town.
18	65, 66 & 70 ...	3/61, Arunachala Naicken Street, Chintadripet.
19	67, 68 & 69 ...	34, Poosala Gengu Reddy Street, Egmore.
20	53, 54, 55 & 56 ...	15, Noor Veeraswamy Iyer Street, Nungambakkam.
21	92 & 96 ...	107, Arcot Road, Kodambakkam.
22	93, 94 & 95 ...	1, Sir Theagaraya Road, T. Nagar.
23	57 to 60 & 71 to 73.	369, Pycrofts Road, Pudupakkam.
24	74 to 77 ...	25, Pycrofts Road, Triplicane.
25	78 to 80 ...	25, B. B. Road, Krishnampet.
26	82 to 84 ...	101, Kutcheri Road, Mylapore.
27	85 & 86 ...	63, Kutcheri Road, Mylapore.
28	81, 87 & 88 ...	2/104, Mount Road, Teynampet.
29	97, 98 and 100 ...	1, Karaneeswarar Koil Street, Saidapet.
30	99 ...	32/5, Velacheri Road, Guindy.
31	89 & 90 ...	13, Greenways Road, Adyar.

## Office of Sanitary Inspectors.

<i>Serial No.</i>	<i>Division served.</i>	<i>Location.</i>
1	1 & 2	81, Surya Narayana Chetty Street, Kasimode.
2	3 & 4	Kalmandapam Road, Royapuram.
3	5 & 6	546, Thiruvottiyur High Road, Washermanpet.
4	7 & 8	151, Mannarswamy Koil Street, Royapuram.
5	9 & 10	Do. Do.
6	11 & 12	5/31, Saint Xavier Street, G.T., Madras.
7	13 & 14	6/7, Adam Street.
8	15 & 16	31, St. Xavier Street, G.T., Madras.
9	17 & 18	161, Govindappa Naicken Street.
10	19	48, Thatha Muthiappan Street.
11	20	32, Thambu Chetty Street.
12	21, 22 & 23	546, T. H. Road, Madras-21.
13	24 & 25	244, Mint Street.
14	26 & 27	Do.
15	28 & 29	183, Wall Tax Road.
16	30	96, Wall Tax Road.
17	31 & 32	40, Barathy Road, Perambur.
18	33 & 34	55, Pulianthope High Road.
19	35	1/B, Bashiam Reddy 1st Street.
20	36 & 37	Smith Field Market, Choolai.
21	38 & 39	55, Pulianthope High Road.
22	40	Smith Field Market, Choolai.
23	41, 42 & 43	23, Paper Mills Road, Sembiam.
24	44 & 45	127, K. H. Road.
25	46 & 47	Smith Field Market, Choolai.
26	48, 49 & 50	Do.
27	51 & 52	Shenoy Nagar Market.
28	53 & 54	15B, Nungambakkam High Road.
29	55 & 56	21, Village Road, Nungambakkam.
30	57 & 58	369, Pycrofts Road, Amir Mahal.
31	59 & 60	Do.
32	61	65, Poonamallee High Road (near Napier Park).
33	62 & 63	People's Park, near Zoo.
34	64	23, Kolandai Street, Park Town.
35	65 & 66	Vedagiri Maistry Street, Chintadripet.
36	67	33, Poosala Gengu Reddi Street.
37	68 & 69	35, Veerabadrachari Street, Pudupet.
38	70	Adikesavalu Street, Narasingapuram.
39	71 & 72	1, Balamuthu Street, Madras-2.

<i>Serial No.</i>	<i>Division served.</i>	<i>Location.</i>
40	73	... 25, Pycrofts Road.
41	74	... 25, Pycrofts Road, Triplicane.
42	75	... 25, Pycrofts Road.
43	76 & 77	... 22, Chengalvaroya Mudali Street.
44	78	... 25, Barbers Bridge Road, Krishnampet.
45	79 & 80	... 25, Barbers Bridge Road.
46	81	... 2/104, Mount Road.
47	84	... 55, R. H. Road, Madras-4.
48	85 & 86	... 101, Kutchery Road.
49	87 & 88	... 2/104, Mount Road, Madras-18.
50	89 & 90	... 13, Greenways Road, Adyar.
51	91 & 92	... 107, Arcot Road, Kodambakkam.
52	93 & 94	... Theagaraya Road, T. Nagar.
53	95 & 96	... 5, Sivagnanam Street.
54	97 & 98	... 22, Bulma Street.
55	99	... 32/5, Velachery Road, Guindy.
56	100	... 22, Brahmin Street.

#### **Dispensaries.**

<i>Serial No.</i>	<i>Divn. No.</i>	<i>Name of Dispensary.</i>	<i>Location.</i>
1	2	Royapuram	... 2/87, Surya Narayana Chetty Street
2	3	Palmyra Kuppam	... Kalmandapam Road.
3	3	Royapuram Siddha	... 109, Adam Sahib Street.
4	4	Sanjeevarayanpet	... 21/22, Kappal Polu Chetty Street.
5	11	Seven Wells	... 1/50, Saint Xavier Street.
6	14	Harbour	... 6/7, Adam Street.
7	15	Muthialpet	... Geils Street.
8	19	Mofuskhan Garden	... 55, Thatha Muthiappan Street.
9	20	Mannady	... 47, Linghi Chetty Street.
10	23	Washermanpet	... 85, Thiruvottiyur High Road.
11	25	Mint	... 284, Mint Street.
11B	25	B. Bridge	... 51, Basin Bridge Road.
12	26	Trevelyan Basin	... 17, Basin Water Works Street.
13	31	Perambur	... 55, Madavaram High Road.
14	32	Vyasarpady	... Hope Lodge, Gantz Road.
15	33	Pulianthope Unani	... 55, Pulianthope High Road.
16	34	Otteri	... Strahans Road.
17	35	Otteri Siddha	... 1/B, Bashiam Reddy Street.
18	39	Choolai Siddha	... Alathur Subramania Achari Street.
19	40	Balialah Naidu	... Rotlers Street.

<i>Serial No.</i>	<i>Divn. No.</i>	<i>Name of Dispensary.</i>	<i>Location.</i>
20	42	Sembiam ... ..	Paper Mills Road.
21	44	Ayanavaram ... ..	127, Kunnur High Road.
22	48	Kosapet ... ..	7/1, Chellappa Mudali Street.
23	51	Aminjikarai ... ..	171, Poonamallee High Road.
24	53	Chetput ... ..	24, McNichols Road.
25	55	Nungambakkam ... ..	15, Noor Veeraswamy Iyer Street.
26	56	Thousand Lights ... ..	Model School Street.
27	59	Pudupakkam ... ..	368, Pycrofts Road.
28	61	Kilpauk ... ..	6, Gangathareswarar Koil Street.
29	65	Chintadripet ... ..	2/61, Arunachala Naicken Street.
30	67	Egmore ... ..	33, Poosala Gengu Reddi Street.
31	69	Pudupet ... ..	83, Harris Road.
32	71	Tiruvateeswaranpet ... ..	102, Thayar Sahib Street.
33	72	Chepauk ... ..	Khana Baugh Street.
34	75	Triplicane ... ..	25, Pycrofts Road.
35	77	Zam Bazaar ... ..	Gazette Begum Street.
36	80	Krishnampet ... ..	25, Barbers Bridge Road.
37	84	Mylapore (North) ... ..	Karaneswarar Pagoda Street.
38	85	Mylapore (South) ... ..	101, Kutchery Road.
39	88	Teynampet ... ..	2/104, Mount Road.
40	89	Adayar ... ..	13, Greenways Road.
41	92	Kodambakkam ... ..	107, Arcot Road.
42	93	T. Nagar (North) ... ..	4, Dr. Sadhasivam Road.
43	94	T. Nagar (South) ... ..	3, Sivagnanam Road.
44	97	Saidapet ... ..	51, Sadayappa Mudali Street.
45	99	Guindy ... ..	1-A, Sathani Street.

*Clinics :—*

Venereal Clinic	...	82/83, Strahans Road, Perambur.
Leprosy Clinic	... ..	(1) Ice House Road (Besant Road), Triplicane. (2) Hope Lodge, Vyasarpady.
Tuberculosis Clinics	...	Pulianthope High Road. Government General Hospital. Government Stanley Hospital. Government Royapettah Hospital. Government Kasturba Gandhi Hospital.

*Laboratories :—*

Public Health Clinical Laboratory	Ripon Buildings.
Public Analyst's Laboratory,	Ripon Buildings.
Water Analyst's Laboratory,	Kilpauk Water Works (Tel. No. 2202).
Malaria Laboratory,	Trevelyan Basin Water Works Street.

*Hospital :—*

Infectious Diseases Hospital, Tiruvottiyur High Road, Tondiarpet (Tel. Nos. 5317 and 51293).

*Other Institutions :—*

Ashok Vihar, Health & Recreation Centre, Peoples Park (Tel. No. 4754).  
 Zoological Gardens, Peoples Park (Tel. No. 55314).  
 Lethal Chamber, Basin Road.  
 Hearse—Corporation Lorry Station (Tel. No. 3457).  
 Special Home for the Diseased and Infirm, Krishnampet (Tel. No. 86377).

*Midday Meals Centres :—*

- (1) Basin Bridge Road, Kondithope, North Range.
- (2) Iyah Mudaly Street, Chintadripet, Central Range (Tel. No. 85763).
- (3) Conran Smith Road, Gopalapuram, South Range.

*Veterinary Dispensaries :—*

Basin Bridge Road, Kondithope.  
 Barbers Bridge Road, Krishnampet.  
 Prasanna Vinayagar Koil Street, Mylapore.  
 Harris Road, Pudupet.

*Corporation Cattle Yards :—*

Basin Bridge Road, Kondithope.  
 Singanna Chetty Street, Chintadripet.  
 Vinaitheertha Vinayaga Mudali Street, Kosapet.  
 Venkatrangam Pillai Street, Saidapet.

*Slaughter Houses :—*

Sheep and Cattle—  
 Gantz Road—Perambur Barracks.  
 Alandur Road—Saidapet.

Pigs—  
 Junction of Basin Road and Pulianthope High Road.

**Burial and Burning Grounds.**

<i>Serial No.</i>	<i>Divn. No.</i>	<i>Name of Burial Ground.</i>	<i>Location.</i>
1	2	Kasimode Burial and Burning Grounds.	Suryanarayana Chetty Street.
2	8	Parsee Burial Ground	38-E, Main Road, Royapuram.
3	9	St. Roques Cemetery	6, Monegar Choultry Road
4	9	Christian Mission Society Burial Ground.	Old Slaughter House Road.
5	14	Private Burial Ground, Basha Muslims.	Angappa Naicken Street.

<i>Serial No.</i>	<i>Divn. No.</i>	<i>Name of Burial Ground.</i>	<i>Location.</i>
6	23	Sait Mosque Burial Ground ...	556, Thiruvottiyur High Road.
7	24	Washermanpet Hindu Burial Ground.	Kathiwalkkam High Road.
8	31	Melpathi Ponnappa Mudaliar Street Burial Ground.	Melpathi Ponnappa Mudali Street.
9	38	Choolai, Gujarathi Jain Burial Ground.	Basin Road.
10	38	Burial Ground ...	Assam Road.
11	38	Vyasa Burning Ground ...	D'Millers Road.
12	40	Purasawalkam Cemetery ...	Perambur Barracks Street.
13	41	Thangal Burial and Burning Grounds.	Thangal, Sembiam.
14	43	Agaram Burial Ground ...	Agaram.
15	45	Gujju Naicken Street Burial Ground.	Gujju Naicken Street.
16	45	Burial and Burning Ground ...	South of Avadi.
17	47	Missori Synod Luther Mission Cemetery.	Brick Kiln Road.
18	50	Ottery Burial Ground ...	Brick Kiln Road.
19	50	Subadar Makhan Burial Ground.	Thandavaraya Mudali Street.
20	50	Lutheran Mission Cemetry ...	Brick Kiln Street.
21	51	Kilpauk Christian Corporation Old Burial Ground.	Shenoy Nagar.
22	52	Aminjikai Muslim Burial Ground.	Aminjikai.
23	52	Reddythope Muslim Burial Ground.	Do.
24	52	Arumbakkam Burial and Burning Ground.	Do.
25	52	Naduvankarai Burial and Burning Ground.	Do.
26	54	Sterling Road Burial and Burning Ground.	Sterling Road.
27	57	St. George Cathedral Burial Ground.	Mount Road.
28	60	Rama Rao Makhan Burial Ground.	Peters Road.
29	71	St. Patric Burial Ground ...	Body Guard Road.
30	71	Sacred Heart Burial Ground ...	Do.
31	71	St. Andrews Burial Ground ...	Do.
32	71	Armenian Street Burial Ground.	Do.
33	71	St. Mary's Burial Ground ...	Do.

<i>Serial No.</i>	<i>Divn. No.</i>	<i>Name of Burial Ground</i>	<i>Location</i>
34	79	Desthagir Deonge Burial Ground.	B. B. Road.
35	79	Pappu Durga Burial Ground ...	Do.
36	79	Haji Syed Maccan Burial Ground.	Lloyds Road.
37	80	Krishnampet Burial and Burning Ground.	Gajapathi Lala Street.
38	80	Kudratha Alimakhan Burial Ground.	B. B. Road.
39	80	Neela Badth Dunge Burial Ground.	Behind Lady Willingdon College.
40	84	Mylapore Hindu Burial and Burning Ground.	Karneeswarar Koil Street.
41	86	Elapatha Mada Coil Cemetery.	66, St. Mary's Road.
42	89	Qubiel Cemetery ...	Santhome High Road.
43	90	Urur Burial and Burning Ground.	Urur.
44	91	Aminjikai Burial Ground ...	Lime Kiln Street.
45	92	Puliyur Burning and Burial Ground.	Puliyur.
46	92	Kodambakkam Burial and Burning Ground.	Kodambakkam.
47	95	T. Nagar Burial and Burning Ground.	Usman Road.
48	97	Jones Road Burial and Burning Ground.	Jones Road.
49	99	Jain Adayar Burial and Burning Ground.	Guindy.
50	99	Kottur Burial and Burning Ground.	Do.
51	99	Vellichery Burial and Burning Ground.	Do.
52	99	Kalikandra Burial and Burning Ground.	Do.
53	99	Pathupet Burial and Burning Ground.	Do.
54	99	Erukanthangal Burial and Burning Ground.	Do.
55	99	Little Mount Burial Ground ...	Do.
56	99	Y.M.C.A. Burial Ground ...	Do.
57	99	Muslim Burial Ground ...	Do.
58	100	Ikkattu Thangal Burial and Burning Ground.	Alandur Road.

### Cattle Depots and Veterinary Dispensaries

<i>Serial No.</i>	<i>Divn. No.</i>	<i>Location of Veterinary Dispensaries.</i>
1	3	... 68, Gollavar Agraharam Road.
2	33, 34 & 35	... " G " Cattle Depot, Peranbur High Road.
3	68 & 69	... " D " Depot, 25, Harris Road.
4	78	... " E " Depot, Muthiah Mudaly Street.
5	84	... Karaneswarar Pagoda Street.
6	93	... Junction of Kodambakkam Road and Thirumalai Pillai Road.
7	99	... Government Dispensary, Mount Road, Saidapet.

### CHILD WELFARE CENTRES

<i>Serial No.</i>	<i>Divn. No.</i>	<i>Name of Centre or Creche</i>	<i>Location</i>
1	1	Tondiarpet Child Welfare Centre.	385, Thiruvottiyur High Road, Tondiarpet.
2	8	Palmyrahkuppam Welfare Centre.	Near Corporation Model Lines, Palmyrahkuppam.
3	3	Royapuram Child Welfare Centre.	26, Suryanarayana Chetty Street, Royapuram.
4	4	Sanjeevirayanpet Welfare Centre.	21/22, Kappal Pollu Chetty Street, Washermanpet.
5	23	Washermanpet Child Welfare Centre.	86, Thiruvottiyur High Road, Washermanpet.
6	31	Vyasarpany Child Welfare Centre.	Bharathi Road, Perambur.
7	26	Peddunaickenpet Child Welfare Centre.	18, Zinda Sahib Street, Peddunaickenpet.
8	26	George Town Child Welfare Centre.	44, Amman Koil Street, George Town, Madras.
9	16	Kothwal Bazaar Child Welfare Centre.	1/27, Appu Maistry Street, George Town, Madras.
10	13	Muthialpet Child Welfare Centre.	47, Linghi Chetty Street, George Town, Madras.
11	28	Trevelyan Basin Child Welfare Centre.	52, Trevelyan Basin Street, Sowcarpet.
12	39	Choolai Maternity Home ...	15, Vijayavigneswarar Koil Street, Choolai.
13	33	Pulianthope Child Welfare Centre.	1/33, Gantz Road, Pulianthope.
14	34	North Perambur Child Welfare Centre.	54, Perambur High Road, Perambur.

<i>Serial No.</i>	<i>Divn. No.</i>	<i>Name of Centre or Creche</i>	<i>Location</i>
15	41	Sembiam Child Welfare Centre.	45, Paper Mills Road, Sembiam.
16	45	Ayanavaram Maternity Home.	United India Colony, Ayana- varam.
17	51	Kilpauk Child Welfare Centre.	19, Halls Road, Kilpauk.
18	46	Nammalwarpet Child Welfare Centre.	14, Subbaraya Chetty Street, Nammalwarpet.
19	47	Kosapet Child Welfare Centre.	8, Chellappa Mudali Street, Kosapet.
20	50	Purasawalkam Child Welfare Centre.	109, Purasawalkam High- Road, Purasawalkam.
21	62	Periamet Child Welfare Centre.	4/8 Naval Hospital Road, Periamet.
22	64	Ashok Vihar Maternity Home.	Ashok Vihar, behind Moore Market, Park Town, Madras.
23	29	Edapalayam Child Welfare Centre.	Mallaya Market, Wall Tax Road, Madras.
24	64	Park Town Child Welfare Centre.	2/3, Periera Street, Park Town.
25	66	Napier Park Child Welfare Centre.	1/61, Arunachala Naicken Street, Chintadripet.
26	68	Egmore Child Welfare Centre.	37, Langs Garden Road, Egmore.
27	53	Chetput Child Welfare Centre.	27, Jaganathapuram 2nd Street, Chetput.
28	56	Thousand Lights Child Welfare Centre.	26, Aziz Mulk 3rd Street, Chetput.
29	55	Nungambakkam Child Welfare Centre.	15, Noor Veeraswamy Iyer Street, Nungambakkam.
30	92	Kodambakkam Child Welfare Centre.	68, Arcot Road, Kodam- bakkam.
31	93	T. Nagar (North) Child Welfare Centre.	16, Raghaviah Road, T. Nagar,
32	79	Royapettah Child Welfare Centre.	84, Lloyds Road, Royapettah.
33	58	Triplicane Child Welfare Centre.	8, Nyniappa Maistry Street, Triplicane.
34	76	Zam Bazaar Child Welfare Centre.	24/25, Surappa Mudali Street, Zam Bazaar.

<i>Serial No.</i>	<i>Divn. No.</i>	<i>Name of Centre or Creche</i>	<i>Location</i>
35	77	Mirsaibpet Child Welfare Centre.	65, Dr. Besant Road, Triplieane.
36	84	Mylapore Child Welfare Centre.	48, Bazaar Road, Mylapore.
37	81	Teynampet Child Welfare Centre.	104, Mount Road, Teynampet.
38	98	Saidapet Maternity Home ...	2, Jeenis Road, Saidapet.
39	94	T.Nagar (South) Child Welfare Centre.	3, Sivagnanam Road, T.Nagar
40	97	Saidapet Sub-Centre	24, Dhanapal Chetty Street, Saidapet.
41	99	Guindy Child Welfare Centre.	6, Perumal Koil Street, Kottur.
42	89	Mandavalli Child Welfare Centre.	34, Brodies Road, Adayar.
43	90	Adayar Child Welfare Centre.	44, Vasantha Press Road, Adayar.
44	25	Basin Bridge Child Welfare Centre.	53-B, Basin Bridge Road.
45	53	Chetput Creche ...	27, Jagannathapuram 2nd Street, Chetput.
46	12	Broadway Creche ...	80/81, Broadway (Bunder Rama Naicken Garden).
47	3	Royapuram Creche ...	26, Suryanarayana Chetty Street, Royapuram.

STATISTICS SUPPLEMENT No. 1.

Meteorological Data of Madras-Nungambakkam for the Year 1959.

Temperature °C

Months (1)	Temperature °C						Number of rainy days (7)	Monthly mean Bar Pressure Mts. (8)	Monthly mean Rel. Humidity % (9)	Mean direction of wind in degrees from North (10)
	Monthly Mean Maximum (2)	Monthly Mean Minimum (3)	Dew point temperature (at 8-30 Hrs.) (4)	Monthly Rain-fall (in mms.) (5)	Heaviest fall in 24 Hours (6)					
January	28.4	21.5	21.3	0.0	0.0	0	1015.9	78	N 23 W	
February	30.2	22.1	21.7	22.2	20.2	1	1014.3	80	S 88 W	
March	31.4	22.4	22.1	0.0	0.0	0	1013.4	77	S 55 W	
April	33.3	26.2	24.3	17.5	14.2	1	1010.4	74	S 33 W	
May	35.3	25.1	24.2	12.5	9.5	2	1006.9	66	S 33 W	
June	35.1	24.0	22.9	51.1	17.0	5	1005.7	68	S 55 W	
July	34.6	25.8	22.5	66.1	16.4	6	1006.0	70	S 60 W	
August	35.4	25.8	22.3	27.5	7.0	6	1006.1	69	S 75 W	
September	34.4	25.4	23.5	84.9	50.0	4	1006.9	74	S 69 W	
October	31.9	24.6	24.3	343.1	94.5	11	1009.8	83	S 84 W	
November	29.1	22.8	...	304.4	128.4	6	1012.6	75	...	
December	27.8	21.2	21.4	36.0	16.6	4	1015.1	85	N 23 W	
Mean or Total	366.9	286.9	250.5	965.3	373.8	46	12112.1	899	...	

To convert degrees Centigrade into degrees Fahrenheit apply :  
 $(^{\circ}\text{C} \times 9/5 + 32 = ^{\circ}\text{F})$ .

STATISTICS SUPPLEMENT No. 2.

Births Registered in each Division with rates during 1959

Division No.	Name of Division	Population according to the Census of 1951.			Number of Live Births Registered			Ratio per 1,000 of Population			Number of males born to every 100 females born.	Excess of Births over Deaths per 100 of population.	Excess of Deaths over Births per 1,000 of Population.	Number of still births registered.
		Males	Females	Total	Males	Females	Total	Males	Females	Total				
1	New Washermenpet	15,543	15,826	31,369	939	950	1,889	60.4	60.0	60.2	98.8	22.3	Nil	45
2	Royapuram	10,117	10,734	20,851	471	464	935	46.5	43.2	44.8	101.5	26.6	"	24
3	Singara Garden	24,597	18,602	43,196	1,905	1,756	3,661	77.4	94.3	84.7	108.4	57.1	"	173
4	Sanjeevirayanpet	26,660	24,718	51,378	1,355	1,249	2,604	50.8	50.5	50.6	108.4	23.2	"	78
5	Korukupet	16,456	20,150	36,606	1,281	1,317	2,598	77.8	65.3	70.9	97.2	24.4	"	125
6	Vyasarpady	12,641	12,147	24,788	674	683	1,357	53.3	56.2	54.7	98.6	26.3	"	49
7	Basin Bridge	11,472	11,272	22,744	530	494	1,024	46.1	43.8	45.0	107.2	18.6	"	46
8	Peddunaickenpet	16,011	15,001	31,012	567	620	1,187	35.4	41.3	38.2	91.4	21.9	"	44
9	Seven Wells	14,994	11,990	26,984	613	602	1,215	41.0	58.5	45.0	101.8	12.6	"	34
10	Ammankoil	12,636	10,954	23,590	509	487	996	40.3	44.6	42.2	104.5	21.9	"	34
11	Muthialpet	12,894	13,297	26,191	470	452	922	36.4	34.0	35.2	103.9	23.0	"	6
12	Harbour	8,950	7,021	15,971	371	337	708	41.4	48.0	44.3	110.0	12.5	"	25
13	Kachaleswarar Koil	7,832	4,961	12,793	298	294	592	38.0	59.3	46.3	101.3	23.7	"	19
14	Kothawal Bazaar	8,771	6,346	15,117	209	237	446	23.7	37.3	29.5	88.1	16.1	"	13
15	Sowcarpet	8,782	6,489	15,271	261	207	468	29.5	31.8	30.6	126.0	17.2	"	15
16	Trevelyan Basin	15,124	14,072	29,196	633	601	1,234	41.8	42.7	41.7	105.3	27.4	"	35
17	Choolai	27,226	25,751	52,977	1,188	1,147	2,335	43.6	44.5	44.1	103.5	23.2	"	52
18	Pulianthope	23,000	21,194	44,194	1,161	1,132	2,293	54.7	53.4	51.8	102.5	20.2	"	84
19	Perumbur Barracks	14,843	14,662	29,505	622	609	1,231	43.2	41.5	41.7	102.1	16.0	"	37
20	Sembiam	14,608	15,667	30,285	856	831	1,687	58.5	53.0	55.6	103.0	27.1	"	50
21	Ayanavaram	14,464	14,354	28,818	925	961	1,886	63.8	62.7	65.3	96.2	33.7	"	49
22	Kilpauk	12,629	10,287	22,916	733	696	1,429	58.0	67.6	62.5	105.3	37.0	"	45
23	Purasawalkam	16,738	14,008	30,746	636	624	1,260	38.0	44.0	40.9	101.9	17.3	"	35
24	Kosapet	20,227	19,407	39,634	980	950	1,930	48.4	49.5	49.2	103.1	23.1	"	30
25	Vepery	8,298	9,136	17,434	336	292	628	40.5	31.9	36.0	115.0	21.6	"	21

26	Periamet	16,728	14,835	31,563	584	596	1,180	34.9	40.2	37.3	97.9	21.3	39
27	Edapalayam	10,124	8,350	18,482	350	369	719	34.5	44.2	38.9	94.8	25.1	21
28	Park Town	9,160	7,075	16,235	219	216	435	23.9	30.5	26.7	101.3	...	12
29	Napier Park	10,682	8,876	19,558	352	364	716	32.8	41.0	36.6	103.4	22.5	16
30	Chintadripet	13,688	12,809	26,497	502	495	997	36.8	38.5	37.6	101.4	20.6	24
31	Komaleeswaranpet	14,814	13,126	27,940	613	574	1,187	41.4	43.7	42.5	106.7	24.9	31
32	Egmore	8,385	8,319	16,704	1,215	1,221	2,436	144.9	146.7	145.8	99.4	120.0	195
33	Thousand Lights	15,997	15,345	31,342	805	727	1,532	56.6	47.4	48.8	110.7	29.6	41
34	Nungambakkam	14,739	12,668	27,407	668	674	1,342	45.3	53.1	48.9	99.1	27.0	26
35	Kodambakkam	19,226	17,908	37,134	1,426	1,315	2,741	74.1	73.3	73.8	108.4	45.0	67
36	Theagaraya Nagar (North)	10,886	10,487	21,373	500	446	946	45.9	42.5	44.5	112.1	15.0	38
37	Royapettah	11,901	11,443	23,344	490	479	969	41.2	41.8	41.8	102.2	23.3	17
38	Pudupakkam	14,448	14,224	28,672	622	628	1,250	49.9	44.1	43.6	99.0	24.1	35
39	Thiruvateswaranpet	15,878	14,485	30,363	748	690	1,438	47.1	48.3	47.3	108.4	27.1	40
40	Chepauk	12,818	11,449	24,267	625	586	1,211	48.8	51.2	49.9	106.6	35.3	49
41	Triplicane	14,537	12,240	26,777	548	529	1,077	37.7	43.2	40.2	103.5	22.5	26
42	Zam Bazaar	13,295	11,749	25,044	545	509	1,054	40.0	43.3	42.1	107.0	23.5	31
43	Mirsaibpet	23,307	20,873	44,180	1,242	1,136	2,378	53.3	64.0	53.8	109.3	22.3	66
44	Mylapore (North)	17,383	21,351	38,734	873	888	1,761	50.2	41.1	45.4	98.3	22.9	59
45	Mylapore (South)	13,137	12,608	25,745	524	406	930	39.8	32.2	34.4	129.0	20.0	17
46	Teynampet	17,741	15,736	33,477	889	828	1,717	50.1	52.6	51.0	107.3	26.6	60
47	Theagaraya Nagar (South)	18,630	16,762	35,392	882	882	1,764	46.3	52.6	49.7	100.0	26.7	50
48	Saidapet	18,093	16,373	34,466	730	668	1,398	39.7	40.8	40.6	109.2	19.4	36
49	Guindy	9,604	7,812	17,416	340	281	621	35.5	36.0	36.2	120.9	13.8	22
50	Adayar	14,550	13,548	28,098	939	902	1,841	64.5	66.6	65.5	104.1	39.1	47
	Fort St. George	17,52	528	2,280	...	...	...	...	...	...	...	...	...
	Total	7,37,013	6,79,043	14,16,056	35,754	34,401	70,155	48.5	50.6	49.5	103.9	25.8	2,253

Births Registered in each Division during each month in 1959

Dn. No	Name of Divisions	Janu-ary (3)	Feb-ruary (4)	March (5)	April (6)	May (7)	June (8)	July (9)	August (10)	Sep-tember (11)	October (12)	Novem-ber (13)	Decem-ber (14)	Total (15)
1	New Washermpet	97	149	166	152	123	137	166	151	131	88	120	409	1,889
2	Royapuram	44	74	84	62	79	72	85	79	68	83	62	143	935
3	Singara Garden	211	248	248	293	205	323	344	268	379	318	290	534	3,661
4	Sanjeevirayanpet	115	228	182	218	189	252	222	199	240	225	169	365	2,604
5	Korukupet	150	190	184	229	190	224	225	190	213	230	247	327	2,598
6	Vyasarjadi	81	98	64	113	95	122	123	111	125	72	96	257	1,357
7	Basin Bridge	58	75	62	75	76	83	94	73	91	81	82	174	1,024
8	Peddunaickenpet	48	88	75	85	85	96	97	125	81	71	93	243	1,187
9	Seven Wells	62	89	85	86	85	93	113	93	110	72	125	202	1,215
10	Ammankoil	44	66	68	71	72	90	106	78	86	66	94	155	996
11	Muthialpet	65	60	64	46	75	89	94	85	59	63	66	156	922
12	Harbour	41	36	52	54	38	82	64	56	42	47	51	145	708
13	Kachaleswarar Koil	41	50	27	34	46	62	53	44	53	46	56	80	592
14	Kothawal Bazaar	32	37	26	46	34	27	44	31	26	31	57	55	446
15	Sowcarpet	25	41	34	35	36	33	41	40	42	28	57	56	468
16	Trevelyan Basin	55	86	83	102	87	96	109	104	103	63	102	244	1,234
17	Choolai	148	152	132	165	215	166	227	195	160	186	179	410	2,335
18	Pulianthope	154	169	191	176	163	210	224	138	161	152	222	333	2,293
19	Permabur Barracks	91	104	95	87	95	86	124	93	86	93	85	192	1,231
20	Sembiam	92	118	87	87	184	75	211	159	148	89	153	284	1,687
21	Aynavaram	119	121	94	161	138	154	174	124	158	131	202	310	1,886
22	Kilpauk	73	101	86	103	128	88	170	116	93	74	156	241	1,429

23	Purasawalkam	70	90	89	95	93	111	119	96	96	102	98	201	1,260
24	Kosapet	120	134	122	164	146	143	172	155	182	162	160	270	1,930
25	Vepery	38	43	48	49	47	50	77	54	46	47	43	86	628
26	Periamet	55	77	97	100	94	97	110	73	65	70	172	170	1,180
27	Edapalayam	35	41	41	51	69	50	64	75	50	67	57	119	719
28	Park Town	17	32	37	39	37	33	38	35	27	27	53	60	435
29	Napier Park	46	45	64	49	39	54	77	64	55	75	63	85	716
30	Chintadripet	60	55	58	72	67	92	86	70	100	108	94	135	997
31	Komaleeswaranpet	64	80	82	100	57	108	126	93	124	112	80	161	1,187
32	Egmore	86	166	170	173	115	206	248	229	259	266	172	346	2,436
33	Thousand Lights	94	111	85	105	129	113	120	120	144	115	130	266	1,532
34	Nungambakkam	69	103	88	102	104	122	112	103	127	91	125	196	1,342
35	Kodambakkam	142	202	199	207	227	218	242	292	235	125	300	352	2,741
36	Theagaraya Nagar (North)	58	72	77	59	91	73	105	27	84	73	100	127	946
37	Royapettah	45	64	67	73	51	97	86	80	94	80	83	149	969
38	Pudupakkam	72	73	88	101	67	119	122	115	105	82	111	195	1,250
39	Thiruvaitteeswaranpet	93	82	113	118	70	131	124	132	125	110	106	234	1,438
40	Chepauk	70	77	76	128	48	117	147	86	103	112	85	162	1,211
41	Triplicane	60	72	76	106	36	115	88	84	123	102	101	114	1,077
42	Zam Bazaar	58	57	70	87	62	96	129	91	116	86	101	101	1,054
43	Mirshibipet	150	163	170	221	134	254	209	192	240	207	166	272	2,378
44	Mylapore (North)	103	111	114	147	112	184	157	139	168	166	135	225	1,761
45	Mylapore (South)	35	72	56	81	62	76	94	81	92	80	64	137	930
46	Teynampet	75	157	104	154	109	171	160	140	160	141	109	237	1,717
47	Theagaraya Nagar (South)	94	113	121	121	135	164	180	174	203	111	140	208	1,764
48	Saidapet	73	79	74	109	85	116	179	94	248	56	145	140	1,398
49	Guindy	38	38	50	50	68	49	76	45	42	42	49	74	621
50	Adayar	72	172	114	149	123	203	183	106	189	132	111	287	1,841
Total		3,838	4,961	4,739	5,490	4,915	6,021	6,740	5,597	6,257	5,256	5,917	10,424	70,155

Births Registered among Principal Communities in each Division during 1959

Division No.	Name of Divisions	Aliens.		Anglo-Indians		Indian Christians		Muslims		Hindus		Others		All Communities		Total births registered (excluding still births)
		Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
1	New Washermentpet	1	...	2	...	73	71	35	28	827	850	1	1	939	950	1,889
2	Royapuram	...	...	14	10	67	70	42	42	347	342	...	...	471	464	935
3	Singara Garden	...	...	...	1	72	56	138	107	1,694	1,590	...	2	1,905	1,756	3,661
4	Sanjeevirayanpet	...	...	2	4	40	33	56	48	1,257	1,164	...	...	1,355	1,249	2,604
5	Korukupet	...	...	...	...	16	14	227	228	1,038	1,075	...	...	1,281	1,317	2,598
6	Vyasarpadu	...	...	1	...	30	27	7	6	636	650	...	...	674	683	1,357
7	Basin Bridge	...	...	2	3	35	28	61	44	432	419	...	...	580	494	1,024
8	Peddunaickenpet	...	...	...	...	5	3	3	4	559	613	...	...	567	620	1,187
9	Seven Wells	...	...	4	4	23	23	71	58	515	517	...	...	613	602	1,215
10	Ammankoil	...	...	5	3	48	61	77	60	379	363	...	...	509	487	996
11	Muthialpet	...	...	...	...	14	12	24	30	432	410	...	...	470	452	922
12	Harbour	1	...	...	...	13	6	141	129	216	202	...	...	371	337	708
13	Kachaleeswararkoil	...	1	1	2	15	20	23	28	260	243	...	...	298	294	592
14	Kothawal Bazaar	...	...	...	...	6	3	51	41	152	193	...	...	209	237	446
15	Sowcarpet	...	...	...	...	1	...	20	15	240	192	...	...	261	207	468
16	Trevelyan Basin	...	...	...	...	3	...	...	2	630	599	...	...	633	601	1,234
17	Choolai	...	...	...	3	43	37	16	11	1,129	1,096	...	...	1,188	1,147	2,335
18	Pulianthope	...	...	...	...	64	64	226	213	871	855	...	...	1,161	1,132	2,293
19	Perambur Barracks	...	...	2	2	45	57	101	102	473	448	1	...	622	609	1,231
20	Sembiam	...	...	21	18	50	44	63	55	721	714	...	...	856	831	1,687
21	Ayanavaram	...	...	2	8	51	44	37	29	835	880	...	...	925	961	1,886
22	Kilpauk	2	...	1	2	44	39	21	25	664	630	...	1	733	696	1,429

23	Purasawalkam	65	63	9	12	560	547	...	...	...	636	624	1,260												
24	Kosapet	79	64	23	28	875	856	...	...	...	980	950	1,930												
25	Vepery	21	14	13	15	300	257	...	...	...	336	292	628												
26	Periamet	68	55	72	73	431	460	...	...	...	584	596	1,180												
27	Edapalayam	2	1	...	...	348	368	...	...	...	350	369	719												
28	Park Town	8	14	1	8	206	194	...	...	...	219	216	435												
29	Napier Park	19	17	33	23	297	324	...	1	...	352	364	716												
30	Chintadripet	28	28	14	25	455	441	...	...	...	502	495	997												
31	Komaleeswaranpet	68	61	83	65	458	445	...	...	...	618	574	1,187												
32	Egmore	82	75	34	28	1,094	1,114	...	1	...	1,215	1,221	2,436												
33	Thousand Lights	114	96	58	38	626	585	...	3	...	805	727	1,532												
34	Nungambakkam	37	36	8	18	630	620	...	1	...	668	674	1,342												
35	Kodambakkam	61	47	41	52	1,334	1,216	...	...	...	1,426	1,315	2,741												
36	Theagaraya Nagar (North)	11	11	15	10	474	425	...	...	...	500	446	946												
37	Royapettah	45	38	24	29	418	410	...	...	...	490	479	969												
38	Pudupakkam	19	18	144	143	459	466	...	...	...	622	628	1,250												
39	Thiruvatteeswaranpet	21	12	244	242	482	436	...	...	...	748	690	1,438												
40	Chepauk	14	9	72	68	539	509	...	...	...	625	586	1,211												
41	Triplicane	4	5	5	5	529	519	...	...	...	548	529	1,077												
42	Zam Bazaar	4	3	108	75	433	431	...	...	...	545	509	1,054												
43	Mirshibpet	39	32	274	268	928	836	...	...	...	1,242	1,136	2,378												
44	Mylapore (North)	27	25	40	35	806	827	...	...	...	873	888	1,761												
45	Mylapore (South)	34	30	18	7	472	369	...	...	...	524	406	930												
46	Teynampet	19	24	10	4	860	800	...	...	...	889	828	1,717												
47	Theagaraya Nagar (South)	13	18	29	31	839	833	...	...	...	882	882	1,764												
48	Saidapet	8	7	13	5	709	656	...	...	...	730	668	1,398												
49	Guindy	38	24	15	12	286	244	...	...	...	340	281	621												
50	Adayar	45	49	23	15	868	836	...	1	...	939	902	1,841												
Total											14	14	86	92	1,751	1,588	2,863	2,639	31,023	30,069	11	5	35,754	34,401	70,155

Statement showing Area, Density of Population, the number of Deaths, and Infant Deaths with rates registered in each division during the year 1959.

Division No.	Name of Divisions.	Area in Square Miles.	Area in Acres.	Density per Acres.	Population according to the census of 1951.		Number of Deaths registered excluding Still Births.		Ratio of Deaths per 1,000 of population.			Number of Deaths of Males to every 100 Female deaths.	Number of Infant Deaths Registered.				
					Males.	Females.	Total.	Males.	Females.	Total.	Males.		Females.	Total.	Grand Total.		
1	New Washermanpet.	2.6158	1674.112	21.9	15,543	15,826	31,369	614	573	1,187	39.5	36.2	37.8	200	142	342	181.04
2	Royapuram	0.4444	284.416	82.1	10,117	10,734	20,851	180	199	379	17.7	18.5	18.1	46	54	100	106.9
3	Singara Garden	0.4430	283.520	177.8	24,594	18,602	43,196	573	618	1,191	23.2	33.2	27.5	234	210	444	101.2
4	Sanjeevirayanpet	0.5249	335.936	178.4	26,660	24,718	51,378	710	698	1,408	26.6	28.2	27.4	209	195	404	155.1
5	Korukupet	1.1113	711.232	60.1	16,456	20,150	36,606	825	878	1,703	50.1	43.0	46.5	243	250	493	189.7
6	Vyasarpany	1.9180	1227.520	23.5	12,641	12,147	24,788	344	360	704	27.2	29.6	28.4	92	110	202	148.8
7	Basin Bridge	0.3155	201.920	118.2	11,472	11,272	22,744	300	300	600	26.1	26.6	26.3	75	86	161	157.2
8	Peddunaickenpet	0.1393	89.152	405.7	16,011	15,001	31,012	273	233	506	17.0	15.5	16.3	69	49	118	99.3
9	Seven Wells	0.1491	95.424	329.9	14,994	11,990	26,984	493	330	823	32.0	27.5	30.4	70	62	132	108.6
10	Ammankoil	0.1051	67.264	409.1	12,636	10,954	23,590	207	196	403	16.3	17.8	17.0	44	49	93	93.3
11	Muthialpet	0.1437	91.968	332.3	12,894	13,297	26,191	194	185	379	15.0	13.9	14.4	45	46	91	98.6
12	Harbour	0.5346	342.144	54.3	8,950	7,021	15,971	207	156	363	23.1	22.2	22.7	72	44	116	163.8
13	Kachaleswararkoil.	0.5244	335.616	44.4	7,832	4,961	12,793	160	128	288	20.4	25.8	22.2	54	36	90	152.02
14	Kothawal Bazaar	0.1250	80.000	220.4	8,771	6,346	15,117	97	105	202	11.0	16.5	13.3	30	22	52	165.9
15	Sowcarpet	0.1039	66.496	268.3	8,782	6,489	15,271	105	99	204	11.9	15.2	13.3	32	16	48	102.5
16	Trevelyan Basin	0.1533	98.112	347.2	15,124	14,072	26,196	274	241	515	18.1	17.1	9.1	70	49	119	96.43
17	Choolai	0.3600	230.400	268.3	27,226	25,751	52,977	545	558	1,103	20.0	21.6	20.8	156	136	292	125.05
18	Pulianthope	0.8840	565.760	91.1	27,000	21,194	44,194	682	714	1,396	25.2	33.6	31.5	230	200	430	187.52
19	Perambur Barracks.	0.9050	579.200	59.5	14,843	14,662	29,505	404	354	758	27.7	24.1	25.6	83	74	157	127.53
20	Sembium	2.0127	1288.128	27.4	14,608	15,677	30,285	449	416	865	30.7	26.5	28.5	145	111	256	151.69
21	Ayanavaram	2.6100	1670.400	20.6	14,464	14,354	28,818	341	372	713	23.5	25.9	24.7	89	97	186	98.6
22	Kilbank	2.8542	1826.688	14.7	12,629	10,287	22,916	304	285	589	24.0	27.7	25.7	64	72	136	95.17

23	Purasawalkam	...	0.4553	278.592	198.8	16,738	14,008	30,746	374	352	726	22.3	25.1	53.9	106.2	104	83	187	148.4
24	Kosapet	...	0.2800	179.200	258.1	20,227	19,407	39,634	492	521	1,013	24.3	26.8	25.5	94.4	139	146	285	147.6
25	Vepery	...	0.4310	275.840	73.7	8,298	9,136	17,434	142	108	250	17.1	11.8	14.3	131.4	40	25	65	103.5
26	Periamet	...	0.5667	362.688	101.5	16,728	14,835	31,563	260	245	505	15.5	16.5	15.9	106.1	57	60	117	99.1
27	Edapalayam	...	0.1090	69.760	309.2	10,124	8,358	18,482	125	130	255	12.3	15.5	13.7	96.1	42	36	78	108.4
28	Park Town	...	0.3401	217.664	87.0	9,160	7,075	16,235	596	318	914	65.0	44.9	56.2	187.4	33	45	78	179.3
29	Napier Park	...	0.3001	192.064	118.8	10,682	8,876	19,558	146	128	274	13.6	14.4	14.0	114.0	41	33	74	103.3
30	Chintadripet	...	0.1384	88.576	348.9	13,688	12,809	26,497	230	221	451	16.7	17.2	17.0	104.0	64	50	114	114.3
31	Komaleeswarampet.	...	0.3181	203.584	160.1	14,814	13,126	27,940	256	234	490	17.2	17.8	17.5	109.4	67	52	119	100.2
32	Egmore	...	0.7729	494.656	39.2	8,385	8,319	16,704	182	248	430	21.7	29.8	25.7	73.3	97	107	204	83.7
33	Thousand Lights	...	1.3495	863.680	42.3	15,997	15,345	31,342	307	296	603	19.1	19.2	19.2	103.7	104	62	166	108.3
34	Nungambakkam	...	1.3821	884.544	36.2	14,739	12,668	27,407	321	279	600	21.7	22.0	21.8	115.0	92	65	157	116.9
35	Kodambakkam	...	4.2000	2688.000	16.1	19,226	17,908	37,134	519	548	1,067	26.9	30.6	28.7	94.7	184	166	350	127.6
36	T. Nagar (North)	...	1.0360	663.040	37.6	10,886	10,487	21,373	304	320	624	27.9	30.5	29.1	95.0	72	73	145	153.2
37	Royapettah	...	0.5400	345.600	78.7	11,901	11,443	20,344	206	218	424	17.3	19.0	20.8	94.4	74	53	127	131.06
38	Pudupakkam	...	0.2238	143.232	233.6	14,448	14,224	28,672	297	262	559	20.5	18.4	19.4	113.3	80	67	147	117.6
39	Thiruvateeswaran- pet	...	1.0499	671.936	52.7	15,878	14,485	30,363	295	319	614	18.5	22.0	20.2	92.4	94	89	183	127.2
40	Chepauk	...	0.2997	191.808	147.6	12,818	11,449	24,267	162	194	356	12.6	16.9	14.5	83.5	51	54	105	86.7
41	Triplicane	...	0.1760	112.640	277.3	14,537	12,240	26,777	243	231	474	16.7	18.8	17.7	105.1	68	60	128	118.8
42	Zam Bazaar	...	0.1391	89.024	328.2	13,295	11,749	25,044	234	241	475	17.6	20.5	18.9	97.0	66	53	119	112.9
43	Mirshahibpet	...	0.7000	448.000	115.0	23,307	20,873	44,180	675	716	1,391	28.9	34.3	31.4	94.2	192	193	385	161.9
44	Mylapore (North)	...	0.7485	479.040	94.5	17,383	21,351	38,734	439	433	872	25.2	20.2	22.5	101.3	111	126	237	134.5
45	Mylapore (South)	...	0.4299	275.136	109.2	13,137	12,608	25,745	223	192	415	16.8	15.2	16.1	116.1	61	47	108	116.6
46	Teynampet	...	1.3310	851.840	45.8	17,741	15,736	33,477	395	431	826	22.2	27.3	24.6	91.6	114	110	224	130.4
47	T. Nagar (South)	...	1.2320	788.480	52.5	18,630	16,762	35,392	419	400	819	22.4	23.8	23.1	104.7	119	99	218	123.5
48	Saidapet	...	2.2020	1409.280	28.6	18,093	16,373	34,466	399	329	728	22.0	20.0	21.1	121.2	94	79	173	123.7
49	Guindy	...	5.3240	3407.360	6.0	9,604	7,812	17,416	167	173	340	17.3	22.1	19.5	96.5	59	44	103	165.8
50	Adayar	...	4.6080	2949.120	11.2	14,550	13,548	28,098	391	350	741	26.8	25.8	26.3	111.7	110	94	204	110.8
	Fort St. George	...	...	...	...	1,752	528	2,280	...	...	...	...	...	...	...	...	...	...	...
	Total	...	49.8453	31900.992	53.04	7,37,013	6,79,043	14,16,056	17,080	16,435	33,515	23.1	24.2	23.6	103.9	4,781	4,281	9,062	129.17

STATISTICS SUPPLEMENT No. 6.

Deaths registered in each Division during each month in 1959.

Division No	Name of Divisions.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Deaths registered (excluding still Births).
1	New Washermenpet	112	111	104	77	89	86	108	90	73	68	107	162	1,187
2	Royapuram	49	39	32	22	27	27	39	33	15	13	31	52	379
3	Singara Garden	106	79	116	66	83	80	107	106	100	78	127	143	1,191
4	Sanjeevirayanpet	134	108	105	91	104	97	118	127	101	98	144	181	1,408
5	Korukupet	130	140	129	127	97	104	124	164	140	116	176	256	1,703
6	Vyasarpady	56	59	40	45	55	51	71	66	55	44	58	104	704
7	Basin Bridge	66	42	55	43	40	38	45	60	56	40	45	70	600
8	Peddunaickenpet	36	43	33	30	28	28	65	53	43	37	51	59	506
9	Seven Wells	46	63	78	74	75	53	68	63	70	60	62	111	823
10	Ammankoil	29	43	28	40	23	25	41	36	29	29	39	41	403
11	Muthialpet	44	31	32	18	26	28	27	21	36	30	29	57	379
12	Harbour	30	30	25	18	15	25	27	29	47	37	35	45	363
13	Kachaleeswarar Koil	28	22	20	28	13	31	20	23	21	22	25	35	288
14	Kothawal Bazaar	17	19	19	11	16	13	21	14	12	15	19	26	202
15	Sowcarpet	14	23	15	13	18	16	15	16	15	12	22	25	204
16	Trevelyan Basin	42	44	47	30	38	41	47	46	48	41	35	56	515
17	Choolai	98	82	85	57	80	71	90	108	110	86	93	143	1,103
18	Pulianthope	139	106	122	84	83	85	126	119	107	101	130	194	1,396
19	Perambur Barracks	64	68	61	56	55	40	73	63	63	51	67	97	758
20	Sembium	57	73	73	59	68	56	72	83	84	54	76	110	865
21	Ayanavaram	33	59	49	49	58	51	72	76	63	47	55	101	713
22	Kilpauk	47	36	43	42	36	47	49	49	57	38	57	88	589



Deaths registered among Principal Communities in each Division during the year 1959.

Division No.	Name of Divisions.	Aliens.		Anglo-Indians.		Indian Christians.		Hindus.		Muslims.		Others.		All Communities		Total Deaths registered (excluding still Births).
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
1	New Washermenpet	..	..	1	1	60	55	519	477	34	40	..	..	614	573	1,187
2	Royapuram	..	..	2	5	32	24	119	150	27	20	..	..	180	199	379
3	Singara Garden	..	..	1	..	17	22	491	539	64	57	..	..	573	618	1,191
4	Sanjeevirayanpet	..	..	..	2	26	21	643	640	41	35	..	..	710	698	1,408
5	Korukupet	..	..	..	..	8	12	649	674	168	192	..	..	825	878	1,703
6	Vyasarpany	..	..	..	..	9	3	329	354	2	1	4	2	344	360	704
7	Basin Bridge	..	..	..	3	19	11	231	247	46	39	..	..	300	300	600
8	Peddunaickenpet	..	..	..	..	..	..	272	231	1	2	..	..	273	233	506
9	Seven Wells	..	..	..	5	15	10	436	289	38	26	..	..	493	330	823
10	Amman Koil	..	..	..	2	16	15	159	154	28	25	..	..	207	196	403
11	Muthialpet	..	..	..	..	4	5	180	166	10	14	..	..	194	185	379
12	Harbour	..	..	..	..	3	1	116	98	86	57	..	..	207	156	363
13	Kachaleswarar Koil	..	..	..	..	8	6	143	110	6	11	..	1	160	128	288
14	Kothawal Bazaar	..	..	..	..	..	2	67	72	30	31	..	..	97	105	202
15	Sowcarpet	..	..	..	..	1	..	104	99	..	..	..	..	105	99	204
16	Trevelyan Basin	..	..	..	..	..	1	272	240	2	..	..	..	274	241	515
17	Choolai	..	..	..	1	24	17	509	536	11	4	..	..	545	558	1,103
18	Puliantthope	..	..	..	..	28	28	483	528	171	158	..	..	682	714	1,396
19	Perambur Barracks	..	..	..	1	35	17	273	255	95	82	..	..	404	354	758
20	Sembium	..	..	..	6	22	20	390	366	30	26	1	..	449	416	865
21	Ayanavaram	..	..	..	1	16	12	304	343	19	16	..	..	341	372	713
22	Kilpauk	..	..	..	1	26	17	263	254	12	13	2	..	304	285	589



STATISTICS SUPPLEMENT No. 8.

Deaths registered according to age and sex in each Division during the year 1959

Division No.	Under one year.		One year and under five years.		Five years and under ten years.		Ten years and under fifteen years.		Fifteen years and under twenty years.		Twenty years and under thirty years.		Thirty years and under forty years.		Forty years and under fifty years.		Fifty years and under sixty years.		Sixty years and above.		Total of all ages			
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Total of Males & Females	
1	200	142	190	195	19	27	9	8	8	3	9	28	39	26	45	28	25	27	24	79	59	614	573	1,187
2	46	53	48	56	7	6	3	3	3	3	5	5	13	6	6	11	10	14	11	39	38	180	199	379
3	230	207	135	155	21	25	3	14	14	12	14	14	43	12	34	26	28	34	27	84	82	573	618	1,191
4	202	224	223	209	20	14	5	9	9	15	27	29	29	24	33	35	27	49	33	116	109	710	698	1,408
5	266	268	254	284	22	24	9	4	3	13	26	56	56	36	36	48	22	50	40	111	131	825	878	1,703
6	89	103	77	108	16	8	2	6	3	5	18	15	15	9	9	18	16	29	16	83	74	344	360	704
7	77	90	77	89	12	6	3	3	2	4	10	20	20	16	13	15	12	33	14	55	49	300	300	600
8	63	47	58	66	7	6	2	3	2	2	8	11	11	16	29	29	16	29	17	64	49	273	233	506
9	82	60	57	63	20	12	15	5	13	9	44	35	44	54	77	77	28	49	24	82	67	493	330	823
10	34	45	57	51	4	9	2	2	4	3	9	8	8	9	12	11	10	25	14	52	42	207	196	403
11	50	47	42	49	5	5	5	3	3	3	6	10	10	8	7	10	6	18	8	47	47	194	185	379
12	73	41	47	45	3	5	...	2	1	3	19	10	10	12	8	11	9	10	7	31	26	207	156	363
13	56	36	35	37	3	2	3	2	7	1	4	8	8	8	8	13	7	11	2	20	25	160	128	288
14	28	21	14	17	4	3	3	2	3	1	6	8	8	4	6	5	9	12	5	18	33	97	105	202
15	18	7	15	17	...	5	3	2	2	2	4	8	8	6	3	12	3	3	8	37	45	105	99	204
16	54	38	56	80	11	5	3	7	8	10	16	14	14	11	8	13	7	32	23	70	49	274	241	515
17	139	131	171	165	10	27	10	3	10	15	23	30	30	19	24	38	23	27	26	98	114	545	558	1,103
18	252	215	182	226	32	27	8	6	6	13	21	40	40	26	21	29	19	50	35	76	112	682	714	1,396
19	93	67	97	115	16	8	4	3	3	7	21	22	21	17	13	34	16	33	22	86	81	404	354	758
20	150	111	99	105	13	12	4	7	4	8	19	21	21	16	9	20	18	40	24	84	101	449	416	865
21	94	100	68	91	16	20	2	5	4	6	14	30	30	16	21	25	15	35	21	67	63	341	372	713
22	46	69	59	62	7	7	4	5	3	2	31	26	26	25	15	39	10	36	15	54	74	304	285	589

23	Purasawalkam	...	98	88	93	106	11	9	6	2	4	4	21	1	25	8	28	23	37	16	51	79	374	352	726
24	Kosapet	...	182	168	135	142	13	23	9	4	4	7	19	27	15	30	20	24	30	24	65	72	492	521	1,013
25	Vepery	...	35	27	19	15	9	5	3	1	3	3	4	8	5	1	5	10	10	8	49	30	142	108	250
26	Periamet	...	72	57	48	56	5	11	2	1	5	7	14	13	22	13	7	12	24	11	61	64	260	245	505
27	Edapalayam	...	31	25	18	27	2	2	5	1	3	6	6	8	6	12	5	9	11	7	38	33	125	130	255
28	Park Town	...	48	51	71	42	28	16	20	14	21	18	91	46	99	44	69	21	80	28	69	38	596	318	914
29	Napier Park	...	50	26	23	33	1	3	1	2	2	2	12	4	6	5	3	7	10	7	38	39	146	128	274
30	Chintadripet	...	51	47	55	54	7	9	1	1	3	6	13	21	11	9	12	12	24	11	52	51	230	221	451
31	Komaleeswaranpet.	...	81	65	57	67	11	7	1	3	2	3	9	9	9	12	15	8	16	15	55	45	256	234	490
32	Egmore	...	76	93	30	25	1	7	2	3	0	6	11	36	5	27	6	16	10	12	41	23	182	248	430
33	Thousand Lights	...	100	65	73	76	11	16	...	4	4	5	10	20	17	11	17	16	21	23	54	60	307	296	603
34	Nungambakkam	...	100	56	79	87	15	10	3	1	4	5	8	11	9	7	14	15	15	16	74	71	321	279	600
35	Kodambakkam	...	156	159	122	142	21	27	6	12	10	7	26	29	26	30	20	24	39	26	93	92	519	548	1,067
36	Theagaraya Nagar (North)	...	110	120	69	70	17	17	5	6	1	6	7	13	12	6	9	9	19	14	55	59	304	320	624
37	Royapettah	...	69	47	38	52	6	6	4	6	...	3	11	16	9	8	13	7	24	20	32	53	206	218	424
38	Pudupakkam	...	70	57	64	65	9	7	3	3	3	2	21	20	15	18	37	10	22	22	53	58	297	262	559
39	Thiruvateeswaranpet	...	103	96	48	60	2	9	4	4	4	4	17	19	17	22	22	22	22	23	56	60	295	319	614
40	Chepauk	...	42	51	26	29	5	2	1	1	5	9	5	18	9	8	10	18	30	13	29	45	162	194	356
41	Triplicane	...	67	51	57	64	7	10	4	5	1	3	10	15	12	8	15	12	15	10	55	53	243	231	474
42	Zam Bazaar	...	50	37	61	75	6	10	5	2	5	1	9	10	19	13	16	15	17	14	46	64	234	241	475
43	Mirshibpet	...	206	228	173	203	16	26	2	7	9	8	20	40	47	37	48	31	42	33	112	103	675	716	1,391
44	Mylapore (North)	...	114	127	117	136	10	15	6	3	9	4	23	17	26	22	31	16	23	18	80	75	439	433	872
45	Mylapore (South)	...	52	43	53	52	10	5	...	2	3	2	10	9	8	4	13	6	19	11	55	58	223	192	415
46	Teynampet	...	123	119	101	144	7	15	6	3	5	10	16	19	22	12	23	14	26	7	66	88	395	431	826
47	Theagaraya Nagar (South)	...	111	91	119	113	21	14	3	5	5	8	9	22	21	16	24	26	32	19	74	86	419	400	819
48	Saidapet	...	105	93	95	80	23	10	4	4	4	5	21	22	17	15	15	16	32	22	83	62	399	329	728
49	Guindy	...	48	32	40	44	8	5	3	2	3	3	5	8	7	18	8	16	14	8	31	37	167	173	340
50	Adayar	...	89	40	125	105	11	19	8	3	3	4	10	17	17	63	20	21	35	28	73	50	391	350	741
Total		...	4781	4281	4070	4449	561	578	217	196	240	296	811	1010	884	853	1072	772	1351	882	3093	3118	17,080	16,435	33,515

Deaths from Principal Causes registered in the Divisions during the year 1959

Division No.	Name of Divisions	Plague	Cholera	Small-pox	Measles	Enteric Fever	Kala-azar	Malaria	Influenza	Other Fevers	Dysentery	Diarrhoea	Tuberculosis including T.B. of Lungs	General Respiratory Diseases	Injuries	Maternal Deaths	All other Causes	Total Deaths Registered (excluding Still Births).
1	New Washermenpet	..	19	93	..	..	..	..	..	120	122	168	7	328	..	2	328	1,187
2	Royapuram	..	2	2	..	..	..	..	..	42	42	29	4	120	..	2	136	379
3	Singara Garden	..	4	24	..	..	..	..	..	142	78	125	17	345	..	18	434	1,191
4	Sanjeevirayanpet	..	9	22	..	..	..	..	..	8	139	20	13	334	3	3	854	1,408
5	Korukupet	..	6	7	..	2	..	..	..	3	198	14	18	405	3	8	1,039	1,703
6	Vyasarpady	..	1	7	..	..	..	..	..	6	76	69	6	118	2	2	417	704
7	Basin Bridge	..	1	13	..	2	..	..	..	3	59	6	11	146	1	1	357	600
8	Peddunaickenpet	..	1	2	..	4	..	..	..	2	35	8	3	94	..	10	347	506
9	Seven Wells	..	..	3	..	6	..	..	..	1	36	9	43	117	..	2	606	823
10	Amman Koil	..	..	2	..	..	..	..	..	..	34	5	10	74	..	2	276	403
11	Muthialpet	..	..	2	..	1	..	..	..	1	26	34	7	68	2	2	236	379
12	Harbour	..	..	16	..	2	..	..	..	3	19	32	4	67	1	..	219	363
13	Kachaleswarar Koil	..	4	1	..	..	..	..	..	..	17	22	6	71	3	..	164	288
14	Kothawal Bazaar	..	..	2	..	..	..	..	..	4	9	16	8	46	..	2	115	302
15	Sowcarpet	..	..	3	..	..	..	..	..	3	..	15	8	41	..	..	134	204
16	Trevelyan Basin	..	1	10	..	1	..	..	1	6	31	20	9	94	1	9	332	515
17	Choolai	..	2	50	..	6	..	..	..	207	64	105	20	198	1	1	449	1,103
18	Pulianthope	..	..	49	..	3	..	..	..	35	136	66	18	346	1	1	741	1,396
19	Perambur Barracks	..	..	10	..	2	..	..	..	17	59	44	14	158	..	3	451	758
20	Sembiam	..	..	26	..	1	..	..	..	24	41	98	3	124	..	2	546	865
21	Ayanavaram	..	1	14	..	2	..	..	..	7	40	86	25	132	1	2	403	713
22	Kilpauk	..	..	5	..	2	..	..	..	12	41	11	61	81	1	3	372	589



STATISTICS SUPPLEMENT NO. 10

Births, Deaths and Infant Deaths with rates by months in 1959 and 1958

	1959						1958					
	Births regis- tered excluding still births.	Births Rate.	Deaths regis- tered excluding still births.	Deaths rate.	Infant Deaths.	Infant Deaths Rate.	Births Regis- tered excluding still Births.	Births Rate.	Deaths Regis- tered excluding still Births.	Deaths Rate.	Infant Deaths	Infant Deaths Rate.
January	3,838	21.82	2,709	15.40	641	167.01	4,618	30.57	2,866	18.80	720	155.91
February	4,961	30.56	2,722	15.48	671	135.25	4,399	29.12	2,625	17.37	699	158.89
March	4,739	26.95	2,752	15.65	745	157.20	4,329	28.65	2,692	17.82	711	164.24
April	5,490	31.22	2,223	12.64	544	99.08	5,064	33.52	2,645	17.50	758	149.68
May	4,915	27.95	2,530	14.38	677	137.74	6,068	40.16	2,910	19.26	898	147.98
June	6,021	34.24	2,360	13.42	697	115.76	6,109	40.44	2,898	19.18	922	150.92
July	6,740	38.33	2,906	16.52	873	129.52	5,971	39.52	2,834	18.75	831	139.17
August	5,597	31.83	3,081	17.52	923	164.90	6,417	42.48	2,911	19.27	873	136.04
September	6,257	35.58	2,758	15.68	691	110.43	7,186	47.57	3,616	23.93	1,015	141.24
October	5,256	34.62	2,224	12.64	559	106.35	6,708	44.40	3,546	23.57	986	146.98
November	5,917	33.65	2,965	16.86	848	143.34	6,568	43.48	2,979	19.72	829	126.21
December	10,424	59.28	4,285	24.36	1,193	114.44	8,451	55.94	4,366	28.24	1,159	137.19
Total	70,155	33.24	33,515	15.88	9,062	129.17	71,888	39.65	36,888	20.34	10,401	144.68

Births, Deaths and Infant Deaths with rates registered among principal Communities during 1959 compared with 1958

Community	1959							1958			
	Population according to the Census of 1951	Total number of births registered excluding still-births	Births rate	Total number of deaths registered excluding still-births	Deaths rate	Infant deaths registered	Infant deaths rate.	Total number of deaths registered excluding still-births	Deaths rate	Infant deaths registered	Infant deaths rate.
Aliens ...	1,534	28	18.2	7	4.56	...	...	23	14.99	7	4.56
Anglo-Indians ...	13,247	178	13.43	106	8.00	18	101.12	187	14.11	137	10.34
Indian Christians ...	95,387	3,339	35.00	1,500	15.72	313	93.74	3,498	36.67	1,740	18.24
Muslims ...	1,40,319	5,502	39.21	3,313	23.61	981	178.29	5,846	41.66	3,844	27.39
Hindus ...	11,55,722	61,092	52.86	28,573	24.72	7,747	126.80	62,322	53.92	31,142	26.94
Others ...	9,847	16	1.62	16	1.62	3	187.50	12	1.21	18	1.82
Total ...	14,16,056	70,155	49.54	33,515	23.66	9,062	129.17	71,888	39.65	36,888	20.34

Report on the Births, Deaths and Infant Deaths registered among principal Communities during 1959

STATISTICS SUPPLEMENT No. 11

Infant Deaths among principal Communities during 1959

Community	Under seven days		Seven days and under one month		One month and under six months		Six months and under one year		Total		Total of Males and Females
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	
Aliens	...	...	...	...	...	...	...	...	...	...	...
Anglo-Indians	1	...	3	1	1	4	4	4	9	9	18
Indian Christians	38	29	14	9	31	57	66	49	169	144	313
Muslims	86	61	49	35	223	184	176	167	534	447	981
Hindus	1,110	811	502	417	1,167	1,123	1,289	1,328	4,068	3,679	7,747
Others	1	1	...	...	...	1	...	...	1	2	3
Total	1,236	902	568	462	1,442	1,369	1,535	1,548	4,781	4,281	9,062

Infant Deaths from principal causes by age periods in 1959

Age periods	Cholera		Small-pox		Measles		Diphtheria		Enteric fever		Malaria		Other fever		Dysentery		Diarhoea		Infantile debility and Malnutritions, inclg. premature births, etc.		Diseases of the Respiratory system		Convulsions		Other causes		Total Infant deaths	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Under one week ...	...	...	2	0.09	...	...	3	0.14	...	...	...	...	...	...	...	...	5	0.23	1,614	75.49	218	11.96	39	1.82	257	12.02	2,138	23.58
One week and under one month ...	...	...	12	1.16	...	...	1	0.09	...	6	0.58	...	7	0.67	27	2.62	683	66.31	126	12.23	65	6.31	103	10.00	1,030	11.39		
One month and under six months ...	...	...	47	1.67	...	...	7	0.24	2	0.07	63	2.24	181	6.43	283	10.06	117	4.16	1,313	46.70	148	5.26	650	23.08	2,811	31.01		
Six months and under one year ...	...	...	51	1.65	1	0.03	6	0.19	1	0.03	84	2.72	357	11.22	384	12.43	10	0.32	1,426	46.25	88	2.85	674	21.86	3,083	34.02		
Total ...	...	...	112	1.23	1	0.01	17	0.18	3	0.03	153	1.68	545	6.01	699	7.71	2,424	26.74	3,083	34.02	340	3.75	1,684	18.58	9,062	100.00		

Infant Deaths from Principal Causes by months in 1959

Months.	Cholera.	Small-pox	Measles	Diphtheria	Enteric Fever	Malaria	Other Fevers	Dysentery	Diarrhoea	Infantile debility & Malformations including premature births	Diseases of the Respiratory system	Convulsions	Other Causes	Total Infant deaths in 1959	Total Infant deaths in 1958
January	...	10	...	2	...	...	10	37	49	160	256	34	83	641	720
February	...	8	...	...	...	...	9	31	44	184	247	26	122	671	699
March	...	12	1	3	...	1	15	34	53	210	250	32	134	745	711
April	...	11	...	...	...	...	16	33	40	123	198	14	109	544	758
May	...	10	...	2	...	...	14	32	59	192	275	20	73	677	898
June	...	4	...	1	...	...	3	28	55	197	264	34	111	697	922
July	...	5	...	...	...	...	13	55	80	221	283	19	197	873	831
August	...	11	...	...	...	...	8	94	105	190	291	20	204	923	873
September	...	12	...	2	2	...	12	41	37	210	195	31	149	691	1,015
October	...	10	...	2	...	...	13	20	26	185	180	20	103	559	986
November	...	10	...	1	...	...	28	57	63	212	289	42	146	848	829
December	...	9	...	4	1	...	12	83	88	340	355	48	253	1,193	1,159
Total	...	112	1	17	3	1	153	545	699	2,424	3,083	340	1,684	9,062	10,401

Statement of Live Births by age of mother and order of Live Births registered in order of confinement at Live Births during 1959

Age of mother at birth	Order of confinement at Live Births															Total	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 and above		Not stated
Under 15 years	158	8	...	...	...	...	...	...	...	...	...	...	...	...	...	4	170
15 years and under 20 years	7,395	2,491	576	80	19	11	2	1	...	...	...	...	...	...	...	29	10,604
20 years 25 under	5,436	7,076	5,113	2,819	1,272	431	164	30	10	4	1	...	...	...	...	56	22,412
25 " 30 "	1,404	2,715	4,219	4,625	3,986	2,422	1,163	431	139	42	9	2	2	...	...	54	21,213
30 " 35 "	230	577	1,072	1,661	1,851	2,027	1,448	922	496	154	63	19	4	1	...	22	10,547
35 " 40 "	43	131	195	356	566	595	748	679	504	269	154	42	16	6	1	11	4,316
40 " 45 "	7	17	23	25	55	63	124	103	125	79	47	18	8	5	1	3	703
45 years	...	1	1	2	2	4	9	4	5	5	14	4	5	...	...	...	56
46 "	...	...	3	...	...	...	...	...	1	...	1	2	...	...	...	...	7
47 "	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
48 "	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	2
49 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50 years and above	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Not stated	25	22	22	8	9	12	4	4	...	...	...	...	...	...	...	18	124
Total	14,698	13,038	11,224	9,576	7,760	5,565	3,662	2,176	1,280	554	289	87	35	12	2	197	70,155

STATISTICS SUPPLEMENT No. 16.

Deaths registered from principal causes with rates in 1959 compared with the previous five years.

Year	Plague		Cholera		Small-pox		Measles		Enteric Fevers		Malaria		Other Fever		Dysentery		Diarrhoea		Tubercle including Tubercle of lungs		General Respiratory diseases		Injuries		Maternal deaths		All other causes		Total deaths	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1954	7	0.004	305	0.20	5	0.003	234	0.15	105	0.07	3,115	2.00	2,642	17.0	1,892	1.19	403	0.25	8,198	5.14	488	0.31	150	0.10	15,637	9.80	33,181	20.78		
1955	...	...	37	0.02	...	...	182	0.11	75	0.05	3,191	1.93	2,788	1.69	2,392	1.45	442	0.27	8,142	4.93	497	0.30	161	0.10	16,357	9.91	34,264	20.76		
1956	...	...	68	0.04	...	...	143	0.08	33	0.02	3,022	1.77	2,533	1.49	2,883	1.69	386	0.23	7,691	4.51	495	0.29	153	0.09	16,510	9.69	33,927	19.90		
1957	...	...	428	0.24	2	0.001	187	0.10	18	0.01	2,520	1.43	2,640	1.50	2,545	1.45	615	0.35	8,604	4.89	523	0.30	150	0.09	18,137	10.31	36,783	20.92		
1958	...	...	1,389	0.76	3	0.001	165	0.09	14	0.007	3,728	2.5	2,868	1.58	2,210	1.21	629	0.34	8,174	4.50	129	0.07	145	0.07	17,371	9.57	36,888	23.34		
Mean of the previous five years	96	0.04	445	0.21	2	0.001	182	0.08	49	0.02	3,115	1.47	2,694	1.27	2,384	1.12	497	0.23	8,161	3.82	426	0.20	151	0.07	16,796	7.96	35,008	16.59		
1959	64	0.03	517	0.24	1	0.001	108	0.05	8	0.003	1,015	0.48	2,983	1.41	1,902	0.90	672	0.31	8,415	3.98	79	0.03	140	0.06	17,690	8.38	33,515	15.88		

Vaccinations performed during each month in 1959.

Months.	Primary Vaccinations.						Re-vaccinations.					
	Number of persons vaccinated			Results			Number of persons Re-vaccinated			Results		
	Males	Females	Total	Successful	Failure	Absent	Males	Females	Total	Successful	Failure	Absent
January	2,620	2,536	5,156	5,156	...	...	11,905	13,971	25,876	748	20,050	5,078
February	2,993	3,071	6,064	6,064	...	...	20,393	20,654	41,047	1,603	30,755	8,689
March	2,422	2,316	4,738	4,738	...	...	12,857	13,842	26,699	980	20,031	5,688
April	2,200	2,197	4,397	4,390	3	4	10,117	10,164	20,281	698	14,773	4,810
May	1,938	1,833	3,771	3,771	...	...	7,769	7,354	15,123	551	10,691	3,881
June	1,997	1,859	3,856	3,856	...	...	5,799	5,172	10,971	289	7,934	2,748
July	2,121	2,085	4,206	4,206	...	...	6,773	6,445	13,218	464	9,569	3,185
August	1,983	1,869	3,852	3,852	...	...	9,155	7,533	16,688	664	12,156	3,868
September	2,230	1,987	4,217	4,217	...	...	7,740	7,636	15,376	679	10,816	3,881
October	1,867	1,756	3,623	3,623	...	...	8,305	8,880	17,185	574	11,914	4,697
November	2,050	1,966	4,016	4,011	5	...	10,616	9,871	20,487	818	14,307	5,362
December	2,068	1,946	4,014	4,014	...	...	7,243	6,175	13,418	498	10,020	2,900
Total	26,489	25,421	51,910	51,898	8	4	118,672	117,697	236,369	8,566	173,016	54,787

Division No.	Name of Divisions.	Population according to the census of 1951.	Total number of persons vaccinated.			Primary Vaccination							
			Males.	Females.	Total.	Total			Successful.				
						Males.	Females.	Total.	Under one year.	One year and under five years.	Five years and under ten years.	Ten years and above.	Total.
1	New Washermanpet ...	31,369	4,738	3,955	8,693	586	572	1,158	806	318	33	1	1,158
2	Royapuram ...	20,851	1,878	1,886	3,764	326	304	630	414	203	13	...	630
3	Singara Garden ...	43,196	3,548	4,903	8,451	794	789	1,583	1,190	392	1	...	1,583
4	Sanjeevirayanpet ...	51,378	4,499	4,852	9,351	965	950	1,915	1,619	277	19	...	1,915
5	Korukupet ...	36,606	5,363	4,366	9,729	798	731	1,529	1,206	297	26	...	1,529
6	Vyasarpady ...	24,788	1,606	1,980	3,586	557	474	1,031	701	319	11	...	1,031
7	Basin Bridge ...	22,744	2,188	2,796	4,984	402	514	916	820	93	3	...	916
8	Peddunaickenpet ...	31,012	2,124	2,654	4,778	437	570	1,007	924	80	3	...	1,007
9	Seven Wells ...	26,984	1,570	2,070	3,640	416	521	937	841	89	7	...	937
10	Amman Koil ...	23,190	1,522	1,705	3,227	338	426	764	706	54	4	...	764
11	Muthialpet ...	26,191	2,204	2,579	4,783	409	410	819	514	285	19	1	819
12	Harbour ...	15,971	2,730	2,419	5,149	384	314	698	421	275	2	...	698
13	Kachaleeswarar Koil ...	12,793	1,993	1,483	3,476	287	235	522	351	168	3	...	522
14	Kothawal Bazaar ...	15,117	1,954	1,607	3,561	2617	230	491	414	67	10	...	491
15	Sowcarpet ...	15,271	1,347	1,400	2,747	253	259	512	425	77	10	...	512
16	Trevelyan Basin ...	29,196	2,381	2,145	4,526	480	420	900	814	84	2	...	900
17	Choolai ...	52,977	7,683	8,725	16,408	1223	1,164	2,387	1,883	473	31	...	2,387
18	Pulianthope ...	44,194	6,061	6,703	12,764	1,090	1,042	2,132	1,730	380	21	1	2,132
19	Perambur Barracks ...	29,505	2,725	2,163	4,888	483	517	1,000	809	182	8	1	1,000
20	Sembium ...	30,285	1,674	1,774	3,448	561	510	1,071	870	199	2	...	1,071
21	Ayanavaram ...	28,818	3,098	3,408	6,506	649	657	1,306	1,040	241	24	1	1,306
22	Kilpauk ...	22,916	3,337	2,474	5,811	484	420	904	743	153	8	...	904
23	Purasawalkam ...	30,746	2,339	1,882	4,221	587	416	1,003	693	258	52	...	1,003
24	Kosapet ...	39,634	4,705	5,587	10,292	885	803	1,688	1,333	332	22	1	1,688
25	Vepery ...	17,434	1,655	1,275	2,930	257	238	495	419	73	3	...	495
26	Periamet ...	31,563	3,961	4,126	8,087	493	583	1,076	882	183	11	...	1,076
27	Edapalayam ...	18,482	1,098	1,110	2,208	291	309	600	499	95	5	1	600
28	Park Town ...	16,235	1,170	1,351	2,521	193	200	393	304	81	8	...	393
29	Napier Park ...	19,558	2,032	2,448	4,480	314	346	660	556	103	1	...	660
30	Chintadripet ...	26,497	2,218	1,976	4,194	499	406	905	686	209	10	...	905
31	Komaleeswaranpet ...	27,940	2,078	2,443	4,521	423	428	851	662	178	4	...	851
32	Egmore ...	16,704	1,724	1,963	3,687	256	172	428	341	87	...	...	428
33	Thousand Lights ...	31,342	3,107	2,579	5,686	556	565	1,121	890	212	19	...	1,121
34	Nungambakkam ...	27,407	1,999	2,328	4,327	481	455	936	628	293	15	...	936
35	Kodambakkam ...	37,134	3,836	3,580	7,416	949	869	1,818	1,281	481	55	1	1,818
36	Theagaraya Nagar (North).	21,373	2,792	1,962	4,754	415	328	743	541	188	14	...	743
37	Royapettah ...	23,344	1,373	1,799	3,172	383	342	725	608	112	5	...	725
38	Pudupakkam ...	28,672	1,312	1,242	2,554	416	396	812	673	133	6	...	812
39	Tiruvatteeswaranpet ...	30,363	1,707	1,439	3,146	507	427	934	743	187	4	...	934
40	Chepauk ...	24,267	1,511	1,573	3,084	380	327	707	529	170	8	...	707
41	Triplicane ...	26,777	3,692	4,239	7,931	402	400	802	570	227	5	...	802
42	Zam Bazaar ...	25,044	1,504	1,608	3,112	409	460	869	788	81	...	...	869
43	Mirsaibpet ...	44,180	6,452	8,034	14,486	813	829	1,642	1,244	378	20	...	1,642
44	Mylapore (North) ...	38,734	3,562	2,473	6,035	608	686	1,294	1,080	201	10	3	1,294
45	Mylapore (South) ...	25,745	1,630	1,848	3,478	380	320	700	560	133	7	...	700
46	Teynampet ...	33,477	4,451	1,436	5,887	706	723	1,429	1,227	195	7	...	1,429
47	Theagaraya Nagar (South).	35,392	5,920	5,053	10,973	939	799	1,738	1,286	439	7	1	1,738
48	Saidapet ...	34,466	5,107	5,098	10,205	683	633	1,316	1,005	280	28	3	1,316
49	Guindy ...	17,416	2,696	1,424	4,120	314	280	594	479	113	2	...	594
50	Adayar ...	28,098	3,307	3,195	6,502	767	652	1,419	989	419	11	...	1,419
	Total ...	14,16,056	1,45,161	1,43,118	2,88,279	26,489	25,421	51,910	40,737	10,547	599	15	51,899

performed in each division during the year 1959

Re-vaccination.						Percentage of successful cases in which the results were known.	
Total.			Result.			Primary.	Re-vaccination.
Males.	Females.	Total.	Successful.	Failure.	Absent.		
4,152	3,383	7,535	312	4,958	2,265	100.0	4.1
1,552	1,582	3,134	166	2,276	692	100.0	5.2
2,754	4,114	6,868	598	4,866	1,404	100.0	8.7
3,534	3,902	7,436	167	5,149	2,120	100.0	2.2
4,565	3,635	8,200	108	5,941	2,151	100.0	1.3
1,049	1,506	2,555	3	2,109	443	100.0	0.1
1,786	2,282	4,068	26	2,908	1,134	100.0	0.6
1,687	2,084	3,771	40	2,696	1,035	100.0	1.0
1,154	1,549	2,703	21	1,970	712	100.0	0.7
1,184	1,279	2,463	8	1,774	681	100.0	0.3
1,795	2,169	3,964	386	2,042	1,536	100.0	9.7
2,346	2,105	4,451	424	2,308	1,719	100.0	9.5
1,706	1,248	2,954	272	1,603	1,079	100.0	9.2
1,693	1,377	3,070	43	2,111	916	100.0	1.4
1,094	1,141	2,235	46	1,552	637	100.0	2.0
1,901	1,725	3,626	83	2,369	1,174	100.0	2.2
6,460	7,561	14,021	287	9,654	4,080	100.0	2.0
4,971	5,661	10,632	351	7,465	2,816	100.0	3.3
2,242	1,646	3,888	27	2,904	957	100.0	0.6
1,113	1,264	2,377	68	1,721	588	100.0	2.8
2,449	2,751	5,200	227	3,760	1,213	100.0	4.3
2,853	2,054	4,907	272	3,873	762	100.0	5.5
1,752	1,466	3,218	64	2,561	593	100.0	1.9
3,820	4,784	8,604	116	7,368	1,120	100.0	1.3
1,398	1,037	2,435	86	2,178	171	100.0	3.5
3,468	3,543	7,011	159	6,047	805	100.0	2.2
807	801	1,608	42	1,394	172	100.0	2.6
977	1,151	2,128	59	1,835	234	100.0	2.7
1,718	2,102	3,820	21	3,561	238	100.0	0.5
1,719	1,570	3,289	49	2,407	833	100.0	1.4
1,655	2,015	3,670	90	2,310	1,270	99.1	2.4
1,468	1,791	3,259	42	1,810	1,407	100.0	1.2
2,551	2,014	4,565	212	3,190	1,163	100.0	4.6
1,518	1,873	3,391	102	2,399	890	100.0	3.0
2,887	2,711	5,598	217	4,298	1,083	100.0	3.8
2,377	1,634	4,011	348	3,088	575	100.0	8.6
990	1,457	2,447	44	1,846	557	100.0	1.7
896	846	1,742	41	1,293	408	100.0	2.3
1,200	1,012	2,212	51	1,637	524	100.0	2.3
1,131	1,246	2,377	42	1,655	680	100.0	1.7
3,290	3,839	7,129	168	4,690	2,271	100.0	2.3
1,095	1,148	2,243	371	1,600	272	100.0	16.5
5,639	7,205	12,844	422	10,442	1,980	100.0	3.2
2,954	1,787	4,741	136	4,163	442	100.0	2.8
1,250	1,528	2,778	80	2,006	692	100.0	2.8
3,745	713	4,458	305	3,199	954	100.0	6.8
4,981	4,254	9,235	541	6,986	1,708	99.7	5.8
4,424	4,465	8,889	613	6,078	2,198	100.0	6.8
2,382	1,144	3,526	64	3,188	274	100.0	1.8
2,540	2,543	5,083	146	3,778	1,159	100.0	2.8
1,18,672	1,17,697	2,36,369	8,566	1,73,016	54,787	99.9	3.6

## NATIONAL MALARIA ERADICATION PROGRAMME.

Statement showing Spleen, Rates, Size of Spleen mass and parasite rates in the City of Madras in 1959.

Serial No.	Old Div. No.	Name of Divisions.	No. of children examined.	No. positive.	Spleen rate per cent.	Spleen size.							No. of blood smears.	No. positive.	Parasite rate per cent.	Plasmodium species.			Remarks.
						0	1	2	3	4	5	AES				P.V.	P.F.	P.M.	
1	2	Royapuram	533	4	0.8	529	3	1	...	...	...	...	201	...	...	...	...	...	
2	3	Singara Garden	489	3	0.6	486	3	...	...	...	...	182	...	...	...	...	...	...	
3	4	Sanjeevirayanpet	640	9	1.4	631	2	7	...	...	...	225	...	...	...	...	...	...	
4	5	Korukupet	777	1	0.1	776	1	...	...	...	...	206	...	...	...	...	...	...	
5	7	Basin Bridge	611	5	0.8	606	2	2	1	...	...	198	1	0.5	1	...	...	...	
6	8	Peddunaickenpet	661	6	0.9	655	5	1	...	...	...	102	...	...	...	...	...	...	
7	9	Seven Wells	638	13	2.0	625	10	2	1	...	...	132	2	1.5	2	...	...	...	
8	10	Amman Koil	332	4	1.2	328	4	...	...	...	...	95	...	...	...	...	...	...	
9	11	Muthialpet	657	8	1.2	649	1	5	2	...	...	110	...	...	...	...	...	...	
10	12	Harbour	289	3	1.1	286	1	2	...	...	...	89	1	1.1	1	...	...	...	
11	13	Katchaleswarar Koil	512	8	1.6	504	5	3	...	...	...	112	1	0.9	1	...	...	...	
12	14	Kothawal Bazaar	494	6	1.0	488	2	4	2	...	...	90	...	...	...	...	...	...	
13	15	Sowcarpet	621	15	2.4	606	4	9	2	...	...	117	1	0.9	1	...	...	...	
14	16	Trevelyan Basin	491	6	1.2	485	0	6	...	...	...	105	...	...	...	...	...	...	
15	17	Choolai	557	10	1.8	551	8	2	...	...	...	100	2	2.0	2	...	...	...	
16	18	Pulianthope	510	11	2.1	489	0	11	1	...	...	125	2	1.6	1	...	...	...	
17	19	Perambur Barracks	625	11	1.8	614	4	6	...	...	...	82	...	...	...	...	...	...	
18	20	Purasawalkam	525	5	0.95	520	3	2	...	...	...	97	...	...	...	...	...	...	
19	24	Kosapet	607	10	1.6	597	5	4	...	...	...	113	...	...	...	...	...	...	
20	25	Vepery	650	...	0.0	650	...	...	...	...	...	70	...	...	...	...	...	...	
21	26	Periamet	508	4	0.8	504	1	3	...	...	...	104	...	...	...	...	...	...	
22	27	Edapalayam	589	13	2.2	576	2	11	...	...	...	127	2	1.6	2	...	...	...	
23	28	Park Town	446	4	0.9	442	3	1	...	...	...	88	1	1.1	1	...	...	...	
24	29	Napier Park	416	14	3.4	402	0	14	...	...	...	109	2	1.8	2	...	...	...	
25	30	Chintadripet	650	4	0.6	646	2	2	...	...	...	76	...	...	...	...	...	...	
26	31	Komaleswaranpet	477	7	1.5	470	2	5	...	...	...	93	...	...	...	...	...	...	
27	32	Egmore	363	1	0.3	362	...	1	...	...	...	85	...	...	...	...	...	...	
28	33	Thousand Lights	704	7	0.99	697	3	4	...	...	...	134	1	0.7	1	...	...	...	
Total			15,372	192	1.2	15,180	76	108	7	1	...	3,367	16	0.5	4	12	...	...	

Consolidated for routine adult collection for the year 1959.

	Janu-ary.	Febru-ary.	March.	April.	May.	June.	July.	August.	Sep-tember.	Octo-ber.	Novem-ber.	Decem-ber.	Total.
	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1. Human and Mixed Dwelling—													
Time spent—Man hours ...	45 20	45 10	44 00	56 20	35 30	53 00	63 30	40 00	22 00	19 00	20 00	27 00	470 50
Numbers—													
A. Culicifacies ...	...	...	...	...	...	...	...	...	...	...	...	...	...
A. Stephensi ...	...	...	...	...	...	...	...	...	...	...	...	...	...
All species including vectors.	150	146	279	300	69	554	504	104	58	66	174	74	2,478
Per Man Hour—													
A. Culicifacies ...	...	...	...	...	...	...	...	...	...	...	...	...	...
A. Stephensi ...	...	...	...	...	...	...	...	...	...	...	...	...	...
All species including vectors.	3.31	3.23	6.34	5.31	1.94	10.45	7.95	2.625	2.64	3.47	8.70	2.74	5.26
2. Cattle Shed—													
Time spent—Man Hour ...	10 50	10 00	13 30	13 10	7 30	14 00	15 00	9 30	7 00	6 00	6 00	9 00	121 30
Numbers—													
A. Culicifacies ...	...	...	...	...	...	...	...	...	...	...	...	...	...
A. Stephensi ...	...	...	...	...	...	...	...	...	...	...	...	...	...
All species including vectors.	40	23	39	51	4	85	47	7	14	11	40	105	466
Per man hour—													
A. Culicifacies ...	...	...	...	...	...	...	...	...	...	...	...	...	...
A. Stephensi ...	...	...	...	...	...	...	...	...	...	...	...	...	...
All species including vectors.	3.69	2.30	2.89	3.87	.53	6.07	3.13	.74	2.00	1.83	6.67	11.66	3.84

LABORATORY TESTS.

For determining effectiveness of insecticides against Mosquitos.

Species of mosquito used. A. subpictus female with blood meal captured in nature in adult stage.

One Hour Exposure.

Serial No.	Date.	Concentration of D.D.T. and the non-volatile oil per cent.	No. female mosquitos used.	No. mosquitos dead after 24 hrs. observation in clean case.	Mortality Rate.	Temperature during the rest.		Relative Humidity %	Remarks.
						Maximum.	Minimum.		
I	16- 9-59	0.5%	3	3 dead.	100%	35.5 C	24.8 C	64	
		1.0%	3	1 "	33.3%	...	...	...	
		2.0%	3	1 "	33.3%	...	...	...	
II	25- 9-59	0.5%	4	2 "	50%	34.2 C	25.6 C	68	
		1.0%	4	1 "	25%	...	...	...	
III	30- 9-59	2.0%	4	1 "	25%	...	...	...	
		0.5%	5	1 "	20%	39.8 C	23.6 C	72	
		1.0%	5	1 "	20%	...	...	...	
		2.0%	5	Nil.	0.0%	...	...	...	

## MALARIA ERADICATION PROGRAMME.

## Consolidated Infant Parasite Survey Report for 1959-60.

Malaria Unit—Madras City.

Serial No. (1)	No. of Division (2)	Name of the Divisions. (3)	Previous infant parasite indices if any. (4)	Date. (5)	Survey during year 1959-60.					Remarks. (10)	
					No. of infants examined. (6)	No. positive. (7)	Infant parasite index per cent. (8)	Species.			
								V	F (9)	M	Mixed.
13		Kachaleswarar	0.0	30-4-59	17	...	0.0	...	...	...	...
13		Do.	0.0	29-5-59	15	...	0.0	...	...	...	...
13		Do.	0.0	20-6-59	11	...	0.0	...	...	...	...
13		Do.	0.0	23-7-59	6	...	0.0	...	...	...	...
4		Sanjeevirayanpet	...	23-12-59	100	...	0.0	...	...	...	...
5		Korukupet	...	24-12-59	100	...	0.0	...	...	...	...
9		Seven Wells	...	26-12-59	107	...	0.0	...	...	...	...
10		Amman Koil	...	29-12-59	52	...	0.0	...	...	...	...
12		Harbour ...	...	24-12-59	100	...	0.0	...	...	...	...
14		Kothawal Bazaar	...	29-12-59	48	...	0.0	...	...	...	...
16		Trevelyan Basin	0.0	26-12-59	101	...	0.0	...	...	...	...
17		Choolai ...	...	2-1-60	107	...	0.0	...	...	...	...
18		Pulianthope	...	24-12-59	94	...	0.0	...	...	...	...
27		Edapalayam	...	24-12-59	103	...	0.0	...	...	...	...
28		Park Town	...	26-12-59	58	...	0.0	...	...	...	...
29		Napier Park	...	31-12-59	42	...	0.0	...	...	...	...
		Total ...			1,061	...	0.0	...	...	...	...

Statement showing the number of cases and contacts admitted and treated in the Infectious Diseases Hospital, Madras, during the year ending 31-12-59.

Particulars	Small-pox	Chicken-pox	Measles	Cholera	Gastro Enteritis and Chronic Entries	Typhoid	Diphtheria	Whooping Cough	Mumps	Other Diseases	Contacts	Total
Number remained in the Hospital on 31-12-59 (Mid-night) ...	190	47	6	62	15	...	...	...	4	12	82	418
No. admitted from 1-1-59 to 31-12-59. { City ... { Mofussil ...	2,109	1,738	705	166	896	...	...	...	209	411	1,200	7,434
Total No. treated during the year ...	380	228	77	20	204	...	...	...	12	59	...	980
Total No. discharged ...	2,679	2,013	788	248	1,115	...	...	...	225	482	1,282	8,832
Total No. died ...	2,096	1,965	779	187	1,030	...	...	...	220	413	1,235	7,925
Case fatal rate ...	487	...	3	61	81	...	...	...	1	63	...	696
No. remained on 31-12-59 (Midnight) ...	18%	...	0.038%	0.25	7.26	...	...	...	0.04	12%	...	7.9
	96	48	6	...	4	...	...	...	4	6	47	211

## Comparative Statement of the Out-turn of Work in Dispensaries during 1958 and 1959.

Serial No.	Division No.	Year of Opening.	Name of the Dispensaries.	Location.	Total Attendance		New Cases.		Minor operation.	System of Treatment.
					1958	1959	1958	1959		
1	2	1924	Royapuram	2/87, Sooryanarayana Chetty Street.	35,827	76,128	18,907	39,290	256	Allopathic.
2	3	1952	Palmyra Kuppam	Kalandapam Road	64,277	56,815	35,826	32,825	20	Do.
3	3	1945	Royapuram Siddha	109, Adam Sahib Street	75,152	36,859	43,740	20,173	20	Siddha.
4	4	1957	Sanjeevirayanpet	21/22, Kappal Polu Chetty Street.	60,068	58,633	26,344	26,826	53	Allopathic.
5	11	1956	Seven Wells	1/50, Saint Xavier Street...	77,911	88,797	35,059	40,441	99	Do.
6	14	1929	Harbour	6/7, Adam Street	55,404	61,940	26,986	32,917	53	Do.
7	15	1955	Muthialpet	Geils Street	92,270	100,650	45,763	44,459	25	Do.
8	19	1923	Mofuskhan Garden	55, Thatha Muthiappan Street	81,102	81,390	39,866	40,926	167	Do.
9	20	1938	Mannady	47, Linghi Chetty Street	56,046	83,342	24,067	16,166	13	Do.
10	23	1913	Washermanpet	85, Tiruvottiyur High Road	1,17,409	1,27,806	56,954	52,352	12	Do.
11	25	1923	Mint	284, Mint Street	85,708	81,120	45,177	42,276	34	Do.
11B	25	1957	Basin Bridge	51, Basin Bridge Road	31,295	49,238	17,618	26,474	33	Do.
12	26	1919	Trevelyan Basin	17, Basin Water Works Street	31,113	71,448	17,340	39,548	21	Do.
13	31	1928	Perambur	55, Madavaram High Road	1,17,119	2,34,238	64,414	64,414	215	Do.
14	32	1929	Vyasarpady	'Hope Lodge', Gantz Road	84,792	77,731	42,368	39,585	...	Do.
15	33	1930	Pulianthope Unani	55, Pulianthope High Road	93,552	1,01,497	47,877	50,535	164	Unani.
16	34	1958	Otteri	Strahans Road	...	67,446	...	37,751	76	Veneraal Clinic converted into a G.D.—14-6-58
17	35	1931	Otteri Siddha	1/B, Bashiam Reddy Street	92,178	1,05,471	52,791	53,658	98	Siddha.
18	39	1931	Choolai Siddha	Alathur Subramania Achari Street.	1,41,946	1,12,445	74,408	60,794	67	Do.
19	40	1899	Baliah Naidu	Rotlers Street	1,84,251	1,86,813	1,08,142	1,08,608	1,894	Allopathic.
20	42	1946	Sembiam	Paper Mills Road	1,13,527	73,749	61,532	44,251	190	Do.
21	44	1948	Ayanavaram	127, Konnur High Road	71,129	91,805	38,638	52,541	59	Do.
22	48	1929	Kosapet	7/1, Chellappa Mudali Street	72,493	48,525	38,769	28,880	161	Do.

Serial No.	Division No.	Year of Opening.	Name of the Dispensaries.	Location.	Total Attendance.		New Cases.		Minor operation.	System of Treatment.
					1958	1959	1958	1959		
23	51	1956	Aminjikarai	...	63,520	55,332	34,603	35,743	299	Allopathic.
24	53	1959	Chetput	171, Poonamallee High Road 24, McNichols Road, Chetput	...	12,503	...	6,024	18	Do. (Newly opened on 19-10-59)
25	55	1923	Nungambakkam	15, Noor Veerasamy Iyer Street	81,430	50,757	43,888	30,009	115	Do.
26	56	1930	Thousand Lights	Model School Street	96,338	80,995	47,525	41,609	769	Ayurvedic.
27	59	1924	Pudupakkam	368, Pycrofts Road	58,408	50,983	28,334	28,790	29	Allopathic.
28	61	1919	Kilpauk	6, Gangathareswar Koil Street	96,129	94,709	54,337	49,080	80	Do.
29	65	1909	Chintadripet	2/61, Arunachala Naicken Street	1,30,459	1,06,343	58,067	50,904	147	Do.
30	67	1923	Egmore	33, Poosala Gengu Reddi Street	35,835	71,056	17,781	43,191	31	Do.
31	69	1939	Pudupet	83, Harris Road	56,232	78,865	30,783	40,047	57	Converted to Allopathic from Unani.
32	71	1932	Tiruvatteswaranpet	102, Thayar Sahib Street	1,12,185	95,263	21,407	42,339	234	Unani.
33	72	1955	Chepauk	Khana Baugh Street	1,03,093	1,13,542	24,990	56,153	...	Unani.
34	75	1918	Triplicane	25, Pycrofts Road	72,318	72,318	1,405	39,549	23	Allopathic.
35	77	1956	Zam Bazaar	Gazette Begum Street	1,00,818	94,586	20,195	36,049	71	Do.
36	80	1938	Krishnampet	25, Barber's Bridge Road	66,554	76,119	16,957	34,231	400	Do.
37	84	1959	Mylapore (North)	Karneswarar Pagoda Street	...	36,907	...	16,610	...	Do.
38	85	1924	Mylapore (South)	101, Kutchery Road	92,886	79,334	18,462	32,022	14	Do.
39	88	1927	Teynampet	2/104, Mount Road	84,393	79,677	33,235	25,089	32	Do.
40	89	1948	Adayar	13, Greenways Road	42,604	47,700	8,406	28,156	270	Do.
41	92	1948	Kodambakkam	107, Arcot Road	32,590	34,623	20,573	27,173	11	Do.
42	93	1956	T. Nagar (North)	4, Dr. Sadhasivan Road	45,348	40,507	21,903	21,045	25	Do.
43	94	1922	T. Nagar (South)	3, Sivagnanam Road	86,955	80,341	23,550	42,189	114	Do.
44	97	1956	Saidapet	51, Sadayappa Mudali Street	13,785	31,298	4,010	16,955	...	Do.
45	99	1957	Guindy	1A, Satham Street	22,118	33,736	4,465	9,523	...	Do.
					33,38,587	35,88,780	14,97,462	17,56,170	6,469	

## T. B. CLINIC, KASTURIBAI GANDHI HOSPITAL.

## Contact Work—Coverage..

S. No.	Particulars.	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	Total.
1	Patients picked up (open cases) ...	161	675	614	546	735	765	567	432	396	403	5,294
2	Houses visited ...	161	675	614	546	735	765	567	432	396	403	5,294
3	No. queried at their houses...	468	1,422	2,036	1,659	1,939	1,784	1,635	1,409	1,221	1,227	14,800
4	No. of contacts totally examined ...	28	763	1,127	1,315	1,035	774	472	464	609	400	6,987
5	No. Found:											
	P.T. I ...	...	...	39	21	18	10	2	6	7	16	119
	P.T. II ...	...	...	17	15	21	30	13	14	9	5	124
	P.T. III ...	...	...	12	30	35	26	21	26	29	16	195
6	Total No. of P.T. cases found among the contacts ...	...	...	68	66	74	67	30	52	43	37	437

## T.B. CLINIC, KASTURIBAI GANDHI HOSPITAL.

Year.	Area in Sq. miles.	No. of Divisions.	Popu- lation.	No. of old.	Attended new.	P.T. cases.	Sputum negative.	Sputum positive.	No. of deaths.
11-9-50	2,8855	6	1,78,303	...	1,544	79	35	44	42
1951	Do.	Do.	Do.	6,124	1,442	369	81	101	151
1952	Do.	Do.	Do.	8,562	2,323	380	33	113	160
1953	Do.	Do.	Do.	6,725	3,174	447	36	146	134
1954	Do.	Do.	Do.	10,240	3,669	925	136	146	131
1955	Do.	Do.	Do.	13,892	4,672	583	80	265	89
1956	Do.	Do.	Do.	13,381	2,306	332	267	65	199
1957	Do.	Do.	Do.	13,123	1,902	325	100	83	180
1958	Do.	Do.	Do.	16,026	2,250	331	200	107	24
1959	Do.	Do.	Do.	18,866	2,129	356	200	115	20

MEDICAL INSPECTION

Defects	Boys						Girls								
	Entrants			Regulars			Entrants			Regulars			Total No. of entrants and regulars		
	No defective	Percentage		No defective	Percentage		No defective	Percentage		No defective	Percentage		No defective	Percentage	
		1959-60	1958-59		1959-60	1958-59		1959-60	1958-59		1959-60	1958-59			
1 Malnutrition	427	16,0061	9,3575	763	11,1631	9,6243	1184	12,5118	806	15,2190	9,6377	1468	16,7377	2274	16,1620
2 Dirty Head and Body and Nails.	94	3,5245	1,3010	182	2,6738	1,3224	276	2,9090	23	0,4343	1,9392	31	0,3535	54	0,3127
3 Teeth and mouth	388	14,9231	5,3184	986	14,4055	5,1703	1374	14,4464	516	9,7431	9,4996	1000	11,2833	1516	10,7747
4 Nose and throat	115	4,3119	4,0617	307	4,4856	3,7276	422	4,4361	371	7,0053	7,5172	650	7,4081	1021	7,2566
5 Eye Diseases	69	2,5833	2,9069	209	3,0557	2,3230	278	2,9229	226	4,2673	4,9952	397	4,5247	623	4,4352
6 Vision	40	1,4998	0,0799	142	2,0748	0,1102	182	1,9125	21	0,3965	0,2962	59	0,6724	80	0,5757
7 Ear Diseases	12	0,4499	0,6916	16	0,2337	0,4478	28	0,2944	32	0,6080	0,4074	36	0,4217	68	0,4905
8 Hearing	5	6,1874	—	6	0,0876	0,0091	11	0,1157	0	—	0,0371	15	0,1708	15	0,0668
9 Speech	0	—	0,0830	2	0,0292	0,0275	2	0,0210	10	0,1858	—	12	0,2266	22	0,5636
10 Circulatory system	38	1,4248	0,3875	147	2,1624	0,5326	185	1,9451	92	1,7384	1,5914	122	1,3901	214	1,5210
11 Tuberculosis	2	0,0292	0,1384	0	—	0,1560	2	0,0210	12	0,2666	0,8373	20	0,2291	32	0,2274
12 Respiratory system	...	—	—	3	0,0478	1,4877	3	0,0315	91	1,7107	1,4437	94	1,0713	185	1,3177
13 Abdominal system	0	—	0,7198	3	0,6438	0,7622	3	0,0315	6	0,1133	0,0743	12	0,2266	18	0,1238
14 Bones and joints	118	4,3757	1,2735	309	4,5148	2,3601	427	4,4895	83	1,5820	1,5916	68	0,7755	151	1,0732
15 Nervous and psychic system.	0	0,1384	—	0	—	0,1010	0	0	7	0,1332	0,0934	5	0,0569	12	0,0852
16 Infectious and contagious diseases.	297	11,1361	4,6230	409	5,9686	3,1499	706	7,4230	368	6,9487	7,6044	582	6,6332	950	6,7520
17 Other diseases and defects.	87	3,2995	2,5999	159	2,3232	3,0948	246	2,5865	144	2,7192	2,3492	219	2,4261	363	1,1585
18 Vaccination	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19 Deformities	3	00,438	—	26	0,6080	0,0734	29	0,3049	32	0,6080	0,1674	36	0,6080	68	0,483

## MEDICAL INSPECTION

Groups	No. on Roll		Average Daily Attendance		Number Examined		Number Defective		Percentage	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Entrants ...	3,640	6,426	3,608	5,592	2,667	5,296	1,421	2,457	53.24	46.39
Regulars ...	9,176	10,411	8,952	8,936	6,844	8,774	3,505	4,250	51.19	48.31
Total ...	12,816	16,837	12,560	14,528	9,511	14,070	4,926	6,707	51.79	47.66

## TREATMENT TABLE

Sex	Number treated at school	Number sent to Corporation Dispensaries	Number referred to Government Hospitals	Number referred to Government Ophthalmic Hospital.	Number referred to Government Tuberculosis Hospital	Number of Parents met.	Number of re-visits paid to schools	Number of re-examination of school children
Boys ...	3,536	197	312	8	3	288	46	5,805
Girls ...	3,689	537	642	51	...	475	75	8,138
Total ...	7,225	734	954	59	3	763	121	13,943

## MEDICAL INSPECTION

## Height and Weight Tables

Age	Average Height in inches		Average Weight in pounds		Quinquennial Average Height in inches		Quinquennial Average Weight in pounds	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
6	38.848	40.166	33.073	32.423	30.024	40.199	33.301	32.508
7	40.540	41.726	35.975	36.070	41.482	42.394	35.701	35.071
8	42.350	44.026	38.047	39.49	42.637	44.178	37.368	39.367
9	44.637	46.903	42.502	42.249	46.063	46.240	42.261	42.049
10	46.475	48.640	45.123	47.606	47.840	48.285	45.670	45.122
11	48.283	51.333	47.935	53.680	49.627	50.482	49.224	49.244
12	50.317	52.533	52.822	56.910	51.219	52.157	52.429	53.443
13	52.018	54.783	53.967	61.710	53.632	54.064	56.141	59.156
14	53.520	57.380	58.70	71.536	55.199	56.394	61.682	67.440
15	55.403	58.663	68.825	82.860	57.039	58.589	67.434	74.907
16	56.086	62.220	64.310	94.913	58.342	60.578	71.453	80.371
17	57.062	63.475	73.00	95.208	59.00	...	80.500	85.210
18	61.000	...	77.026	...	61.000	...	84.632	...

FOOD ANALYSIS

S. No.	Nature of Samples	Adulterated samples among the samples analysed in 1959						Adulterated samples of the previous year pending disposal on 1-1-1959						Total number of adulterated samples dealt with during 1959						Total fines imposed in 1959.		Number of conviction in 1958.		Total fines disposed in 1958.		Average fine per conviction in 1958.	
		Number of samples	Number of convictions	Number of articles seized and forfeited or destroyed without prosecution.	Number acquitted, dismissed, warned, admonished or withdrawn.	Number of not prosecuted	Number pending disposal on 31st December 1959.	Number of samples	Number of convictions	Number of articles seized and forfeited or destroyed without prosecution.	Number acquitted, dismissed, warned, admonished or withdrawn.	Number of not prosecuted	Number pending disposal on 31st December 1959.	Number of samples	Number of convictions	Number of articles seized and forfeited destroyed without prosecution.	Number acquitted, dismissed, warned, admonished or withdrawn.	Number of not prosecuted	Number pending disposal on 31st December 1959.	Total fines imposed in 1959.	Number of conviction in 1958.	Total fines disposed in 1958.	Average fine per conviction in 1958.				
1	Milk	1898	795	...	10	71	1022	2416	556	...	12	...	1848	4134	1351	...	22	71	2870	61,635	46	1309	55,271	42			
2	Butter	92	42	...	2	2	46	96	30	...	1	...	65	182	72	...	3	2	111	3,650	51	82	2,585	32			
3	Ghee	66	33	...	1	...	32	153	18	...	2	...	133	219	51	...	3	...	165	2,465	48	32	1,930	60			
4	Gingelly Oil	106	66	...	1	...	39	98	36	...	2	...	60	204	102	...	3	...	99	5,620	55	211	15,247	72			
5	Groundnut Oil	5	1	...	1	1	2	11	4	...	2	...	5	16	5	...	3	1	7	160	32	12	475	40			
6	Cocoa nut Oil	8	6	...	...	...	2	4	3	...	...	...	34	87	37	...	...	3	3	430	48	6	440	73			
7	Coffee Powder	36	22	...	1	...	13	51	15	...	2	...	10	16	5	...	...	47	1,805	49	20	1,255	63				
8	Tea	5	4	...	...	...	1	11	1	...	...	...	4	5	...	...	...	11	200	40	9	355	39				
9	Ghee Substitutes	1	...	...	...	...	1	4	...	...	...	...	20	74	26	...	...	5	...	...	...	...	...	...			
10	Other articles	44	16	...	...	2	30	10	...	...	...	...	20	74	26	...	...	2	46	1,080	42	32	1,340	42			
	Total	2261	985	...	16	76	1184	2874	673	...	21	...	2180	5135	1658	...	37	76	3364	77,143	46	1713	78,898	46			

Nature of samples	1959		1954		1955		1956		1957		1958		
	Number of samples analysed	Number of adulterated samples	Percentage of adulterated samples	Number of samples analysed	Percentage of adulterated samples	Number of samples analysed	Percentage of adulterated samples	Number of samples analysed	Percentage of adulterated samples	Number of samples analysed	Percentage of adulterated samples	Number of samples analysed	Percentage of adulterated samples
Milk ...	4,496	1,898	42.2	3,141	56.1	3,002	50.1	3,251	42.1	3,554	44.5	4,597	41.6
Butter ...	567	92	16.2	601	36.1	498	31.1	432	24.8	497	18.9	555	17.1
Ghee ...	854	66	7.7	798	27.1	742	24.0	627	10.4	725	5.0	918	5.3
Gingelly Oil ...	1,140	106	9.3	201	33.8	343	20.1	395	21.5	751	30.8	1,319	14.7
Groundnut Oil ...	109	5	4.6	123	4.1	13	15.4	39	2.6	73	12.3	154	10.4
Cocoanut Oil ...	273	8	2.9	163	7.4	154	7.1	139	1.4	101	...	209	5.3
Coffee Powder ...	452	36	8.0	120	56.7	138	47.8	187	24.6	245	10.6	322	41.5
Tea ...	63	5	7.9	21	14.3	23	...	77	16.9	98	2.0	73	15.1
Ghee substitutes	3	1	33.3	31	19.4	9	33.3	4	...	12	16.7	2	100.0
Other articles ...	166	44	26.8	104	51.9	108	55.6	119	28.6	134	22.4	153	21.6
Total ...	8,123	2,261	27.8	5,303	45.5	5,030	40.7	5,270	32.7	6,190	32.5	8,302	28.5

## WATER ANALYSIS

## STATEMENT No. I

Water Analysis showing the number of Samples of Water for Bacteriological  
Chemical purposes in 1959

Serial No.	Description of the Samples	Number of Samples
1	From the sources of the Kortalayar River system ...	21
2	From the Headworks at Kilpauk Water Works ...	1,339
3	From the infiltration gallery wells at Sembiam ...	11
4	From the infiltration gallery wells at Saidapet ...	10
5	From the Kortalayar distribution system ...	891
6	From the Sembiam distribution system ...	80
7	From the Saidapet distribution system ...	72
8	From the shallow wells at Adayar, Kodambakkam, Guindy, Saidapet, Triplicane and Marina ...	101
9	Private samples ...	91
10	From the water mains under sterilisation ...	323
11	Sewage samples from the Kodungaiyur Farm ...	4
	Total ...	2,943

## WATER ANALYSIS

## STATEMENT No. II

Monthly average levels in the three Reservoirs and the total monthly rainfall recorded in their catchments in 1959

Months	Sathyamoorthy Sagar (Poondi Reservoir)		Sholavaram Reservoir		Red Hills Reservoir	
	Average lake level in feet	Total rainfall recorded in the region (inches)	Average lake level in feet	Total rainfall recorded in the region (inches)	Average lake level in feet	Total rainfall recorded in the region (inches)
January	137.66	Nil	61.82	Nil	45.29	Nil
February	137.10	0.20	61.31	1.95	44.72	2.24
March	136.16	Nil	60.65	Nil	43.41	Nil
April	135.13	1.00	59.90	0.05	41.62	Nil
May	134.04	0.79	57.75	1.25	39.84	0.90
June	130.79	2.63	57.66	3.57	40.30	2.80
July	130.02	5.88	57.52	4.20	39.61	2.69
August	129.55	2.28	57.12	1.21	38.19	2.04
September	129.23	5.08	56.63	6.29	36.97	5.50
October	129.23	9.92	52.08	8.31	38.94	8.55
November	127.21	11.44	50.02	16.54	42.98	13.64
December	132.44	0.50	56.72	0.80	45.53	0.47
Total	1588.56	39.72	689.18	44.17	497.40	38.83

WATER ANALYSIS

STATEMENT III

Limnological conditions of the Sources of the City Water Supply (a) Sathyamurthi Sagar in 1959  
(Results expressed in parts per 100,000)

Description	28- 1-59	19-2-	25-4-59	21- 5-59	9- 7-59	26- 8-59	28-11-59
<b>A. Physical conditions :</b>							
Time	1130 A.M.	2.00 P.M.	2.00 P.M.	3.00 P.M.	2.15 P.M.	2.00 P.M.	2.30 P.M.
Depth in feet (above mean sea-level)	13740	137.03	134.56	133.88	130.12	129.34	127.20
Colour	S.G.	S.G.	S.Y.	S.G.	Y.	G	G
Temperature (" C ")	29	32	34	35	30	30	26
<b>B. Chemical Conditions :</b>							
Total solids	30.8	26.0	30.0	27.8	25.6	36.6	26.8
Total hardness	9.0	8.2	7.2	7.4	7.6	6.2	7.6
Calcium hardness	4.2	3.1	2.4	1.8	2.0	2.4	3.2
Magnesium hardness	4.8	5.1	4.8	5.6	5.6	3.8	4.4
Chlorides	2.5	2.6	3.3	4.0	4.2	4.9	3.6
Ammoniacal Nitrogen	0.002	0.003	0.004	Nil	0.002	0.002	0.003
Albuminoid Nitrogen	0.032	0.040	0.032	0.040	0.120	0.096	0.064
Nitrous Nitrogen	Nil	Nil	Tr.	Nil	Nil	Nil	Nil
Nitric Nitrogen	Nil	Nil	Nil	Nil	—	Nil	Tr.
Oxygen absorbed (Tidy)	0.136	0.134	0.174	0.227	0.312	0.412	0.308
Alkalinity to Phenolphthalein	0.7	1.5	2.4	1.8	1.0	1.2	0.4
" Mythyl orange	15.8	15.4	16.5	16.1	17.8	18.8	16.5
Phosphates (PO4)	Nil	0.001	Nil	Tr.	0.001	0.001	0.001
Iron	0.01	Tr.	0.005	0.005	0.015	Tr.	Tr.
P.H.	8.2	8.6	9.1	9.1	8.3	9.1	8.3
Silicates (Sio 2)	0.8	0.6	0.6	1.2	0.4	0.8	0.8
Dissolved Oxygen (c.c./l)	5.8	6.56	4.34	5.53	4.69	4.4	4.75
<b>C. Bacteriological Conditions :</b>							
B. Coli present in ? cc. and upds.	5 c.c.	5 c.c.	5 c.c.	1.0 c.c.	1.0 c.c.	5 c.c.	1.0 c.c.

S. G. = Slightly greenish.

S. Y. = Slightly yellowish.

Y = Yellowish.

G. Greenish.

Tr. = Trace.

**WATER ANALYSIS**

**STATEMENT IV.**

Limnological conditions of the Sources of the City Water Supply (b) Sholavaram Reservoir in 1959.  
(Results expressed in parts per 100,000).

Description	28- 1-59	19- 2-60	25- 4-59	21- 5-59	9- 7-59	26- 8-59	28-11-59	28-12-59
<b>A. Physical conditions :</b>								
Time	3.00 P.M.	4.30 P.M.	12.15 P.M.	12.15 P.M.	11.30 A.M.	10.30 A.M.	11.00 A.M.	3.45 P.M.
Depth in feet (above mean sea-level)	61.90	61.46	59.62	56.41	57.58	56.82	51.64	57.49
Colour	S.G.	S.G.	G	Y	Y	G <sup>z</sup>	W	Y.G.
Temperature (°C)	30	30	32	35.5	32	28	27	24.5
<b>B. Chemical conditions :</b>								
Total solids	23.2	25.2	26.4	32.0	30.8	32.4	22.0	18.0
Total hardness	8.0	8.0	9.2	1.6	8.0	7.8	9.2	9.0
Calcium hardness	3.8	3.9	4.2	4.4	3.0	3.2	4.8	4.8
Magnesium hardness	4.2	4.1	5.0	4.2	5.0	4.6	4.4	4.2
Chlorides	3.2	3.4	3.9	4.5	4.4	5.0	4.2	3.3
Ammonical Nitrogen	0.002	0.002	0.032	Nil	0.002	0.002	0.002	0.003
Albuminoid Nitrogen	0.040	0.040	0.040	0.048	0.120	0.080	0.056	0.040
Nitrous Nitrogen	Nil	Nil	Tr.	Nil	Nil	Nil	Pr.	Nil
Nitric Nitrogen	Tr.	Nil	Nil	Nil	—	Nil	Tr.	Tr.
Oxygen absorbed (Tidy)	0.154	0.193	0.203	0.241	0.312	0.415	0.258	0.286
Alkalinity to Phenolphthalein	1.1	1.0	0.3	0.8	0.9	0.7	0.4	0.6
"    Methyl orange	10.7	10.7	13.7	14.2	15.0	16.5	11.4	10.8
Phosphates (PO4)	Nil	Nil	Nil	Tr.	Nil	0.001	0.001	Nil
Iron	Tr.	0.01	0.005	0.005	0.01	Tr.	0.01	0.01
P.H.	8.6	8.4	8.5	8.6	8.3	8.9	8.2	8.5
Silicates (SiO2)	0.6	0.4	0.6	0.6	0.4	0.8	0.6	0.8
Dissolved oxygen (c.c./l)	0.94	8.2	5.25	5.11	5.25	4.97	5.94	6.72
<b>C. Bacteriological conditions :</b>								
B. Cote present in ? c.c. and upds.	5 c.c.	1.0 c.c.	5 cc.	5 c.c.	1.0 c.c.	5 c.c.	1.0 c.c.	2.0 c.c.

**WATER ANALYSIS**

STATEMENT No. V.

Limnological conditions of the Sources of the City Water Supply : (c) Red Hills Reservoir, 1959  
(Results expressed in parts per 100,000).

Description	28- 1-59	19- 2-59	25- 4-59	21- 5-59	9- 7-59	26- 8-59	20-10-59	28-11-59	28-12-59
<i>A. Physical conditions :</i>									
Time	4.00 P.M.	5.00 P.M.	10.00 A.M.	11.00 A.M.	10.15 A.M.	9.30 A.M.	3.45 P.M.	10.30 P.M.	3.15 P.M.
Depth in feet (above mean sea-level.)	44.91	44.55	41.06	40.05	39.88	37.64	39.28	42.80	45.21
Colour	S.G.	S.G.	Y	Y	S.Y.	S.G.	Y.G.	G	GY
Temperature (°c)	30	29.5	32	34	33	28	30.5	27	25
<i>B. Chemical conditions :</i>									
Total solids	22.8	21.6	22.0	20.2	15.6	28.0	28.0	22.4	21.6
Total hardness	6.6	7.0	7.6	8.0	8.0	8.2	8.2	7.2	7.0
Calcium hardness	3.0	3.8	4.0	4.6	4.0	4.2	3.6	3.2	3.4
Magnesium hardness	3.6	3.2	3.6	3.4	4.0	4.0	4.6	4.0	3.6
Chlorides	2.8	2.9	3.4	4.0	4.1	4.6	4.8	4.2	3.5
Ammoniacal Nitrogen	0.003	0.002	0.002	Nil	0.002	0.002	0.002	0.002	0.003
Albuminoid Nitrogen	0.072	0.048	0.040	0.048	0.096	0.080	0.096	0.072	0.064
Nitrous Nitrogen	Nil	Nil	Tr.	Nil	Nil	Nil	Tr.	Nil	Nil
Nitric Nitrogen	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Tr.	Tr.
Oxygen absorbed (Tidy)	0.166	0.184	0.158	0.196	0.254	0.288	0.403	0.303	0.265
Aikality to Phenolphthaline	0.7	0.2	0.3	0.7	0.4	0.5	0.8	0.4	0.3
'' Mythyl Orange.	9.0	9.2	10.8	11.8	13.2	14.1	15.5	13.8	12.0
Phosphates (Po4)	Nil	Nil	Nil	Tr.	Nil	0.001	0.02	0.001	Nil
Iron	Tr.	Tr.	0.005	Nil	Tr.	Tr.	Nil	Tr.	Tr.
PH.	8.5	8.1	8.5	8.5	8.1	8.6	8.9	8.3	8.3
Silicates (Sio2)	0.4	0.4	0.4	0.6	0.6	0.6	1.0	0.8	0.8
Dissolved oxygen (cc/l)	6.63	6.8	4.55	4.83	5.04	4.62	5.74	5.24	5.88
<i>C. Bacteriological conditions :</i>									
B. Coli present in ? c.c. and upwards.	5 c.c.	5 c.c.	5 c.c.	1.0 c.c.	5 c.c.	5 c.c.	1.0 c.c.	5 c.c.	5 c.c.

## STATEMENT No. VI

WATER ANALYSIS  
Some important Physical, Chemical and Bacteriological Result of chlorinated Raw Water in 1959  
(Result expressed in parts per 100,000)

Months 1959	No. of Samples	Colour	Total solids	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Oxygen absorbed (Tidy.)	Alkalinity to		PO <sub>4</sub>	Fe	Pb	SiO <sub>2</sub>	B. Coll—60cc%
											P.T.H.	M.O.					
January	20	S.G.	20.3	6.7	2.9	0.002	0.053	Nil	Nil	0.160	0.3	8.1	Nil	Tr.	8.1	0.6	80
February	23	S.W.	21.7	6.9	3.1	0.001	0.036	Nil	Nil	0.146	0.3	8.9	0.001	Tr	8.1	0.6	83
March	23	W	18.4	7.1	3.3	0.004	0.058	Nil	Nil	0.165	0.2	9.3	0.001	0.008	8.0	0.6	91
April	21	W	17.3	6.7	3.4	0.003	0.041	Nil	Nil	0.154	0.3	10.5	0.001	0.008	8.2	0.6	57
May	25	W	22.6	8.1	3.9	0.002	0.042	Nil	Nil	0.171	0.3	11.0	0.001	0.006	8.2	0.6	20
June	24	G	25.1	8.5	4.1	0.006	0.051	Nil	Nil	0.192	0.4	12.6	0.001	Tr	8.4	0.8	17
July	25	S.Y.	23.5	7.9	4.2	0.002	0.060	Nil	Nil	0.216	0.6	13.0	0.001	0.001	8.2	0.7	60
August	21	W	33.1	8.4	4.8	0.007	0.048	Nil	Nil	0.293	0.6	13.3	0.001	Tr.	8.4	0.7	38
September	24	S.G.	26.6	8.7	4.5	0.002	0.065	Nil	Tr	0.273	0.8	13.9	0.001	Nil	8.3	0.6	75
October	22	W	31.5	8.5	4.7	0.003	0.088	Nil	Nil	0.312	0.5	14.4	0.001	Tr	8.1	0.6	94
November	24	S.W.	25.8	7.1	4.3	0.002	0.098	Tr	Tr	0.291	0.3	13.4	0.001	Tr	8.1	0.8	94
December	25	W	21.5	6.9	3.8	0.003	0.075	Nil	Tr	0.239	0.1	11.5	0.001	0.005	8.1	0.7	100

S.G.—Sl. Greenish / S.W.—Sl. Whitish ; W.—Whitish. S.—Greenish. Sy. Sl. Yellowish. S.W.—Sl. Whitish.  
Tr.—Trace. Pr. Present.

## WATER ANALYSIS

## STATEMENT No. VII

Some important Physical, Chemical and Bacteriological Results of Filtrates from Gravity Mechanical filters in 1959  
(Results expressed in Parts per 100,000)

Months 1959	No. of Samples	Colour	Smell	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Oxygenabsorbed (Tidy)	Alkalinity to		Po <sub>4</sub>	Fe	Ph	SiO <sub>2</sub>	B. Coll—60cc%
											T.H.	M.O.					
January	20	C	Nil	6.8	2.9	0.012	0.048	0.001	...	...	0.4	8.3	Nil	0.01	7.4	0.6	10
February	23	C	Nil	6.7	3.1	0.006	0.031	Tr	...	123	0.4	8.7	0.001	0.01	7.8	0.5	4
March	23	C	Nil	7.2	3.2	0.018	0.039	Tr	...	0.150	0.5	9.4	0.001	0.01	7.6	0.6	0
April	21	C	Nil	7.7	3.4	0.009	0.040	Tr	Nil	0.135	0.5	10.2	0.001	0.01	7.8	0.6	0
May	25	C	Nil	8.2	3.9	0.005	0.040	Tr	Nil	0.147	0.6	11.1	0.001	0.009	7.8	0.6	0
June	24	S.Y.	Sl. Hs.	8.5	4.1	0.034	0.054	Nil	Nil	0.154	0.4	13.3	0.001	Tr	8.1	0.8	0
July	25	C	H <sub>2</sub> S.	8.4	4.3	0.014	0.050	Pr	Nil	0.177	0.5	13.1	0.001	0.005	7.7	0.7	4
August	21	C	H <sub>2</sub> S.	8.8	4.7	0.058	0.058	Tr	Nil	0.278	0.6	13.9	0.001	Tr	7.7	6.6	0
September	24	C	Sl. H <sub>2</sub> S	8.8	4.7	0.055	0.051	Tr	Tr	0.234	0.5	14.0	0.001	Tr	7.9	0.6	0
October	22	C	Sl. H <sub>2</sub> S.	8.1	4.9	0.056	0.074	Nil	Nil	0.303	0.4	14.4	0.001	Tr.	7.8	0.6	0
November	24	Sl. Dis.	Nil	7.2	4.4	0.052	0.078	Rr	Tr	0.270	0.8	13.4	0.001	Tr	7.6	0.8	0
December	25	C	Nil	7.0	3.8	0.022	0.062	Pr	Tr	0.233	0.4	11.7	0.001	Tr	7.6	0.8	0

C.—Colourless ; Sl. Dis.—Slightly discoloured.

WATER ANALYSIS

STATEMENT No. VIII.

Some Important Physical, Chemical and Bacteriological Results of Filtrates from Gravity Mechanical Filters in 1959.

(Result expressed in parts per 100,000)

Months 1959	No. of Samples	Colour	Total solids	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Oxygen absorbed (Tidy.)	Alkalinity to		PO <sub>4</sub>	Fe	Ph	SiO <sub>2</sub>	B. Coli—60cc%
											P.T.H.	M.O.					
January	14	C	18.2	6.9	3.1	0.002	0.040	Nil	Nil	0.084	-0.8	5.9	0.001	Tr	7.0	0.6	64
February	24	C	20.9	7.1	3.2	0.001	0.010	Nil	Nil	0.082	0.8	6.0	0.001	0.01	0.4	0.4	33
March	23	C	17.2	7.1	3.3	0.005	0.019	Nil	Nil	0.105	0.7	7.3	0.001	Tr	7.1	0.6	26
April	21	C	...	7.8	3.6	0.002	0.048	Nil	Nil	0.081	1.2	8.9	0.003	Tr	7.1	0.6	24
May	25	C	24.1	8.4	4.0	0.002	0.014	Nil	Nil	0.104	1.1	8.5	0.005	0.007	7.0	0.6	0
June	22	C	22.5	8.1	4.2	0.002	0.019	Nil	Nil	0.120	1.7	9.5	0.001	Tr	6.9	0.8	0
July	25	C	23.8	8.3	4.3	0.002	0.040	Nil	Nil	0.104	1.2	10.3	0.001	Tr	7.1	0.6	4
August	21	C	30.0	8.4	4.5	0.002	0.043	Nil	Nil	0.126	1.7	9.8	0.001	Tr.	7.0	0.8	10
September	24	C	24.8	8.3	4.7	0.002	0.044	Tr	Nil	0.118	1.4	10.6	0.001	Tr.	7.1	0.7	33
October	22	C	28.0	7.8	4.9	0.002	0.056	Tr	Nil	0.144	1.4	10.6	0.001	Tr	7.1	0.7	28
November	24	C	23.9	7.1	4.4	0.002	0.056	Nil	Tr	0.156	1.3	10.4	0.001	Tr	7.2	0.8	47
December	25	C	22.6	7.0	3.9	0.002	0.060	Nil	Tr	0.095	1.0	8.9	0.001	Tr	7.1	0.8	72

## STATEMENT No. IX

## WATER ANALYSIS

Some important Physical, Chemical and Bacteriological Result of the Test Tap Water at K. P. S. in 1959.  
(Results expressed in parts per 100,000)

Months 1959	No. of samples.	Colour.	Total solids.	Total hardness.	Chlorides.	Ammonical Nitrogen.	Albuminoid Nitrogen.	Nitrous Nitrogen.	Nitric-Nitrogen.	Oxygen absorbed (Tidy)	Alkalinity to		PO <sub>4</sub>	Fe	pH	SiO <sub>2</sub>	B. Coli —60 c.c. %		
											PTH	M.O.					11-00 a.m.	4-00 p.m.	
January ...	41	C	18.7	6.7	3.2	0.002	0.046	Nil	Nil	0.120	—	0.4	7.8	0.001	Tr	7.2	0.5	86	70
February ...	47	C	20.7	7.0	3.3	0.001	0.029	Nil	Nil	0.107	—	0.4	8.1	0.001	Tr	7.2	0.5	100	78
March ...	45	C	18.8	7.5	3.6	0.004	0.041	Nil	Nil	0.121	—	0.5	8.6	0.001	0.012	7.4	0.5	87	73
April ...	40	C	18.7	7.9	3.6	0.003	0.031	Pr	Nil	0.109	—	0.6	9.5	0.001	0.005	7.3	0.6	81	47
May ...	49	C	19.5	8.2	4.1	0.002	0.038	Tr	Nil	0.123	—	0.7	10.0	0.001	0.009	7.4	0.6	20	8
June ...	47	C	19.3	8.4	4.2	0.008	0.045	Tr	Nil	0.131	—	1.0	12.3	0.001	Tr	7.5	0.8	17	13
July ...	49	C	22.6	8.4	4.5	0.007	0.040	Tr	Nil	0.139	—	0.8	11.6	0.001	Tr	7.3	0.7	44	17
August ...	42	C	31.2	7.9	4.7	0.027	0.056	Tr	Nil	0.200	—	0.7	12.8	0.001	Tr	7.4	0.6	19	14
September ...	46	C	26.7	8.8	4.8	0.016	0.042	Tr	Tr	0.187	—	0.8	14.6	0.001	0.005	7.4	0.6	38	14
October ...	38	C	28.8	8.0	5.0	0.010	0.070	Pr	Nil	0.238	—	0.7	12.9	Nil	Tr	7.5	0.6	18	0
November ...	47	C	23.7	7.1	4.5	0.009	0.082	Tr	T	0.222	—	0.7	12.5	0.001	Tr	7.5	0.8	53	18
December ...	49	C	21.6	6.9	3.9	0.006	0.066	Tr	Tr	0.180	—	0.6	10.3	0.001	Tr	7.3	0.8	88	87

Tr — Trace; Pr — Present; C — Colourless.

WATER ANALYSIS

STATEMENT No. X.

Chlorination data for 1959—Furnished by the Water Works Department

Months.	Quantity of water filtered in million gallons per day.			Dose of chlorinic applied to raw water in ppm.			Dose of chlorine applied to filter water in ppm.			Lbs. of chlorine used per month for pre-chlorination of R.W.	Lbs. of chloride used per month for post-chlorination of F.W.	Total lbs. of chlorine used per month.	Cost of chlorine per lb. at 2% Do.	Total cost of Chlorine	
	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.					RS.	nP.
January	32.55	29.22	31.29	2.95	1.6	2.41	2.75	1.7	2.35	22,933	21,624	44,557	25 nP. + S.T.	11,362	03
February	32.05	29.05	30.22	2.9	1.5	2.61	2.7	2.5	2.62	21,665	21,919	43,584	Do.	11,113	92
March	33.21	29.19	30.45	2.9	1.4	2.38	3.2	1.6	2.52	22,713	24,126	46,839	Do.	11,943	94
April	34.08	29.6	30.92	2.87	1.2	2.29	3.34	1.56	2.39	21,309	21,958	43,267	Do.	11,033	08
May	33.49	30.16	32.06	2.86	1.7	2.41	3.99	2.4	3.03	23,756	29,932	53,688	Do.	13,690	44
June	33.82	31.38	32.76	2.7	1.0	1.68	3.7	2.3	3.23	16,290	31,640	47,930	Do.	12,222	15
July	34.19	32.14	33.54	3.3	1.03	1.85	3.9	2.87	3.44	17,683	36,393	54,076	Do.	13,789	38
August	33.46	31.49	32.45	2.4	0.5	2.05	4.3	2.91	3.65	20,448	37,491	57,739	Do.	14,723	44
September	33.69	32.0	32.55	2.6	0.07	2.1	4.1	3.13	3.62	20,642	35,472	56,114	Do.	14,309	07
October	34.23	30.02	32.08	2.6	1.9	2.27	4.4	3.3	3.89	22,888	38,825	61,663	Do.	15,724	06
November	32.68	30.24	31.84	2.7	1.8	2.39	4.3	3.5	3.87	22,747	37,312	60,059	Do.	15,315	04
December	31.82	29.56	30.4	2.7	1.5	2.4	4.2	3.7	3.95	22,742	38,300	61,042	Do.	15,564	71

WATER ANALYSIS.

STATEMENT No. XI.

Kortalayar River System—City Distribution System—Results of Chemical and Bacteriological Examination in 1959  
(Results expressed in parts per 100,000).

Months 1959	High Pressure Areas (Near Head Works)											Low Pressure Areas (Out-lying Divisions)															
	No. of samples	Smell	Total solids	Total hardness	Chlorides	Ammonical Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Oxygen absorbed (Tidy)	Iron	pH.	B. Coll.—60 c.c. per cent.	No. of samples	Smell	Total solids	Total hardness	Chlorides	Ammonical Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Oxygen absorbed (Tidy)	Iron	pH.	B. Coll.—60 c.c. per cent.	
January	9	Nil	20.8	6.5	3.2	0.003	0.049	Nil	Nil	0.139	...	7.3	67	45	Nil	20.9	6.6	3.2	0.002	0.104	Nil	Nil	0.113	Nil	7.3	53	
February	6	Nil	20.2	7.1	3.3	0.002	0.023	Nil	Nil	0.098	0.01	7.4	100	54	Nil	22.4	6.9	3.3	0.003	0.042	Nil	Nil	0.099	0.01	7.3	63	
March	10	Nil	...	7.2	3.5	0.002	0.040	Nil	Nil	0.129	0.01	7.3	80	61	Nil	19.0	7.5	3.5	0.002	0.039	Pr.	Nil	0.100	0.02	7.3	68	
April	10	Nil	21.6	8.0	3.5	0.003	0.037	Pr.	Nil	0.118	0.006	7.3	100	65	Nil	19.5	7.9	3.6	0.004	0.043	Pr.	Tr.	0.121	0.01	7.3	60	
May	8	Nil	30.8	8.0	4.0	0.003	0.042	Int.	Nil	0.140	0.01	7.3	0	36	Nil	24.8	8.3	4.0	0.002	0.030	Pr.	Nil	0.121	0.015	7.3	0	
June	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
July	8	Nil	19.2	8.0	4.4	0.002	0.060	Pr.	Nil	0.141	0.01	7.3	38	124	Nil	21.0	8.5	4.6	0.002	0.040	Pr.	Nil	0.144	0.01	7.3	36	
August	10	Nil	30.0	9.0	5.0	0.005	0.049	Pr.	Tr.	0.174	0.005	7.3	10	144	Nil	29.6	8.6	4.9	0.003	0.030	Pr.	Nil	0.168	0.01	7.3	26	
September	3	Nil	27.6	8.5	4.8	0.017	0.036	Pr.	Tr.	0.193	0.01	7.3	0	10	Nil	25.8	8.6	4.9	0.019	0.064	Pr.	Tr.	0.162	0.005	7.3	20	
October	...	Nil	31.2	8.1	5.1	0.016	0.066	Pr.	0.204	0.704	0.704	7.3	...	...	Nil	26.8	7.8	5.1	0.024	0.040	Tr.	Pr.	0.172	Nil	7.5	...	
November	9	Nil	26.4	7.6	4.6	0.006	0.062	Int.	Tr.	0.198	0.01	7.3	38	49	Nil	28.7	7.6	4.6	0.010	0.053	Pr.	Tr.	0.188	0.01	7.3	56	
December	8	Nil	23.3	7.2	4.1	0.004	0.064	Tr.	Tr.	0.137	0.01	7.4	100	32	Nil	23.6	7.1	4.0	0.003	0.058	Tr.	Tr.	0.135	0.015	7.3	78	

Samples could not be collected

Samples could not be collected

STATEMENT No XII.  
 WATER ANALYSIS  
 Kortalayar River System—Booster Area—Results of Chemical and Bacteriological Examination in 1959.  
 (Results expressed in parts per 1,00,000)

Months 1959	No. of samples.	Smell.	Total solids.	Total hardness.	Chlorides.	Ammonical Nitrogen.	Albuminoid Nitrogen.	Nitrous Nitrogen.	Nitric Nitrogen.	Oxygen absorbed (Tidy).	Iron.	pH	B. Coll—60 c.c. %	
January	5	Nil	21.0	6.3	3.3	0.002	0.048	Nil	Nil	0.107	...	7.2	20	
February	9	Nil	16.1	7.0	3.4	0.002	0.041	Pr	Tr	0.107	0.01	7.3	56	
March	10	Nil	22.0	7.0	3.4	0.003	0.041	Pr	Nil	0.123	0.01	7.4	20	
April	12	Nil	...	...	3.8	0.003	0.040	Pr	Tr	0.117	0.01	7.4	0	
May	...	...	...	...	...	...	...	...	...	...	...	...	...	...
June	...	...	...	...	...	...	...	...	...	...	...	...	...	...
July	12	Nil	18.0	8.4	4.4	0.002	0.060	Pr	Nil	0.140	0.012	7.4	25	
August	16	Nil	29.8	8.4	4.7	0.016	0.056	Pr	Nil	0.158	0.01	7.51	13	
September	5	Nil	31.2	8.8	4.8	0.010	0.046	Pr	Nil	0.159	0.01	7.4	0	
October	...	Nil	32.4	7.8	5.1	0.024	0.040	Tr	Pr	0.172	Nil	7.5	...	
November	5	Nil	28.9	7.6	4.7	0.010	0.060	Pr	Tr	0.177	0.005	7.4	60	
December	6	Nil	23.2	7.5	4.3	0.004	0.075	Pr	Tr	0.155	0.01	7.4	33	

Samples could not be collected.

Samples could not be collected.

WATER ANALYSIS.

Results of Chemical and Bacteriological Examination of the Infiltration Gallery—Wells at Sembiam and Saidapet in 1959 (Results expressed in parts per 100,000)

STATEMENT No. XIII.

Months 1959	SEMBIAM													SAIDAPET																																		
	Total solids	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Oxygen absorbed (Tidy)	Phenolphthalein Alkalinity	Methyl Orange Alkalinity	Phosphate	Iron	pH.	Silicates	B. Coll—present in 2 cc. and upwards	Total solids	Total hardness	Chlorides	Ammoniacal Nitrogen	Albuminoid Nitrogen	Nitrous Nitrogen	Nitric Nitrogen	Oxygen absorbed (Tidy)	Phenolphthalein Alkalinity	Methyl Orange Alkalinity	Phosphate	Iron	pH.	Silicates	B. Coll—present in 2 cc. and upwards																		
January	36.0	12.0	10.0	0.003	0.003	Nil	Tr.	0.0366	— 1.5	9.5	0.02	0.08	6.9	0.8	60	43.6	15.6	12.8	0.003	0.003	Nil	Pr.	0.035	—	0.8	13.4	0.01	0.01	7.1	0.8	60																	
February	40.8	16.0	10.0	Nil	Nil	Nil	Tr.	0.032	— 1.4	10.2	0.002	0.10	7.2	0.8	60	58.8	22.0	16.0	Nil	Nil	Nil	Pr.	0.038	—	2.0	14.4	0.001	0.01	7.5	0.6	60																	
March	47.6	17.0	20.0	0.002	0.002	Nil	Tr.	0.040	— 2.2	11.2	0.001	0.02	6.9	0.4	60	54.0	20.0	16.0	0.002	0.002	Nil	Pr.	0.077	—	1.4	16.1	0.02	0.01	7.2	0.8	60																	
April	46.8	19.0	13.0	0.003	0.002	Tr.	M.Tr.	0.024	— 2.5	11.8	0.008	0.04	6.9	0.6	60	52.0	21.0	14.0	0.002	0.002	Nil	Tr.	0.009	—	2.0	16.5	0.03	Tr.	7.1	0.8	60																	
May	47.4	19.0	19.0	0.002	0.002	Nil	Tr.	0.183	— 2.5	11.5	0.002	0.08	6.9	0.6	5.0	49.6	20.6	14.0	Nil	Nil	Nil	Tr.	0.052	—	1.5	17.1	0.002	Tr.	7.2	0.6	60																	
June	Samples were not collected																																															
July	52.8	24.0	20.0	0.002	0.003	Nil	Nil	0.057	— 2.8	14.0	0.01	0.10	7.8	0.8	60	53.2	19.0	14.0	0.002	0.004	Nil	Pr.	0.062	—	2.2	17.5	0.01	0.01	7.3	0.8	60																	
August	54.8	19.0	19.0	0.002	0.002	Tr.	Nil	0.045	— 2.8	14.0	0.02	0.04	7.0	0.8	60	56.8	20.0	16.0	0.002	0.002	Tr.	Pr.	0.052	—	1.1	18.5	0.02	0.01	7.3	0.8	60																	
September	55.6	18.0	18.0	Nil	Nil	Nil	Tr.	0.052	— 1.8	14.1	0.01	0.10	7.1	0.8	...	66.8	22.0	15.0	0.002	0.002	Pr.	Pr.	0.010	—	1.8	19.2	0.01	0.01	7.3	0.8	60																	
October	92.8	30.0	32.0	0.005	0.002	Tr.	Tr.	0.010	— 2.5	15.4	0.008	0.03	7.0	0.6	60	Samples were not collected																																
November	65.2	19.0	17.0	0.003	0.003	Nil	Tr.	0.175	— 1.2	10.7	0.01	0.06	7.1	1.0	60	60.4	19.0	14.0	0.002	0.002	Nil	Tr.	0.86	—	1.7	16.9	0.02	0.01	7.1	0.6	60																	
December	43.6	18.0	16.0	0.003	0.003	Nil	Pr.	0.031	— 1.4	10.3	0.006	0.04	7.1	0.6	...	...	16.0	11.0	0.003	0.003	Nil	Tr.	0.018	—	1.2	15.6	0.01	0.01	7.3	0.8	60																	



WATER ANALYSIS

Results of Chemical and Bacteriological Examination of the Important Shallow—Wells used as sources of water supply to outlying areas in 1959. (Results expressed in Parts per 100,000)

STATEMENT No. XV (a)

Months 1959	ADAYAR EASTERN WELL												ADAYAR WESTERN WELL											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Colour	Sl. Wh.	Wh.	Wh.	Wh.	Not in use.	Samples not collected	Wh. and H.	Wh.	Samples not collected	Wh.	Samples not collected	Sly.	C. & C.	C. & C.	Samples not collected	C. & C.	Samples not collected	C. & C.	G. & C.	Samples not collected.	Samples not collected	C. & C.	Samples not collected	
Total Solids	32.4	18.4	24.8				21.2	26.4		16.4		46.0	42.0	46.0		35.6		39.6	39.6			34.8		
Total Hardness	9.0	6.8	10.0				8.0	7.0		6.8		15.0	17.0	17.0		16.0		16.0	15.0			13.6		
Chlorides	13.0	1.0	1.8				1.2	1.6		1.6		6.0	6.0	6.8		7.0		4.8	5.0			5.0		
Ammonical Nitrogen	0.003	0.002	0.002				0.003	0.002		0.003		0.002	0.003	0.002		0.002		0.002	0.004			0.003		
Albuminoid Nitrogen	0.002	0.003	0.002				0.003	0.003		0.004		0.003	0.004	0.002		0.002		0.003	0.002			0.003		
Nitrous Nitrogen	Nil	Nil	Nil				Tr.	Nil		Tr.		Nil	0.005	Nil		Nil		Pr.	Pr.			Pr.		
Nitric Nitrogen.	Tr.	Pr.	Tr.				Nil	Nil		Tr.		Pr.	Int.	Pr.		Nil		Pr.	Nil			Pr.		
Oxygen Absorbed (Tidy)	0.067	0.070	0.034				0.054	0.08		0.083		0.038	0.065	0.069		0.088		0.054	0.097			0.087		
P.T.H. Alkalinity	0.2	0.6	0.5				1.1	0.7		0.4		0.5	1.1	1.0		0.8		1.2	1.0			1.1		
M.O. Alkalinity.	8.2	9.2	9.5				9.0	9.6		9.5		16.2	18.8	18.0		16.0		16.8	17.4			17.0		
Phosphates	0.03	0.03	0.02				0.02	0.02		0.03		0.04	0.03	0.02		0.02		0.02	0.02			0.02		
Iron	0.06	0.03	0.015				0.02	0.03		0.01		0.01	Tr.	0.01		0.005		Tr.	Nil			Tr.		
PH	7.5	7.7	7.5				7.5	7.9		7.7		7.5	7.6	7.5		7.8		7.8	7.7			7.7		
Silicates	0.6	0.6	0.6				0.8	0.8		0.8		0.8	0.6	0.6		0.6		0.8	0.8			0.8		
B. Coli present in many c.c. and upwards	6.0	1.0	6.0				1.0	1.0		1.0		60.0	1.0	6.0		60.0		1.0	5.0			5.0		









25	Ramakrishna Mutt Road.	1	2-7-59 to 7-7-59 (5 days)	29	...	...	0.158	0.01	0.001	40	...	0.130	0.03	0.001	100	...	...	+ 200	
26	Ramakrishna Mutt Road (near Kapali Talkies)	2	6-7-59 to 27-7-59 (9 days)	38	0.002	0.048	0.148	0.01	0.001	50	0.002	0.040	0.02	0.002	100	Nil	- 17	+ 10	
27	Adayar Bridge Road (opp. to Neptune Studio).	1	10-7-59 to 22-7-59 (6 days)	24	0.002	0.048	0.136	0.01	0.001	50	0.002	0.040	0.02	0.001	50	Nil	- 17	+ 100	
<i>III. Trunk Main No. 6</i>																			
28	Mount Road (near Police Station).	2	23-7-59 to 2-8-59 (5 days)	28	0.002	0.018	0.156	0.02	0.001	...	0.002	0.056	0.03	0.002	...	Nil	+ 17	+ 50	
29	Mount Road (near A.G.'s Office).	1	23-7-59 to 2-8-59 (5 days)	31	0.002	0.048	0.156	0.03	0.002	...	0.002	0.056	0.03	0.002	...	Nil	+ 17	+ 50	
30	Mount Road (near Jn. Eldams Road).	1	3-8-59 to 10-8-59 (4 days)	39	0.003	0.030	0.163	Nil	0.001	...	0.003	0.033	0.03	0.002	...	Nil	+ 6	+ 300	
31	Cenotaph Road	2	3-8-49 to 10-8-59 ( days)	27	0.003	0.030	0.163	Nil	0.001	...	0.003	0.032	0.03	0.002	...	Nil	+ 6	+ 300	
32	Chamiers Road (near Mowbrays Road Junction).	1	11-8-59 to 24-8-59 (7 days)	51	0.010	0.048	0.148	0.01	0.001	...	0.008	0.040	0.03	0.001	...	- 20	- 17	+ 200	
33	Chamiers Road (near Bridge).	21	11-8-59 to 24-8-59 (7 days)	51	0.010	0.048	0.148	0.01	0.001	...	0.008	0.040	0.03	0.001	...	- 20	- 17	+ 200	
34	Greenways Road (from Bridge).	1	25-8-59 to 7-9-59 (7 days)	52	0.003	0.060	0.177	0.01	0.001	50	0.002	0.056	0.04	0.003	50	- 33	- 61	+ 300	







## CHILD WELFARE SCHEME.

Statement showing the number of cases of labour which came under the care and observation of Child Welfare Centres during 1959.

Serial No.	Centre.	How conducted.				Total.	Caste.				Still Births.
		By Nurses of C. W. S.	Taken to Hospitals.	Taken over after handled by barber women.	Maternity ward.		Hindus.	Christians.	Muslims.	Twins.	
1	Tondiarpet	162	72	26	918	1,178	1,047	73	58	13	19
2	Palmyrahkuppam	154	17	3	...	174	123	7	44	1	4
3	Royapuram	294	23	8	...	325	196	4	125	3	8
4	Sanjeeviroyanpet	285	47	11	1,025	1,368	1,279	20	69	6	28
5	Washermanpet	537	65	14	1,124	1,740	1,325	21	394	9	47
6	Vyasarjadi	220	75	22	636	953	913	28	12	1	24
7	Peddunaickenpet	145	3	1	...	149	148	...	1	2	2
8	George Town	242	30	2	640	914	779	22	113	2	14
9	Kothawal Bazaar	311	38	13	545	907	668	44	195	10	12
10	Muthialpet	353	20	11	457	841	619	12	210	6	8
11	Trevelyan Basin	128	48	6	872	1,054	1,049	2	2	10	10
12	Maternity Home	437	175	14	2,394	3,020	2,845	75	100	21	70
13	Pulianthope	753	58	13	...	824	506	19	299	4	24
14	North Perambur	332	18	4	...	354	206	132	16	7	9
15	Sembium	533	129	19	704	1,385	1,211	58	116	6	34
16	Ayanavaram	268	62	15	857	1,202	1,122	33	47	7	41
17	Kilpauk	162	41	13	337	553	511	12	30	6	15
18	Nammalwarpet	256	17	6	...	279	266	7	6	2	5
19	Kosapet	307	7	5	...	319	290	13	16	3	1
20	Purasawalkam	196	33	2	915	1,146	1,053	57	36	7	21
21	Periamet	139	12	8	...	159	104	49	6	1	4
22	Ashok Vihar	...	21	...	731	752	638	64	50	8	14
23	Edapalayam	59	7	5	...	71	71	...	...	...	2
24	Park Town	65	4	2	...	71	64	5	2	2	2
25	Napier Park	260	10	10	...	280	238	5	37	...	3
26	Egmore	230	18	3	...	251	154	7	90	3	7
27	Chetput	94	65	6	510	675	602	58	15	7	20
28	Nungambakkam	159	5	2	...	166	162	...	4	1	2
29	Kodambakkam	279	105	30	1,174	1,588	1,458	77	53	15	36
30	Royapettah	333	36	2	...	371	319	6	46	8	5
31	Triplicane	459	84	9	660	1,212	748	13	451	7	31
32	Zam Bazaar	294	14	2	...	310	198	2	110	1	8
33	Mirsahibpet	325	19	2	...	346	174	1	171	4	9
34	Mylapore	377	4	2	...	483	403	5	75	4	16
35	Teynampet	428	4	6	...	438	433	2	3	...	8
36	Saidapet Mty. Home.	190	158	5	552	2,105	1,952	56	88	12	42
37	T. Nagar (North)	191	15	1	...	207	198	1	8	1	5
38	Saidapet Sub-Centre.	132	12	8	...	152	149	...	3	4	1
39	Guindy	74	9	4	...	87	84	2	1	...	3
40	Mandavalli	294	4	...	...	298	290	3	5	2	3
41	Adayar	77	16	4	251	348	328	10	10	5	8
42	Thousand Lights	184	9	2	...	195	143	11	41	1	5
43	T. Nagar (South)	215	15	2	...	232	228	2	2	...	11
44	Basin Bridge	213	11	3	...	227	184	6	37	1	6
	Total	11,246	1,635	326	16,502	29,709	25,478	1034	3197	213	644

## CHILD WELFARE SCHEME.

Statement showing the number of visits paid by the staff of Child Welfare Centre during 1959.

S. No.	Centre.	Midwives.	Health Visitors.	Assistant Surgeons.	Total.
1	Tondiarpet	8,565	9,083	430	18,078
2	Palmyrahkuppam	2,923	2,767	383	6,073
3	Royapuram	5,347	2,817	711	8,935
4	Sanjiviroyanpet	8,568	976	455	14,999
5	Washermanpet	12,604	6,181	256	19,041
6	Vyasarpadi	4,444	3,245	578	8,267
7	Peddunaickenpet	2,396	1,693	247	4,436
8	George Town	5,832	6,177	730	12,739
9	Kothawal Bazaar	6,772	6,403	628	13,803
10	Muthialpet	5,171	4,773	685	10,629
11	Trevelyan Basin	3,940	2,596	392	6,928
12	Maternity Home	13,709	6,659	947	21,315
13	Pulianthope	14,856	4,578	502	19,936
14	North Perambur	3,398	2,268	336	6,002
15	Sembium	7,780	1,817	715	10,312
16	Ayanavaram	6,232	4,569	468	11,269
17	Kilpauk	4,017	3,470	773	8,260
18	Nammalwarpet	3,137	1,756	244	5,137
19	Kosapet	6,108	2,816	289	9,213
20	Purasawalkam	4,753	3,423	475	8,651
21	Periamet	2,214	1,985	333	4,532
22	Ashok Vihar	2,045	1,279	...	3,324
23	Edapalayam	1,437	1,088	205	2,730
24	Park Town	1,195	1,099	195	2,489
25	Napier Park	3,089	2,096	238	5,423
26	Egmore	2,417	1,767	259	4,443
27	Chetput	3,525	2,247	369	6,141
28	Nungambakkam	3,116	2,325	449	5,890
29	Kodambakkam	7,357	6,247	1,058	14,662
30	Royapettah	3,984	1,981	559	6,524
31	Triplicane	6,082	7,961	605	14,648
32	Zam Bazaar	3,519	1,783	415	5,717
33	Mirsahibpet	3,889	1,954	509	6,352
34	Mylapore	6,034	2,432	662	9,128
35	Teynampet	4,147	2,123	366	6,637
36	Saidapet Mty. Home	5,101	4,117	565	9,783
37	T. Nagar (South)	2,967	2,485	359	5,811
38	Saidapet Sub-Centre	4,010	2,250	397	6,657
39	Guindy	737	1,093	456	2,286
40	Mandavalli	4,309	2,265	552	7,226
41	Adayar	1,635	1,806	545	3,986
42	Thousand Lights	3,191	1,777	436	5,404
43	T. Nagar (North)	3,255	2,487	318	6,060
44	Basin Bridge	4,524	2,721	229	7,474
	Total	214,432	142,425	20,433	377,290

## • CHILD WELFARE SCHEME.

Statement showing deaths among cases which came under the treatment of Child Welfare Scheme during the year 1959.

S. No.	Centre.	Deaths among cases brought under the care of C.W.S. but not under treatment.			Deaths among cases brought under cases treatment of C.W.S.	
		Under Private Doctors.	Under Vaidians.	In ₹s.		
1	Tondiarpet	...	...	...	...	
2	Palmyrabkuppam	...	...	...	...	
3	Royapuram	...	...	...	...	
4	Sanjiviroyanpet	...	...	...	...	
5	Washermanpet	...	...	...	...	
6	Vyasarjadi	...	...	...	...	
7	Peddunaickenpet	...	...	...	...	
8	George Town	...	...	...	...	
9	Kothawal Bazaar	...	...	1	1	
10	Muthialpet	...	...	...	1	
11	Trevelyan Bridge	...	...	3	3	
12	Choolai Maternity Home	...	1	2	3	
13	Pulianthope	...	...	1	1	
14	North Perambur	...	...	...	...	
15	Sembium	...	...	...	...	
16	Ayanavaram	...	...	4	1	
17	Kilpauk	...	...	...	...	
18	Nammalwarpet	...	...	...	...	
19	Kosapet	...	...	...	...	
20	Purasawalkam	...	...	1	1	
21	Periamet	...	...	...	...	
22	Ashok Vihar	...	...	...	...	
23	Edapalayam	...	...	...	...	
24	Park Town	...	...	...	...	
25	Napier Park	...	...	...	...	
26	Egmore	...	...	...	...	
27	Chetput	...	...	...	...	
28	Nungambakkam	...	...	...	...	
29	Kodambakkam	...	...	1	1	
30	Royapettah	...	...	1	1	
31	Triplicane	...	...	...	...	
32	Zam Bazaar	...	...	...	...	
33	Mirsahibpet	...	...	...	...	
34	Mylapore	...	...	...	...	
35	Teynampet	...	...	...	...	
36	Saidapet Maty. Home	...	...	...	...	
37	T. Nagar (South)	...	...	...	...	
38	Saidapet	...	...	...	...	
39	Guindy	...	...	...	...	
40	Mandavalli	...	...	...	...	
41	Adayar	...	...	1	1	
42	Thousand Lights	...	...	1	1	
43	T. Nagar (North)	...	...	...	...	
44	Basin Bridge Centre	...	...	...	...	
	Total	...	1	16	2	19

## CHILD WELFARE SCHEME.

Statement regarding Serological Examination of Blood of Ante-natal cases during 1959.

	Centre.	Total No. of Blood samples examined.	No. of positive cases.	No. of positive cases that took full course of treatment.	No. of positive cases that took partial treatments.	No. of positive cases that did not turn up for treatment.
1	Tondiarpet ...	733	33	3	5	25
2	Sanjeeviroyanpet ...	908	58	24	14	20
3	Washermanpet ...	1,234	84	8	25	51
4	Vyasarpadi ...	958	33	12	1	20
5	George Town ...	921	42	27	7	8
6	Kothawal Bazaar ...	923	40	23	4	13
7	Trevelyan Basin ...	673	34	13	4	17
8	Choolai Maternity House.	2,135	87	48	16	23
9	Sembium ...	1,298	47	1	11	35
10	Ayanavaram ...	1,200	50	35	4	11
11	Purasawalkam ...	665	28	25	2	1
12	Kodambakkam ...	1,517	82	9	12	61
13	Triplicane ...	1,203	40	10	10	20
14	Saidapet Maternity Home.	1,720	86	...	16	71
15	Adayar ...	187	13	9	2	2
	Total ...	16,315	758	247	133	378

## CHILD WELFARE SCHEME.

Showing the number of Labour cases came under the care and observation of Child Welfare Scheme : Infant mortality rate and Maternal mortality rate of Child Welfare Scheme from the years 1940 to 1959.

Year.	Under the labour cases that cause under the care and observation.	Infant mortality rate (per 1,000).	Maternal mortality rate per 100.
1940	14,489	115.80	2.50
1941	14,984	103.40	2.60
1942	8,390	104.40	3.00
1943	11,227	113.50	2.40
1944	10,591	140.60	2.20
1945	14,002	141.90	1.57
1946	19,147	102.80	2.50
1947	18,412	81.70	1.95
1948	26,051	83.00	1.91
1949	28,129	70.41	2.31
1950	26,957	95.52	2.00
1951	29,931	123.16	1.90
1952	32,264	125.43	1.73
1953	27,219	114.23	1.76
1954	29,209	110.31	1.27
1955	32,285	105.75	1.39
1956	31,267	109.30	1.15
1957	31,955	108.25	0.94
1958	30,671	104.32	1.01
1959	29,709	99.40	0.64

CHILD WELFARE CENTRE.

Statement showing the number of pre-natal cases registered and followed up during the year 1959.

Centre.	Pre-natal cases registered.	Booked Cases.							Unbooked Cases.								
		Total	C.W.S.	Hospital.	Private Doctors.	Private Nurses.	Unskilled attendants.	Not traceable.	Not confined.	Total.	C.W.S.	Hospital	Private Doctors.	Private Nurses.	Unskilled attendants.	Not traceable.	Not confined.
1 Tondiarpet	1,837	1,135	621	333	...	2	33	63	83	702	255	200	...	...	28	50	169
2 Palmyrakuppam	1,222	492	231	129	3	2	12	62	53	730	43	296	1	4	28	142	266
3 Royapuram	1,879	968	464	265	2	1	11	75	150	911	66	463	2	1	24	288	167
4 Sanjeeviroyanpet	1,796	1,183	728	254	2	2	73	14	110	613	72	385	...	1	127	9	19
5 Washermanpet	2,016	1,421	1,070	188	2	...	17	70	74	595	225	209	...	...	32	124	5
6 Vyasarpady	1,496	1,104	856	75	...	...	22	32	119	392	...	18	...	200	14	160	182
7 Peddunaickenpet	720	606	316	255	12	11	6	6	...	114	34	55	5	6	2	12	...
8 George Town	1,477	1,031	691	189	6	11	15	65	54	446	47	208	15	4	12	110	50
9 Kothawal Bazaar	1,681	973	701	154	7	9	34	33	35	708	68	176	3	4	90	220	147
10 Muthialpet	1,433	1,104	622	161	9	3	43	13	253	325	33	80	9	4	30	6	163
11 Trevelyan Basin	1,279	714	442	144	6	4	10	65	40	565	50	190	18	11	19	178	99
12 Choolai Maty. Home.	2,395	2,395	1,697	129	2	...	6	147	414	...	...	...	...	...	...	...	...
13 Pulianthope	2,339	2,119	458	20	8	12	15	992	614	220	95	17	2	2	28	66	10
14 North Perambur	989	833	301	65	1	...	1	95	370	156	53	40	...	...	5	50	8
15 Sembium	2,240	1,663	1,344	103	...	...	60	14	142	577	205	176	...	...	140	25	31
16 Ayanavaram Maty. Home.	2,388	1,378	790	292	9	...	44	129	114	1,010	333	268	5	1	62	230	111
17 Kilpauk	1,329	770	499	119	2	1	21	60	68	559	111	180	5	2	38	87	136
18 Nammalwarpet	892	582	390	47	2	1	50	42	50	310	106	34	...	...	40	50	80

19	Kosapet	...	1,477	1,094	941	128	...	1	77	04	80	383	156	50	...	40	45	72
20	Purasawalkam	...	1,260	710	517	100	5	5	7	13	63	550	272	89	3	25	25	149
21	Periamet	...	736	321	104	92	31	24	20	40	10	415	186	66	23	27	57	7
22	Ashok Vihar	...	787	640	396	145	2	...	14	20	63	147	24	97	3	8	12	-3
23	Edapalayam	...	411	286	153	86	16	7	4	9	11	125	17	66	3	4	5	26
24	Park Town	...	379	229	148	28	18	...	1	15	20	150	15	51	19	6	28	35
25	Napier Park	...	1,141	765	314	355	3	1	10	20	62	376	52	260	3	10	4	46
26	Egmore	...	1,163	690	289	323	...	1	6	13	58	473	24	381	1	4	20	43
27	Chetput	...	1,148	762	435	208	...	...	11	44	64	386	36	108	...	11	113	118
28	Nungambakkam	...	860	555	215	192	32	16	5	50	45	305	104	109	12	2	32	38
29	Kodambakkam	...	2,365	1,666	975	266	3	...	169	186	67	699	249	149	11	84	164	42
30	Royapettah	...	1,055	768	293	391	7	...	7	14	56	287	20	187	1	2	9	68
31	Triplicane	...	2,337	1,412	844	398	5	...	31	11	123	925	71	659	2	23	18	150
32	Zam Bazaar	...	1,104	661	260	312	1	1	10	21	56	443	31	326	...	2	22	62
33	Mirsalubpet	...	1,086	752	316	315	4	2	6	44	65	334	7	206	1	5	90	25
34	Mylapore	...	1,529	1,046	400	440	12	15	62	5	102	483	22	296	19	37	...	109
35	Teynampet	...	1,512	945	388	275	...	...	97	110	75	567	95	199	...	22	59	190
36	Saidapet Maty. Home.	...	2,312	1,944	1,205	253	...	4	118	234	130	368	22	137	...	55	124	28
37	T. Nagar South	...	748	491	276	125	4	3	13	18	52	257	46	100	2	24	53	32
38	Saidapet	...	1,063	1,890	678	75	...	1	18	39	79	173	35	39	...	31	35	33
39	Guindy	...	366	210	112	47	2	...	8	15	26	156	9	66	1	4	38	37
40	Mandavalli	...	1,339	574	232	230	9	7	9	43	44	765	8	542	1	15	59	138
41	Adayar	...	643	393	272	61	...	...	8	14	38	250	76	51	...	15	55	53
42	Thousand Lights	...	948	408	144	167	7	4	10	10	66	540	53	390	21	9	12	51
43	T. Nagar North	...	823	622	287	203	1	...	26	51	54	201	22	71	...	13	66	29
44	Basin Bridge	...	837	588	402	102	2	2	4	6	70	249	41	135	26	6	10	21
Total		...	58,837	39,893	22,617	8,238	237	153	1,217	3,109	4,322	18,940	3,489	7,725	252	1,387	2,816	3,172

## CHILD WELFARE SCHEME

Statement showing deaths among cases brought to the notice

Serial No.	Centre.	Cardio vascular deceases of heart.				Respi- ratory disease.	Alimen- tary disease.	Urinary Tract disease.	Toxaemias.			
		Valvular diseases of Heart	Heart failure.	Anaemia.	Pnemonia.	Tuberculosis.	Tuberculosis enterics.	Dysentery Intesi- nal obstruction.	Urinary disease Renal failure.	Pre-eclamptic Toxaemia.	Cholaemia.	Cerebral Thrombosis.
1	Tondiarpet	...	...	...	...	...	...	...	...	...	...	...
2	Palmyrahkuppam	...	...	...	...	...	...	...	...	...	...	...
3	Royapuram	...	...	...	...	...	...	...	...	...	...	...
4	Sanjivaroyanpet	...	...	...	...	...	...	...	...	...	...	...
5	Washermanpet	...	...	...	...	...	...	...	...	...	...	...
6	Vyasarjadi	...	...	...	...	...	...	...	...	...	...	...
7	Peddunaickenpet	...	...	...	...	...	...	...	...	...	...	...
8	George Town	...	...	...	...	...	...	...	...	...	...	...
9	Kothawal Bazaar	...	...	...	...	...	...	...	...	...	...	...
10	Muthialpet	...	...	...	1	...	...	...	...	...	...	...
11	Trevelyan Basin	...	...	1	...	...	...	...	...	...	...	...
12	Maternity Home	...	...	...	...	1	...	...	...	...	...	...
13	Pulianthope	...	...	...	...	...	...	...	...	...	...	...
14	North Perambur	...	...	...	...	...	...	...	...	...	...	...
15	Sembiam	...	...	...	...	...	...	...	...	...	...	...
16	Ayanavaram	...	1	1	...	...	...	...	...	...	...	1
17	Kilpauk	...	...	...	...	...	...	...	...	...	...	...
18	Nammalwarpet	...	...	...	...	...	...	...	...	...	...	...
19	Kosapet	...	...	...	...	...	...	...	...	...	...	...
20	Purasawalkam	...	...	...	...	...	...	...	...	...	...	...
21	Periamet	...	...	...	...	...	...	...	...	...	...	...
22	Ashok Vihar	...	...	...	...	...	...	...	...	...	...	...
23	Edapalayam	...	...	...	...	...	...	...	...	...	...	...
24	Park Town	...	...	...	...	...	...	...	...	...	...	...
25	Napier Park	...	...	...	...	...	...	...	...	...	...	...
26	Egmore	...	...	...	...	...	...	...	...	...	...	...
27	Chetput	...	...	...	...	...	...	...	...	...	...	...
28	Nungambakkam	...	...	...	...	...	...	...	...	...	...	...
29	Kodambakkam	...	...	...	...	...	...	...	...	...	...	...
30	Royapettah	...	...	...	...	...	...	...	...	...	...	...
31	Triplicane	...	...	...	...	...	...	...	...	...	...	...
32	Zam Bazaar	...	...	...	...	...	...	...	...	...	...	...
33	Mirsahibpet	...	...	...	...	...	...	...	...	...	...	...
34	Mylapore	...	...	...	...	...	...	...	...	...	...	...
35	Teynampet	...	...	...	...	...	...	...	...	...	...	...
36	Saidapet Home.	Maternity	...	...	...	...	...	...	...	...	...	...
37	T. Nagar	...	...	...	...	...	...	...	...	...	...	...
38	Saidapet	...	...	...	...	...	...	...	...	...	...	...
39	Guindy	...	...	...	...	...	...	...	...	...	...	...
40	Mandavalli	...	...	...	...	...	...	...	...	...	...	...
41	Adayar	...	...	...	...	...	...	...	...	...	...	...
42	Thousand Lights	...	...	...	...	...	...	...	...	...	...	...
43	T. Nagar (North)	...	...	...	...	...	...	...	...	...	...	...
44	Basin Bridge Centre.	...	...	...	...	...	...	...	...	...	...	...
		...	1	2	1	1	...	...	...	...	...	1

the Child Welfare Scheme during the year 1959.

Haemorrhage.			Shocks.			Infectious diseases.						Puerperal Spris	Pulmonary embolism.	Puerperal Mania	Total.	
Accidental haemorrhage.	Placenta Pravia.	Intra and Post Partum Haemorrhage.	Retained Placenta.	Obstetric Shock.	Shock due to Internal Manipulation.	Post operative Shock.	Ruptured Uterus.	Tetanus	Typhoid.	Meningitis.	Small-poz, Measles, etc.					Other Fevers.
1																1
1		1		2												3
			1		1											1
			1													5
										1						1
																1
																1
																1
																1
																1
																1
1																1
	1															1
3	2	2	1	2	1	...	1	...	...	1	...	...	...	...	...	19

Statement showing Pre-natal cases registered an

Serial number	Child Welfare Centres.	Cardio Vascular diseases.			Respiratory diseases.				Alimentary Tract diseases.				Diseases Urinary Tract.			Toxaemia of Pregnancy.				
		Vascular disease of Heart. (V.D.H.)	Hypertension.	Varicose Veins.	Bronchitis.	Pneumonia.	Pulmonary Tuberculosis.	Asthma.	Constipation.	Dyspepsia.	Diarrhoea.	Dysentery.	Scanty Micturition and Retention of Urine.	Albuminuria.	Pyelitis.	Pre-eclamptic Toxaemia.	Eclampsia.	Acute (Jaundice).	General anasarca.	
1	Tondiarpet	...	...	...	1	...	1	...	...	1	...	2	...	...	2	...	...	...		
2	Palmyrakuppam	...	...	...	6	...	...	...	...	28	3	7	...	...	5	3	...	...		
3	Royapuram	...	1	1	6	...	...	...	...	47	1	9	...	3	16	3	...	...		
4	Sanjeeviroyanpet	...	...	1	36	2	...	2	512	22	18	1	...	8	1	6	...	...		
5	Washermanpet	...	3	...	37	...	...	6	70	6	21	21	...	30	8	14	...	...		
6	Vyasarpany	...	4	4	46	...	...	4	9	10	11	9	...	28	...	19	13	...		
7	Peddunaickenpet	...	1	4	27	1	...	5	104	54	11	12	...	102	8	10	...	...		
8	George Town	...	2	...	59	...	1	1	27	40	6	2	...	8	3	19	...	...		
9	Kothawal Bazaar	...	...	...	10	...	3	...	160	6	5	4	...	40	...	21	...	...		
10	Muthialpet	...	...	...	74	...	...	1	15	...	4	6	...	41	19	15	...	...		
11	Trevelyan Basin	...	...	...	9	...	...	...	7	83	...	5	...	58	2	8	4	...		
12	Choolai Maty. Home	...	6	14	2	145	1	2	5	176	61	35	20	...	81	2	60	1		
13	Puliantbope	...	...	12	28	...	...	...	12	158	4	24	...	172	14	47	2	...		
14	North Perambur	...	...	...	8	...	...	...	...	51	10	2	...	48	1	1	...	...		
15	Sembium	...	...	...	4	...	...	1	19	42	1	5	...	19	...	5	...	...		
16	Ayanavaram Maty. Home.	...	4	1	15	...	...	...	...	8	...	...	...	2	2	75	...	...		
17	Kilpauk	...	1	...	10	...	...	...	36	120	1	1	...	115	...	7	...	...		
18	Nammalwarpet	...	...	4	7	...	...	1	45	20	3	10	...	40	...	1	...	...		
19	Kosapet	...	4	...	32	...	3	...	80	13	9	11	...	54	9	2	...	...		
20	Purasawalkam	...	2	2	20	...	1	1	3	63	10	6	...	93	3	28	...	...		
21	Periamet	...	...	...	12	2	...	...	20	14	5	1	...	13	1	4	...	...		
22	Ashok Vihar	...	20	1	27	...	...	5	12	31	1	3	...	13	...	21	...	...		
23	Edapalayam	...	2	1	1	15	...	...	3	42	10	5	...	36	...	4	...	...		
24	Park Town	...	...	1	4	...	...	9	...	...	6	1	...	3	...	...	...	...		
25	Napier Park	...	1	...	5	...	...	12	24	13	4	4	...	10	5	4	...	...		
26	Egmore	...	1	...	41	...	...	1	18	30	7	5	...	27	1	4	...	...		
27	Chetput	...	1	...	36	...	...	3	43	12	6	2	...	35	...	23	1	...		
28	Nungambakkam	...	2	...	35	...	...	2	10	105	34	15	...	35	26	...	...	...		
29	Kodambakkam	...	3	...	8	...	...	7	22	4	2	2	...	1	1	55	...	...		
30	Royapettah	...	21	2	29	...	...	1	...	149	3	3	...	94	27	...	...	...		
31	Triplicane	...	6	10	8	...	...	8	23	35	14	7	...	25	...	44	...	...		
32	Zam Bazaar	...	1	1	41	...	...	1	13	31	5	7	...	18	...	4	...	...		
33	Mirsaahibpet	...	30	3	29	...	...	1	...	171	7	9	...	110	9	...	...	...		
34	Mylapore	...	3	...	50	2	4	9	3	184	5	9	...	...	10	17	...	...		
35	Teynampet	...	...	...	6	...	...	...	20	20	6	2	...	4	...	7	...	...		
36	Saidapet Maternity Home.	...	...	...	40	...	...	...	42	90	9	24	...	40	...	77	5	7		
37	T. Nagar South	...	...	...	11	...	...	...	6	2	3	1	...	...	...	1	...	...		
38	Saidapet -	...	...	...	6	...	...	1	21	18	...	9	...	4	...	6	...	...		
39	Guindy	...	...	...	3	...	...	...	7	...	...	...	...	3	...	1	...	...		
40	Mandavalli	...	1	...	10	5	3	...	...	91	10	8	...	...	7	18	...	...		
41	Adayar	...	4	...	2	...	...	...	4	7	...	1	...	10	1	2	...	...		
42	Thousand Lights	...	...	...	23	...	...	...	59	91	25	17	...	23	6	...	...	...		
43	T. Nagar North	...	...	...	5	...	...	...	5	2	2	2	...	1	...	3	...	...		
44	Basin Bridge	...	3	3	1	36	...	4	111	22	11	12	...	89	3	11	1	...		
	Total	...	125	52	17	956	13	20	97	1280	1973	322	306	1,523	151	40	588	90	3	12

## ailments of Pregnancy diagnosed and Patients advised in 1959.

Deficiency diseases.	Pyrexia.		Debi- lity.	Specific diseases.					Other diseases and abnormalities of Pregnancy.						Other diseases.	Total.		
	deficiency.	Vitamin deficiency.		Other Nutritional deficiency.	Influenza.	Malaria.	Rheumatism.	General debility (Emaciation).	Skin diseases.	Ear, Nose and Throat.	V.D., Syphilis Gonorrhoea.	Leucorrhoea.	Morning sickness.	Anaemia.			Ante-partum Haemorrhage.	Breast abscess.
6	25	...	1	1	...	5	...	...	33	...	58	258	...	...	...	718	25	1,135
27	75	...	31	...	...	15	...	...	...	...	...	139	...	...	...	159	21	492
28	119	...	67	1	...	23	...	1	...	...	...	308	...	...	...	290	4d	968
8	88	98	13	...	...	4	32	...	...	...	...	305	...	...	...	415	86	1,183
29	35	...	19	7	...	22	4	...	...	...	...	158	...	...	...	780	172	1,421
4	99	...	4	...	...	...	...	...	...	...	106	...	...	...	4	479	226	1,104
14	70	11	4	3	3	15	9	5	...	2	1	54	...	7	...	55	...	606
...	102	...	6	...	...	4	7	...	1	1	...	224	...	...	1	502	7	1,031
...	95	3	18	1	...	29	8	3	40	3	...	84	...	...	...	349	76	973
...	152	...	...	...	...	63	24	...	1	...	...	...	173	...	...	484	32	1,104
...	81	...	6	...	...	41	10	...	...	...	1	84	...	...	...	248	67	714
1	330	...	16	...	1	57	22	...	...	30	...	182	...	1	2	845	283	2,395
...	202	...	22	...	...	175	...	...	...	6	...	222	...	...	...	637	379	2,119
8	42	...	8	...	9	65	...	...	...	8	4	95	...	2	...	381	90	833
...	121	3	...	...	...	11	...	...	...	3	...	149	...	...	...	811	469	1,663
...	60	5	...	...	...	10	13	1	50	1	...	26	...	...	1,100	7	1,378	
...	53	...	...	...	...	36	1	...	...	...	...	127	3	...	...	229	30	770
...	61	...	13	...	...	32	...	...	...	...	...	78	...	...	...	215	52	582
...	147	...	11	...	...	59	4	...	1	...	...	171	...	...	11	340	122	1,094
...	85	30	6	...	...	30	...	...	28	4	19	50	2	2	2	199	18	710
...	25	15	...	...	...	21	...	...	1	...	...	50	...	...	...	108	29	321
...	68	3	5	...	53	7	4	3	...	...	...	24	...	...	...	299	39	640
1	33	4	9	3	1	10	7	2	...	...	612	31	...	4	...	33	3	286
...	3	1	...	...	...	5	2	...	...	...	...	29	...	...	...	158	7	229
2	16	...	...	...	...	12	11	...	...	...	2	186	...	3	...	420	31	765
...	75	...	...	...	...	19	9	2	...	2	...	50	...	...	...	357	41	690
...	42	2	10	...	...	36	1	...	...	2	5	20	1	...	...	323	158	762
46	37	18	7	...	...	52	5	...	...	...	...	45	1	...	...	12	68	555
1	161	...	14	...	...	23	14	2	20	...	...	181	...	2	...	1 082	61	1,666
1	43	...	...	...	...	63	2	...	...	18	...	131	...	...	...	110	71	768
5	171	...	3	...	...	85	11	...	...	...	1	164	...	2	2	762	26	1,412
...	88	...	...	1	...	26	5	1	...	2	1	34	1	...	...	336	42	661
5	34	...	1	...	...	64	...	...	...	16	...	107	...	1	1	106	48	752
...	580	...	34	...	...	...	4	6	5	...	...	90	...	...	15	10	6	1,046
17	185	...	...	...	...	...	1	...	...	...	...	284	...	...	...	389	4	945
...	81	...	13	...	...	28	9	...	22	...	5	191	...	...	...	1,105	89	1,944
...	21	1	2	...	...	15	4	...	...	...	...	24	...	...	2	513	16	622
...	149	...	...	...	...	8	...	...	1	...	...	272	...	...	...	390	5	890
...	49	...	...	...	...	3	...	...	...	...	...	53	...	...	...	88	3	210
...	280	10	...	...	...	...	16	...	5	5	...	76	...	...	9	20	...	574
2	50	...	...	...	...	...	4	...	...	...	...	87	...	...	...	209	10	393
...	54	...	...	...	...	36	...	...	...	...	...	e0	...	...	...	34	10	408
...	13	...	1	...	...	7	2	...	...	...	...	16	1	...	...	421	9	491
12	45	30	19	19	...	5	10	4	...	8	...	10	59	2	5	58	...	588
17	4355	234	363	26	67	1221	255	30	208	117	215	4689	241	26	55	16,579	2,923	39,905

## CHILD WELFARE SCHEME.

Statement showing Maternity Morbidity in the year 1959.

Serial No.	Centre.	Ante Partum						Intra and Post Partum										Puerperium						Total.		
		Accidental Haemorrhage.	Placenta Praevia.	Anaemia.	Abnormal presentation.	Hydatiform mole.	Ectopic Gestation	Placenta Praevia.	Retained Placenta.	Post-Partum Haemorrhage.	Anatomical Abnormality contracted pelvis.	Malposition and disproportion	Tedious labour delayed 2nd stage.	Perineal and Cervical laceration.	Urinary Complication.	Puerperal Sepsis.	Phlebitis.	Thrombosis.	Phyrexia.	Uterine.	Puerperal Toxaemias.	Anaemia.	Poichosis.		Diseases of Breasts.	Other diseases.
1	Tondiarpet	6	...	95	2	...	...	1	2	...	...	24	49	2	...	...	25	...	46	...	...	46	...	6	3	262
2	Palmyrakuppam	1	...	31	2	...	...	...	...	4	3	17	...	...	...	...	1	3	44	...	...	44	...	...	13	119
3	Royapuram	2	...	42	1	...	...	1	10	1	8	22	...	1	...	...	8	8	70	3	...	70	...	2	36	215
4	Sanjeevirayanpet	...	...	59	12	...	...	1	14	15	53	110	10	2	...	...	40	8	71	...	...	71	...	11	41	447
5	Washermanpet	10	...	11	2	...	...	...	6	...	...	...	8	11	...	...	8	...	121	...	...	121	...	...	62	225
6	Kothawal Bazaar	5	...	1	...	...	...	2	...	...	47	8	3	...	...	...	2	2	...	...	...	...	...	...	10	90
7	Vyasarpady	2	...	2	3	...	...	...	6	1	9	3	2	1	...	...	7	...	10	2	...	10	3	...	1	52
8	George Town	2	...	9	18	...	...	...	16	...	11	60	1	...	...	...	23	...	7	...	...	7	...	11	154	
9	Peddunaickenpet	...	...	85	16	...	...	2	25	1	35	66	...	...	...	...	29	...	95	...	...	95	...	2	356	
10	Muthialpet	...	...	28	8	...	...	...	8	...	15	25	...	10	...	...	20	...	2	...	...	20	...	2	40	178
11	Trevelyan Basin	...	...	80	15	...	...	2	14	...	2	21	25	47	1	...	16	...	1	...	...	28	...	11	33	296
12	Choolai Maternity Home	11	...	...	58	...	...	2	23	5	71	163	18	36	...	108	66	1	...	...	1	29	...	27	26	644
13	Pulianthope	4	...	154	5	...	...	...	3	1	19	18	24	5	...	...	90	...	...	...	...	78	...	2	8	413
14	North Perambur	...	...	8	...	...	...	...	...	...	6	36	14	4	...	...	28	...	...	...	...	79	...	3	14	195
15	Sembium	1	...	15	...	...	...	...	12	...	...	8	9	7	...	...	12	...	1	...	...	...	...	1	...	66
16	Ayanavaram	7	...	2	32	...	...	2	10	3	22	49	33	16	...	...	125	...	2	...	...	32	1	40	19	395
17	Kilpauk	7	...	6	2	...	...	...	1	...	24	...	2	1	...	...	4	...	2	...	...	...	...	...	9	58
18	Nammalwarpet	1	...	60	4	...	...	...	...	...	15	3	23	...	...	...	33	...	...	...	...	37	...	...	53	229
19	Kosapet	1	...	38	2	...	...	...	1	...	5	5	27	2	...	...	78	...	...	...	...	62	...	...	113	384
20	Purasawalkam	1	...	32	7	...	...	2	9	2	27	37	15	5	...	...	43	...	...	...	...	...	...	5	30	223

21	Periamet	1	...	1	...	1	6	1	1	...	1	...	1	...	1	...	1	...	1	...	1	...	1	...	15	45
22	Ashok Vihar	1	...	1	...	2	13	50	...	...	13	...	...	...	2	...	...	...	...	...	...	...	...	...	...	89
23	Edapalayam	...	...	2	...	...	3	1	...	...	3	...	...	...	2	...	...	...	...	...	...	...	...	10	29	
24	Napier Park	...	...	...	...	...	1	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	7	
25	Park Town	...	...	...	...	...	6	2	4	...	18	...	...	...	7	...	...	...	...	...	...	...	7	9	84	
26	Egmore	...	...	...	...	...	6	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	2	44	
27	Chetput	...	...	2	...	1	22	38	...	...	50	...	...	...	3	...	...	...	...	...	...	...	29	175		
28	Nungambakkam	...	...	5	...	...	10	12	...	...	15	...	...	...	5	...	...	...	...	...	...	...	8	90		
29	Kodambakkam	...	...	8	...	1	25	6	...	...	21	...	...	...	1	...	...	...	...	...	...	...	22	289		
30	Royapettah	...	...	...	...	...	4	...	5	...	11	...	...	...	3	...	...	...	...	...	...	...	50	150		
31	Triplicane	...	...	8	...	1	...	3	42	43	19	...	...	...	12	...	...	...	...	...	...	...	10	151		
32	Zam Bazaar	...	...	2	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	64	
33	Mirahibpet	...	...	1	...	...	4	...	2	...	13	...	...	...	2	...	...	...	...	...	...	...	2	49	146	
34	Mylapore	...	...	2	...	2	...	23	19	29	23	...	...	...	24	...	...	...	...	...	...	...	10	264		
35	Teynampet	...	...	...	...	...	...	3	...	...	8	...	...	...	...	...	...	...	...	...	...	...	...	...	35	
36	Saidapet Maternity Home	...	...	10	...	...	77	89	6	...	20	...	...	...	...	...	...	...	...	...	...	...	11	282		
37	T. Nagar South	...	...	...	...	...	1	6	4	...	12	...	...	...	1	...	...	...	...	...	...	...	8	48		
38	Saidapet Sub-Centre	...	...	2	...	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	32	
39	Guindy	...	...	...	...	...	...	3	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	23	47	
40	Mandavalli	...	...	...	...	2	...	20	19	28	23	...	...	...	27	...	...	...	...	...	...	...	...	...	224	
41	Adayar	...	...	...	...	...	8	8	...	...	21	...	...	...	3	...	...	...	...	...	...	...	...	50	120	
42	Thousand Lights	...	...	...	...	...	4	10	...	...	12	...	...	...	...	...	...	...	...	...	...	...	...	6	70	
43	T. Nagar North	...	...	2	...	...	1	4	5	3	10	...	...	...	2	...	...	...	...	...	...	...	2	17	54	
44	Basin Bridge	...	...	2	...	...	6	2	...	...	9	...	...	...	5	...	...	...	...	...	...	...	37	95		
Total		105	24	918	333	...	7	20	249	17	46	731	1171	302	174	2	1008	88	150	1151	4	197	888	7585		

## CHILD WELFARE SCHEME.

Statement showing infants born in the year 1958 and kept under observation for a period of one year after birth.

S. No.	Centre.	Total number of infants born in 1958.	Total number of still births in 1958.	Period.												Total No. of deaths excluding still births.	Left City or otherwise not traceable.	Said to be well.	Out of Division.	No. of living children in the City when one year old.	No. of living children when one year old.
				1 to 7 days.		8 days to 1 month.		2 to 3 months.		4 to 6 months.		7 to 9 months.		10 to 12 months.							
				Died.	Not Traceable.	Died.	Not Traceable.	Died.	Not Traceable.	Died.	Not Traceable.	Died.	Not Traceable.	Died.	Not Traceable.						
1	Tondiarpet	1,217	31	27	11	7	1	15	1	26	25	20	23	10	73	105	134	131	118	816	947
2	Palmyrakuppam	199	5	3	4	...	3	3	...	13	1	2	1	2	...	27	2	19	...	146	165
3	Royapuram	356	9	15	7	...	8	1	13	13	11	13	4	8	1	64	8	33	...	242	275
4	Sanjeevarayanpet	1,480	31	25	18	12	6	26	9	37	11	23	22	14	21	137	87	154	...	1,071	1,225
5	Washermanpet	1,976	45	34	24	32	3	49	5	83	22	32	34	15	165	245	253	326	8	1,107	1,433
6	Kothawal Bazaar	954	16	21	15	11	5	26	11	17	13	13	8	19	8	107	60	112	4	659	771
7	Vyasarpady	989	22	13	9	1	14	16	...	11	...	10	2	11	2	68	36	279	58	584	863
8	George Town	900	17	15	7	13	...	16	...	16	4	26	3	14	2	102	16	49	...	716	765
9	Peddunaickenpet	321	10	12	...	1	7	7	...	1	2	9	1	1	...	31	4	30	...	246	276
10	Muthialpet	951	13	12	...	9	1	7	1	4	...	7	...	11	3	50	5	56	...	827	883
11	Trevelyan Basin	1,070	22	19	8	10	8	25	15	21	17	17	25	16	39	108	112	120	51	708	828
12	Choolai Maternity Home.	3,139	68	59	68	44	14	64	36	80	45	70	27	36	85	353	275	601	...	1,842	2,443
13	Pulianthope	913	38	12	2	12	1	22	15	32	19	10	11	12	7	100	55	201	...	519	720
14	North Perambur	396	7	10	3	2	6	7	4	7	3	6	4	3	12	35	32	61	...	261	322
15	Sembium	1,326	33	34	10	5	2	24	30	21	33	25	38	16	51	125	164	123	89	881	1,004
16	Ayanavaram	1,265	24	26	22	16	6	24	24	27	22	22	18	11	20	126	412	133	68	870	1,003

17	Kulpauk	623	14	8	2	9	1	6	3	16	1	10	3	9	17	58	27	116	24	408	524	
18	Nammalwarpet	273	6	7	1	5	2	8	2	5	...	9	1	2	11	36	17	26	...	188	214	
19	Kosapet	345	11	7	1	3	1	8	1	9	...	10	...	7	...	44	3	21	...	266	287	
20	Purasawalkam	1,139	31	18	25	7	5	15	4	27	7	22	9	26	31	115	81	163	...	749	912	
21	Periamet	170	4	3	...	3	...	4	1	8	...	7	...	...	2	25	3	10	13	128	138	
22	Ashok Vihar	713	12	11	15	7	24	11	20	13	19	11	19	6	15	59	112	129	...	401	530	
23	Edapalayam	70	3	1	...	...	...	...	...	1	...	3	1	3	...	8	1	3	...	55	58	
24	Napier Park	313	3	9	...	4	3	9	3	6	4	8	...	2	7	38	17	34	...	221	255	
25	Park Town	83	3	4	...	...	...	1	1	1	2	...	...	2	...	8	3	7	...	62	69	
26	Egmore	288	11	5	...	3	1	7	3	5	2	6	2	4	4	30	12	13	52	222	235	
27	Chetput	489	19	8	8	5	...	11	2	11	6	7	5	8	9	50	30	95	...	295	390	
28	Nungambakkam	217	8	3	...	2	...	3	...	1	1	2	1	...	...	11	2	51	...	145	196	
29	Kodambakkam	1,363	28	25	21	8	6	15	8	19	16	21	22	16	17	104	90	207	105	934	1,141	
30	Royapettah	420	8	9	1	6	2	12	2	11	8	4	3	4	1	46	17	48	...	301	349	
31	Triplicane	1,235	25	28	14	5	1	20	8	28	24	28	18	19	18	128	83	131	...	868	999	
32	Zam Bazaar	305	4	2	...	5	1	6	1	12	3	6	2	7	6	38	13	64	...	186	250	
33	Meersahibpet	342	8	8	...	3	3	12	16	9	6	6	11	4	1	42	37	16	...	239	255	
34	Mylapore	530	10	8	...	4	...	8	3	7	6	7	4	4	6	38	19	35	...	428	463	
35	Teynampet	555	8	12	...	6	...	7	...	15	...	9	...	2	60	51	60	43	...	393	436	
36	Saidapet Maternity Home.	2,268	58	27	49	12	23	33	24	38	52	14	29	8	52	132	229	215	288	1,634	1,849	
37	T. Nagar (South)	342	4	11	...	5	1	2	1	4	2	5	1	5	3	32	8	44	...	254	298	
38	Saidapet Sub-Centre	131	2	2	...	1	...	2	...	3	...	5	...	...	5	13	5	9	...	102	111	
39	Guindy	90	1	3	...	...	...	...	...	...	1	2	1	1	1	6	3	12	...	68	80	
40	Mandavalli	318	9	4	...	2	1	7	2	9	4	10	2	6	2	38	11	28	...	232	260	
41	Adayar	339	7	3	4	4	1	7	2	2	...	2	1	2	4	20	12	42	19	258	300	
42	Thousand Lights	146	8	2	...	2	...	2	...	5	...	3	...	...	...	14	...	32	...	92	124	
43	T. Nagar (North)	112	3	...	...	1	...	4	...	3	...	3	1	1	1	12	2	27	...	68	95	
44	Basin Bridge	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...		30,671	699	565	361	306	131	557	259	677	382	527	357	347	762	2,979	2,252	4,049	900	20,692	24,741	

## CHILD WELFARE SCHEME

Statement showing causes of deaths among infants born in

Serial No.	Centre.	Number of infants born in 1958.	Number of live births.	Number of still births in 1958	Neo-Natal deaths.					Infectious diseases.					Fevers		Respira- tory Diseases			
					Pre-maturity.	Asphyxia— Neo Natorium.	Birth injuries.	Congenital malformation and complications.	Others.	Cholera.	Small-pox.	Diphtheria.	Measles.	Enteric Fever.	Anterior Poliomyelitis	Meningetis.	Others.	Malaria.	Kalazar others.	Tuberculosis lungs.
1	Tondiarpet ...	1,217	1,186	31	14	13	...	...	...	3	1	...	...	...	...	...	1	...	17	8
2	Palmyrakuppam.	199	194	5	...	...	...	...	...	...	...	...	...	...	1	...	6	...	3	...
3	Royapuram ...	356	347	9	13	...	1	1	...	...	1	1	...	...	...	1	...	6	...	
4	Sanjeeviroyanpet	1,480	1,449	31	12	7	...	2	4	1	3	1	...	...	3	...	1	...	35	...
5	Washermanpet ...	1,976	1,931	45	21	15	...	...	2	12	...	...	5	...	2	...	2	...	49	4
6	Vyasarpady ...	989	967	22	2	8	...	...	7	...	3	...	1	2	...	...	...	...	...	...
7	Peddunaickenpet	321	311	10	5	4	...	...	3	...	...	...	...	...	1	...	2	...	4	...
8	George Town ...	900	883	17	18	4	...	1	...	2	...	...	...	...	...	3	...	28	...	
9	Kothawal Bazaar	954	938	16	9	7	...	1	4	...	2	1	...	...	2	...	...	17	3	
10	Muthialpet ...	951	935	16	4	1	...	...	...	1	...	...	...	9	...	...	...	1	2	
11	Trevelian Basin.	1,070	1,048	22	10	13	...	...	6	...	...	...	...	1	...	17	1	20	...	
12	Choolai Maternity Home.	3,139	3,071	68	40	26	1	1	2	...	8	4	1	...	1	5	20	...	54	4
13	Pulianthope ...	913	875	37	8	5	...	...	...	1	...	1	...	...	...	...	...	21	...	
14	North Perambur.	396	389	7	7	3	...	...	...	...	...	...	...	...	...	...	...	3	...	
15	Sembium ...	1,326	1,293	33	19	6	...	1	...	...	...	...	...	2	...	...	...	3	5	
16	Ayanavaram ...	1,265	1,241	24	20	5	...	5	2	...	2	...	...	2	...	...	...	...	17	...
17	Kilpauk ...	623	609	14	4	1	1	...	...	2	1	2	...	2	...	10	...	6	1	
18	Nammalwarpet ...	273	267	6	7	1	...	...	...	1	...	1	...	...	6	...	6	...	...	...
19	Kosapet ...	345	334	11	9	...	...	...	...	2	...	1	...	...	4	...	...	...	2	...
20	Purasawalkam ...	1,139	1,108	31	12	7	...	...	6	...	...	...	1	...	10	...	...	...	...	...
21	Periamet ...	170	166	4	2	...	...	...	4	...	3	...	...	...	3	...	...	...	...	...
22	Ashok Vihar ...	713	701	12	5	1	...	12	...	7	...	...	...	...	9	...	...	2	1	...
23	Edapalayam ...	70	67	3	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...
24	Park Town ...	83	80	3	4	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...
25	Napier Park ...	313	310	3	13	...	...	1	...	1	...	...	...	...	1	...	...	8	...	...
26	Egmore ...	288	277	11	2	2	...	...	...	1	...	...	...	1	...	...	...	2	...	...
27	Chetput ...	489	470	19	4	4	...	1	4	...	2	...	...	...	3	...	10	...	...	...
28	Nungambakkam.	217	209	8	3	...	...	...	...	...	...	...	...	...	2	...	...	1	...	...
29	Kodambakkam ...	1,363	1,335	28	27	2	...	4	...	4	...	...	1	3	...	...	...	20	...	...
30	Royapettah ...	420	412	8	8	1	...	1	...	1	...	...	...	1	...	9	...	4	1	...
31	Triplicane ...	1,235	1,210	25	18	11	4	...	...	1	1	...	...	...	...	...	24	...	...	...
32	Zam Bazaar ...	305	301	4	3	...	...	...	2	...	...	...	...	...	1	1	...	5	...	...
33	Mirsahibpet ...	342	334	8	4	2	...	2	...	...	...	...	2	...	5	...	1	5	...	...
34	Mylapore ...	530	520	10	8	...	...	...	...	...	...	...	...	...	...	...	16	1	...	...
35	Teynampet ...	555	547	8	15	...	...	...	...	...	...	...	...	...	6	...	1	...	...	...
36	Saidapet Maty. Home.	2,268	2,210	58	19	4	2	1	3	1	2	...	...	...	...	...	19	...	...	...
37	T. Nagar South.	342	338	4	10	2	...	...	...	3	...	...	...	...	...	...	7	...	...	...
38	Saidapet ...	131	129	2	3	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
39	Guindy ...	90	89	1	1	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...
40	Mandavalli ...	318	309	9	7	...	...	...	...	1	...	...	...	...	5	...	1	...	...	...
41	Adayar ...	339	332	7	3	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
42	Thousand Lights.	146	138	8	6	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
43	T. Nagar North.	112	109	3	...	...	...	...	...	...	...	...	...	...	...	...	5	1	...	...
44	Basin Bridge ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Total ...	30,671	29,972	699	397	157	10	22	57	7	67	10	8	7	3	1	126	4	381	78

58 and kept under observation during first year of life.

	Diseases ofimentary system					V.D.	Diseases of Nervous system					Deficiency Diseases			General causes.			Total number of deaths excluding still births.	Left the city or otherwise not traceable.	Said to be well.	Out of division.	Number of living children in city when one year old.	Total number of living Children when one year old.		
	Dysentery.	Others.	Nephritis.	Others.	Cirrhosis.		Others.	Congenital Syphilis	Convulsion.	Tetanus.	T.B. Meningitis.	Others.	Rickets.	Malnutrition.	Others.	Septicaemia & Pyaemia.	Accidents, injuries, etc.							Snake bite or Scorpion sting.	Other causes.
39	4			1								2						2	105	134	131	118	816	975	
13																			27	2	19		146	964	
28	9																	3	64	8	33		242	275	
40	2	2										11	4	3				4	2	1	3787	154	8	1,071	1,225
87	14	11				3						14	2	2				3	245	253	326	8	1,099	1,433	
31	1	1					2			1	3		1						68	36	279	53	526	805	
4	2						3					2							31	4	30		246	276	
32	6					2	1					4							102	16	49		716	765	
33	5						4					17		1				1	107	60	112	4	659	771	
15	5						12												50	5	56		824	880	
25	8		1			2	10					4						12	8	112	120	51	708	828	
84	14	13				5	5			46	2		14					2	1	353	275	601		1,840	2,441
34	1					6						21						3	100	55	201		520	721	
18							1								1			2	35	32	61		260	271	
30	3	2				24				20									125	164	123	89	866		
44	2					1	2			1		2		4				1	120	112	133	68	870	1,003	
7	2						3					3	1	1				110	58	26	116	24	410	526	
7	2						3						1					136	17	26		36	188	214	
18	3	4																1	44	3	21		266	287	
41	3	1	1	2		4						8	4	1				4	3	115	81	163		749	912
3	2	1		1	3								1					2	25	3	10	10	128	138	
17	1						1					2		1					59	112	129		401	530	
3	1																		8	1	3		55	58	
2																			8	3	7		62	69	
7	6	1																	38	17	34		221	255	
10		4	1	1								5						1	30	12	52		182	234	
17	1											2	1						50	30	95		295	390	
5																			11	2	51		144	195	
17	8	1					2			1		10						3	104	90	207	105	830	1,037	
12	3											3		1					46	17	48		301	349	
51	4	1					9					3						1	128	83	131		868	991	
10	3	1					2					8						2	38	13	64		184	248	
12	4					1	2					1				1			42	37	16		239	255	
8	2	2	1																38	19	35		430	465	
26																			51	60	43		393	436	
54	4						3											3	7	132	229	215	288	1,634	1,849
4							2			1		2						1	32	8	44		254	298	
9																			13	5	9		102	111	
							1											1	1	6	3	12		68	80
18	2						1					3							38	11	28		232	260	
11																		6	1	20	12	42	10	240	282
6	1																		14		32		92	124	
5	1																		12	2	27		68	95	
57	129	41	6	1	3	5	48	75		47	31	127	29	15	1		46	76	2979	2252	4088	836	19,245	33,694	

## CHILD WELFARE SCHEME

Statement showing the Total Number of Attendance of Expectant and

Serial No.	Centre	Attendance at Clinics								Total New Attendance	Total old Attendance
		Infants		Pre-School		Expectant Mothers		Nursing Mothers			
		New	Old	New	Old	New	Old	New	Old		
1	Tondiarpet	1,832	3,186	256	98	1,135	690	2,471	3,281	5,694	7,25
2	Palmyra Kuppam	593	1,052	69	24	492	367	930	1,074	2,084	2,51
3	Royapuram	712	1,297	108	32	968	604	1,105	1,353	2,893	3,28
4	Sunjeeviroyanpet	1,981	4,903	339	358	1,183	1,337	2,019	4,723	5,522	11,32
5	Washermanpet	2,576	8,657	432	144	1,421	1,928	3,199	9,014	7,628	19,74
6	Vyasarpady	1,382	5,305	287	350	1,104	2,374	2,126	2,126	4,899	10,15
7	Peddunaickenpet	469	964	80	186	606	732	529	1,015	1,684	2,89
8	George Town	1,409	5,571	332	528	1,031	1,938	1,766	5,120	4,534	13,15
9	Kothawal Bazaar	2,438	4,989	1,163	1,242	973	2,186	3,429	4,813	8,003	13,23
10	Muthialpet	1,254	3,640	149	110	1,104	1,800	1,792	4,084	4,209	9,63
11	Trevelyan Basin	2,127	4,294	664	234	714	1,208	2,187	4,327	5,692	10,06
12	Choolai Maty. Home	4,591	8,703	4,260	1,916	2,395	4,802	5,714	11,762	16,960	27,18
13	Pulianthope	1,735	2,348	196	54	2,119	1,013	2,347	2,644	6,397	6,05
14	North Perambur	728	793	179	42	833	548	1,000	2,838	2,740	2,20
15	Sembiam	1,820	5,952	122	132	1,663	3,142	2,741	6,265	6,346	15,49
16	Ayanavaram	1,681	5,059	444	356	1,378	2,318	2,105	4,576	5,608	12,30
17	Kilpauk	1,094	4,442	420	532	770	907	1,282	3,755	3,566	9,63
18	Nammalwarpet	521	988	168	82	582	430	670	1,031	1,941	2,53
19	Kosapet	752	960	64	11	1,094	615	1,021	1,113	2,931	2,68
20	Purasawalkam	1,845	4,560	521	411	710	1,068	1,939	4,613	5,015	10,63
21	Periamet	440	1,010	194	124	321	506	550	1,062	1,505	2,70
22	Ashok Vihar	1,402	2,071	1,217	671	640	870	1,883	3,187	5,142	6,70
23	Edapalayam	397	591	76	80	286	462	466	582	1,225	1,70
24	Park Town	423	750	112	78	229	298	475	769	1,239	1,80
25	Napier Park	609	482	45	4	765	408	717	552	2,136	1,40
26	Egmore	1,115	1,051	367	129	690	846	791	905	2,693	2,90
27	Chetput	945	5,784	219	1,422	762	1,863	1,011	5,009	2,937	14,00
28	Nungambakkam	801	504	27	4	555	414	924	550	2,307	1,40
29	Kodambakkam	2,380	9,530	247	259	1,666	3,442	2,818	8,862	7,111	22,00
30	Royapettah	1,075	1,861	251	250	768	1,105	1,489	1,797	3,583	5,00
31	Triplicane	2,258	6,464	574	499	1,412	2,055	2,734	6,555	6,978	15,50
32	Zam Bazaar	1,095	1,002	131	58	661	856	848	935	2,735	28,00
33	Mirsahibpet	1,017	2,463	181	253	752	1,653	1,353	2,692	3,303	7,00
34	Mylapore	1,052	1,285	361	429	1,046	1,461	1,171	1,406	3,630	4,50
35	Teynampet	611	283	23	27	945	490	627	262	2,206	1,00
36	Saidapet Maty. Home	2,533	9,293	159	35	1,944	2,086	3,170	9,918	7,806	21,30
37	T. Nagar	382	110	33	2	622	201	326	100	1,363	4,00
38	Saidapet	1,107	1,439	190	71	890	1,295	1,130	1,375	3,317	4,10
39	Guindy	447	312	239	41	210	227	463	251	1,359	8,00
40	Mandavalli	1,182	1,318	372	451	574	1,423	1,197	1,323	3,335	4,50
41	Adayar	870	594	390	76	393	498	837	450	2,490	1,60
42	Thousand Lights	839	1,006	114	67	408	520	953	1,066	2,314	2,60
43	T. Nagar (North)	339	232	17	9	491	171	272	94	1,119	5,00
44	Basin Bridge	301	158	20	21	588	203	341	177	1,250	5,00
	Total	55,166	1,25,236	15,812	11,902	39,893	43,360	66,828	127,408	177,699	31,99

## Nursing Mothers and Children at the Out-patient Clinic in 1959.

Grand Total	Diseases Treated (New)										Total
	Respiratory	Alimentary	Skin Affection	Influenza	Ear and Eye Diseases	Anaemia	Vitamin Deficiency	Malaria	Normal	Other Diseases	
12,949	231	347	43	282	10	635	160	10	3,522	454	5,694
4,601	147	236	28	170	8	416	142	3	775	159	2,084
6,179	158	308	33	238	8	613	217	2	1,089	227	2,893
16,843	684	469	78	242	23	435	226	4	3,138	223	5,522
27,371	787	1,042	277	713	259	892	777	88	1,374	1,419	7,628
15,054	608	543	80	...	7	273	340	...	1,588	1,460	4,899
4,581	512	533	86	116	20	116	138	11	69	83	1,684
17,691	641	403	40	92	7	300	78	...	2,456	517	4,534
21,233	895	1,391	314	1,096	75	420	548	143	2,036	1,085	8,003
13,843	332	193	39	33	4	355	396	1	2,498	358	4,209
15,755	458	704	171	723	4	121	121	...	2,361	1,029	5,692
44,143	2,208	2,177	817	1,461	469	1,244	1,394	87	952	6,151	16,960
12,456	1,244	836	492	720	566	620	538	...	493	888	6,397
4,941	540	376	125	124	79	322	291	...	414	469	2,740
21,837	93	292	40	197	...	258	241	...	3,935	1,290	6,346
17,917	641	499	99	2	33	57	87	1	3,649	540	5,608
13,202	660	455	347	293	167	538	173	...	506	427	3,566
4,472	385	261	62	51	44	170	180	...	285	501	1,941
5,630	401	302	125	5	18	390	467	...	869	354	2,931
15,667	1,220	539	89	126	46	94	141	1	1,311	1,448	5,015
4,207	317	219	59	10	20	187	189	...	406	98	1,505
11,941	1,351	1,330	354	565	338	30	130	2	361	681	5,142
2,940	352	286	71	59	10	108	116	7	175	41	1,225
3,134	335	189	56	26	18	165	153	3	206	88	1,239
3,582	417	267	110	22	36	337	295	...	500	152	2,136
5,894	869	507	128	3	2	242	119	...	292	801	2,963
17,015	137	302	39	15	9	49	90	...	1,739	557	2,937
3,779	98	161	16	189	...	70	85	...	1,618	70	2,307
29,204	523	441	105	213	35	225	206	3	4,761	399	7,111
8,596	450	484	131	381	20	428	401	...	491	797	3,583
22,551	554	734	91	442	24	215	231	...	4,685	2	6,978
5,586	868	424	125	...	14	222	87	3	298	694	2,735
10,364	436	427	104	472	25	407	353	...	401	678	3,303
8,211	810	551	286	17	7	225	644	...	260	830	3,630
3,268	67	88	59	23	15	406	344	...	1,158	46	2,206
29,138	334	584	35	123	5	388	331	2	5,050	954	7,806
1,776	105	72	29	50	3	52	32	10	934	76	1,363
7,497	288	352	73	103	3	478	184	4	1,632	200	3,127
2,190	347	152	74	49	62	81	97	2	161	334	1,359
7,850	748	543	270	17	15	195	575	...	242	710	3,335
4,108	499	305	162	74	111	199	124	3	276	737	2,490
4,975	155	250	57	288	1	62	125	1	1,287	88	2,314
1,625	90	68	34	49	2	62	29	1	718	66	1,119
1,809	313	359	53	86	7	114	158	5	91	64	1,250
4,97,605	23,308	21,001	5,906	9,960	2,629	13,216	11,755	397	61,282	28,245	1,77,699

## CHILD WELFARE SCHEME

## Annual Statement of Maternity and Child Welfare

S. No.	Centre	Brought under Care						Home	
		Maternity Cases Total No. of Mothers	Ante-Natal	Labour	Infants	Pre-School	Medical Officers	Health	
								Ante-Natal	Post Natal
1	Tondiarpet	1,837	1,135	1,178	1,159	947	430	21	787
2	Palmyrakuppam	1,222	492	174	170	165	383	...	155
3	Royapuram	1,879	968	325	217	275	711	...	281
4	Sanjeevirayanpet	1,796	1,183	1,368	1,340	1,225	465	9	10
5	Washermanpet	2,016	1,421	1,740	1,693	1,433	256	...	8
7	Peddunaickenpet	720	606	149	147	276	247	76	30
8	George Town	1,477	1,031	914	900	765	730	7	93
9	Kothawal Bazaar	1,681	973	907	895	771	628	...	677
10	Muthialpet	1,433	1,104	841	833	883	685	...	...
11	Trevelyan Basin	1,279	714	1,054	1,044	828	392	...	288
12	Choolai Maternity Home	2,395	2,395	3,020	2,950	2,443	947	4	10
13	Pulianthope	2,339	2,119	824	800	720	502	...	935
14	North Perambur	989	833	354	375	322	336	...	426
15	Sembiam	2,240	1,663	1,375	1,351	1,004	715	2	39
16	Ayanavaram	2,388	1,378	1,202	1,161	1,003	468	...	191
17	Kilpauk	1,329	770	583	538	524	772	...	435
18	Nammalwarpet	892	582	279	274	214	244	...	84
19	Kosapet	1,477	1,094	319	218	289	289	...	43
20	Purasawalkam	1,260	710	1,146	1,125	912	475	12	566
21	Periamet	736	321	159	155	138	333	...	251
22	Ashok Vihar	787	640	752	738	530	...	...	298
23	Edapalayam	411	286	71	69	58	205	12	22
24	Park Town	379	229	71	69	69	195	...	11
25	Napier Park	1,141	765	280	277	255	238	...	90
26	Egmore	1,163	690	251	244	235	259	4	208
27	Chetput	1,148	762	675	655	390	379	2	10
28	Nungambakkam	860	555	166	164	196	449	...	199
29	Kodambakkam	2,365	1,666	1,588	1,552	1,141	1,058	...	781
30	Royapettah	1,055	768	371	366	349	559	...	49
31	Triplicane	2,337	1,412	1,212	1,181	999	605	...	992
32	Zam Bazaar	1,104	661	310	302	250	415	...	240
33	Mirsaahibpet	1,086	752	346	337	255	509	...	75
34	Mylapore	1,529	1,046	483	478	463	662	...	6
35	Teynampet	1,512	945	438	432	336	366	6	123
36	Saidapet Maternity Home	2,312	1,944	2,105	2,063	1,849	565	...	981
37	T. Nagar (South)	823	622	232	221	298	359	1	33
38	Saidapet	1,063	890	152	151	111	397	15	131
39	Guindy	366	210	87	84	80	456	9	32
40	Mandavalli	1,339	574	298	295	260	662	...	7
41	Adayar	643	393	347	340	300	545	7	192
42	Thousand Lights	948	408	195	190	124	436	...	190
43	T. Nagar (North)	748	491	207	202	95	318	...	23
44	Basin Bridge Centre	837	588	227	221	...	229	33	113
	Total	58,837	31,893	29,709	29,065	24,741	20,433	220	10,604

from 1st January to 31st December 1959.

Visits		Clinics						Maternal Mortality and Morbidity			
Visitors		Midwives		Number Held	Ante-Natal	Number Held	Post Natal	Number Held	Infants and Toddlers	Mortality	Morbidity
Infants	Toddlers	Ante-Natal	Post Natal								
7,534	714	3,935	4,630	86	833	41	100	42	907	...	262
3,334	269	1,298	1,625	103	621	51	72	51	433	...	119
2,023	513	2,092	3,255	104	1,130	51	208	52	621	...	215
5,065	892	2,518	6,050	152	2,520	52	306	105	575	...	447
4,742	1,431	2,195	10,409	157	1,421	52	169	156	1,220	...	225
2,077	530	780	3,664	172	1,104	52	175	104	591	...	90
1,160	427	584	1,912	59	967	31	95	31	265	...	52
5,422	655	1,119	4,713	157	1,031	52	334	10	986	...	154
5,088	638	1,375	5,397	152	973	49	250	107	1,284	1	356
4,254	519	157	5,014	157	2,908	52	168	107	5,153	1	178
1,818	490	1,420	2,520	154	1,972	156	2,187	155	2,791	3	296
4,924	1,721	2,220	11,089	155	3,259	51	635	92	856	3	644
1,838	1,805	1,457	1,3990	90	2,119	37	2,347	40	1,931	1	413
1,256	586	366	3,032	86	833	41	1,000	42	907	...	195
984	792	1,231	6,549	157	3,805	53	8,259	104	8,003	...	66
3,523	855	1,198	5,034	148	1,378	43	143	84	336	5	395
2,212	823	1,063	2,954	156	1,677	44	0	119	804	...	58
1,484	188	770	2,367	85	582	51	98	78	452	...	229
2,507	266	800	5,308	91	1,095	74	240	85	852	...	334
2,328	517	752	4,001	156	1,778	52	232	156	1,093	...	223
1,564	170	513	1,701	85	550	86	533	88	166	...	45
951	103	495	942	87	626	38	72	50	310	...	29
999	89	87	1,108	99	299	34	475	44	535	...	7
1,809	197	244	2,845	99	765	37	717	44	654	...	84
1,492	63	666	1,751	59	1,536	51	204	51	719	...	44
1,897	338	567	2,958	153	872	49	245	92	511	...	175
1,943	183	1,316	4,000	105	542	52	928	25	828	...	90
4,964	502	1,195	6,162	156	1,666	51	359	103	1,237	1	289
1,597	335	787	3,197	52	252	52	252	52	773	1	150
6,070	899	948	5,134	157	1,412	52	352	104	993	1	151
1,491	52	82	2,637	95	1,517	47	253	74	840	...	64
1,614	265	758	3,131	014	184	52	198	52	719	...	1
2,094	332	1,529	4,505	138	1,046	48	209	48	444	...	64
1,617	377	1,109	3,039	106	945	42	100	42	458	...	35
2,534	702	1,078	4,023	154	1,944	49	320	131	995	...	282
2,139	312	549	2,418	103	622	54	326	54	415	...	48
1,646	458	1,125	2,885	104	890	46	712	36	606	...	32
983	69	141	596	104	210	53	463	53	696	...	47
2,025	224	1,339	2,970	46	264	48	488	48	34	...	224
1,416	191	414	1,221	114	393	52	837	52	1,260	1	120
1,475	112	948	2,243	104	416	50	448	60	610	1	70
2,187	277	589	2,666	104	491	52	272	52	356	...	54
2,291	383	751	3,773	74	402	37	114	37	373	...	95
11,361	21,240	46,447	1,67,983	5,123	52,309	2,231	25,393	3,284	45,104	19	7,585

## CHILD WELFARE SCHEME.

Statement showing the total number of priority milk consumers from  
1st January to 31st December 1959.

	Centre.	Expectant Mothers.	Nursing Mothers.	Infants.	Toddlers.	Total.
1	Tondiarpet	...	...	125	...	125
2	Palmyrahkuppam	...	...	84	...	84
3	Royapuram	...	...	91	...	91
4	Sanjeeviroyanpet	...	...	50	...	50
5	Washermanpet	...	...	67	...	67
6	Vyasarpadi	...	...	90	...	90
7	Peddunaickenpet	...	...	54	...	54
8	George Town	...	...	83	...	83
9	Kothawal Bazaar	...	...	99	...	99
10	Muthialpet	...	...	95	...	95
11	Trevelyan Basin	...	...	85	2	87
12	Choolai Meternity Home.	...	...	136	...	136
13	Pulianthope	...	...	105	...	105
14	North Perambur	...	...	108	...	108
15	Sembium	...	...	103	...	103
16	Ayanavaram	...	...	89	2	91
17	Kilpauk	...	...	88	...	88
18	Nammalwarpet	...	...	79	...	89
19	Kosapet	...	...	90	...	90
20	Purasawalkam	...	...	101	3	104
21	Periamet	...	...	95	11	106
22	Ashok Vihar	...	...	104	...	104
23	Edapalayam	...	...	72	...	72
24	Park Town	...	...	79	...	79
25	Napier Park	...	...	90	...	90
26	Egmore	...	...	96	...	96
27	Chetput	...	...	73	...	73
28	Nungambakkam	...	...	88	...	88
29	Kodambakkam	...	...	337	17	354
30	Royapettah	...	...	102	...	102
31	Triplicane	...	...	106	...	106
32	Zam Bazaar	...	...	101	...	101
33	Mirsaahibpet	...	...	94	...	94
34	Mylapore	...	...	51	...	51
35	Teynampet	...	...	79	...	79
36	Saidapet Maternity Home.	...	...	74	...	74
37	T. Nagar (South)	...	...	60	...	60
38	Saidapet	...	...	92	1	93
39	Guindy	...	...	85	5	90
40	Mandavalli	...	...	53	...	53
41	Adayar	...	...	93	...	93
42	Thousand Lights	...	...	88	...	88
43	T. Nagar (North)	...	...	98	...	98
44	Basin Bridge (Centre)	...	...	81	...	81
	Total	...	...	4,113	41	4,154



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