

INTRODUCTION.

Commissioner,

Sir,

I submit herewith my report on the health of Madras during 1936.

The estimated population for 1936 was 7,20,894 as against the census population of 6,47,230 in 1931. The number of live births registered was more by 5,529 than the number of deaths. This excess of births over deaths was equivalent to 7.7 per thousand of the population and was recorded 8 times in succession.

The total number of births 29,189 shows a decrease of 1,842 as compared with the births in 1935 and increase of 899 over the average for the quinquennium 1931-1935. The birthrate was 40.5 as against 43.9 in 1935.

The deathrate shows a noticeable reduction of 2.5 per thousand population. The total number of deaths 23,660 shows a reduction of 1,295 as compared to 1935. 2,569 non-residents died in the City. Cases of small-pox and cholera were brought from St. Thomas Mount, Saidapet, Poonamallee, Tiruvotthiyur etc. for treatment at the Corporation Infectious Diseases Hospitals and deaths among these cases were also registered here as usual. Despite all this it is gratifying to note the downward trend of deathrate as demonstrated by the graph on page 3.

Muthyalpet Division has again returned the lowest mortality. Congested areas inhabited by the lower classes have again recorded rates above the average annual death rate. The high deathrates of these divisions will continue to be so until the prevailing housing conditions and the low standard of life of the people are brought to a more satisfactory level.

A reference to the graph on page 5 shows the gradual decline of infantile mortality. Deaths among infants under 1 year of age numbered 6,818 as against 6,948 of the previous year giving an infantile mortality rate of 216.5 as against 223.9 for 1935. The infantile mortality rate which was the lowest in 1935 showed a further reduction of 7.4 in 1936.

294 women died from causes connected with child birth as against 295 in 1935. Although the infantile mortality rate shows a definite tendency towards decline the maternal mortality rate remains practically stationary since 1932. It is clear that the provision for ante-natal care has to be further augmented. Cases of pregnancy with definite signs of organic diseases have to be sent to the Maternity Hospitals sufficiently early. A certain proportion of deaths occurs in healthy mothers owing to sudden complications of haemorrhage, mal-presentation etc. The employment of mid-wifery experts in conducting these cases at homes will be of great advantage. A panel of 3 or 4 such experts who undertake to be at the homes within 5 minutes of call will have the same effect as the provision of "flying squads". All that is required is to fix a reasonable fee per case to be paid by the Corporation. Not more than hundred cases may have to be dealt with in the above manner in the course of a year. This will do away with the present practice of transferring cases to the hospitals in too advanced a stage of their progress, very often with fatal consequences to the mother.

The city was comparatively free from epidemics although there were sporadic attacks of cholera. The existence of several villages and small towns round about the city without protected water supply and drainage constitutes a serious menace as regards cholera. As many as 55 cases of cholera were brought over to our hospitals in our ambulance cars from outside city limits, out of which 30 died. Infection is often imported into the City from these areas owing to the constant movement of population to and from the city and nothing but absolute vigilance of the staff and the co-operation of the medical practitioners can prevent its taking a serious turn. It is high time that the Chinglepet District Authorities take up the question of providing one or two infectious diseases hospitals at convenient places for the isolation and treatment of cases of infectious diseases that occur in the adjoining mofussil area and are sent

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over to the City Infectious Diseases Hospitals. This is a measure which will not only help the city to prevent importation of cholera into it but also will serve the interests of the mofussil patients themselves who are taken to the city hospitals in a moribund condition.

When compared to 1935 mortality from cholera, diarrhoea, dysentery, Small-pox, measles, malaria, typhoid and tuberculosis shows reduction. There is a slight increase in the deaths from respiratory diseases. The mortality from Phthisis does not show any appreciable reduction. The disease is so intimately connected with the economic condition of the patients that a large number of them are from the poorer classes without proper accommodation at their houses. To supplement the efforts of the other agencies a tuberculosis dispensary will be an important innovation in the prevention of Tuberculosis. Attached to this dispensary should be a staff of nurses for visits and propaganda. These nurses will establish a satisfactory link with the patients and the treatment centre. The opening of an institution for the care of the pre-tubercular patient including the children of the patients suffering from tuberculosis will also have to be considered at no distant date. The most urgent need is the opening of a dispensary on the above lines and the formation of a colony for the isolation and treatment of the cases discharged from the Tuberculosis Hospital. Proposals in this behalf will be placed before the Corporation.

The work of Malaria Section shows increased activity. 5633 blood smears were examined microscopically of which 38.9 per cent. showed malarial parasites. As in previous years George Town area recorded the largest number of cases. The fact that 17697 cases of malaria were treated in our dispensaries during the year under report shows the need for keeping up the malaria establishment for some more years to come. Greater attention was paid to the wells in George Town. 718 wells were either filled up or otherwise permanently dealt with. 1270 wells were provided with trap doors. 3 tanks were filled up. An intensive anti-mosquito campaign was organised in Mambalam which minimised the nuisance to a great extent. There is a great need to continue the special staff there until the whole area is sewered. A scheme for the control of *Stegomyia* mosquitoes half-a-mile around the harbour came into operation during the year. An illuminating summary of work done will be found in the appendix to the report. Although aimed against *stegomyia* mosquitoes the scheme is essentially one for mosquito prevention, and its extension to the entire city particularly in the cold season will be a beneficial measure.

The work of the school medical service reveals a low incidence of tuberculosis and a reduction under respiratory, infectious and contagious diseases. Still a perusal of the figures furnished would show the unsatisfactory state of the health of our school children. This is due to the low economic state of their parents who are unable to provide the children with the primary requirements of a clean and hygienic home life. Furthermore, many of the schools are located in premises unsuitable for the purpose. A programme of construction of buildings for schools will not only be a sound economic measure but also a good investment to ensure the health of the school children. The buildings should be attractively designed with all the sanitary amenities necessary for a public school.

The survey of children for leprosy was kept up as in the previous year. 92 fresh cases were detected giving a total of 460 cases for the year under report. 61 cases improved after a tedious and prolonged course of treatment. The ambulance car was used for sending these children to the leprosy clinics. The previous year the following up work yielded satisfactory results. As in the previous year the following up work yielded satisfactory results. 200 ill-nourished children regained normal health after treatment. 1114 children were cured of scabies etc. The expansion of work introduced in the school medical service would indicate the necessity for the creation of the post of a Chief Medical Inspector of Schools as in other large cities of the world. Such an officer will be in a position to co-ordinate and supervise the work of the Medical Inspectors, ensure proper attendance and treatment of the defective children at the various hospitals and clinics in the city. The work is of such a paramount importance to the well-being of the nation as a whole that I trust nobody will grudge the extra expenditure involved.

There was a definite improvement in the quality of the food stuffs sold in the city during the year as demonstrated by the decrease in adulteration. The percentage of adulteration was 23.9 as against 32.9 in 1935 and 35.9 in 1934. The percentage of adulteration was 23.9 as against 32.9 in 1935 and 35.9 in 1934. Butter alone showed an increase. 1028 samples were analysed as against 806 in the previous year. With deterrent fine there is every possibility of putting down the adulteration of foodstuffs in the city. The scheme for the installation of a Public Health Laboratory was not taken on hand owing to the paucity of funds. It is hoped that the early realisation of this project will give a fresh impetus to the co-ordination and expansion of the microscopical work at present done in several places without adequate facilities.

36,578 ft. of sewers were laid during the year as against 2,227 ft. in 1935. 2727 flushout latrines were installed in dwelling houses as against 1495 in 1935. 2978 dwelling houses were repaired and rendered fit for human habitation. Lowlands near Cross Road Kanni Koil Cherry, Coonoor Road, Kaliappa Mudaly Road, Poonamallee High Road, Sundaram Pillai Cherry and Kodambakkam High Road were reclaimed. As in 1935, a vigorous campaign to destroy noxious food was maintained throughout the year and many of the thoroughfares were kept tolerably free from the dangerous nuisance. 633 cattle-yards were improved but several condemned cattleyards remained in the same filthy state in spite of repeated prosecutions. The owners preferred to pay a small fine now and then instead of rendering them sanitary. More deterrent fines alone will solve this difficulty which is present in almost all the divisions of the city.

The conservancy was under the Health Officer throughout the year although the Lorry Section of it was transferred to the Works Department in the middle of the year. Many difficulties cropped up as a result of the divided responsibility in the management of the Lorry section and the whole scheme is under reconsideration. Nothing helps conservancy so much as the presence of the neatly laid roads with the underground drainage everywhere. Several areas are not provided with these amenities yet, with the result that the City looks ugly and ill-conserved. A major portion of the area between Basin Road, Buckingham Canal, Mint Subrayalu Naidu Street and Tiruvethiyur High Road comes under this category. A small percentage of this area is sewered without the other portion having a satisfactory drainage. A special scheme for sewerage this area is urgently required in order to get rid of the stinking cesspools. The area is thickly populated with several cherries and hutting grounds in it. There is a flourishing trade going on here and hundreds of boats laden with rice, fire-wood etc halt near the wharf every day. Until the area is sewered, it is not possible to introduce public latrines, baths etc. for the use of the boatmen and the dealers.

The most important event in connection with conservancy was the presentation of a scheme by Dr. Gilbert Fowler which has come to be known as 'Fowler's Scheme'. This is essentially a scheme for the purification of the sewage by the well-known 'activated sludge process'. Dr. Fowler has called attention in his scheme to several problems intimately associated with conservancy. His reference to the necessity of keeping the Coom in a sanitary condition is particularly noteworthy. The scheme is still under consideration by authorities.

Pure water is a prime necessity of life. A plentiful supply of it is essential to the inhabitants if they are to lead a healthy and long life. The city is gradually expending and its consumption of water is increasing at the rate of about 1 million gallons every year. In spite of the increase in the city's consumption there are several houses where the poor congregate and which are not provided with a single tap. Not only is the quantity of water insufficient but also the quality of water supply—though safe from water borne diseases—is far from satisfactory from the aesthetic point of view. Efficient chlorination has been the only redeeming feature. It is slightly yellowish or hazy due to the present system of indifferent filtration. This state of affairs should not be allowed to continue long. Pure, sparkling and plentiful water should be supplied to each and every house and hut in the city. For this purpose a bold step has to be taken at once to replace the existing slow sand filters by rapid filters in the interest of the health of the city.

There was much discussion during the year under report regarding the present unsatisfactory position of the housing problem in the city. The Council passed a resolution on 9-9-36 recommending the creation of an Improvement Trust for the City of Madras. Beyond this no definite step was taken for the improvement of the slums and backward areas. It has been repeatedly mentioned in this report that the city is fast growing owing to the migration of the poorer classes into it in search of employment. The year also witnessed the growth of a few more slums in the city.

The most important thing in safeguarding the health of the city is the prevention of the formation of new slums and hutting grounds. Arguments of poverty etc. are advanced on all critical occasions. Surely, everybody likes to see the homeless well provided for. But such colonies should be formed only with all the essential necessities of life namely, water supply, drainage, flushout latrines, bathrooms, roads and good plinths in a row. The agencies interested in providing homes for the poor will have to see that the above amenities are also provided so that our vacant spaces might not be converted into regions of insanitation and disease.

It is true that a fair number of houses are springing up in the city every year as a result of individual enterprise. 1536 new houses were constructed during the year. But, here again, the problem is not without its weak points. Many of the new houses are constructed in non-sewered areas without satisfactory sanitary conveniences.

Now that the Act has been amended proposals are under preparation to set right the cherries and hutting grounds under section 257-A. Side by side with the action that may be taken regarding hutting grounds action has to be pursued to promote the reconstruction of low-roofed, dark and ill-ventilated houses. Housing problem is a vital concern with all urban authorities. But it is life itself so far as Madras is concerned seeing that more than a third of its population is without proper dwellings.

The success of the Health Department always depends upon the measure of financial support it receives from the authorities concerned for carrying out its schemes. For the past few years no sanitary reforms worth mentioning could be carried out owing to financial stringency. The composition of the new Council under the Amended Act has altered the whole atmosphere auguring a happy future. Several useful schemes of sanitary reform and the ways and means of financing them are under contemplation by the authorities. It is hoped that more funds will be placed at the disposal of the department in coming years to speed up schemes already in progress and to launch new schemes beneficial to the health of the city.

In conclusion I thank all those who furnished figures for incorporation in this report. I also desire to thank the clerical and outdoor staff of the department for their high sense of duty and co-operation.

Corporation of Madras, }
Ripon Buildings, }
30-9-1937. }

C. S. GOVINDA PILLAI,
M.B., Ch. B., L.R.C.P. & S., D.P.H. (Edin.)
Health Officer.

Forwarded to the Council.

R. SUBBAYYA,

Commissioner.

Summary of Vital Statistics for 1936.

Area	...	29.396	sq. miles.
Population (Census 1931).	...	6,47,280	
Population (Estimated to middle of year 1936)	...	7,20,894	
Average density per acre	...	38.3	
Inhabited houses (Census 1931)	...	73,845	
Live-Births	...	29,139	Birth-rate ... 40.5 per 1000 estimated population.
Deaths (all causes)	...	23,660	Death-rate ... 32.8 "
Natural increase	...	5,529	Rate of increase ... 7.7 "
Deaths under 1 year of age	...	6,318	Infantile mortality-rate ... 216.5 per 1000 births.
Deaths from child-birth	294		Maternal mortality-rate... 10.1 "

Deaths From Principal Diseases.

	No. of deaths.	Death-rate per 1000 estimated population.
Cholera	... 140	0.19
Diarrhoea & Dysentery	... 2,208	3.1
Small-pox	... 3	0.004
Measles	... 5	0.007
Malaria	... 113	0.16
Enteric Fever	... 163	0.23
Phthisis	... 1,010	1.4
Respiratory diseases	... 6,410	8.9

Vital Statistics.

Area and Population:—The area of the city is 29.396 sq. miles. The mid-year population for 1936 worked out by the method of geometrical progression is estimated to be 7,20,894, the 1931 census population being 6,47,230. The estimated population has been used for the calculation of different important rates in the report. The statistical statements appended to the report have been worked out as usual on the basis of the census population.

Meteorology:—The annual form A furnishes the atmospheric conditions recorded during 1936.

The total rainfall was 44.25 inches being 3.91 inches more than in the preceding year. The highest rainfall was in November (14.5 inches) and the lowest in May (0.02 inches). The last quarter of the year recorded the highest rainfall of 24.63 inches against 24.28 inches in the same quarter of 1935. There was rainfall on 121 days during the year.

Registration Staff:—Seventeen sub-assistant surgeons attended to the registration of births and deaths during the year under report.

Births and Birth-rate:—The number of live births registered during 1936 was 29,189—1842 births less than in the previous year and 899 births more than the average of the quinquennium (1931–35). The number of births in the previous year 1935 has been reported to be the highest in the city's vital statistics but the number of births during the year under report comes next to it.

The birth-rate calculated on the estimated population was 40.5 per mille as compared with 43.9 in 1935. The birth-rate calculated on the census population worked out to 45.1 as against 47.9 in the preceding year, the average rate for the quinquennium 1931–35 being 43.8.

Of the total births, 14,848 were males and 14,341 females; thus there were 104 male births for every 100 female births. The excess of male births over female births was recorded in 18 municipal divisions. The births were equal in both sexes in one division and in the remaining 11 divisions the female births were in excess.

Illegitimate births:—The number of illegitimate births registered during the year was 256 or 0.9% of the total births as compared with 228 or 0.7 per cent in 1935.

Births in different quarters of 1936:—The largest number of births was recorded in September (2,920) and the lowest in February (1,820). A comparative statement of births registered in each quarter of 1935, 1936 and the quarterly average for the quinquennium 1931–35 is furnished below.

Year.	1st quarter.	2nd quarter.	3rd quarter.	4th quarter.
1931–35	5916	7045	7578	7751
1935	6224	7464	8808	8535
1936	5985	6747	8048	8414

It will be observed from the statement that the 1st quarters under reference have recorded the lowest number of births and that the last quarters the highest with the exception of 1935 which registered the highest number of births in the third quarter.

Birth-rates in divisions:—The annual form No. I gives the births and rates registered in the various divisions. The highest rate was returned by Washermanpet (55.5), Egmore (54.3) and Korukkupet (54.2). The lowest was recorded by Sowcarpet (27.0) as usual. 12 divisions registered rates above the annual birth-rate for the city.

Birth-rates in communities:—The birth-rates in the principal communities during the year are as follows:

Communities.	Rate per 1000 estimated population in each community.
European	12.0
Anglo-Indian	32.5
Indian Christian	31.9
Hindu	42.0
Mohammedan	38.6
All communities :—	40.5

The birth-rate among the Hindu community is the highest. The Mohammedan community comes next to the Hindu community. The European community has returned the lowest rate.

Table C appended to this report gives the number of births and birth-rates in the above communities according to the census population.

Still births:—The number of still births registered during the year was 1,415 as against 1,414 in 1935. It represented 48.5 per 1000 live births as compared with 45.6 in the preceding year.

Deaths and Death-rates:—The total number of deaths registered during the year under report numbered 23,660 recording 1,295 deaths less than in the preceding year and 53 deaths less than the average of the previous 5 years (1931–35). Of the total deaths, 21,091 deaths were those of residents and 2,569 deaths were those of non-residents (including homeless) chiefly occurring in public institutions, hospitals etc.

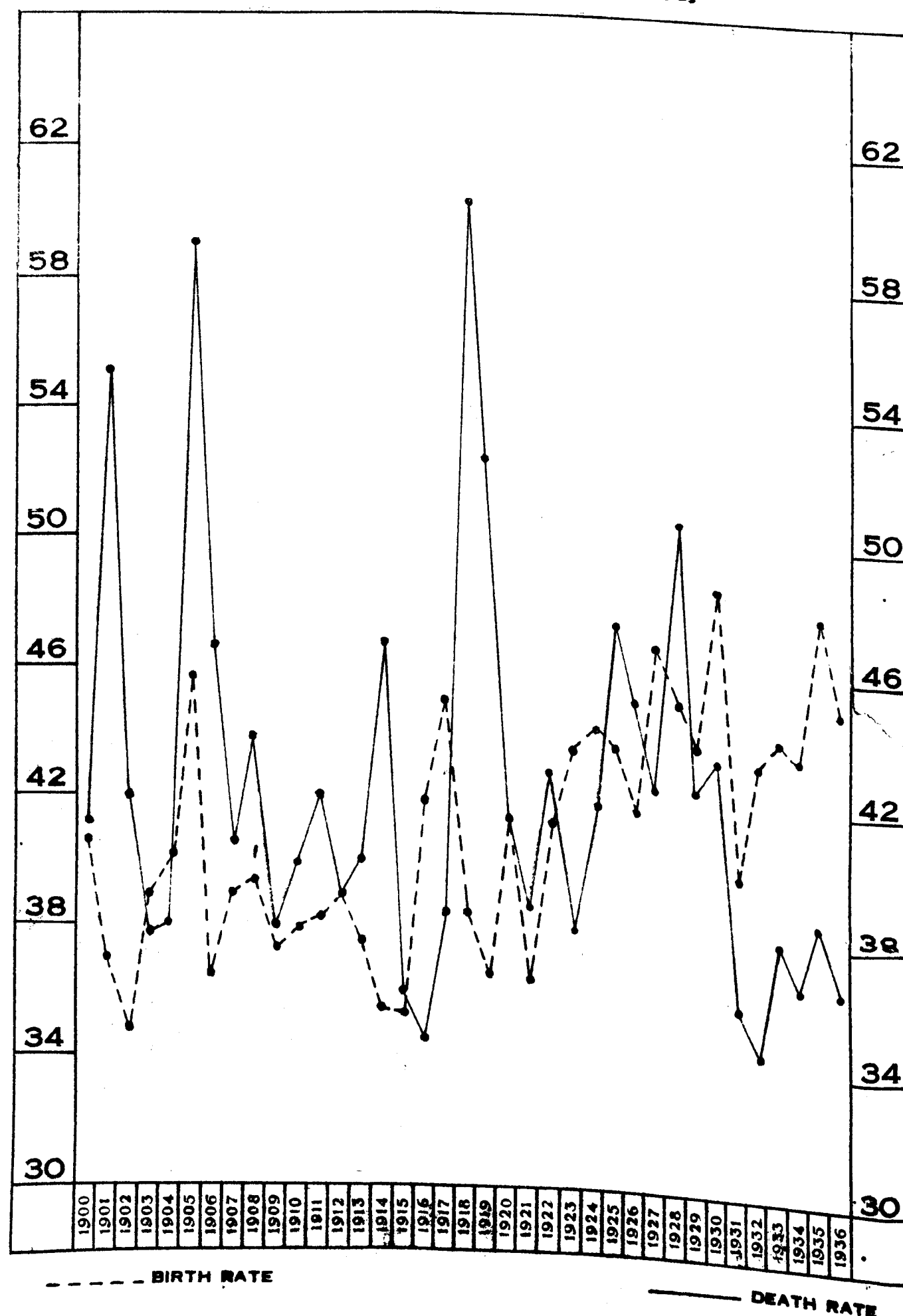
Calculated on the estimated population the annual death-rate was 32.8 as against 35.3 in the previous year. Excluding the deaths of non-residents the death-rate for the year was 29.3 per mille. Calculated on the census population the rate was 36.6 as against 38.6 in 1935, the quinquennial average (1931–35) being the same (36.6) as the rate for 1936. The rate worked out on the estimated population represents a more correct and real state of the public health than that worked out on the census population of 1931, as it takes into account the growth of the population during the intercensal period.

An excess of 5,529 births over deaths was recorded during the year as against 6,076 in 1935. The rate of natural increase worked out to 7.7 per mille of estimated population as compared with 8.6 in the preceding year. A statement showing the births and deaths recorded in the city from 1900–36 is furnished below with special reference to the natural increase.

A continuous record of natural increase is being kept up since 1929.

Years	Births.	Deaths.	Natural increase or decrease.
1900	20,672	20,937	— 265
1901	18,872	28,031	— 9,159
1902	17,743	21,395	— 3,652
1903	19,830	19,205	+ 625
1904	20,439	19,305	+ 1,134
1905	23,263	30,060	— 6,797
1906	18,608	23,749	— 5,141
1907	19,808	20,638	— 830
1908	19,980	22,285	— 2,305
1909	18,981	19,854	— 873
1910	19,340	20,212	— 872
1911	19,785	21,771	— 2,086
1912	20,099	20,132	— 38
1913	19,470	20,675	— 1,205
1914	18,241	24,174	— 5,933
1915	18,331	18,688	— 357

GRAPH 1
CITY OF MADRAS
BIRTH AND DEATH RATES 1900-1936
RATE PER 1,000 POPULATION (CENSUS)



LITHO BY GOLDEN & CO., MADRAS

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Years	Births.	Deaths.	Natural increase or decrease.
1916	21,675	17,872	+ 3,803
1917	23,296	19,917	+ 3,379
1918	19,897	31,262	- 11,365
1919	18,936	27,187	- 8,251
1920	21,896	21,418	- 22
1921	19,187	20,268	- 1,081
1922	21,650	22,475	- 825
1923	22,975	19,933	+ 3,042
1924	23,275	21,960	+ 1,315
1925	23,070	25,000	- 1,930
1926	22,000	23,776	- 1,776
1927	24,761	22,364	+ 2,396
1928	23,729	26,715	- 2,986
1929	23,124	22,415	+ 709
1930	25,662	22,839	+ 2,823
1931	25,738	23,162	+ 2,576
1932	27,996	22,290	+ 5,706
1933	28,533	24,500	+ 4,033
1934	28,149	23,659	+ 4,490
1935	31,031	24,955	+ 6,076
1936	29,189	23,660	+ 5,529

Graph No. 1 represents the birth and death-rates from 1900-36.

During the year under report all the municipal divisions except Sowcarpet recorded natural increase i.e., excess of births over deaths. The maximum rate of increase was recorded in Egmore (21.8), Chepauk (18.2) and Washermanpet (16.0). The minimum rate of 1.3 per mille occurred in Trevelyan Basin Division.

Death-rates in different quarters of 1936:—The highest number of deaths was registered in December (2,974) and lowest in February (1,775). The following statement furnishes the number of deaths registered in the different quarters of 1935, 1936 and the average for the quinquennium 1931-35.

Year	1st quarter.	2nd quarter.	3rd quarter.	4th quarter.
1931-35	6129	5648	5582	6354
1935	5732	5734	6502	6987
1936	5583	5517	5814	6746

Death-rates in divisions:—Annual form No. II gives in detail the number of deaths and death-rates in the various municipal divisions. The highest rate was recorded by Korukkupet (44.6) followed by Mirsaibpet (43.5), Tondiarpet (41.3), Choolai (40.8), and Perambore (40.5). The lowest rate was returned by Muthyalpet (23.9). Nine divisions viz., Tondiarpet (41.3), Washermanpet (39.5), Korukkupet (44.6), Harbour (38.5), Perambore (40.5), Choolai (40.8), Amir Mahal (37.2), Mirsaibpet (43.5) and Royapettah (37.9) returned rates above the annual death-rate for the city. The high death-rates in these divisions are due to congestion, over-crowding, bad housing conditions, poverty and economic distress of the lower classes.

Death-rates in communities.—The principal communities recorded the following death-rates during the year.

Community	Rate per 1000 estimated population in each community.
European	5.6
Anglo-Indian	20.8
Indian Christian	24.1
Hindu	33.9
Mohammedan	34.2

All communities:— 32.8

The Mohammedan and European communities as usual recorded the highest and the lowest rates respectively. Table C gives the statement of deaths and death-rates in the communities based on the census population.

Age and sex distribution of deaths:—Of the total deaths registered during the year, 12,097 were among males and 11,563 among females, the ratio being 105 males to 100 females as against 103 males to every 100 females in 1935. The deaths among males predominated over female deaths in 22 divisions.

The specific death-rates among males and females were 31.7 and 34.0 per mille of estimated population respectively.

The following table furnishes the number of deaths in each quarter of 1936 and the percentage of deaths to the total deaths in each age-group.

Age-group.	No. of deaths registered in quarter ending				Year 1936.	Percentage to total deaths.
	March.	June.	September.	December.		
Under 1 year ...	1,368	1,420	1,675	1,855	6,318	26.7
1-5 years ...	912	980	1,013	1,085	3,990	16.9
5-10 „ ...	234	177	176	254	841	3.6
10-15 „ ...	120	89	87	135	431	1.8
15-20 „ ...	157	147	165	137	606	2.6
20-30 „ ...	486	519	491	567	2,063	8.7
30-40 „ ...	430	422	444	490	1,786	7.5
40-50 „ ...	391	414	384	439	1,628	6.9
50-60 „ ...	388	414	399	479	1,680	7.1
60 and above ...	1,097	935	980	1,305	4,317	18.2
All ages ...	5,583	5,517	5,814	6,746	23,660	100.0

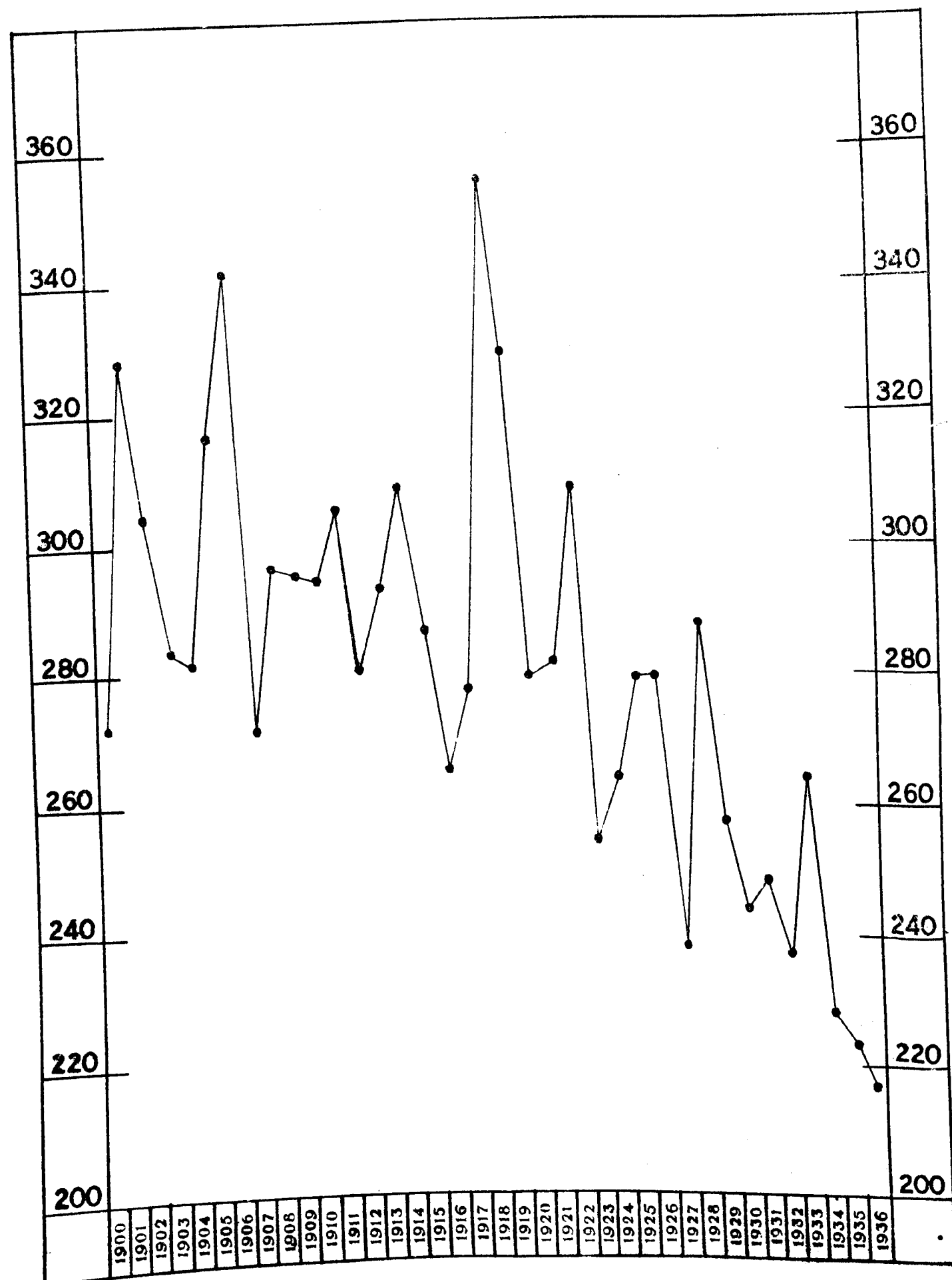
The specific death-rates in each sex according to age distribution are given in the following statement.

Age-group.	Death-rate in 1936 per 1000 estimated population in each age-group.		
	Males.	Females.	Both Sexes.
Under 1 year. ...	*225.3	*207.3	*216.5
1-5 years. ...	53.7	57.0	55.3
5-10 „ ...	10.2	11.9	11.0
10-15 „ ...	5.8	5.9	5.8
15-20 „ ...	6.1	9.7	7.9
20-30 „ ...	11.5	13.1	13.3
30-40 „ ...	14.1	16.9	15.3
40-50 „ ...	23.8	22.8	23.4
50-60 „ ...	51.1	41.6	46.8
60 and above. ...	190.6	247.8	215.8

*Calculated on 1000 births registered during the year.

The highest rates of mortality are seen to occur at both ends of life and the lowest between the ages 10 and 15 years. The higher death-rates among females than among males between the ages of 15 and 40 are attributed to the risks of child birth to which women are exposed during this period.

GRAPH 2
CITY OF MADRAS
INFANTILE MORTALITY RATES 1900-1936
(RATE PER 1,000 LIVE BIRTHS)



Annual form No. IV furnishes the death-rates among the sexes in different age-groups calculated on the census population.

Infantile mortality:—During the year under report, the deaths of 6,318 infants under one year of age were registered. Of these, 4,619 deaths occurred among infants born in the city and 1,599 deaths among infants born in mofussil.

The infantile mortality-rate during the year was 216.5 recording a decrease of 7.4 from the rate of the preceding year. The rate for 1935 i.e. 223.9 has been reported in the previous report as the lowest ; but the rate for the year under report has shown a further decrease and is the lowest rate ever recorded in the city's vital statistics. The average rate for the previous 5 years was 240.2. Excluding the deaths of infants born outside the city, the infantile mortality would be 158.2.

The infantile mortality-rates recorded in the city from 1900-36 are as follows :—

Year.	Rate per 1000 births.	Average for 10 years.
1900	272.0	298.8
1901	328.3	
1902	303.9	
1903	283.3	
1904	280.9	
1905	316.3	
1906	341.2	
1907	270.7	
1908	296.3	
1909	295.0	
1910	294.1	299.5
1911	305.4	
1912	280.4	
1913	293.4	
1914	308.9	
1915	286.1	
1916	265.1	
1917	277.3	
1918	355.2	
1919	329.0	
1920	279.3	272.6
1921	281.9	
1922	308.0	
1923	254.0	
1924	264.1	
1925	278.8	
1926	279.3	
1927	237.6	
1928	286.8	
1929	256.6	
1930	243.9	
1931	248.3	
1932	236.5	
1933	264.3	
1934	228.2	
1935	223.9	
1936	216.5	

It will be observed from the above table and Graph II that the rates for the years following 1930 show a gradual and steady decline with the exception of the year 1933.

*Age and causes of infant deaths :—*The following statement furnishes the principal causes of infant deaths under different age periods :—

Age periods.	Small-pox.	Measles.	Malaria.	Other fevers.	Diarrhoea and Dysentery.	Premature birth.	Debility.	Nervous system. (Infantile Convulsions).	Respiratory Diseases.	Other causes.	Total.	Percentage of deaths to total infant deaths.
Under 7 days	...	...	...	8	13	1,090	5	77	5	231	1,429	22.6
7 days & under 1 month	...	...	...	14	28	625	9	47	45	128	896	14.2
1 month & under 4 months.	...	...	...	83	124	259	20	116	544	224	1,380	21.8
4 months & under 7 months.	...	...	...	72	126	6	3	63	694	138	1,092	17.3
7 months & under 10 months.	...	...	...	65	129	...	4	36	598	104	936	14.8
10 months & under 1 year.	1	1	...	18	83	...	...	24	385	73	585	9.3
	1	1	...	260	503	1,980	41	353	2,281	898	6,318	100.0

36.8 % of total infant deaths occurred during the 1st month of life. 22.6% occurred during the first week.

Ignorance, poverty, economic distress of the parents living in squalid and ill-ventilated homes and indifference to make the best use of maternity and child welfare assistance available in the city are responsible for high death-rate among the infants.

*Infantile deaths by months :—*Table E in the Appendix gives in detail the number of infant deaths and infantile mortality-rates according to months as compared with 1935. The highest mortality-rate was recorded in December (275.4) and the lowest in September (177.0) and October (177.1).

*Infantile mortality-rates in divisions :—*Table F furnishes the infant deaths and death-rates recorded in the various municipal divisions as compared with 1935. The highest rate was recorded by Trevelyan Basin (295.9) followed by Harbour (283.8), Esplanade (279.1) and Royapuram (267.8). The lowest rate was returned by Egmore (167.2). 16 divisions returned rates above the annual infantile mortality-rate for the whole city.

*Infantile death-rates in communities :—*The infantile death-rates in different communities during 1936 are as follows :—

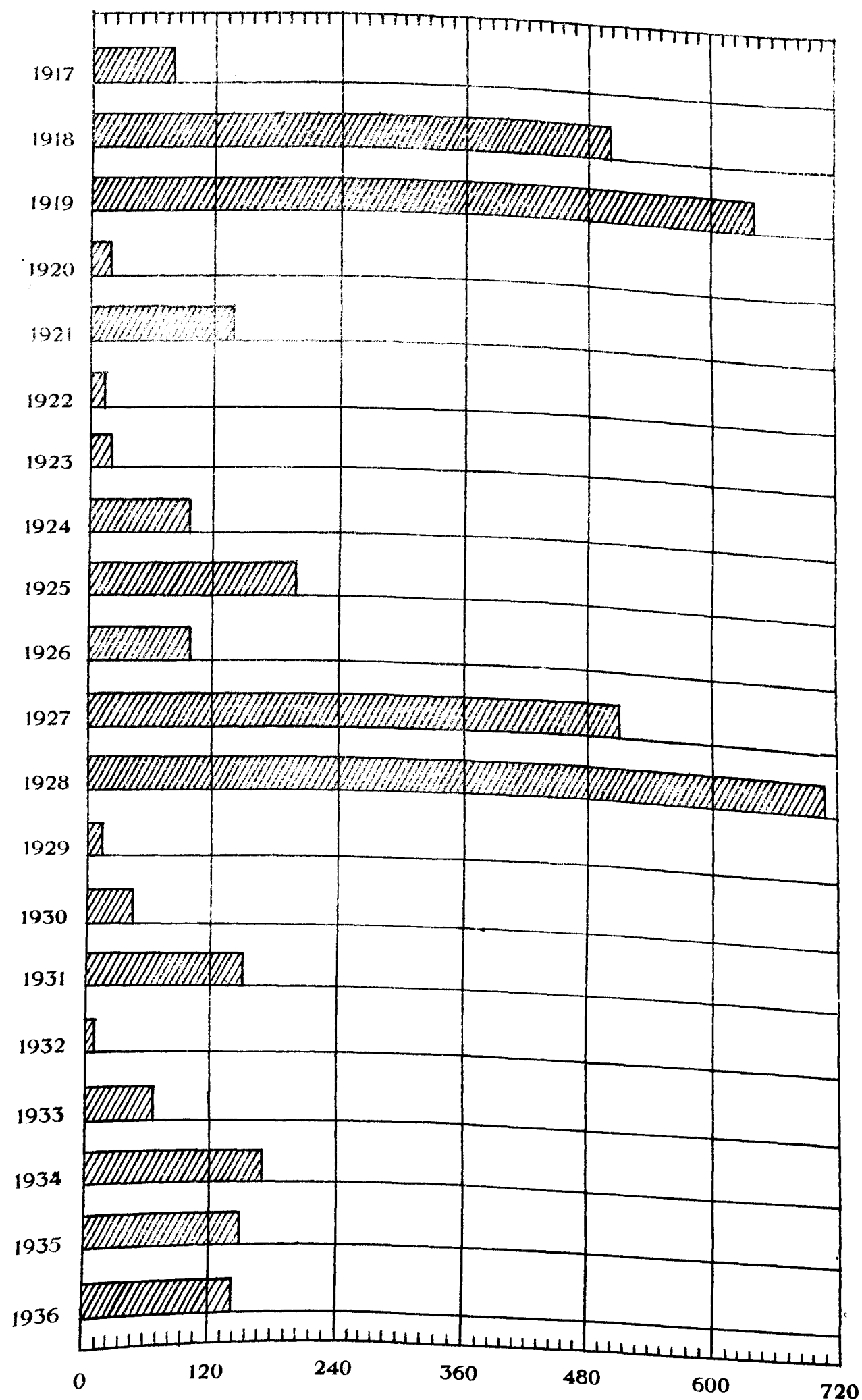
Community.	Rate per 1000 births in each community.
European	...
Anglo-Indian	...
Indian Christian	...
Hindu	...
Mohammedan	...
All communities:—	...

The births, infant deaths and infantile mortality-rates in the principal sub-castes of the Hindu community for 1936 are set forth in the table below :—

Caste.	Births in each caste.	Infant deaths in each caste.	Infantile death-rate per 1000 births in each caste.
Brahmin	2,138	331	154.8
Chetty	1,671	387	231.6
Vellala or Mudaliar	3,161	694	219.6
Baliya or Naidu	2,167	468	216.0
Vannia or Naicker	3,336	785	235.3
Adi-Dravida	3,390	895	264.0
Paluavar	748	151	201.9
Yadavas or Edaiyar	1,077	239	221.9
Visvakarma Brahmin or Kammalar.	848	171	201.6
Others	5,682	981	172.7
All Hindus	24,218	5,102	210.7

GRAPH 3

DEATHS FROM CHOLERA 1917-36



7

Principal causes of deaths:—A comparative table of the principal causes of deaths in 1935 and 1936 is set forth below.

Causes of death.	Deaths in		Increase or decrease in 1936 as compared with 1935.
	1935	1936	
Cholera	145	140	-5
Dysentery & Diarrhoea	2,320	2,208	-112
Small-pox	59	3	-56
Measles	7	5	-2
Malaria	167	113	-54
Enteric fever	186	163	-23
Other fevers	2,305	1,799	-506
General respiratory diseases	6,254	6,410	+156
Tuberculosis	1,209	1,136	-73
Deaths from child birth	295	294	-1
All other causes including deaths from injuries	12,008	11,389	-619
	24,955	23,660	-1,295

It is gratifying to note that there has been a reduction in the general mortality by 1,295 deaths over the preceding year with remarkable decreases in all diseases except under general respiratory diseases. There has also been a reduction in the infantile mortality-rate during the year under report. The state of public health may therefore be said to have been more satisfactory during the year under report than during the previous year. The causes of deaths are discussed in detail below:—

Cholera :—395 attacks and 140 deaths from cholera occurred during the year as against 348 attacks and 145 deaths in 1935. The annual death-rate was 0.19 per mille of estimated population as compared with 0.21 in the previous year. The death-rate in 1935 and 1936 calculated on the census population was 0.22 in both years, the quinquennial average being 0.16.

The statistics of deaths from cholera from 1917-36 are given below:—

Year.	Deaths.	Year.	Deaths.
1917	78	1927	512
1918	508	1928	708
1919	642	1929	16
1920	22	1930	43
1921	139	1931	153
1922	17	1932	5
1923	21	1933	62
1924	97	1934	166
1925	208	1935	145
1926	98	1936	140

Graph III shows deaths from cholera for the past 20 years.

The infection that was prevalent in the previous year continued during the year under report. The disease was prevalent in the 1st quarter but during the second and third quarters it showed signs of abatement. It again continued to be severe in the last quarter.

The number of attacks and deaths was distributed as follows during the quarters of the year under report.

Quarters.	Attacks.	Deaths.
1st quarter ...	103	40
2nd „ ...	7	1
3rd „ ...	14	4
4th „ ...	271	95
	395	140

Cases were reported during all the months of the year except June. The highest number of attacks and deaths occurred in December (185 attacks and 74 deaths). The next in severity were in November (66 attacks and 15 deaths) and February (64 attacks and 23 deaths). The incidence was lowest in August (1 attack and no death) and May (2 attacks and no death).

All the municipal divisions except Esplanade were affected. The highest number of attacks took place in Korukkupet (57 attacks), Washermanpet (30 attacks), Perambore (30 attacks) and Purasawalkam (30 attacks). The lowest incidence was in Trevelyan Basin (1 attack), Nungambakkam (1 attack), Chepauk (1 attack) and Mylapore (1 attack).

Out of 395 attacks, 55 attacks took place in the mofussil and were admitted into the Infectious Diseases Hospitals for treatment. Among those 55 cases, death occurred in 30 cases.

The annual form No. VI gives the number of deaths and death-rates in the various divisions during the year. The death-rate was highest in Korukkupet (0.74), Purasawalkam (0.41), and Mirsaibpet (0.36). Katchaleswaranpet, Esplanade, Chepauk and Mylapore divisions reported no deaths from cholera.

Preventive measures were promptly carried out by the sanitary and medical staff of the department. The former attended to the removal of patients to the Infectious Diseases Hospitals, disinfection of infected houses, soiled beddings, clothings etc. and kept the contacts and the locality under observation. The medical staff inoculated 20,519 persons with anti cholera vaccine as a prophylactic measure. The city water-supply was found to be absolutely free from infection. An elaborate campaign was conducted against the sale of noxious food. Special attention was paid to the conservancy of the infected localities.

The two ambulance cars attached to the Corporation Isolation Hospitals were utilised for the prompt removal of patients free of charge. Effective isolation minimised the chances for the spread of infection. The number of cases treated and the results of treatment are given in the reports of the Infectious Diseases Hospitals.

Diarrhoea and Dysentery :—Diarrhoea and dysentery accounted for 2,208 deaths with a death-rate of 3.1 per mille of estimated population as compared with 3.3 per mille in 1935. Calculated on the census population the death-rate was 3.4 in 1936 and 3.6 in 1935, the average of the previous five years 1931–35 being 3.8.

The mortality from diarrhoea and dysentery from 1927 to 1936 is shown below :—

Year.	Deaths.	Year.	Deaths.
1927	3,263	1932	2,644
1928	3,931	1933	2,670
1929	3,127	1934	2,008
1930	3,056	1935	2,320
1931	2,746	1936	2,208

There has been a decrease of 112 deaths over the previous year and, with the exception of the year 1934, the number of deaths from diarrhoea and dysentery during the year under report is the lowest.

Measles.—5 deaths from measles were registered during the year as against 7 in the previous year. The death-rate was 0.07 per estimated population as compared with 0.01 in 1935. Tondiarpet, Korukkupet, Trevelyan Basin, and Egmore divisions were the 4 divisions which registered deaths from measles.

Malaria.—113 deaths from malaria were registered as against 167 in the preceding year. The death-rate was 0.16 per mille of estimated population as against 0.24 in 1935. Calculated on the census population the rate was 0.18 in 1936 and 0.26 in 1935, the quinquennial average being 0.29.

The mortality from malaria from 1927 to 1936 is furnished below:—

Year.	Deaths	Year.	Deaths.
1927	1,367	1932	165
1928	1,599	1933	140
1929	681	1934	193
1930	283	1935	167
1931	277	1936	113

The number of deaths during the year under report is the lowest.

The seasonal mortality from malaria during 1936 is distributed as follows:—

Quarter.	Deaths.
1st quarter	34
2nd quarter	13
3rd quarter	26
4th quarter	40
	113

The annual form No. X gives the statement of deaths and death-rates from malaria in the several divisions. The highest death-rate was registered by Esplanade (0.8), Kothawal Bazaar Division (0.76), Nungambakkam (0.58), Harbour teeswarapet (0.03). Royapettah was the only division which registered no deaths from malaria.

Anti-malarial measures were carried out by a special staff as in the previous years. A report of the work done by the staff is given separately.

Enteric Fever.—The occurrence of 423 cases of enteric fever was notified during the year. Of these, 163 deaths occurred giving a death-rate of 0.23 per mille of estimated population as against 0.26 in 1935. Calculated on the census population the death-rate was 0.25 in 1936, the rates for 1935 and for the quinquennium (1931-35) being 0.29 and 0.21 respectively.

The mortality from enteric fever for the past 10 years is shown below:—

Year.	Deaths.	Year.	Deaths.
1927	164	1932	101
1928	177	1933	90
1929	130	1934	145
1930	126	1935	186
1931	166	1936	163

Cases occurred throughout the year and were distributed as follows:—

Quarter.	Attacks	Deaths.
1st quarter	122	39
2nd quarter	90	43
3rd quarter	145	42
4th quarter	66	39
	423	163

Annual form No. XI gives in detail the divisional deaths and death-rates. The highest death-rate was recorded by Esplanade Division (1.0) followed by Egmore (0.5) and Royapettah (0.5). The lowest rate of 0.04 was returned by Royapuram and Tondiarpet. The incidence of enteric fever was reported from all the divisions.

Prompt preventive measures were carried out in all the infected houses and 3,017 contacts were inoculated with anti-typhoid vaccine as a prophylactic measure.

Other Fevers.—Under this head are included deaths other than from malaria, tuberculosis, enteric fever and respiratory diseases with fever as the predominant symptom. 1,799 deaths were registered under this cause—506 deaths less than in the preceding year—the death-rates being 2.5 and 3.3 per mille of estimated population in 1936 and 1935 respectively. Calculated on the census population the death-rate was 2.8 in 1936 and 3.6 in 1935, the average for 1931-35 being 3.04 (Annual form No. XII).

General Respiratory Diseases.—6,410 deaths were registered under this group as compared with 6,254 in 1935. The death-rate was 8.9 per mille of estimated population being the same as in the preceding year. Calculated on the census population the death-rate was 9.9 in 1936, the rates for 1935 and for the quinquennium (1931-35) being 9.7 and 8.9 respectively (Annual form No. XV).

Tuberculosis.—1,136 deaths from tuberculosis were registered during the year i. e. 73 deaths less than in the previous year 1935. The death-rate was 1.6 per mille of estimated population as compared with 1.7 in the preceding year. The number of deaths due to tuberculosis of lungs was 1,010 or 1.4 per mille of estimated population as against 1,032 or 1.5 in 1935. Calculated on the census population, the death-rate from tuberculosis was 1.7 in 1936, the rates for 1935 and the quinquennium 1931-35 being 1.9 and 1.6 respectively.

The mortality from tuberculosis from 1927 to 1936 is as follows:—

Year.	Deaths.
1927	1,781
1928	1,812
1929	1,371
1930	1,075
1931	1,020
1932	917
1933	1,011
1934	1,122
1935	1,209
1936	1,136

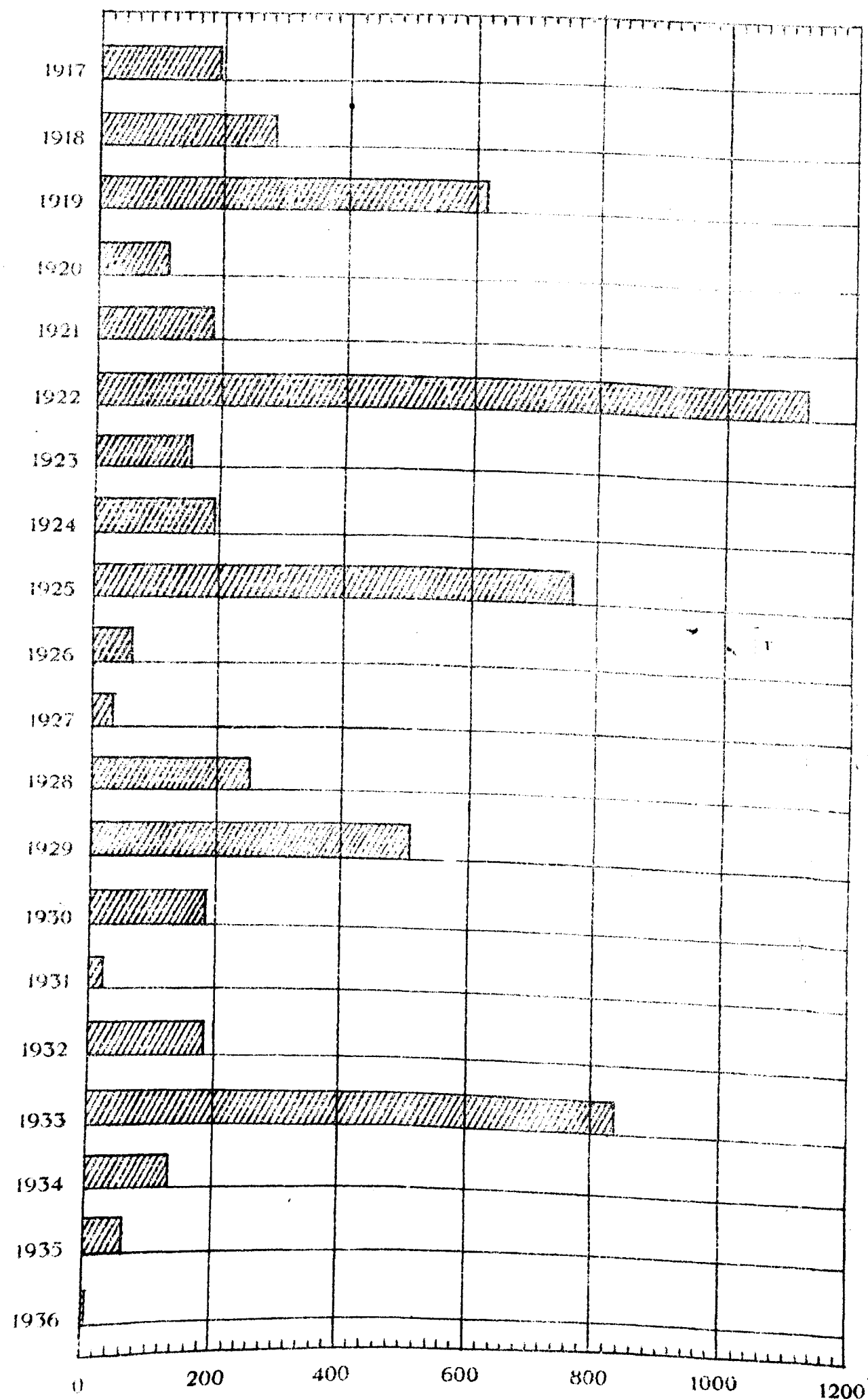
The following is the number of deaths registered in each quarter of the year.

Quarter.	Deaths.
1st quarter	339
2nd quarter	228
3rd quarter	274
4th quarter	295
	1,136

The number of deaths and death-rates in the various divisions is given in the annual form No. XIV. The highest death-rate was recorded by Vepery (3.8) followed by Chepauk (3.1). The lowest rate was returned by Sowcarpet (0.4). Though the mortality from tuberculosis is known by the system of registration its extent of morbidity is not known as this disease is seldom notified. There is no doubt that the occurrence of the disease in any place or community is an index to the housing, industrial and economic conditions of the people. The suffering and economic distress caused by it are very great. Its spread from

GRAPH 4

DEATHS FROM SMALLPOX 1917-36



The occurrence of deaths in the different quarters of the year is as follows:—

Quarter.	Deaths.
1st quarter	520
2nd "	523
3rd "	632
4th "	533
	2,208

The annual form No. XIII furnishes the number of deaths and death rates in the various divisions. The highest death-rate was recorded by Mirsaibpet (6.2) followed by Perambore (5.2), Tondiarpet (5.0) and Purasawalkam (5.0). The lowest rate was returned by Esplanade (0.5). 9 divisions recorded rates above the annual death-rate of the city due to diarrhoea and dysentery.

Small-pox:—The remarkable feature of the year under report is the lowest incidence of small-pox. 37 attacks and 3 deaths occurred as against 295 attacks and 59 deaths in 1935. The annual death-rate was 0.004 per mille of estimated population as compared with 0.08 in 1935. It is the lowest on record. Calculated on the census population the rate was 0.005 in 1936 and 0.09 in 1935, the rate for the past five years being 0.38.

The incidence of small-pox from 1917-36 is furnished below.

Year.	Attacks.	Deaths.	Year.	Attacks.	Deaths.
1917	582	195	1927	385	32
1918	677	272	1928	1,066	251
1919	1,227	611	1929	2,019	506
1920	315	109	1930	877	188
1921	569	180	1931	109	24
1922	2,727	1,121	1932	842	176
1923	481	151	1933	3,503	837
1924	665	197	1934	638	131
1925	1,807	763	1935	295	59
1926	300	60	1936	37	3

Graph IV illustrates deaths from small-pox for the past 20 years.

The incidence in several quarters of the year under report is as follows:—

Quarters.	Attacks.	Deaths.
1st quarter	18	1
2nd quarter	6	1
3rd quarter	5	...
4th quarter	8	1
Total	37	3

Small-pox was reported only from 13 municipal divisions viz., Korukkupet (15 attacks), Katchaleswaranpet (one attack), Kothawal Bazaar Division (one attack), Sewcarpet (2 attacks), Peddunaickanpet (one attack), Esplanade (2 attacks), Perambore (4 attacks), Vepery (one attack), Egmore (one attack), Kilpauk (2 attacks), Chintadripet (3 attacks), Triplicane (3 attacks) and Royapettah (one attack). Of these, deaths had occurred only in Korukkupet Division (2 deaths) with a death-rate of 0.07 per mille and in Kothawal Bazaar Division (1 death) with a death-rate of 0.15 per mille—Annual form No. VII.

Preventive measures were vigorously carried out. Vaccination and re-vaccination performed during the year are given in a separate report elsewhere.

Small-pox cases isolated and treated during the year are given in the reports of the two Infectious Diseases Hospitals.

person to person is through direct contact; and open or active cases of consumption should therefore be considered as a potential danger and focus of infection to others. Early diagnosis, notification, isolation and treatment are measures that would bring down the incidence of tuberculosis. Further, measures for improving housing conditions, relieving congestion and over-crowding and also those for improving the economic conditions of the people are necessary for its reduction in the city.

Deaths from Child-birth.—294 women died from causes connected with child-bearing as against 295 in 1935. The maternal mortality-rate was 10.1 per 1000 live births as compared with 9.5 in the preceding year.

The maternal mortality-rates from 1927 to 1936 are as follows:—

Year.	Rate per 1000 births.
1927	11.8
1928	15.4
1929	13.1
1930	12.7
1931	11.6
1932	10.0
1933	11.6
1934	11.1
1935	9.5
1936	10.1

The maternal deaths during the year are classified below according to age and causes of death.

Causes of death.	Deaths in age-periods.				Total.	Percentage to the total deaths.
	15-20	20-30	30-40	40 & above.		
Puerperal Sepsis ...	39	91	49	9	188	64.0
Abortion ...	...	8	8	2	18	6.1
Other accidents and diseases of pregnancy ...	12	42	26	8	88	29.9
Total ...	51	141	83	19	294	100.0

Puerperal sepsis accounted for 64.0 % of the total maternal deaths. Calculated with reference to the births registered during the year the death-rate from puerperal sepsis was 6.4 per 1000 births as compared with 4.0 in 1935.

Annual form No. XVII gives the maternal deaths and death-rates in the various divisions. 13 divisions recorded maternal death-rates above the rate for the whole city. High rates are noticed in the divisions which contain a large number of poorer classes.

The statistics relating to the death of mothers who come under the care of the various clinics of the Corporation Child Welfare Scheme are given in a separate report of the Superintendent, Corporation Child Welfare Scheme.

Deaths from "Other Causes"—11,157 deaths were registered under this group as against 11,810 deaths in 1935. Under this group are included deaths due to diseases of the circulatory, digestive, nervous, genito-urinary and other systems except respiratory system. The death-rate was 15.5 per mille of estimated population as compared with 16.7 in the previous year 1935. Calculated on the census population the death-rate was 17.2, the rate for 1935 and for the quinquennium (1931-35) being 18.2 and 16.9 respectively (Annual form No. XVIII).

Certified deaths.—4,191 deaths were certified by the various hospitals in the city and 1,114 by the private medical practitioners. The certified deaths represent 22.4 per cent. of the total deaths in 1936 as compared with 21.0 per cent. in 1935. There has been an appreciable response from the hospitals and private medical practitioners in the reporting of the causes of death of persons that came under their treatment and in the notification of "dangerous diseases" to the Health Officer through the printed cards and forms supplied by the Department.

Burial & Burning Grounds.—The divisional sanitary inspectors supervised the burial and burning grounds in the city. Out of 23,660 deaths, 5,892 corpses were burnt and 17,768 corpses buried.

Vaccination.

Staff.—17 Sub. Assistant surgeons and 38 vaccinators including 2 women vaccinators attended to the vaccination work as in the previous year. The female vaccinators worked mainly in the gosha and mussalman localities.

Operations.—43,179 vaccinations were performed during the year as against 61,919 in 1935. Of these 27,286 were primary vaccinations and 15,893 re-vaccinations. The vaccinations performed in 1934, 1935 and 1936 are set forth in the following statement:—

	1934	1935	1936
Primary Vaccination	28,233	26,414	27,286
Re-Vaccination	19,805	35,505	15,893
	48,038	61,919	43,179

The decrease in the total number of vaccinations during the year was due to the fall in the number of re-vaccinations on account of the low incidence of Small-pox throughout the year. In fact the incidence of the disease was the lowest in the vital statistics of the City as explained elsewhere in this report and it was therefore not possible to push on re-vaccination.

On the other hand there was an increase of 872 under primary vaccinations as compared with the preceding year.

No. of successful vaccinations.—27,052 primary vaccinations and 1459 re-vaccinations were successful during the year as against 26,251 and 3,983 respectively in 1935.

Success-rate.—The success-rate in primary vaccinations was 99.8 being the same as that of the preceding year. The success rate in re-vaccination was 15.9 as against 16.1 in 1935. The success-rates in primary vaccination for the past 10 years are given below.

Year.	Success-rate.	Year.	Success-rate.
1927	99.7	1932	99.9
1928	99.7	1933	99.7
1929	98.5	1934	99.8
1930	99.0	1935	99.8
1931	99.6	1936	99.8

No. of persons successfully vaccinated per 1000 population.—The number of persons successfully vaccinated per mille of population during the year was 44.5 as against 46.7 in 1935.

Infantile Vaccinations.—19,053 infants under one year of age were vaccinated during the year as against 19,245 in the preceding year. Of these, 18,918 were successfully vaccinated as against 19,148 in 1935.

Out of 19,053 infants vaccinated, 4,628 infants were born in mofussil and 14,425 in the City.

The vaccination staff continued to examine children under 5 years of age by house to house inspections and vaccinated those who had not been vaccinated already. In this way unprotected children born in the City or mofussil and whose vaccination was evaded for some reason or other were detected and vaccinated.

Such a campaign is continued throughout every year whether Small-pox is prevalent or not. The value of vaccination and re-vaccination is explained to the public during the course of the daily inspections and persons who desire re-vaccination are vaccinated. The births of children are also verified and failure to register any birth is rectified.

Verification of Births.—28,998 births were verified for purposes of vaccination as compared with 28,618 births verified in the preceding year. 4,093 children died before attaining the age of one year and without being vaccinated. 7,358 were removed from the City before they could be vaccinated. The number of children available for vaccination was 17,547. Of these, 13,116 children or 74.7% were vaccinated as against 72.9 in 1935.

Postponement of Vaccination of Children.—The vaccination of 1,707 children was postponed for medical reasons.

Inspection of vaccinated persons.—The results of vaccinations were verified by the Health Officer, the Asst. Health Officers and the Medical Vaccinators. The results of 27,121 or 99.4 per cent. of the total primary vaccinations and 9,198 or 57.9 per cent. of the total re-vaccinations were verified by them during the year under report.

Prosecutions.—40 persons were prosecuted for failure to vaccinate their children. 36 prosecutions were withdrawn as the children concerned were vaccinated subsequently. Two prosecutions resulted in conviction and two were pending.

Cost of Vaccination.—The cost of each successful vaccination in 1936 was Rs. 0-15-9 compared with Rs. 0-15-10 in 1935.

Vaccine lymph was supplied as usual by the King Institute of Preventive Medicine at Guindy.

Sanitation.

In the administration of the Department the Health Officer as usual was assisted by two Assistant Health Officers. Dr. P. Sadasivan, L.M.&S., B.S.Sc., was in charge of the South Range of the City. In the place of Dr. S.E.D. Masilamani, M.B., B.S., B.S.Sc., who left for England on leave for higher studies Dr. G. Srinivasan, M.B., B.S., B.S.Sc. was put in charge of the North Range of the City. Mr. V. Venkatachalam, M.A., continued to be the Public Analyst of the Corporation in charge of the Food Analysis Laboratory.

Water-Supply. The quality of the City's water-supply was epidemiologically safe throughout the year. The Water Analyst of the Corporation was constantly testing the water both at the source of supply and at the tap ends of the City in various places. There were 2,649 public water-taps and 143 bathing-fountains in the City. A detailed report about the work of the water analysis is appended.

Sewerage.—New sewers were constructed during the year to a length of 36,578 ft. Total length covered by sewers upto 31-12-1936 was 12,67,519 ft. or 240.06 miles. The scheme was completed during the year in Seven Wells area while in Peddunaickenpet area 99 per cent. of the work has been done. The scheme regarding the Compulsory construction of Flush Out Latrines was in force in several Divisions of the City. 2,727 F. O. Ls. were constructed during the official year as against 1,495 in the previous year.

Housing.—1,336 new houses have been constructed by private enterprise during the year. Majority of the new houses were constructed in Theygaraya Nagar Mylapore, Nungambakkam, Triplicane and Perambore areas. Housing schemes of the Corporation was in progress in Bogipalayam during the year and 32 tenements were constructed.

Under the House Inspection scheme 14,103 houses were inspected during the year. Of these 2,978 were found defective—530 for want of proper drainage, 398 for want of proper latrine accommodation, 79 due to defective water supply, 737 on account of bad ventilation and 1396 due to other miscellaneous defects. The Health Department received for scrutiny 2,680 building plans for construction and reconstruction of houses. In addition to the systematic house inspections the Sanitary Staff inspected 18,066 houses in connection with the detection and prevention of infectious diseases. 2,405 houses were disinfected.

Factories.—As Additional Inspectors of Factories under the Factory Act, the Health Officer and the two Assistant Health Officers inspected the factories in the City during the year and forwarded their reports to the Chief Inspector of Factories with suggestions for improvement. There were 133 factories in the City coming under the Factory Act at the end of the year.

Offensive Trades.—3,216 applications were received during the year for licences for offensive trades. Licences were sanctioned in 5,537 cases and refused in 213 cases. 466 cases were pending disposal at the end of the year.

Cattle-yards.—Largest number of applications was for cattle-yards. 2,286 cases were dealt with and 2,075 licences were issued in the year. Three applications were refused and 208 cases were pending at the end of the year. The Sanitary Inspectors reported 456 cattle-yards as condemned places and the owners thereof were all prosecuted. 633 cattle-yards were improved during the year as a result of the action taken by this Department.

Three cattle-yards at Basin Road, Purasawalkam and Chintadripet were maintained by the Corporation housing 324 animals during the year. Increased accommodation for storing straw was provided during the year at the Purasawalkam yard.

Eating-Houses.—1,002 applications were received and 715 licences were issued. 45 applications were refused and 242 were pending disposal at the end of the year.

Cart-Stands.—There were 14 private licensed cart-stands. The Corporation cart stand at Elephant Gate was under the management of the Health Department. It was let on contract for a year and a sum of Rs. 5,428-9-4 was realised for the official year.

Meat Supply.—The Corporation maintained Slaughter Houses at Perambore for the slaughter of sheep, pigs and cattle. 4,59,785 sheep, 1,114 pigs and 17,936 cattle were slaughtered during 1936. The Superintendent in charge of Slaughter Houses is a qualified Veterinary Graduate. He examined every animal that was brought for slaughter and also the carcasses. The construction of the new Slaughter House for pigs was completed and it was opened for use during the year. There are no private Slaughter Houses in the City. However permission was granted to slaughter 559 sheep and 9 pigs during the year in private places for religious and festival purposes. The right of collecting fees from the Slaughter Houses was let on contract for a total sum of Rs. 77,275. The City gets most of the meat supply from the Public Slaughter Houses. There were 179 licensed mutton stalls in the City. Besides these, mutton was being sold in 39 private markets and 4 public markets. The Sanitary Inspectors in charge of sanitation of the divisions inspect meat sold in licensed mutton stalls and in markets to see that no unwholesome meat is sold.

A statement of the animals and carcasses examined is given below:—

	No. Brought and examined.	No. Rejected.	No. of Carcasses Examined.	No. Condemned.	No. of Organs condemned.
Sheep ...	4,68,322	8,537	4,59,785	20	11,009
Cattle ...	18,545	609	17,936	6	8,377
Pigs ...	1,305	191	1,114	16	703

Food Control:—The Corporation owns six markets *viz.*, Moore Market, Smithfield Market, Purasawalkam Vegetable Market, Nungambakkam Market, Mambalam Market and Fruit Market. There were 42 private markets in the City. A small vegetable market kept in Poonamallee High Road without licence was removed after prosecution. As a result of the action taken by this Department masonry drains were constructed in the Kothwal Bazaar market during the year. The conservancy of Kothwal Bazaar, Jam Bazaar and Chintadripet markets was carried on by the Health Department on payment of necessary fees. Attempts made to take over the conservancy of other markets did not fructify as the owners were not inclined to do so. The question of municipalisation of markets is engaging the attention of the Corporation. Vigorous attempts were made to prevent the sale of articles of food in insanitary places. A list of unwholesome articles of food destroyed during the year is appended.

Weights and Measures:—Weights and measures and scales used in markets, bazaars and shops in the City were systematically inspected by the two Inspectors of Weights and Measures. The itinerant vendors and hawkers were intercepted and the weights, measures and scales used by them were also examined. Action was taken in the case of unstamped weights and measures as well as stamped articles which were found to be tampered with and thereby rendered defective. Non-standard and defective scales were also seized by them. 584 weights, measures and scales were seized during the year. Twenty prosecutions were launched during the year of which 19 resulted in conviction. Seven cases pending at the beginning of the year were also disposed of during the year. One case was pending disposal at the end of the year.

Medical Relief.—The Corporation maintained two Infectious Diseases Hospitals and 23 Out patient Dispensaries. Of the 23 out-patient dispensaries 19 were of Allopathic, 2 of Unani, 1 of Siddha and 1 of Ayurvedic systems. 1,841 cases were treated at the two Infectious Diseases Hospitals and 20,18,480 patients were treated at the 23 out-patient dispensaries. Details of cases treated in these institutions are furnished in statements which will be found in the appendix to this report. In seven allopathic dispensaries separate ladies' sections were maintained and another dispensary exclusively for ladies was also maintained in the Child Welfare Centre at Perambore. These ladies' sections were in charge of Lady Doctors transferred from Child Welfare Scheme as per recommendations of the *Ad-Hoc* Committee.

Poor House:—There were 171 inmates at the beginning of the year. 136 persons were newly admitted during the year. 91 were discharged, 50 died and 4 absconded leaving a balance of 162 inmates at the end of the year. The Poor House contains accommodation for about 300 persons but for want of sufficient provision in the budget, the strength of the House could not be increased. There were 2 sick wards for males and 1 for females with bed accommodation for 60 inmates. Out of the interest accrued from the endowments of Rs. 5,000 and Rs. 1,000 made by M. R. Ry. Dewan Bahadur C. V. Visvanatha Sastri Ayl. and the Government Officials' party respectively twelve treats were given to the inmates on special festival days. The inmates of the Poor House were well looked after and they were having healthy and homely life.

Anti-rabic measures.—7,970 stray dogs were caught during the year and removed to the Lethal Chamber. The system of catching dogs by means of Motor Vans had to be stopped from September as the budget provision had almost exhausted by the time. Out of the dogs caught 125 were released from the Lethal Chamber on claims from owners. 7,879 dogs were electrocuted.

Zoological Gardens.—The Zoo situated in Peoples Park is in charge of a Superintendent who is assisted by the staff of 2 Sergeants and 10 Animal Keepers. Pleasure boats were allowed to ply in the lake in the gardens. The right of collecting fees from people visiting the Zoo was let on contract for a period of three years from 1-4-36 for Rs. 59,500-0-0. The right of collecting fees from persons using pleasure boats which was let on contract for three years continued during this year also.

Publicity and Health Education.—Regular Health Propaganda was conducted in every division throughout the year by means of lectures and magic lantern and Cinema shows etc. Subjects like Leprosy, Tuberculosis, Cholera, Small-Pox, Malaria, Personal & Domestic Hygiene were given prominence in the Health Propaganda programme. Pamphlets were distributed on these subjects and on the importance of household cleanliness and responsibilities of citizens. 2,435 lectures, 1,855 talks, 115 Cinema Shows and 1,140 Magic Lantern Demonstrations were conducted during the year. Besides the Civic Exhibition at the Park Fair during the Christmas week two divisional exhibitions at Triplicane and Kilpauk were held during the year.

Conservancy.

Mr. W. L. Edwards, the Drainage Superintendent, was in charge of conservancy work during the year under report. He was assisted by the two Supervisors with sanitary and menial staff. The sewer cleaning staff consisting of the Sewer Foreman, Sewer Superintendents and coolies continued to be under the control of the Health Department. Mr. V. J. Balasundara Doss, G.M.V.C., Veterinary Officer, was in charge of the veterinary work of the cattle depots.

Cleaning staff:—There were 2401 male coolies, 193 women coolies and 352 boy coolies employed for the cleaning of streets, drains, syphons, water tables and latrines with 160 peons to supervise their work. The following carts were engaged for the removal of rubbish, filth, sewage and silt from all the divisions.

Trolleys, double and single draught carts for the removal of rubbish	...	409
Night soil carts	...	96
Sewage and silt carts	...	56
Animals.	1935.	1936
Number of bullocks at the commencement of the year	899	870
Number purchased during the year...	82	89
Number died during the year	111	134
Number at the end of the year	870	825

134 bullocks died during the year as against 111 bullocks in the previous year—79 of old age and general debility, 13 of Tuberculosis, 11 of Piroplasmiasis, 6 of Anthrax, 3 of Foot and Mouth disease, 3 of Bovine Lymphangitis and 19 of other causes.

Foot and Mouth Disease:—There was a severe outbreak of Foot and Mouth disease in the City. It broke out in a severe form in all the conservancy depots. 458 bullocks were affected with the disease. All the affected animals were immediately segregated and carefully attended to. Thatched sheds were put up at the Veterinary Hospital premises. All of them speedily recovered except 3 bullocks which succumbed to the disease.

Anthrax:—There were 6 deaths from Anthrax during the year, 4 from Monegar Choultry Depot, 1 from Choolai depot and 1 from Harris depot. The spread of the disease was effectively checked by adopting immediate preventive measures and by protecting the other bullocks with Anti-Anthrax Serum.

Piroplasmiasis:—There were 11 deaths during the year. The disease was brought under control by taking preventive measures immediately.

Rinderpest:—There were no deaths from Rinderpest during the year as all the bullocks were protected against Rinderpest with sero-virus method.

Tuberculosis:—There were 13 deaths from Tuberculosis. One bullock which was showing clinical symptoms was destroyed. Some of the bullocks which were suspected for T. B. were segregated at the Veterinary Isolation Hospital at Vyasarpady. All the possible preventive measures were adopted to stamp out the disease and it is on the decline now.

1,194 bullocks were treated for various diseases during the year.

Motor Lorries:—The Lorry Station which was under the control of the Health Department was transferred to the Engineer with effect from 15-6-1936 as per resolution of the Council dated 29-1-1936. There were 39 motor lorries for the removal of rubbish and filth in the city. 2 were purchased during the year at a cost of Rs. 6,649.

Tipping Platforms:—The tipping platforms at the Basin Bridge Depot and Langs Garden Pumping Station continued to serve satisfactorily.

Carts:—During the year one handcart, 44 night soil cart bodies, 12 hand cart bodies, 11 Sewage barrel cart bodies, one R.C. dustbin and 306 night soil buckets were manufactured at a cost of Rs. 7,976.

Disposal of rubbish:—About 5,82,147 cartloads of rubbish were removed from the City during the year as against 5,80,605 in the previous year. Of these 1,41,105 cartloads were received at the Incinerators and burnt after separating earth and other incombustible materials. 3,41,806 cartloads were dumped at the Korukkupet, Ottery and Mylapore Dumping Grounds. 99,736 Cartloads were used to fill up the low lands at Kakathope, Padavattamman Coil Tank, Paddy field Street, Kodambakkam High Road, Pond in Hensman Road, Appasawmi cheri, Perambore Tank etc.

71,801 cartloads of earth were used for reclaiming low-lands and pits in unobjectionable localities. Special efforts were taken to minimise the fly nuisance at the dumping grounds by levelling the rubbish heaps then and there systematically. The incinerators at Krishnampet and Basin Bridge continued to function throughout the year. 71,801 cartloads of incinerator ashes and screened earth were removed by private parties free of charge for raising low-lands.

Disposal of filth:—The pail depots at the DeMellows Road, Ice House Road, and Langs Garden continued to work satisfactorily during the year. 86,826 cart loads of filth were removed from the City of which 46,388 cartloads were flushed into sewers in the pail depots and the rest trenched in the Korukkupet and Ottery Nightsoil depots. The amount realised by the sale of manure from the trenching grounds during the year 1936-37 was Rs. 3,360. Coal tar was burnt in the pail depots to mitigate the smell emanating from them.

Public Latrines:—There are 296 latrines in the city of which 240 are flush-out ones with 3,482 seats (1,892 for males and 1,590 for females) 34 are masonry and the remaining 22 are sanded. The public latrines were all lime-washed and special care was taken about the cleanliness of the sanded latrines. 1,231 gallons of technocol and phenyle were used during the year for the disinfection of latrines and drains. 5,453 parabs of chunam were used for spreading near dustbins, nightsoil buckets, latrines and street corners rendered unsightly by the committal of nuisance.

Festival:—Special conservancy arrangements were made during the festivals at Mylapore and Triplicane during the year under report. The arrangements for the removal of rubbish and filth from the S. I. A. A. Grounds were also undertaken as usual during the Park Fair and Exhibition on payment of the charges in advance.

Private Scavenging:—The removal of rubbish and filth from several institutions in the City was carried out by the Health Department as per Section 197 of the Act and the total amount of income realised thereby during 1936-37 was Rs. 26,444-6-2.

Nuisance:—The conservancy staff was paying particular attention to cleaning and disinfecting the places where the committal of nuisance was too severe. The Police Authorities also launched a number of prosecutions in the worst cases on intimation from the Health Department. Notice Boards warning the public against committal of nuisance were newly put up in several parts of the city during the year.

Labour:—Bonus was granted to the coolies who retired on account of old age and infirmity as per regulations issued in G. O. No. 1917 L. & M. dated 22-12-31. 306 coolies are occupying houses in model lines and 301 live in huts on Corporation land. Owing to paucity of funds no additional lines were constructed though the demand for them was great. Personal attention was devoted to the needs of the labourers and genuine grievances were redressed when they were brought to notice. Every case of grievance represented to the Health Officer and the Commissioner either in person or through petitions was personally enquired into.

General:—The conservancy of hutting grounds and slum areas in the city received special attention. Special gangs of coolies were formed for the special conservancy of slum areas such as Washermanpet, Perambore and Parthasarathy Kuppam to prevent the breeding of flies. The total expenditure on conservancy for the financial year 1936-37 was Rs. 9,75,459 (Rs. 20,891 capital and Rs. 9,54,568 ordinary) against Rs. 9,90,967 for 1935-36 (Rs. 28,233 capital and Rs. 9,62,734 ordinary). The amount spent on wages of conservancy labour was Rs. 5,94,835.

Anti-Mosquito Measures.

During the year 1936 the anti-mosquito measures were carried out as usual by 2 supervisors, 6 maistries and 68 coolies under the direct supervision of a medical officer. A separate staff of one maistry and 2 coolies was appointed from May for combating mosquito nuisance in Mambalam which has no drainage system. During the year under report, stegomyia survey was conducted in the portion of the city half a mile round the Madras Port limits and also within the area of the Port under the management of the Madras Port Trust. The findings have been embodied in separate survey reports, copies of which will be found in the Appendix to this report.

Control of tanks and ponds:—473 tanks and ponds existed at the beginning of the year. The Corporation staff periodically cleaned 199 private ponds and collected a sum of Rs. 1,980 from the owners. The owners of 162 ponds made their own arrangements to clean them after notification. 5 private ponds were cleaned free of charge on account of their receiving storm water from surrounding areas. 10 Corporation tanks were also attended to by the staff. As a result of action taken against the owners 3 ponds were reclaimed. Action was pending in respect of 12 ponds at the end of the year. As regards the remaining ponds action was not taken as some were dry and others kept clean and free from larval breeding.

Larvae and pupae of mosquitoes were collected during inspections and bred out in the laboratory for adult identification.

The breeding of *A. culicifacies*-malaria-carrier-continued to exist in some of the ponds and tanks in Tondiarpet, Washermanpet, Korukkupet, Perambore, Nungambakkam and Royapettah. The breeding places of *A. varuna*-malaria-carrying species—were met with in Nungambakkam and Royapettah. *A. stephensi*-another malaria-carrier—was found to breed in a few ponds though it breeds chiefly in wells. There were also other anopheline species breeding in ponds but of no malarial importance. The mosquito-breeding in ponds was controlled by the removal of weeds, moss, and other aquatic vegetations and stocking larvicidal fish in them.

Wells:—13,813 wells in the City were inspected once and 2,163 wells twice during the year. During the inspection of wells it was noticed that 307 wells had been filled up, 411 wells covered with cuddappa slabs and 1,270 wells provided with trap doors. These figures include cases in which action was taken against the owners by the department.

In nearly 59 per cent of the wells the fish stocked previously were found to be absent. All the wells were restocked with larvicidal fish.

17.6 per cent of the wells were found to contain the larvae of anopheles, culex and stegomyia either alone or in combination. Anopheles larvae were recorded from 11.62 per cent of the wells examined.

A. stephensi dangerous malaria-carrier—was found breeding chiefly in the wells. 885 wells or 79.9 per cent of the wells from which anopheles larvae were collected contained the larvae of this species *A. (stephensi)*. It was found to be prevalent in a large number of wells in the divisions of the North Range. *A. culicifacies* and *A. varuna* were also noticed in some of the garden wells in Nungambakkam and Royapettah.

Larvae of culex and stegomyia mosquitoes were also collected and bred out. 497 wells or 51.2 per cent of the wells from which culicine larvae were collected were found to breed aedes or stegomyia larvae. Apart from being the cause of malarial incidence, the wells formed also the breeding grounds of culicine mosquitoes which spread filarial and dengue fevers and cause severe annoyance and loss of sleep by their bites. This problem could only be solved either by covering the wells with cuddappah slabs and providing pumps or by stocking them with larvicidal fish at least four times a year.

Larvicidal fish were obtained from some of the local tanks and ponds in the city.

The fish pond in the compound of the Infectious Diseases Hospital, Tondiarpet, containing Gambusia has been successfully maintained. Gambusia have multiplied in numbers in this pond and are removed from it for stocking the wells in the city. Many ponds and tanks in the city have also been stocked with this species so as to maintain several nurseries in different parts of the city. It is gratifying to report that they are thriving very satisfactorily in most of these places. The climatic conditions here appear to be none-the-less favourable and suitable to their life and growth. Ere long this species may form one of the local fishes.

The wells inspected during the latter half of the year under report were stocked with Gambusia. They are voracious larvae-eaters and are very useful for mosquito control.

In addition to the inspection of wells, the fish gangs inspected the entire premises during the course of their work and destroyed nearly 433 breeding-grounds of mosquitoes in collections of water in broken vessels, tins, cisterns, tubs etc., after showing them to the occupants. Aedes or stegomyia mosquitoes were the chief species met with in these places. The breeding-grounds of culex and anopheles mosquitoes were also met with.

Control of covered drains, cesspools etc.—All covered drains, open drains, ditch drains, cesspools and gully traps in public places were petrolised once a week. Stagnation in low lands, ditches and excavations in public places were also attended to by the staff.

A mixture of liquid fuel and kerosine oil was used for petrolising. Saw dust and used cotton-waste soaked in the mixture was used wherever necessary to give a continuous film of oil. Oil balls were tied in some of the big drains.

Control of River Cooum and Buckingham Canal.—The present staff was insufficient to attend to these places regularly. Whenever the situation was bad, the existing staff attended to them.

Control of low lands:—During the year under report lowlands were reclaimed in Cross road, Kannikoil Cherry, Connoor Road, near Strahans Road, near Model Cattleyard in Kosapet, near Kalathiappa Mudaly Street, Poonamallee High Road, Sundaram Pillai Cherry, Kodambakkam High Road, burial ground in Sterling Road, portion of river bund in Appaswamy Cherry, portion of the Perambore tank, portion of the pond in Venkatanarayana Road, behind Conran Smith Nagar and near Slaughter House.

The Council's resolution prohibiting dumping of rubbish in lowlands continued to be in force during the year under report and substantial reclamation work was not therefore possible.

Control of mosquito-breeding in private premises:—All complaints about mosquito-nuisance received from different parts of the city were promptly attended to by the medical officer and the staff. Relief was afforded by prompt destruction of breeding-grounds. The citizens were taken over a few such breeding-grounds and given instructions on the methods of preventing their existence.

To educate the public, pamphlets were distributed. During the course of daily inspections, personal instructions were given. In the Triplicane and Park Fair Exhibitions opportunity was availed of to show to the citizens the different developmental stages of mosquitoes and the methods of exterminating them altogether.

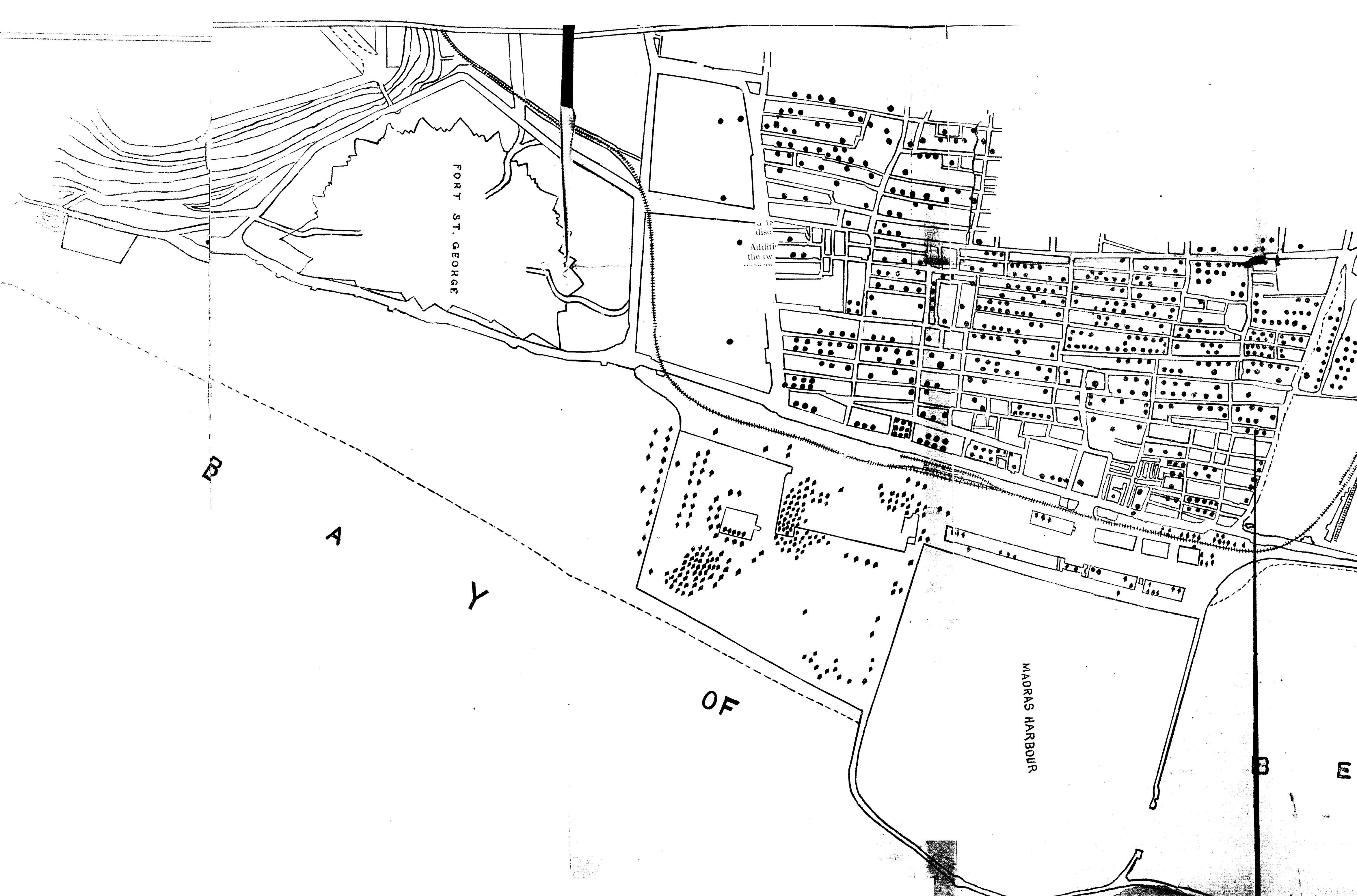
Intensive anti-mosquito campaign at Theagaraya Nagar:—A special staff of one maistry and 2 coolies was appointed for anti-mosquito work in Theagarayanagar from May 1936. All wells, drains, cesspools, stagnation in pits, low-lands and collections of rain water in discarded tins, cans, bottles, pots etc. within premises were prevented from becoming mosquito-breeding places. The nuisance was thus greatly minimised. As this area is expanding and more houses are cropping up, it is necessary to increase the staff suitably.

A similar separate staff for house visits is necessary even for other unsewered and garden areas where the nuisance is always great.

Control of dyeing yards:—Special attention was paid to the control of mosquito-breeding in vats buried in the ground and used for dyeing. The dyeing yards were inspected and action was taken to provide the vats in use with lids to prevent the entry of mosquitoes.

Malaria cases treated in hospitals:—The following statement gives the number of malaria cases treated in the principal Government and Private Hospitals and Institutions in the City during 1936.

Name of the Institution.	No. of malaria cases treated in In-patient and Out-patient Departments.	No. of cases in which malaria parasites were found.	No. of deaths from malaria.
Govt. General Hospital ...	3,628	442	17
Govt. Royapuram Hospital ...	10,344	211	7
Govt. Royapettah Hospital ...	1,707	60	1
Govt. Victoria Caste and Gosha Hospital.	236	103	1
Govt. Indian Medical School Hospital.	657	35	...
Govt. Hospital for Women and Children.	622	26	...
Govt. Tuberculosis Hospital ...	10	10	...
Govt. Mental Hospital ...	6	6	1
Govt. Ophthalmic Hospital ...	2	2	...
Madras Penitentiary Jail Hospital.	4	2	...
Rajah Sir Ramaswamy Mudaliar's Lying-in-Hospital.	1,743	30	3
Christiana Rainy Hospital ...	64	16	2
Kalyani Hospital ...	64	1	...
The Lady Ampthill Nurse's Institute and the South Indian Nursing Association.	4	4	...
	19,091	946	82



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Malaria cases treated in Corporation Dispensaries:—During the year under report 17,697 malaria cases were treated in the several Corporation dispensaries.

Microscopical examination of blood smears:—5,633 blood smears received from the medical officers of several Corporation dispensaries were microscopically examined for malarial parasites. Of these, 2,191 smears were positive i. e., 38.9 per cent.

The following table gives the number of blood smears received from the Corporation dispensaries.

Name of the Dispensary.	No. of blood smears received.	No. of smears in which malarial parasites were found.			Percentage of smears positive.
		Benign Tertian.	Malig-nant Tertian.	Total.	
Washermanpet Dispensary.	550	94	29	123	22.4
Royapuram "	103	29	5	34	33.7
Mint "	1020	310	155	465	45.6
Trevelyan Basin "	1045	524	177	701	67.1
Mafuskhan "	609	170	34	204	31.8
Mannady "	253	83	11	94	37.1
Harbour "	79	38	6	44	55.2
Pulianthope (Unani) "	15	3	1	4	26.6
Pulianthope (Allopathic) "	120	24	5	29	24.1
Perambore Dispensary "	48	20	1	21	43.7
Vyasarpany "	109	20	7	27	13.1
Baliah Naidu "	304	69	24	93	30.6
Kosapet "	19	2	...	2	10.5
Kilpauk "	164	30	6	36	21.9
Nungambakkam "	7	1	...	1	14.3
Mambalam "	28	...	...	...	...
Chintadripet "	438	145	56	201	41.2
Triplicane "	196	10	2	12	6.2
Pudupakkam "	102	11	8	19	18.7
Mylapore "	183	26	1	27	14.7
Teynampet "	54	5	...	5	9.2
Choolai (Siddha) "	110	30	9	39	35.3
Thousandlights (Ayurvedic) "	8	3	2	5	62.5
Thayar Sub Street (Unani) "	19	4	1	5	26.3
	5,633	1,651	540	2,191	38.9

Along with blood smears of 5,633 patients sent by the medical officers of dispensaries, reports were also received that 948 patients had enlargement of spleen, (416 adults and 502 children) i. e., 16.8 per cent.

Cases of enlarged spleen among Corporation School Children:—During the school year 1936-37 the medical inspection staff attached to the Corporation Schools detected 118 cases of enlarged spleen among children attending the Corporation Schools. Of these, 100 cases were found among the children attending the Corporation Schools situated in the North Range.

Medical Inspection of Corporation Schools for the year 1936-1937.

Staff:—The four Medical Inspectors and two Medical Inspectresses continued to work during the year. No additional staff was employed and the work had to be carried on under heavy strain. The need for additional staff was keenly felt during the year.

Findings of Medical Inspection:—The average number on rolls was 19,762 in Boys' Schools and 14,144 in Girls' Schools. The average attendance during the year was 15,959 boys and 10,733 girls. 17,761 boys and 11,615 girls were subjected to medical examination. The percentages of children examined to the total number on rolls were 89.62 in boys and 82.12 in girls.

Out of the total number examined 9,081 boys (51.13%) and 4,166 girls (35.87%) were ailing and required treatment. The percentages of defectives during the previous year was 51.06 among boys and 42.16 among girls.

The health of the school children did not suffer much and remained almost at the same level. In certain aspects improvement was noted. The dental and throat conditions had further improved during the year. Fewer children were having infectious diseases.

Cleanliness, condition of the scalp, body and nails:—1,904 boys (10.72 per cent.) and 561 girls (4.33 per cent.) were found to be dirty in their person and clothing and the percentages for the previous year were 10.70 among boys and 4.25 among girls. The school bath for the dirty children was continued during the year for improving their personal hygiene.

Malnutrition:—2,545 boys (14.33 per cent.) and 302 girls (2.60 per cent.) were under-nourished and required treatment. The corresponding percentages for the previous year were 14.18 and 2.56 respectively. The graph shown elsewhere of average weights of entrants and regulars of boys and girls taken separately shows that the regulars uniformly weighed more in all the ages and the difference was more marked between the ages of 12 and 15.

Teeth and Mouth:—1,641 boys (9.24 per cent.) and 507 girls (6.98 per cent.) had dental and oral complaints. The percentages of defectives during the previous year were 10.03 among boys and 8.18 among girls. 1,424 children had stomatitis and were treated at the dispensaries. 206 who had tartar were advised scaling at dental sections of Government hospitals. 333 were referred to the same section for extraction of carious teeth.

Nose and Throat:—2,988 boys (16.82 per cent.) and 2,479 girls (21.34 per cent.) had defects of nose and throat. The percentages of defectives during the previous year were 17.86 among boys and 22.22 among girls. 4,316 children had simple enlargement of tonsils without other complications and were treated at the dispensaries. 440 had the same condition with other complications and were advised removal early. 527 children had enlarged glands of the neck. 215 had nasal catarrh. Suitable treatment was given at the dispensaries.

Eye diseases:—560 boys (3.15 per cent.) and 334 girls (2.88 per cent.) had eye diseases as against 2.73 per cent. and 2.96 per cent respectively in the previous year. All the minor complaints of the eyes were treated at the local dispensaries. 220 children had conjunctivitis. Being of an infectious nature they were excluded from the schools till recovery. 18 of the squinting children were referred to the eye hospitals for correcting errors of refraction.

Defective Vision:—165 boys (0.93 per cent.) 18 girls (0.15 per cent.) had defects of vision requiring treatment, the corresponding percentages in the previous year being 1.32 and 0.26 respectively. 58 children had defects of a minor degree and were advised to take Cod Liver Oil to improve their general health. 125 were referred to Ophthalmic Hospital or eye sections of other hospitals for correction by the use of glasses.

Ear Diseases:—282 boys (1.59 per cent.) and 87 girls (0.75 per cent.) had otitis, otorrhoea or other ear diseases, the percentages for the previous year being 1.68 among boys and 1.10 among girls. 59 children had otitis and 280 were having otorrhoea. Chronic and resistant cases were referred to the specialist for treatment.

Hearing:—8 boys (0.05 per cent.) and 4 girls (0.03 per cent.) were short of hearing as against 0.03 per cent. and 0.04 per cent in the previous year. All such cases were of the congenital type and were given seats nearest the teachers.

Speech.—28 boys (0.16 per cent.) and 4 girls (0.03 per cent.) were either stammerers or otherwise defective in articulation. The percentages during the previous year under this head were 0.23 in boys and 0.06 in girls. 26 were stammerers while 5 had defects in articulation. One was dumb.

Circulatory system.—156 boys (0.88 per cent.) and 23 girls (0.20 per cent.) had defects of heart and circulation as against 0.99 per cent. and 0.31 per cent. respectively in the previous year. Organic diseases of the heart were detected in 52 children, while 40 had functional disorders. 69 were anaemic and they were treated at the local dispensaries.

Tuberculosis.—23 boys (0.13%) and 7 girls (0.06%) had signs and symptoms of early Pthisis. The percentages during the previous year were 0.20 among boys and 0.09 among girls. The School Medical Officers were alive to the necessity of early detection and treatment of these cases. All cases of fatigue, wasting, anaemia and irregular temperature were carefully investigated and necessary advice and prescriptions were given. The parents were made aware of the nature of the disease and were advised to resort to early treatment. The school staff were also instructed to watch their progress. 27 were referred to Government Tuberculosis Institute where they underwent treatment. The rest were treated at the Corporation dispensaries and Government Hospitals. Talks and lectures were also arranged on the subject.

Respiratory diseases.—251 boys (1.41%) and 86 girls (0.74%) as against 2.00 per cent. and 0.72 per cent. respectively in the previous year had bronchitis and other non-tubercular affections of lungs. 314 children had bronchitis. 23 were suffering from bronchial asthma. They were treated at the local dispensaries.

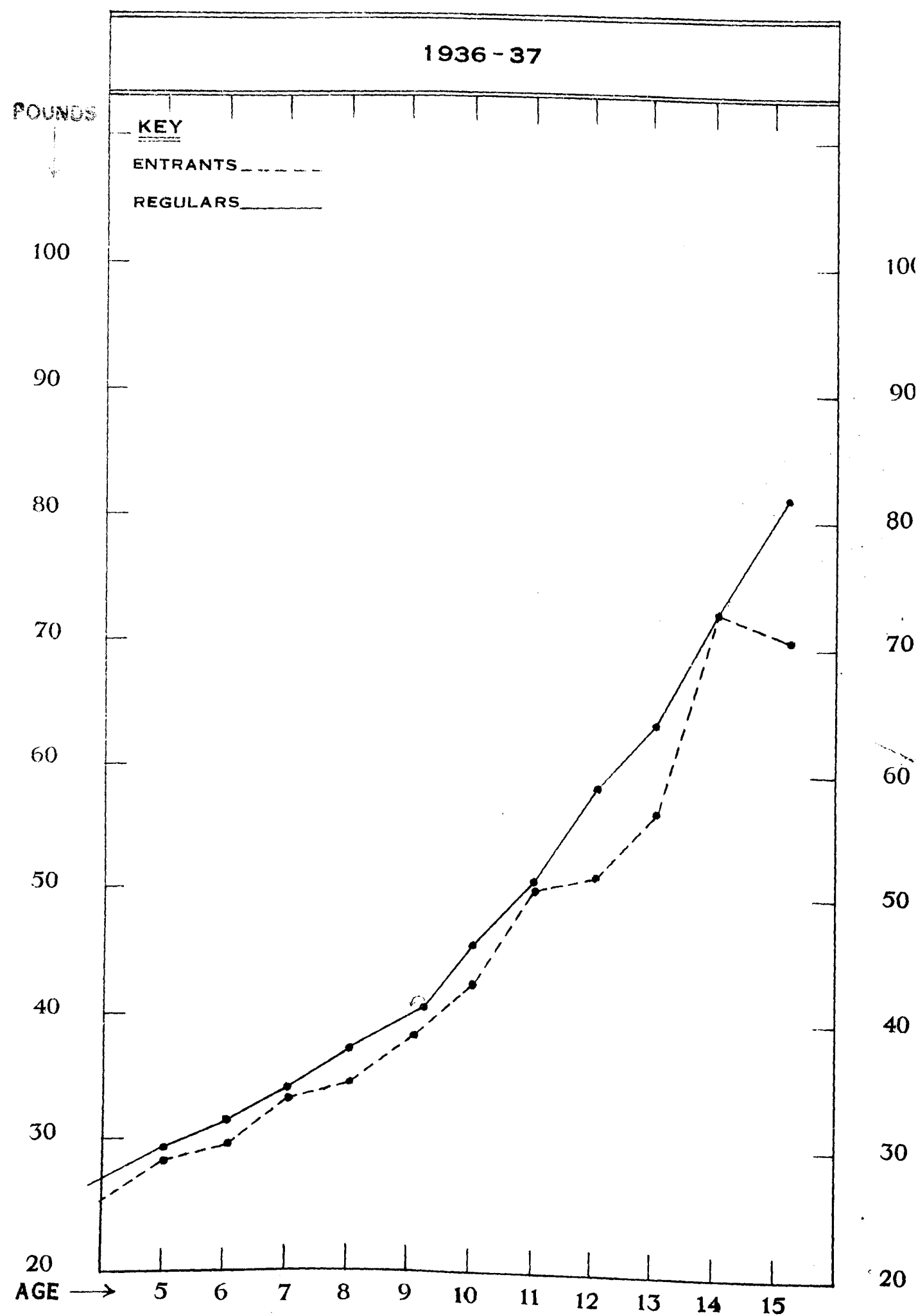
Abdominal organs.—275 boys (1.55 per cent.) and 50 girls (0.43 per cent.) were found defective under this head. The percentages of defectives during the previous year were 1.80 among boys and 0.43 among girls. During the year under report 118 children were found having enlarged spleen due to malaria. 100 of them were residing in North Range while 18 were in South Range. They have been carefully followed up both by the school staff and the Medical Inspectors. The result of treatment given to them is shown in the statement on "following up" work. Cases of inguinal hernia and hydrocele requiring operative procedures were directed to the Government General Hospital.

Bones and joints.—339 boys (1.91 per cent.) had defects and diseases of the bones or joints. Percentages of defectives during the previous year were 1.53 among boys and 0.82 among girls. 160 children had deformed chest while 186 had symptoms of rickets. The details of defects have been shown in the detailed statement.

Nervous and Psychic system.—18 boys (0.10 per cent.) and one girl (0.01 per cent.) had defects under this head. 0.12 per cent. of boys and 0.03 per cent. of girls were defective during the previous year. 6 children had infantile palsies, while the rest had functional disorders such as epilepsy etc. Two were mentally defective.

Infectious and contagious diseases.—1936 boys (10.90 per cent.) and 598 girls (5.15 per cent.) had infectious diseases including skin diseases. The corresponding percentages during the previous year were 11.46 and 5.59 respectively. The incidence of scabies showed a further decrease during the year. 1,275 were having it as against 1,534 in the previous year. In the absence of facilities for regular cleansing in the homes, the schools served the purpose to some extent and this has had the desired effect. 460 children had signs and symptoms of leprosy during this year. Of these 92 were new admissions while the rest were old children already under treatment. They have been sent to the Skin Sections of various hospitals in the City. The details of the findings are given under a separate head. Cases of eczema and other skin affections while undergoing treatment at the local dispensaries were isolated in the classes and given baths daily.

GRAPH SHOWING COMPARATIVE WEIGHTS OF ENTRANTS AND OLD GIRLS



LITHO BY GOLDEN & CO., MADRAS.

Other diseases and defects.—880 boys (4.95 per cent.) and 258 girls (2.22 per cent.) had diseases and defects not included in other items. The percentages of defectives during the previous year were 3.86 among boys and 3.26 among girls. 242 children harboured intestinal worms. 228 had phimosis and were advised circumcision.

Deformities.—18 boys (0.10 per cent.) and 13 girls (0.11 per cent.) had deformities as against 0.28 per cent. and 0.20 per cent. respectively in the previous year. The details of deformities have been shown in the table.

Number without marks of vaccination.—147 boys (0.83 per cent.) and 26 girls (0.22 per cent.) had no visible marks of vaccination and were subsequently vaccinated.

Medical treatment.—During the year under report 12,400 children were referred for treatment of defects to the various institutions.

	Boys.	Grls.
1. Children sent to Corporation Dispensaries	6,478	3,451
2. " referred to Government Hospitals	1,183	501
3. " " " Ophthalmic Hospital	162	35
4. " " " Tuberculosis Institute	20	7
5. " " " skin sections of hospitals	497	66
	8,340	4,060

Leprosy.—460 children showed signs and symptoms of the malady during this year. 368 were old cases and 92 were entrants. Systematic following up was continued during the year to ensure regular and continuous attendance at treatment centres. The parents of all these children were met and subjected to medical examination and such of those as had the disease among them were also treated. In addition, 270 homes of the children were visited to study their environmental conditions and detect any others afflicted with the disease. 31 such persons were brought under treatment. One child had the disease in the infectious stage and was excluded from the school. He was attending the clinic for treatment.

The distribution of the disease according to sex was as follows:—

Group.	Number defective.	Percentage to the total examined.	Percentage to the total of Leprosy. cases.
1. Boys	394	2.22	85.65
2. Girls	66	0.57	14.35
	460	1.57	100.00

Careful following up revealed varying results. In 6 children the disease was arrested. In 55 children good improvement was noted after a prolonged course of treatment. 335 children continued treatment at the various skin clinics as they did not show evidence of improvement. 39 children whose parents were indifferent in spite of repeated advice and persuasion, were irregular in attending the centres. 7 parents refused altogether to take any action. 17 children left the school after inspection and could not be traced.

A beginning was made during this year to provide facilities for children to attend the skin clinics from schools situated far away from the clinics. They were taken to the clinics in motor vans and left back in their schools after treatment.

Re-Inspections and following up work:—During the year 268 revisits were paid to the schools after routine inspection. 18,754 re-examinations of children were made to note the improvement and change the course of treatment when necessary. Leprous children were kept under observation throughout the year and the parents were invited to the school frequently for giving advice. The details of the results obtained are given below.

Malnutrition:—Of the children who were ill-nourished 200 regained normal health after a course of cod liver oil and tonics, 634 obtained benefit after the course while 579 had to continue treatment before signs of improvement could be noted.

Teeth and mouth:—84 children had their carious teeth extracted and 29 had teeth scaled at the dental sections of hospitals. 483 cases of stomatitis were cured and 307 improved after treatment. 8 children had their tongue tie clipped.

Nose and throat:—95 children had their tonsils removed by operation while 341 were treated at the dispensaries and cured. 791 were improved after treatment. One underwent operation for nasal polypus.

Defective vision:—29 children had their defective vision corrected after medical advice and were wearing glasses. 18 children had their vision improved after taking cod liver oil.

Tuberculosis:—15 of the children who were advised treatment for tuberculosis showed much improvement while an equal number were continuing treatment.

Abdominal organs:—34 children having enlarged spleen were cured after treatment. In 78 the spleen was much reduced while in 6 treatment was continued.

Infectious and Contagious Diseases:—1,114 children having skin complaints as scabies, eczema, fungus, etc. were cured after treatment. The scheme of treatment included instructions on personal hygiene and daily baths in the school. The results of treatment given to leprosy children have already been given.

Other diseases and defects:—93 children underwent operation for phimosis after medical advice. 42 attending the schools with fever due to various causes were sent home with suitable advice and medicines and were later found cured.

Co-operation of parents:—4,645 parents responded to the invitation of the Medical Inspectors to be present during the examination of their boys. In many cases, the parents themselves asked for and obtained treatment for their ailments.

Co-operation of teachers:—The school staff continued their co-operation in following up the defective children and were meeting the parents frequently to keep themselves well informed of the progress of the children. A separate list of all the leprosy children was also maintained and the treatment given to them was carefully followed. Any slackness was immediately brought to the notice of the Medical Inspector and the parents were sent for and suitably advised. In some cases the staff visited them in their homes and gave advice.

School Sanitation:—The Medical Inspectors continued to inspect the school buildings to draw the attention of the authorities in regard to the sanitary defects noted. Three schools were considered unfit for school purposes and an early change of premises was suggested. In 56 schools improvements were suggested to rectify defects concerning ventilation, sunlight etc.

School latrines:—79 schools had flushout latrines which were generally clean. In all other schools in sewered areas the flushout type was recommended.

Play ground:—48 schools had no play-grounds and the children had their drill and games indoors.

Water Supply:—All the schools have been provided with a sufficient number of taps. Strained tap water was used by school children for drinking.

School Equipment:—Every school had adequate and suitable furniture and equipment.

School baths:—61 schools had bathing rooms. Dirty children utilised them daily during the recess hours.

Midday meals:—In 81 schools 4500 children were provided with midday meals daily. The school medical officers supervised the arrangements made for distribution of the meals at the schools.

Propaganda:—187 lectures and 184 talks were arranged in the schools as detailed below. The total attendance at these was 19,032. Charts relating to school hygiene were exhibited at the divisional health exhibitions.

A brief report of the Port Health Officer on the working of the Quarantine Regulations at the Port of Madras during 1936.

Incoming Vessels:—691 Vessels arrived here during the year from different Ports with 58,008 crew and 53,337 passengers as against 660 vessels with 56,143 crew and 53,486 passengers in the previous year.

Outgoing Vessels:—673 Vessels with 58,639 crew and 49,620 passengers were inspected and granted Bills of Health during the year as against 639 vessels with 55,237 crew and 72,906 passengers in the previous year.

Epidemic and Infectious Diseases:—1 case of Chickenpox and one case of Small-pox were landed from ships and sent to the Infectious Diseases Hospital.

Disinfection of bedding and clothing of deck passengers and crew landing and embarking here is carried on at the discretion of the Port Health Officer. The disinfection shed is in charge of a sub-assistant surgeon and a nurse is employed to assist in examining the female passengers.

Rats on Steamers:—No deaths among rats were found on any of the vessels that entered the harbour during the year under report.

Public Health activities of Aided Institutions.

Ambal Siddha Vaidya Free Dispensary, St. Xavier Street, G. T. rendered medical aid to 12,994 patients.

Annadhana Samajam, Nyniappa Naick Street, G.T. fed 85,682 poor persons, supplied ragi bags to the Child Welfare Centre at Chetput and provided boarding and lodging for 76 school boys.

Annadhana Samajam, Pilliar Koil Street, Triplicane, fed 85,122 poor persons.

Bairava Free Dispensary, 21 Sundaramoorthi Vinayagar Koil Street, Triplicane, treated 44,986 patients.

Chennai Majnana Siddha Dharma Vaidya-sala, Tiruvateeswaranpet. treated 10,797 patients.

Chengalvaroya Naick Free Ayurvedic Dispensary treated 2,27,411 patients.

Free Unani Dispensary, 31, Hussain Mulk Sahib Street, Pudupakkam, treated 24,763 patients.

Free Unani Dispensary, Takuddin Khan Bahadur Street, Triplicane, treated 13,871 patients.

Friend-in-need Society had 84 persons as inmates.

Kalyani Hospital, Mylapore, rendered medical aid to 2,929 in-door patients and 14,774 out-door patients and treated 1090 labour cases.

Madras Siddha Ayurvedic Free Dispensary, Mylapore, treated 20,957 patients.

Oddarpalayam Free Dispensary, Krishnampet, treated 566 patients.

Osmania Shafa Khana, Triplicane, treated 8,858 patients.

Pandit Anandam's Medical Hall, Theagarayanagar treated 38,860 patients.

Saraswathi Sangam Dharma Oushadhalaya, Pedariar Koil Street, G. T. treated 37,194 patients.

Saraswathi Sangam Free Dispensary, Chintadripet, treated 28,400 patients.

Sri Kanyaka Parameswari Devasthanam Dispensary treated 58,873 patients.

St. Thomas Convent Dispensary, Mylapore, treated 13,765 patients.

Sri Ramakrishna Mutt Dispensary treated 73,115 patients.

Siddananda Free Dispensary, Mint Street, treated 25,586 patients.

Siddha Vaidya Sangam Dharma Vaidyasala, Royapuram, treated 5,428 patients.

Unani Dar-Ush-Shifa Free Dispensary, Triplicane, treated 1,15,911 patients.

Venkataramana Dispensary, Mylapore, treated 1,18,209 patients. In its branches at George Town, Triplicane and Mambalam 15,314 patients 2,147 patients and 738 patients were treated respectively.

Report of the Public Analyst for the City of Madras for the year 1936.

(1) During the year ending 31st December 1935, 1039 samples were received for analysis under the Madras Prevention of Adulteration Act, 1918, as against 820 received during 1935.

Of the 1039 samples received, 1028 samples were analysed and reported upon during the year under report. Report on the remaining 11 samples was pending on 31st December 1936. Among the 1028 samples analysed and reported upon during the year, 782 samples were genuine and the remaining 246 were certified as adulterated. The percentage of adulterated samples calculated on the total number of samples analysed during the year was 23.9 as against 32.9 during 1935.

(2) The samples consisted of ghee, butter, milk, gingelly oil, ground-nut oil, coffee powder and tea. A tabular statement of the samples analysed and the result of analysis during the years 1936 and 1935 is given below:—

Table 1.

Nature of sample.	No. of samples analysed in 1936.	Number of adulterated samples in 1936.	Percentage of adulterated samples in 1936.	Number of samples analysed in 1935.	Percentage of adulterated samples in 1935.
Ghee	523	151	28.9	340	44.4
Butter	98	37	37.8	44	29.5
Milk	74	21	28.4	90	50.0
Gingelly Oil	246	13	5.3	305	18.0
Ground-nut Oil	62	23	37.1	...	...
Coffee Powder	8	...	...	18	5.6
Tea	2	...	...	9	...
Ghee substitutes of vegetable origin.	12	...	...	...	...
Articles variously described.	3	1	33.3	...	...
Total	1028	246	23.9	806	32.9

(3) From Table I, it will be seen that 1028 samples were analysed and reported upon during the year under report as against 806 in the previous year. The percentage of adulterated samples was 23.9 as against 32.9 in the previous year. There has thus been a considerable improvement during the year 1936 in the quality of food-stuffs sold in the Madras City. This is specially noticeable in the case of ghee, milk and gingelly oil. In the case of ghee, adulteration with foreign fat was prohibited by G. O. No. 3081, P. H., dated 28th November 1935 and the advantages of this rule, have been amply illustrated during the year under report by the considerable decrease in the sale of adulterated ghee. The adulteration in the case of butter has increased owing probably to the fact that the public buy more of butter now-a-days in order to make ghee in their homes under the erroneous belief that butter is not admixed with foreign fat. Tea and Coffee continue to be genuine. A new feature during the year was a number of mixtures of gingelly oil and ground-nut oil being sold as ground nut oil under the belief that the vendors could escape conviction, but G. O. No. 2479, P. H., dated 25th October 1934, prohibits the sale of such mixtures under any name whatsoever. In a few cases pure gingelly oil was sold as ground-nut oil and though the former is costlier than the latter, this fact cannot extenuate the offence under the Act.

(4) The nature and extent of adulteration of the various articles are given below:—

(i) *Ghee*:—523 samples were analysed during the year out of which 372 were found to be genuine and 151 were adulterated. The common adulterants were hydrogenated (hardened) oils and the extent of adulteration ranged from 10 to 95 per cent.

(ii) *Butter*:—98 samples were analysed of which 61 were found to be genuine and 37 adulterated. Out of the 37 adulterated samples, 7 samples contained water in excess of the prescribed limit of 20 per cent, 24 contained foreign fat (fat not derived from milk or cream), the percentage of water being within the prescribed limit and 6 samples contained both excess water and foreign fat.

(iii) *Milk*:—74 samples were analysed out of which 49 were of cow's milk, 22 buffalo's milk and 3 were sold as mixtures of cow's and buffalo's milk. Among the 49 samples of cow's milk, 13 were adulterated, among 22 of buffalos milk, 6 were adulterated and among the 3 mixtures, 2 were adulterated. Added water was reported in 20 out of the 21 adulterated samples, and the degree of adulteration varied from 5 to 56 per cent. In one sample of cow's milk, fat was deficient of the prescribed minimum to the extent of 47 per cent.

(iv) *Gingelly Oil*:—246 samples were analysed and only 13 of these were found to be adulterated. The adulterant was in all cases ground-nut oil and the degree of adulteration ranged from 10 per cent to entire substitution.

(v) *Ground-Nut Oil*:—62 samples were analysed and 23 were adulterated. 7 of the adulterated samples proved to be pure gingelly oil, 15 others were mixtures of ground-nut and gingelly oils, and one contained 10 per cent of cocoanut oil.

(vi) *Coffee Powder*:—8 samples were analysed and all were genuine.

(vii) *Tea*:—2 samples were analysed and both were genuine.

(viii) *Other Articles*:—12 ghee substitutes of vegetable origin were analysed and all of them were reported as genuine as the results of analysis showed that the descriptions given by the vendors were correct.

One sample was sold as a mixture of Marvo and ground-nut oil and analysis showed description to be correct.

Another article was sold as 'Grease and oil mixture' and on analysis was found to contain 80 per cent ghee and 20 per cent foreign fat and hence reported as adulterated.

Another sample sold under the fancy name of 'Mattam Amadam' consisted of pure ground-nut oil. Warning of the vendor to use the proper and common descriptions of the articles sold by him was recommended.

(5) The number of samples received and reported as adulterated during 1936 was 246, out of which convictions were obtained in 141 cases. In 10 cases, the vendors were warned but not prosecuted; in one case, the vendor being a minor was admonished by the Magistrate and bound over for good behaviour for six months; in 3 cases the articles had been seized under section 9 of the Act and were destroyed under the orders of the Magistrate; 2 cases ended in the acquittal of vendors; and the remaining 86 cases were pending disposal on 31-12-1936. Two samples received at the end of 1935 were certified as adulterated during the year under report and both the cases ended in conviction of the vendors. 93 cases of the previous years were pending disposal in the court on 1-1-1936, out of which 72 ended in conviction; in 10 cases prosecutions were withdrawn as the vendors could not be traced; 3 cases ended in acquittals of the vendors and the remaining 8 were pending disposal in the court on 31-12-1936.

(6) Table II in the appendix gives a statement of the adulterated samples of 1936 and previous years dealt with during 1936. It will be seen from Table II that the total number of convictions under the Prevention of Adulteration Act, 1918, during 1936 was 218 as against 271 during the previous year. The total amount of fines levied during 1936 was Rs. 5,741 as against Rs. 5,771 during the previous year. The average fine per conviction during 1936 works out at Rs. 26 as against Rs. 21 in 1935 and Rs. 17 in 1934. There has been a welcome increase in the fines inflicted. The Analyst has pointed out in his previous annual reports the need for heavy and deterrent fines for offences under the Food Adulteration Act. Though there has been an improvement in this direction, the fines are still far from being sufficiently deterrent in view of the large profits offered by the trade in adulterated food-stuffs.

In conclusion the Analyst has to point out that the Food Adulteration Act is slowly but surely having its beneficial effect on the quality of food stuffs sold in the City as evidenced in the considerable decrease in adulteration during the year 1936, the percentage of adulteration being 23.9 as against 32.9 in 1935 and 35.7 in 1934. With more deterrent fines, the figure for 1936 could have been very much lower.

V. VENKATACHALAM, M.A., A.I.C.,

Public Analyst.

Report of the Water Analyst for 1936.

The quality of the City's water supply, though epidemiologically safe, was far from satisfactory from the aesthetic point of view. Complaints have been received often about the presence of leeches, worms and other animal-cules in tap water. Their presence has to be attributed to the present system of straining raw water at a rapid rate through a thin layer of fine sand, which does not arrest the above organisms. Besides, the system of filtration in vogue has the following defects. It increases the "organic load" on the filters and results in the penetration of organic matter right down to the bottom of the filter bed. The life of the filters is considerably shortened. A large amount of filtered water is required for washing the dirty sand. Further, this process makes washing unduly difficult in point of time and expense. Several experts have been consulted, experiments have been carried out with the Red Hills Lake Tenders for a new water filtration and purification plant were invited and their disposal is awaited.

But, doubts seem to exist still in some quarters regarding the unsuitability of the method of slow sand filtration for purifying the lake water. The following extracts taken mainly from the reports of the Government Water Filtration Committee issued from time to time in the past will show conclusively that a clear, transparent, tasteless and odourless water cannot be obtained by adopting the process of slow sand filtration.

(i) In G. O. No. 1984 L. & M., 1st September, 1923, on page 5, the Government Committee has stated that "This experiment is of the utmost importance, for it proves that simple slow sand filtration (four vertical inches per hour) with the Madras water cannot be carried on without the formation of H_2S , no matter how carefully the process of filtration is controlled.....".

"All the available evidence so far produced show that slow sand filtration by itself is not able to produce a potable water. Some other means of purification must therefore be sought".

(ii) Lt. Col. Clemesha, I. M. S. (Retd.) who was invited to suggest on improved methods of purifying the Red Hills Lake water, has stated on page 4 of his letter dated 26th January, 1925, to the Commissioner that "I am forced to the same conclusion as the Madras Water Works Committee namely, that slow sand filtration alone is not suited to the water of Madras."

(iii) The reports of Col. Clemesha and that of the Filtration Committee were considered by the Council on 5th May, 1925, who resolved "that the work of constructing five more filter beds making up a total of 22 be taken up immediately, that water be filtered by slow sand filtration and that unfiltered water, which might have to be added should be chlorinated before being mixed up with the filtered water for the present". The resolution of the council was communicated to Govt. on 22-7-25 and the Govt. have in G. O. No. Press 4345 L. & M. dated 30th November, 1925, passed orders on the proposals of the Corporation declining to sanction the proposal for the construction of the additional slow sand filter beds.

(iv) In G. O. No. 1550, P. H., 2nd August, 1928, page 6, the Committee has stated that "These two results are to be compared with the behaviour of a new slow sand filter used as control, which produced sulphuretted hydrogen in increasing amounts after running for three months, thereby confirming previous observations made on this type of filter at Kilpauk".

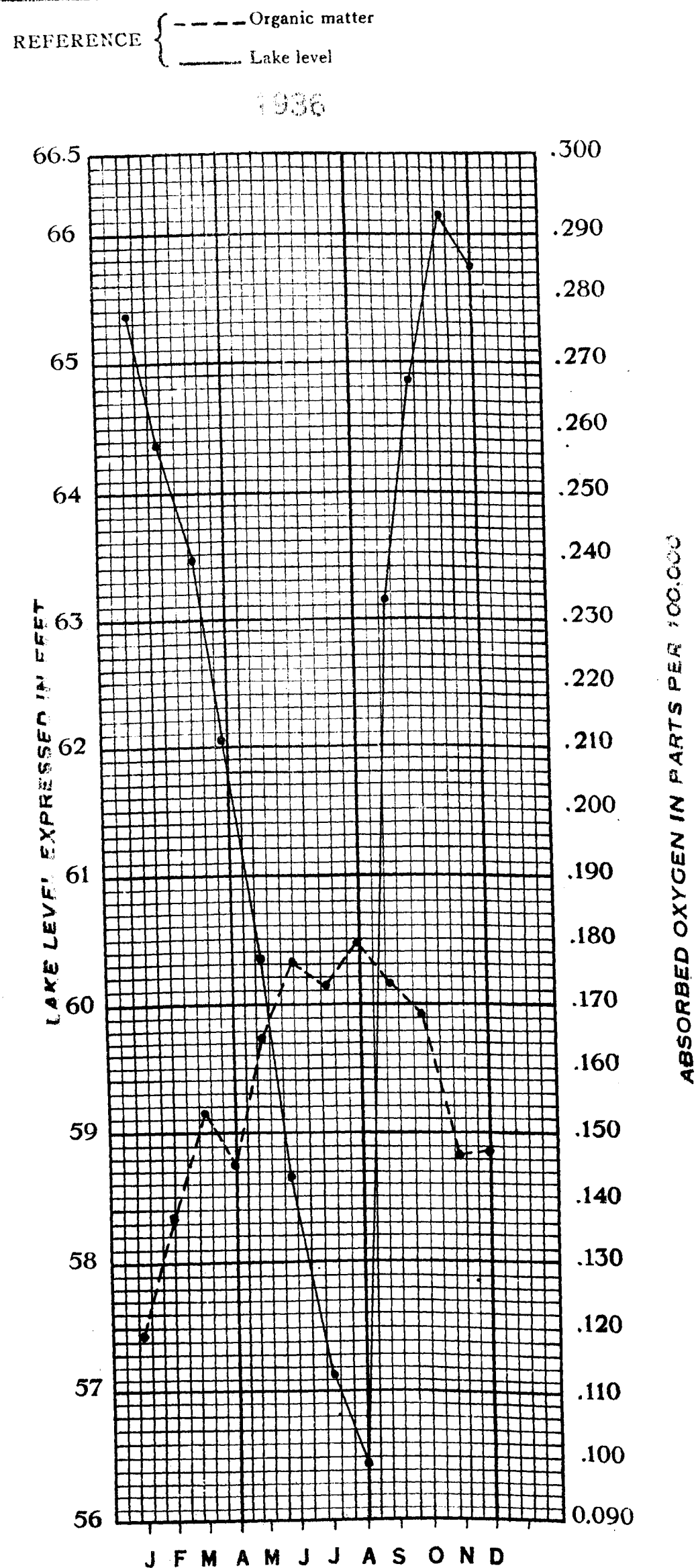
(v) In G. O. No. 709, P. H., dated 15th March, 1929, page 2, it is stated that the results of the Committee's experiments confirmed "once more (1) the early production of sulphuretted hydrogen in a newly laid slow sand filter and (2) the short filter runs after the first run".

(vi) Again in G. O. No. 1419, L. & M., dated 25th April, 1931, page 3, it is stated that "(b) Slow sand filtration of this water is inefficient bacteriologically and produces a particularly unchlorinatable water. Therefore Madras water is not suited for slow sand filtration."

(vii) Dr. Dey and Ganapati have stated in "Water and Water Engineering" Vol. XXXVI Nos. 430 & 432 March and April 1934 that "In the tropics slow sand filters appear, therefore to be very unsuitable for purifying impounded, surface waters of the type of the Madras Red Hills Lake water; as the conditions there favour large scale reduction of sulphates and other attendant biological phenomena."

So, the verdict has been unanimous in condemning the system of slow sand filtration which was adopted originally for purifying the Red Hills Lake water. Two remedies have been suggested by the Government Water Filtration Committee. One was suggested in 1923 namely, that the existing sand filters should be scrapped and replaced by rapid filters preceded by coagulation with alum and settlement and final chlorination, and the other was suggested in 1931 namely, that percolation followed by semi-rapid sand filtration would be the best solution to the problem of the Madras water supply if the existing plant has to be used at all.

GRAPH SHOWING THE RELATION BETWEEN
LAKE LEVEL AND ORGANIC MATTER
(ABSORBED OXYGEN FIGURES)



in January. As for the "oxygen absorbed" figures, they varied between 0.119 and 0.180 parts per 100,000 representing the maximum in August and minimum in January respectively (Table No. IV).

Filtrates from Beds:—As in last year, 17 filter beds were in use. The depth of sand in each filter remained nearly the same. The method of filtration also continued to be the same; the beds were acting merely as strainers to remove the gross suspended matter. As a result the chemical and bacteriological results of filtrates from beds were far from satisfactory (Tables III & IV).

The yearly average percentage of first class samples (L.F. 60 cc.) was only 12.5. The average colonies per cc. was 605 (Table III).

Chemically the figures for "Ammonical N" varied from a trace to 0.006 part per 100,000; those for "Albuminoid N" varied between 0.025 and 0.048 parts per 100,000. The figures for oxidisable organic matter (Absorbed oxygen) varied between 0.092 and 0.155 parts per 100,000. The annual average reduction of organic matter was only 18.1 per cent (Table IV).

Test Tap Samples:—The number of first class samples was 79.2 per cent and the average total colonies count per cc. was reduced to 359. On the chemical side, all the figures showed a distinct reduction over those of the filtrates from beds. The average dose of chlorine which was applied to filtered water was 1.0 ppm. throughout the year (Table IV).

Distribution System:—There was a fall in the number of first class samples (41.3 per cent) and an increase to 505 in the average total colonies count per cc. Chemically an all round reduction in the figures for organic matter over the test tap samples was noticed (Table IV).

S. V. GANAPATI, M. Sc.,

Water Analyst.

Skin and Leprosy Clinics of the Madras Corporation:—The work done during the year under report by the Ice House Skin and Leprosy Clinic and the Skin and Leprosy Sections of the Vyasarpady and other Corporation dispensaries is detailed below.

Ice House Skin and Leprosy Clinic:—This has been in existence since 2-2-1934 and is in immediate charge of a trained Hony. Leprosy Officer. Rao Saheb P. Parthasarathy Naidu continued to be Hony. Leprosy Officer of the Corporation during 1936. The clinic as its name implies undertakes to treat skin diseases and leprosy only. An oil immersion microscope has been supplied and is mainly intended for the detection of micro-bacterium lepra in the nasal and skin smears, the myelium and spores in fungoid diseases, foci in ankylostomiasis etc. Blood specimens are taken and forwarded to Guindy in leprosy cases of a leucic nature. The total number of new and old skin and leprosy cases, treated during 1936 was 25,454 with an average daily attendance of 71 against 24,323 cases with a daily average of 67 of the previous year. Total number of injections given for leprosy was 3637 against 3319 during 1935. The number of Hansen cases registered since the opening of this clinic until 31-12-36 was 1745.

This clinic has also trained the Medical Officers of the Corporation dispensaries to enable them to treat leprosy and the prevalent skin diseases. There were 460 cases of leprosy and 2029 other skin ailments among the Corporation school children.

Skin and leprosy sections of the other Corporation dispensaries:—Arrangements have been made to treat leprosy in the Vyasarpady General Dispensary from 4-8-1931. During the year under report 181 leprosy cases and 1567 other skin affections were treated against 184 and 1901 cases respectively during the previous year. The M. & S. M. Ry. authorities having opened a leprosy clinic of their own, their cases which were hitherto attending this clinic, will hereafter attend their own dispensary.

So then, the Corporation had to decide upon one of the above two proposals. The Council at its meeting held on 19th July, 1932, resolved to construct two units of percolating filters as an experimental measure, and to request the Government Committee to carry on further experiments with the two units to be constructed and to use two of the existing filter beds as secondary filters and that the Committee should submit their report within a period of one year to the Council.

It is nearly four years since the above resolution was passed; the large-scale experiments suggested in the above resolution have not been tried. The period of experimentation may be said to be practically over. The Council has to choose early one of the two processes mentioned above, slow sand filtration being definitely out of the question. Rapid filtration preceded by coagulation with alum and settlement and final chlorination is to be preferred, as with this process, the plant will be capable of easy manipulation and will be provided with efficient washing devices, which constitute the main defect of the other (percolation followed by semi-rapid sand filtration). But the recurring expenditure may be comparatively higher in the case of the former on account of the addition of alum.

*Meteorological Notes:—*The results are shown in Table I. It will be seen therefrom that the cold weather period (January and February) was fairly sunny and windy with a mean temperature of 77.50 F. and 2.63 inches of rainfall.

The hot weather period (March, April and May) had nearly the same hours of bright sunshine as in the former period. But wind was blowing at a moderately higher velocity. It was during this period that highest mean temperature 86.8° F. for the year was recorded. The total rainfall for the same period was 1.38 inches.

The south west monsoon season (June, July, August and September) following the hot weather period had considerably less number of hours of bright sunshine than during the two previous periods. Wind was blowing at a moderate velocity. Temperature was slightly less than during the hot weather period and the total rainfall was 15.61 inches as against 15.49 inches in the previous year for the same period.

In the north-east monsoon season (October, November and December) the hours of bright sunshine were longer, the wind velocity was nearly the same, and temperature lower. The total rainfall during this period was 24.63 inches.

*Red Hills Lake:—*The total rainfall recorded for the year in the lake region was 44.37 inches as against 42.45 inches in the previous year. (*Vide* Table II).

The lake water was of fair quality bacteriologically almost throughout the year. Lactose fermenters were present in 20 cc. and upwards in January; in 10 cc. and upwards, in April and June; and in 5 cc. and upwards in February, July, August and December. The average total colonies per cc. was 769 for the year (*Vide* Table III). Chemically, the lake water contained fairly large amounts of organic matter of vegetable origin.

*Raw water at the Kilpauk end:—*Raw water drawn at the Kilpauk end of the raw water conduit also was of a fair quality bacteriologically. Lactose fermenters were present in 10 cc. and upwards in 20.8 per cent; in 5 cc. and upwards in 56.9 per cent; in 1 cc. and upwards in 22.2 per cent of the samples. The total colonies per cc. growing on nutrient agar at 37° C. after 48 hours was 797 (Table No. III).

On the chemical side the figures for "Ammonical N" varied from a trace to 0.002 parts; while those for "Albuminoid N" varied between 0.028 and 0.057 parts per 100,000. Maximum was reached in October and minimum

A beginning was made to conduct leprosy work in all the other Corporation dispensaries and they were equipped with the necessary medicines and appliances for the treatment of leprosy and skin diseases. The Medical Officers have also been given a week's preliminary training at the Ice House Skin and Leprosy Clinic in the diagnosis and treatment of these ailments. Notice boards (card board) have been supplied to all these dispensaries to give publicity and one hour daily has been fixed for the special treatment, the Medical Officers doing this work in addition to their usual work. These dispensaries have treated during the year under report 25 cases of leprosy and 74,197 other skin diseases against 17 cases of leprosy and 84,330 other skin affections during 1935.

Statement showing the number of skin diseases and leprosy cases treated in the several institutions during 1936 with results.

Serial No.	Name of Institution.	When opened.	No. of leprosy cases treated.		Total.	Results of treatment.			No. of skin diseases excluding leprosy.
			Infectious.	Non-infectious.		No. cured.	No. symptom free.	No. arrested.	
1.	Ice House Skin and Leprosy Clinic.	2-2-34	258	256	514	...	285	229	4,007
2.	Vyasarpady Skin and Leprosy Clinic.	4-8-31	79	102	181	...	21	160	1,567
3.	Skin and Leprosy Department of the Other Dispensaries.	1935	...	25	25	...	...	25	74,197
Grand Total.			337	383	720	...	306	414	79,771

Annual Form No. A :—Meteorological Data for 1936—Madras.

Latitude:—13° 4' North.

Longitude:—80° 15' East.

Months.	Barometer. Mean daily reading reduced to 29.92 F Sea level and gravity.	Reading of Thermometer.					Mean Maximum Solar Radiation.	Difference between dew point temperature and Mean air temperature.	Degree of humidity complete saturation being 100.	Prevailing direction of wind.	Number of days on which rain fell.	Rainfall.	
		Maximum.	Minimum.	Mean daily range.	Mean daily Value.	Dew point. Value.						Total fall of rain during the Month.	Maximum fall of rain during 24 hours.
January	29.915	85.0	68.9	16.1	76.4	67.9	Not available	8.5	77	E	2	0.10	0.06
February	.874	85.5	73.3	12.2	78.6	70.3		8.3	78	SE by E	9	2.53	1.06
March	.859	87.5	73.1	14.4	80.2	70.8		9.4	76	ESE	4	1.07	0.56
April	.787	94.8	78.2	16.6	84.9	73.3		11.6	72	SE by S	1	0.29	0.29
May	.636	95.6	81.6	14.0	86.8	73.5		13.3	69	S by E	2	0.02	0.01
June	.662	96.3	80.3	16.0	86.3	70.1		16.2	63	SW by S	14	3.22	0.97
July	.654	94.6	79.2	15.4	84.9	72.6		12.3	71	SW	14	4.63	1.51
August	.675	94.1	77.3	16.8	83.8	72.3		11.5	72	S	21	5.84	1.71
September	.709	92.5	77.8	14.7	83.7	74.1		9.6	76	S	10	1.92	0.43
October	.804	89.7	76.2	13.5	82.0	73.1		8.9	78	SE by E	15	8.19	2.49
November	.876	84.7	73.5	11.2	78.7	73.8		4.9	87	NE by E	22	14.50	3.33
December	.892	84.0	72.0	12.1	77.3	69.5		7.8	79	NE by N	7	1.94	1.18
Annual Mean ...	29.774	90.4	76.0	14.4	82.0	71.8		10.2	75	SE by S	121	44.25	3.33

Annual Form No. V.—Deaths registered according to class by divisions during the year 1936.

1		2		3			4			5						
		Population as per Census of 1931.					Number of deaths registered.			Ratio of deaths per 1,000 of population.						
Divisions.	Districts.	Christians.	Hindus.	Mohammadans.	Others.	Total.	Christians.	Hindus.	Mohammadans.	Others.	Total.	Christians.	Hindus.	Mohammadans.	Others.	Total.
1	Royapuram	5,797	14,840	1,144	166	21,952	161	486	72	...	719	27.8	32.7	62.7	...	32.8
2	Tondiarpet	1,300	23,616	1,314	81	25,911	40	925	105	...	1,071	30.8	40.9	54.8	...	41.3
3	Washieranpet	888	23,036	1,728	11	25,663	29	933	51	...	1,013	32.6	40.5	54.8	...	39.5
4	Korukkupet	976	20,557	3,957	48	25,538	25	913	192	...	1,140	25.9	44.4	48.5	...	44.6
5	Harbour	503	3,491	4,687	23	8,704	5	133	197	...	335	9.9	37.2	42.0	...	38.5
6	Muthialpet	1,226	12,308	697	16	14,257	3	315	24	...	342	2.4	25.5	27.1	...	24.0
7	Katchadwaranpet	1,838	9,322	935	52	12,707	18	323	27	...	380	15.2	32.9	27.1	...	29.9
8	Kothawal Bazar	185	5,232	1,087	46	6,550	3	186	14	...	203	16.2	35.5	12.9	...	31.0
9	Annen Koil	2,289	19,967	3,839	167	19,202	29	432	139	...	631	25.8	33.3	36.2	...	32.8
10	Seven Wells	1,571	17,329	1,265	129	20,291	31	608	41	...	680	20.0	25.1	32.4	...	23.5
							15	184	13	...	213	...	...	...	...	...
11	Sowcarpet	14	6,858	34	488	7,194	...	197	...	...	197	...	29.6	...	...	27.4
12	Peddunaiickenpet	75	21,141	365	26	21,547	...	753	14	...	767	...	35.6	45.9	...	35.6
13	Trevelyan Basin	38	18,506	86	292	18,916	2	628	2	...	632	52.6	33.9	2.2	...	33.4
14	Espanade	275	3,357	164	86	3,906	...	107	2	...	109	...	31.6	12.2	...	27.9
							37	222	30	...	380	...	...	...	...	...
15	Park Town	665	16,189	219	110	17,183	11	553	3	...	567	16.5	34.1	13.7	...	33.0
16	Perambur	2,175	33,024	8,409	209	43,817	72	1,366	339	...	1,777	33.1	41.4	40.3	...	40.5
17	Choolai	1,427	25,525	567	29	27,188	39	1,160	24	...	1,133	27.3	41.5	47.3	...	40.8
18	Purasawalkam	4,088	22,347	528	91	27,054	98	824	23	...	945	23.1	36.9	43.6	...	34.9
19	Vepery	4,116	15,922	1,910	159	23,337	108	588	65	...	761	26.7	3.9	33.5	...	34.4
20	Egmore	5,690	21,313	2,902	90	29,385	152	716	77	...	956	29.9	34.1	26.5	...	32.5
21	Kilpauk	3,584	20,002	726	22	24,334	87	719	32	...	838	24.3	35.9	44.1	...	34.4
22	Nungambakam	4,365	21,035	1,223	114	27,338	64	641	49	...	754	14.7	30.5	28.4	...	35
23	Chintadripet	1,951	23,550	1,220	124	26,845	59	856	49	...	966	30.2	30.4	40.2	...	27.7
24	Tiruvatteswaranpet	1,071	19,616	10,578	76	31,371	21	715	405	...	1,141	19.6	36.4	38.8	...	35.9
25	Chepauk	603	12,817	2,665	7	17,692	6	390	158	...	554	9.9	30.4	43.1	...	36.4
26	Triplicane	94	19,002	391	27	19,513	1	573	13	...	587	10.6	30.1	33.2	...	32.4
27	Amir Mahal	785	11,314	7,505	11	19,615	20	454	237	...	731	25.5	40.1	34.2	...	30.1
28	Mirshibpet	1,145	20,846	5,271	81	27,343	19	920	252	...	1,191	16.6	44.1	47.8	...	37.3
29	Royapettah	2,481	28,612	1,956	154	33,203	56	1,127	76	...	1,260	22.6	39.4	38.8	...	37.9
30	Mylapore	3,507	17,147	534	32	21,270	78	591	19	...	688	22.2	24.5	22.5	...	32.3
		54,122	5,20,176	70,031	2,901	6,47,230	1,340	19,551	2,764	5	23,660	247	315	39.5	1.7	350

* Includes deaths in Government Royapuram and Government General Hospital of Patients admitted from Mofussil and destitutes.

Annual Form No. VI.—Deaths registered from "Cholera" by divisions during each month of the year 1936.

1		2		3			4				5			6						
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.		Mean ratio per 1,000 during five years.	
														Males.	Females.	Total.	Males.	Females.		Total.
1	Royapuram	...	...	...	...	...	...	...	...	...	...	...	...	2	...	3	...	0.27	0.14	0.18
2	Tondiarpet	...	...	...	...	...	...	...	...	...	...	...	...	2	...	5	...	0.16	0.19	0.19
3	Washermanpet	...	...	...	...	...	...	...	...	...	...	...	...	3	...	4	...	0.16	0.16	0.12
4	Korukkupet	...	...	...	...	...	...	...	...	...	...	...	31	...	8	11	19	0.6	0.9	0.23
5	Harbour	...	...	...	...	...	...	...	...	...	...	...	...	...	9	15	24	...	0.74	...
6	Muthalpet	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	...	0.34	...
7	Katchaleswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	...	0.13	...
8	Kothawal Bazaar	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.39	0.07
9	Ammen Koil	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.25	...
10	Seven Wells	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.11	0.15
11	Sowcarpet	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	...	0.20	0.09
12	Peddunaickenpet	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.83	0.14
13	Trevelyan Basin	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	...	0.19	...
14	Esplanade	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.18	0.14
15	Park Town	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.10	0.05
16	Perambur	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...
17	Choolai	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.10	...
18	Purasawalkam	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.06	0.14
19	Vepery	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.23	0.22
20	Egmore	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.03	0.14
21	Kilpauk	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.12	0.21
22	Nungambakam	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.07	0.07
23	Chintadripet	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.03	0.15
24	Tiruvateeswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.14	0.11
25	Chepauk	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.06	0.22
26	Triplicane	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.12	0.21
27	Amir Mahal	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.03	0.07
28	Mirsahibpet	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.03	0.06
29	Royapettah	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.21	0.21
30	Mylapore	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	0.15	0.14
Total.		6	23	11	1	...	...	2	...	2	6	15	74	68	72	140	...	0.23	0.22	0.16

* Deaths in I. D. Hospitals of patients admitted from mofussil places.

Annual Form No. XIV.—Deaths registered from "Tubercle" including Tubercle of lungs by duration.																			
1		2		3					4		5		6						
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.		Ratio of Deaths per 1,000 of population.		Mean ratio per 1,000 during five years.	
														Males.	Females.	Males.	Females.		
1	Royapuram	...	3	...	2	...	...	2	...	...	2	...	4	16	5	15	0.9	0.4	0.87
2	Tondiarpet	2	5	...	4	...	...	2	...	...	3	...	5	23	10	33	1.7	0.8	1.19
3	Washermanpet	...	...	...	2	...	...	3	...	...	1	...	9	16	13	29	1.2	1.0	1.87
4	Korukkupet	...	...	...	3	...	...	5	...	...	1	...	7	22	16	38	1.7	1.3	1.76
5	Harbour	...	...	...	...	...	...	3	...	...	8	...	2	13	9	22	2.4	2.8	0.9
6	Muthialpet	...	...	...	...	...	...	2	...	...	...	...	...	12	6	18	1.4	1.0	0.7
7	Katchaleswarannpet	...	...	...	...	...	...	2	...	...	...	...	...	10	18	28	1.5	3.1	1.2
8	Kothawal Bazaar	...	...	...	...	...	...	2	...	...	1	...	...	9	6	15	2.2	2.4	0.9
9	Amman Koil	...	...	...	...	...	...	2	...	...	1	...	...	15	14	29	1.5	1.5	1.4
10	Seven Wells	...	...	...	...	...	...	4	...	...	4	...	9	15	18	33	1.4	1.8	1.8
		6	2	3	1	4	8	1	5	3	1	2	...	15	3	18	...	...	1.3
11	Sowcarpet	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	0.7	...	1.7
12	Peddunaiackenpet	...	...	...	...	...	...	...	...	...	...	...	...	19	15	34	1.7	1.4	1.0
13	Trevelyan Basin	...	...	...	...	...	...	...	...	...	...	...	...	6	7	13	0.6	0.8	...
14	Esplanade	...	...	...	...	...	...	...	...	...	...	...	...	9	1	10	...	...	...
		3	4	7	6	5	4	4	3	8	6	...	5	44	7	51	4.0	0.6	3.3
15	Park Town	...	...	...	...	...	...	...	...	...	...	...	...	5	6	11	0.5	0.8	0.6
16	Perambur	...	...	...	...	...	...	...	...	...	...	...	...	51	48	99	2.2	2.3	1.1
17	Choolai	...	...	...	...	...	...	...	...	...	...	...	...	35	27	62	2.4	2.0	2.0
18	Purasawalkam	...	...	...	...	...	...	...	...	...	...	...	...	33	24	57	3.6	1.8	2.1
19	Vepery	...	...	...	...	...	...	...	...	...	...	...	...	43	29	74	3.6	3.0	2.7
20	Egmore	...	...	...	...	...	...	...	...	...	...	...	...	30	22	52	1.4	1.6	0.2
21	Kilpauk	...	...	...	...	...	...	...	...	...	...	...	...	37	17	54	2.3	1.5	0.2
22	Nungambakkam	...	...	...	...	...	...	...	...	...	...	...	...	22	12	34	2.5	1.5	1.4
23	Chintadripet	...	...	...	...	...	...	...	...	...	...	...	...	22	13	35	1.0	0.9	1.8
24	Tiruvateswarannpet	...	...	...	...	...	...	...	...	...	...	...	...	9	13	22	0.6	0.8	2.2
25	Chepauk	...	...	...	...	...	...	...	...	...	...	...	...	23	30	53	2.4	3.9	1.0
26	Triplicane	...	...	...	...	...	...	...	...	...	...	...	...	21	22	43	2.0	2.4	1.8
27	Amir Mahal	...	...	...	...	...	...	...	...	...	...	...	...	7	6	13	0.7	0.6	1.4
28	Mirshahpet	...	...	...	...	...	...	...	...	...	...	...	...	28	32	60	2.6	2.1	1.1
29	Royapettah	...	...	...	...	...	...	...	...	...	...	...	...	19	22	41	1.1	1.4	1.7
30	Mylapore	...	...	...	...	...	...	...	...	...	...	...	...	10	13	23	0.9	1.2	1.3
	Total	106	113	120	86	68	74	89	86	99	79	82	134	646	490	1136	1.9	1.6	1.6

* Includes deaths in Government Royapuram and Government General Hospitals of patients admitted from molussil and destitute.

Annual Form No. XV.—Deaths registered from "Respiratory Diseases" excluding Tubercle of the lungs by divisions during each month of the year 1936.

1		2		3		4		5		6										
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.		Ratio of Deaths per 1,000 of population.		Mean ratio per 1,000 during previous five years.		
														Males.	Females.	Males.	Females.			
1	Royapuram	11	11	10	18	16	14	11	16	10	9	16	25	87	81	168	7.9	7.4	7.7	7.3
2	Tondiarpet	20	10	22	31	23	21	21	19	16	14	19	42	135	123	258	10.2	9.7	10.0	16.1
3	Washermanpet	27	26	28	29	24	27	12	24	18	23	23	51	159	153	312	12.2	12.1	12.1	9.7
4	Korukkupet	18	27	33	24	17	25	16	23	22	26	23	35	142	147	289	10.8	11.9	11.3	8.5
5	Harbour	7	3	...	10	8	7	7	14	4	5	9	12	47	39	86	8.6	12.1	9.9	9.3
6	Muthialpet	6	5	...	10	6	8	8	2	6	9	8	11	38	41	79	4.5	6.9	5.6	5.5
7	Kathaleswaranpet	7	6	...	8	7	21	6	12	4	9	9	14	55	48	103	8.0	8.2	8.1	7.9
8	Kothawal Bazaar	1	2	...	6	3	8	3	3	6	3	5	4	23	21	44	5.7	8.3	6.7	6.4
9	Annen Koil	11	15	18	17	18	13	16	4	12	15	18	23	82	98	180	8.1	10.7	9.4	9.7
10	Seven Wells	23	13	24	19	20	14	21	13	21	15	9	26	90	103	193	8.6	10.4	9.5	9.6
														*20	*5	*25				
														20	28	48	4.8	9.2	6.7	7.1
11	Sowcarpet	3	3	5	6	3	3	5	6	3	1	5	5	123	136	259	11.0	13.1	12.0	10.2
12	Peddunaickenpet	35	18	14	22	19	24	29	26	14	15	14	29	120	108	228	12.4	11.7	12.0	9.5
13	Trevelyan Basin	19	32	14	18	18	11	16	13	12	25	15	35	16	19	35				
14	Esplanade	3	3	9	13	7	6	6	7	6	3	10	8	34	*12	*46	6.9	15.3	9.0	8.4
15	Park Town	11	24	15	15	14	14	16	11	16	18	16	22	107	85	192	11.1	11.2	11.2	9.2
16	Perambur	30	24	37	47	48	54	69	56	50	51	56	82	319	285	604	13.7	13.8	13.8	8.9
17	Choolai	24	21	24	22	11	17	29	16	13	22	26	28	131	122	253	9.2	9.2	9.2	12.6
18	Purasawalkam	32	20	16	14	14	17	17	14	5	13	15	26	102	101	203	7.4	7.7	7.5	10.4
19	Vepery	18	22	14	13	14	23	17	13	16	16	16	22	93	111	204	7.5	11.4	9.2	10.6
20	Egmore	14	8	19	10	21	13	18	11	20	18	29	20	101	100	201	6.6	7.1	6.8	8.0
21	Kilpauk	17	14	7	12	15	13	14	11	11	20	13	29	91	85	176	6.9	7.5	7.2	7.4
22	Nungambakam	13	11	13	17	19	12	20	13	8	10	6	25	78	89	167	5.4	6.9	6.1	7.5
23	Chinadripet	25	13	21	23	23	25	22	21	22	23	15	25	132	126	258	9.5	9.7	9.6	10.3
24	Thiruvatteswaranpet	29	32	40	36	35	51	35	45	46	33	41	42	237	228	465	14.6	15.4	14.8	8.9
25	Chepauk	12	12	6	9	14	18	9	8	9	7	16	10	62	68	130	6.6	8.8	7.6	7.4
26	Triplicane	9	11	13	10	12	11	19	10	12	9	12	21	78	71	149	7.6	7.7	7.6	7.1
27	Amir Mahal	23	21	26	18	19	32	25	23	25	21	18	38	158	131	289	14.6	13.8	14.7	9.4
28	Misrahpet	17	18	...	29	30	36	44	27	40	34	26	46	178	169	347	12.8	12.5	12.6	11.2
29	Royapettah	14	19	22	13	18	18	21	16	8	14	19	41	125	101	226	7.2	6.3	6.8	7.8
30	Mylapore	21	11	...	7	12	21	18	19	16	19	22	27	81	112	193	7.5	10.7	9.1	7.5
	Total	500	455	450	526	508	577	573	496	471	500	529	825	3264	3146	6410	9.6	10.3	9.9	8.9

... in Government Hospitals and Government

Annual Form No. XVI.—Deaths registered from "Injuries" by divisions during each month of the year 1936.

1	2	3			4	5	6										
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	Ratio of Deaths per 1,000 population.		Mean ratio per 1,000 during five years.
														Males.	Females.	Total.	
1	Royapuram	...	...	2	...	1	...	...	1	...	...	...	1	3	2	5	0.3
2	Tondiarpet	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	0.2
3	Washermanpet	...	...	...	...	...	...	...	...	...	...	...	...	10	4	14	0.1
4	Korukkupet	...	...	...	...	...	...	...	...	...	...	...	...	7	4	11	0.8
5	Harbour	...	...	...	...	...	...	...	...	...	...	...	...	5	...	5	0.5
6	Muthialpet	...	...	...	...	...	...	...	...	...	...	...	...	4	...	4	0.5
7	Katchaleeswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	0.3
8	Kothawal Bazaar	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	0.2
9	Amman Koil	...	...	...	...	...	...	...	...	...	...	...	...	3	4	7	0.7
10	Seven Wells	...	...	...	...	...	...	...	...	...	...	...	...	5	4	9	0.3
														4	7	11	0.5
11	Sowcarpet	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	0.4
12	Peddunaickenpet	...	...	...	...	...	...	...	...	...	...	...	...	6	5	11	0.5
13	Trevelyan Basin	...	...	...	...	...	...	...	...	...	...	...	...	6	4	10	0.4
14	Esplanade	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.6
15	Park Town	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	Perambur	...	...	...	...	...	...	...	...	...	...	...	...	2	3	5	0.2
17	Choolai	...	...	...	...	...	...	...	...	...	...	...	...	8	3	11	0.3
18	Purasawalkam	...	...	...	...	...	...	...	...	...	...	...	...	2	2	4	0.1
19	Vepery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1
20	Egmore	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	0.4
21	Kilpauk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.3
22	Nungambakkam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.2
23	Chintadripet	...	...	...	...	...	...	...	...	...	...	...	...	5	3	8	0.4
24	Tiruvateeswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	10	6	16	0.6
25	Chepauk	...	...	...	...	...	...	...	...	...	...	...	...	4	2	6	0.4
26	Triplicane	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	0.1
27	Amir Mahal	...	...	...	...	...	...	...	...	...	...	...	...	5	2	7	0.5
28	Mirasahibpet	...	...	...	...	...	...	...	...	...	...	...	...	3	1	4	0.2
29	Royapettah	...	...	...	...	...	...	...	...	...	...	...	...	8	3	11	0.3
30	Mylapore	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	0.1
	Total	19	17	26	16	19	19	15	24	27	15	23	12	82	232	314	0.4

*Include 8 deaths in Government Royapuram and Government General Hospitals of patients admitted from mofussil and destitutes.

Annual Form No. XVII.—Deaths registered from "Child Birth" by divisions during each month of the year 1936.

1	2	3			4	5	6										
Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Ratio of Deaths per 1,000 of live births delivered.		Mean ratio per 1,000 during five years.	
														Males.	Females.	Total.	
1	Royapuram	1	3	2	1	3	1	5	3	2	4	1	2	11	...	12.4	0.3
2	Tondiarpet	2	1	1	1	1	1	2	...	...	...	4	2	25	...	18.3	0.7
3	Washermanpet	1	1	1	1	1	...	2	...	...	...	...	...	13	...	9.1	0.5
4	Korukkupet	3	1	1	...	3	...	2	...	1	1	...	6	21	...	15.1	0.7
5	Harbour	1	...	...	...	...	...	...	2	1	3	...	1	5	...	13.5	0.6
6	Muthialpet	...	...	...	...	...	...	...	...	1	...	...	...	5	...	13.5	0.4
7	Katchaleeswaranpet	...	...	...	...	...	...	...	...	1	...	2	...	3	...	5.5	0.4
8	Kothawal Bazaar	...	...	...	...	...	...	...	...	...	3	...	...	1	...	4.8	0.3
9	Amman Koil	...	1	...	3	1	1	2	1	2	3	...	1	15	...	17.7	0.5
10	Seven Wells	1	...	2	1	1	1	1	1	...	1	...	...	10	...	13.0	0.6
11	Sowcarpet	...	...	...	...	1	1	...	...	...	...	...	...	8	...	10.3	0.6
12	Peddunaickenpet	2	...	...	...	1	1	1	...	1	1	...	2	6	...	9.1	0.4
13	Trevelyan Basin	...	...	1	...	1	1	...	...	...	1	1	...	1	...	7.8	0.3
14	Esplanade	...	...	...	...	...	...	...	1	...	2	...	...	4	...	6.2	0.4
15	Park Town	...	...	...	...	1	...	1	...	4	2	...	...	26	...	12.7	0.5
16	Perambur	...	...	...	2	3	...	2	3	4	2	...	2	9	...	6.5	0.4
17	Choolai	...	3	1	...	...	1	1	...	...	1	...	...	7	...	6.3	0.4
18	Purasawalkam	...	1	...	...	...	1	1	1	2	1	2	...	11	...	12.9	0.4
19	Vepery	...	...	...	...	...	1	1	...	...	1	1	...	20	...	12.5	0.9
20	Egmore	...	...	...	1	7	2	1	...	4	1	...	...	17	...	17.0	0.3
21	Kilpauk	...	1	...	3	1	1	3	...	...	...	...	...	5	...	4.6	0.4
22	Nungambakkam	...	1	...	1	...	4	...	1	1	...	1	...	10	...	8.0	0.4
23	Chintadripet	...	...	...	...	...	1	1	1	2	2	...	...	13	...	8.7	0.4
24	Tiruvateeswaranpet	...	2	1	1	...	1	1	...	1	...	1	...	11	...	12.8	0.6
25	Chepauk	...	...	...	...	1	1	1	...	...	...	1	...	6	...	7.5	0.4
26	Triplicane	...	...	...	...	1	1	1	...	1	...	...	...	6	...	6.8	0.5
27	Amir Mahal	...	...	...	1	...	1	...	...	1	...	1	...	5	...	3.6	0.4
28	Mirahibpet	...	1	...	...	...	1	1	...	1	1	...	...	16	...	9.5	0.3
29	Royapettah	...	...	1	...	...	...	...	4	2	...	1	1	2	...	2.2	0.3
30	Mylapore	...	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...
	Total	15	18	22	21	34	28	26	23	26	26	19	86	294	294	101	0.5

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Annual Form No. XVIII.—Deaths registered from "Other Causes" by all divisions during each month of the year 1936.

2		3												4		5		6	
1	Divisions.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Ratio of deaths per 1,000 of population.		Mean ratio per 1,000 during five years.
1	Royapuram	32	31	28	25	29	23	24	29	26	27	51	46	195	176	371	17.8	16.9	18.2
2	Pondiarpet	43	34	45	44	43	29	25	48	43	36	50	76	276	257	533	20.9	20.6	21.5
3	Washermanpet	47	30	39	31	25	24	44	41	32	39	54	85	254	228	482	19.4	18.1	19.1
4	Korukkupet	40	35	46	38	31	40	52	49	49	53	48	87	297	271	568	22.5	21.9	17.8
5	Harbour	10	8	15	13	9	9	12	9	11	9	9	12	68	58	126	12.4	18.0	15.6
6	Muthialpet	10	10	16	6	8	21	11	12	13	14	16	24	92	71	163	11.0	12.1	11.0
7	Katchaleswararnpet	13	5	13	15	14	11	6	14	16	14	17	36	92	82	174	13.3	14.0	15.2
8	Kothawal Bazaar.	5	7	10	8	8	11	5	5	8	6	10	7	37	45	82	9.2	17.7	11.4
9	Ammen Koil	21	22	22	21	17	18	19	30	33	16	22	35	140	136	276	13.9	14.9	14.3
10	Seven Wells	33	24	39	37	34	41	25	31	56	31	33	58	152	151	303	14.6	15.3	15.9
														78	84	112*		14.9	
11	Sowcarpet	7	4	8	7	7	4	14	11	7	7	12	8	51	45	96	12.8	14.8	15.0
12	Peddunaickenpet	22	22	34	23	21	25	25	35	26	20	21	28	145	157	302	13.0	15.1	15.5
13	Trevelyan Basin	26	23	18	14	19	22	19	24	22	23	16	33	135	124	259	13.9	13.4	15.9
14	Esplanade	13	18	15	25	25	31	21	24	19	30	24	23	193	20	43	10.0	12.7	23.3
															32	225*		11.0	
15	Park Town	13	21	23	24	14	21	24	25	22	17	28	26	130	126	256	13.5	16.9	18.0
16	Perambur	61	49	62	34	48	48	67	44	39	59	52	82	305	340	645	13.2	16.4	14.3
17	Choolai	61	38	44	48	43	43	47	45	45	34	45	72	301	269	570	21.1	20.3	17.8
18	Purasawaikam	48	33	30	33	32	35	43	25	35	31	38	70	233	220	453	16.7	16.8	14.9
19	Vepery	31	25	28	22	23	29	23	40	11	31	35	46	189	155	344	14.5	15.9	15.3
20	Egmore	40	42	39	42	46	36	47	44	45	50	38	53	271	259	530	17.6	18.5	16.6
21	Kilpauk	44	27	31	34	36	34	28	37	28	37	26	73	234	232	466	17.9	20.6	16.5
22	Nungambakam	36	29	23	28	22	34	28	44	42	47	44	48	202	195	397	13.9	15.3	13.4
23	Chintadripet	32	30	26	23	48	42	38	43	42	47	43	57	250	242	492	15.5	17.6	17.5
24	Tiruvateeswararnpet	45	33	41	41	47	39	35	44	37	27	46	54	247	255	502	15.2	16.8	20.5
25	Chepauk	27	19	25	30	21	16	20	18	16	30	19	32	127	146	273	13.5	18.9	15.7
26	Triplacane	12	29	22	20	20	20	29	28	21	20	26	35	146	136	282	14.2	14.8	14.5
27	Amir Mahal	28	28	35	30	29	27	59	29	25	19	20	24	173	160	333	17.1	16.9	21.9
28	Mirshahpet	41	47	59	34	43	53	58	48	32	36	45	52	305	243	548	22.0	20.0	21.7
29	Royapettah	66	51	43	39	37	42	42	76	49	55	43	64	309	304	613	17.9	18.5	15.2
30	Mylapore	39	26	36	18	31	33	33	34	19	24	23	40	179	177	356	16.5	17.0	15.9
	Total	946	800	915	809	830	863	930	986	834	880	970	1394	5809	5348	11157	17.0	17.2	16.9

* Includes deaths in Government Royapuram and Government General Hospitals of patients admitted from motussil and destitutes.

Annual Form No. XIX.—Comparing the deaths from some of the Principal diseases during the year with the deaths during the previous five years.

Years.	H—14	Respiratory Diseases.										Deaths from Child Birth.		All other causes.		Total Deaths.	
		Tuber- culosis other than Pulmo- nary.		Dysen- tery and Diar- rhoea.		Enteric Fever.		Malaria.		Plague.		Measles.		Small- pox.		Deaths.	
		Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.	Deaths.	Ratio per 1,000.
1931	153 0.08	24 0.04	3 0.006	...	...	...	...	277	0.4	166	0.3	1748	2.7	2746	4.2	177	0.3
1932	5 0.008	176 0.3	16 0.02	1	0.002	...	...	165	0.3	101	0.2	1640	2.5	2644	4.1	176	0.3
1933	62 0.1	837 1.3	44 0.07	...	...	...	...	146	0.2	90	0.1	2095	3.2	2670	4.1	156	0.2
1934	16 0.3	131 0.2	7 0.01	...	...	...	...	193	0.3	145	0.2	2091	3.2	2098	3.1	151	0.2
1935	145 0.22	59 0.09	7 0.01	...	...	...	...	167	0.26	186	0.29	2305	3.6	2320	3.6	177	0.27
Mean of the last 5 years	106 0.16	245 0.38	15 0.02	0.02	0.0003	...	...	180	0.29	138	0.21	1977	3.04	2478	3.8	166	0.26
1936	140 0.22	3 0.003	5 0.01	...	...	...	...	113	0.18	163	0.25	1799	2.8	2208	3.4	126	0.19

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Annual Form No. XX.—Table of Deaths for 1936 arranged in accordance with the International List (Fourth Revision 1929)
as adopted for use in England and Wales, Scotland and Northern Ireland.

Classification Number.	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
I. INFECTIOUS AND PARASITIC DISEASES.														
1	Typhoid Fever	16	17	6	16	11	16	8	20	14	12	5	22	163
6	Small Pox.	...	...	1	...	...	1	...	...	...	...	...	1	3
7	Measles	...	...	...	...	...	1	...	...	...	...	...	...	5
9	Whooping Cough	...	...	4	3	2	5	4	7	5	4	...	5	47
10	Diphtheria	...	...	...	...	...	...	...	2	1	1	...	1	5
11	Influenza (Including Influenzal Pneumonia.)	1	1	...	...	1	1	...	...	...	...	...	5	9
12	Cholera	6	23	11	...	...	...	2	134	100	6	15	74	140
13	Dysentery	117	104	104	87	105	104	...	...	1	80	87	106	1309
15	Erysipelas	1	...	...	1	...	2	...	...	2	2	2	...	12
16	Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	2
18	Cerebro-spinal meningitis	...	...	...	...	...	...	1	...	...	...	...	...	1
21	Rabies	...	...	...	...	3	...	...	...	...	...	...	...	17
22	Tetanus	...	7	9	13	6	11	5	10	2	7	10	6	92
23	Tuberculosis of the Respiratory System...	95	102	112	73	60	71	84	75	85	61	68	124	1010
24	Tuberculous meningitis	4	...	1	2	...	...	...	4	1	1	...	3	15
25	Tabes mesenterica	...	...	...	...	...	...	...	...	...	...	...	...	1
25.b	Other tuberculo-sis of intestine and peritoneum	4	10	5	9	8	2	4	7	10	12	14	7	92
26	Tuberculosis of Vertebral column	1	...	...	...	...	...	...	...	1	1	...	...	3
27	Tuberculosis of other Bones and Joints	...	...	1	...	...	...	...	...	1	1	...	...	3
28	Tuberculosis of Skin & Subcutaneous tissues	...	...	1	...	...	...	...	...	...	...	...	...	1
29	Tuberculosis of the gland and lymphatic System	...	...	...	1	...	1	1	...	1	1	...	...	5
30	Tuberculosis of the Kidney	1	...	...	1	...	...	...	...	...	1	...	...	3
31	Tuberculosis of the Genito-Urinary System	1	1	...	1	...	...	...	...	...	1	...	...	1
	Tuberculosis of other Organs	...	1	...	...	...	...	...	...	...	...	...	...	2

Infectious and Parasitic diseases.

Infectious and Parasitic diseases.														
33	Leprosy	4	4	1	1	1	1	7	5	5	9	4	5	52
34	Syphilis	2	...	...	1	3	...	...	2	2	2	2	3	15
(a)	Congenital Syphilis	...	...	...	...	...	...	...	1	...	...	...	...	11
(b)	Cerebral Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	2
35	Gonorrhoea	...	2	9	7	1	15	...	7	7	7	11	...	90
36(a)	Septicemia	3	...	...	...	...	...	...	...	...	...	...	...	1
	Sapremia	...	2	...	2	...	...	...	...	...	...	...	...	22
(b)	Pyemia	2	2	...	2	...	...	...	4	3	2	...	...	4
(c)	Gas Gangrene	...	...	...	...	...	...	...	3	13	...	...	...	90
38	Malaria	11	10	1	...	...	...	2	2	1	...	3	...	9
	Malarial Cachexia	2	...	...	...	...	...	...	...	...	...	...	...	14
	Malignant tertian Malaria (including Cerebral Malaria)	...	2	2	1	1	1	2	...	...	1	...	3	312
	Intermittent Fever	26	19	19	24	30	34	22	28	26	32	16	36	56
	Remittent Fever	5	2	3	3	8	5	5	7	5	7	...	6	...
OTHER DISEASES DUE TO PROTOZOA.														
39	Kala-azar	2	3	...	...	...	...	...	1	2	1	2	...	15
40	Ankylostomiasis	...	...	6	5	...	...	...	1	3	...	3	4	24
OTHER DISEASES DUE TO HELMINTHS.														
42	Filarial Elephantiasis	...	...	...	...	...	...	1	1	...	...	...	...	3
	Filariasis	...	...	...	1	...	2	2	2	...	1	...	...	9
	Worms	...	...	...	...	...	...	...	...	...	...	...	...	3
43-2	Sprue	...	1	1	...	...	2	...	...	...	...	...	...	9
II. CANCER AND OTHER TUMOURS.														
45	Cancer of the buccal cavity and pharynx.	...	...	1	1	1	2	4	3	3	4	3	1	24
CANCER OF THE DIGESTIVE ORGANS AND PERITONEUM.														
46	Cancer of the liver	1	2	1	1	1	1	...	1	...	1	...	1	11
	Cancer of the rectum	...	...	...	...	2	...	2	...	1	2	...	1	6
	Cancer of the stomach	...	1	...	...	...	...	...	...	...	...	3	2	17
	Cancer of the other digestive organs and peritoneum.	...	...	...	1	1	2	1	1	...	4	2	1	15

Cancer and other Tumours.

Annual Form No. XX—Table of Deaths for 1936 arranged in accordance with the International List (Fourth Revision 1929)
as adopted for use in England and Wales, Scotland and Northern Ireland.

Classification Number.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Cancer and other Tumours.	CANCER OF THE RESPIRATORY ORGANS.													
	47 Cancer of the larynx	...	...	2	...	2	...	...	1	...	2	1	1	9
	48 Cancer of the Cervix and the Uterus	3	3	2	1	2	6	3	3	2	4	2	4	35
	CANCER OF OTHER FEMALE GENITAL ORGANS.													
	49 Cancer of the ovary	...	...	...	...	...	...	...	...	...	...	...	...	...
	50 Cancer of the breast	...	2	1	1	...	...	1	1	...	...	...	2	9
	CANCER OF THE MALE GENITO-URINARY ORGANS.													
	51 Cancer of the bladder	...	...	...	...	...	...	...	...	1	1	1	...	3
	Cancer of the Penis	...	...	...	...	...	...	...	...	...	...	...	...	1
	CANCER OF OTHER OR UNSPECIFIED ORGANS.													
Cancer and other Tumours.	53 Cancer of Skull and nasal cavity	1	1	1	...	2	1	...	...	1	1	...	...	2
	Cancer of other unspecified organs	...	1	1	3	1	...	...	...	1	...	...	1	8
	Sarcoma of other organs	1	1	...	1	1	...	...	...	...	1	1	3	11
	54-a Other Tumours of Uterus	...	...	...	1	1	...	...	...	2	1	...	1	7
	b Kidney Tumours	...	...	...	...	...	...	...	...	1	...	...	...	2
	Tumours of Lung	1	...	...	...	...	...	...	...	...	...	...	...	1
	Other Non-Malignant Tumours	4	...	3	5	3	2	3	3	1	1	2	3	30
	55 Tumours of undetermined nature	...	...	...	...	...	...	...	...	...	...	...	...	2
	55-b Cerebral Tumours	...	2	...	1	...	...	1	1	1	...	...	...	5

General diseases.	III. RHEUMATISM, DISEASES OF NUTRITION AND OF ENDOCRINE GLANDS & OTHER GENERAL DISEASES.													
	55 Rheumatic fever	...	...	1	3	...	1	1	2	...	1	3	1	4
	CHRONIC RHEUMATISM OSTEO-ARTHRITIS.													
	57-(1) Chronic Rheumatism	1	...	...	...	...	...	...	2	...	...	1	...	5
	(2) Chronic Rheumatoid Arthritis	...	...	...	...	...	...	...	...	...	1	...	1	2
	59 DIABETES.													
	Diabetes	6	3	3	3	1	4	3	5	5	2	4	2	42
	Diabetic Carbuncle	...	...	...	...	...	3	6	3	1	1	2	1	20
	Diabetic Coma	...	...	...	...	...	4	2	2	1	4	2	1	23
	Diabetic Gangrene	...	...	...	...	...	1	2	1	1	3	...	...	20
Diseases of the Blood.	61 Beri-beri	...	...	...	...	...	...	...	...	...	...	...	...	1
	63 Rickets	...	13	...	14	12	...	18	23	31	18	...	7	219
	DISEASES OF THE THYROID AND PARATHYROID GLANDS.													
	66-d Tetany	1	...	...	...	...	...	...	...	1	...	...	...	3
	IV. DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS—ANÆMIA, CHLOROSIS.													
	71-a Pernicious Anæmia	3	2	1	1	2	7	...	4	...	2	4	...	27
	b-2 Anæmia	18	21	11	...	5	17	14	14	12	14	11	9	159
	LEUKAEMIA, ALEUKAEMIA													
	72-a Leukæmia	...	...	1	...	...	1	...	...	1	...	...	...	4
	b Hodgkin's Disease	...	...	...	...	...	...	...	...	1	...	...	...	2
	73-a DISEASES OF THE SPLEEN.													
	b Enlargement of Spleen	...	...	...	1	...	1	1	...	1	...	...	1	5

Annual Form No. XX—Table of Deaths for 1936 arranged in accordance with the International List (Fourth Revision 1929)
as adopted for use in England and Wales, Scotland and Northern Ireland.

Classification No.	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Chronic Poisoning.	V. CHRONIC POISONING.	..	..	..	..	1	..	..	..	..	..	..	..	1
	Alcoholism	..	..	..	..	..	..	..	..	..	..	..	..	..
	VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.	..	..	..	..	..	..	..	..	..	..	..	..	..
75		..	..	..	..	..	..	..	..	..	..	..	..	..
78-a	Cerebral Abscess	..	..	..	..	..	..	..	..	..	..	..	..	1
78-b	Encephalitis	..	..	..	..	..	..	..	..	..	..	..	..	14
79	Cerebral Meningitis	..	..	..	..	..	..	..	..	..	..	..	..	2
	Other Meningitis (not including meningococcal meningitis).	..	..	..	..	..	..	..	..	..	..	..	..	18
	OTHER DISEASES OF THE SPINAL CORD.	..	..	..	..	..	..	..	..	..	..	..	..	..
81-3	Transverse Myelitis	..	..	..	..	..	..	..	..	..	..	..	..	2
	CEREBRAL HÆMORRHAGE, APOPLEXY, ETC.	..	..	..	..	..	..	..	..	..	..	..	..	..
82-a	Cerebral Hæmorrhage	8	5	5	..	4	2	3	1	7	2	2	4	43
82-a-(1)	Intra-cranial Hæmorrhage	2	2	2	..	3	2	5	5	3	2	2	7	35
82-a-(2)	Apoplexy (Lesion unstated)	3	..	..	2	..	..	1	2	1	3	1	1	15
82-b-(1)	Cerebral embolism	..	..	..	..	..	..	..	..	..	..	..	..	3
82-b-(2)	Cerebral thrombosis	..	..	..	..	..	..	..	..	..	..	..	..	3
82-c-(1)	Hemiplegia	33	22	15	20	28	21	19	14	26	21	20	39	278
82-c-(2)	Paraplegia	1	2	..	3	2	3	..	..	1	..	2	4	18

83	Infantile Paralysis	..	..	..	..	..	..	..	..	..	..	..	..	1
	Other Paralysis of unstated origin	9	10	13	9	10	10	6	15	10	7	17	21	137
	General Paralysis of the Insane	..	1	3	1	..	..	..	..	..	1	1	..	7
84-b	OTHER FORMS OF INSANITY.	..	..	..	..	..	..	..	..	..	..	..	..	..
	Mania	..	..	1	..	..	..	1	..	..	..	..	..	2
	Melancholia	..	..	..	..	..	..	1	..	..	..	..	..	2
	Other forms of insanity	..	..	..	..	..	..	..	..	..	..	..	..	2
85	Epilepsy	..	..	..	..	..	..	..	..	..	..	..	..	5
	Status epilepticus	..	..	1	..	2	1	2	..	3	2	4	4	21
86	Infantile convulsion, (under 5 years of age).	..	1	1	..	..	..	..	..	..	..	1	3	6
	OTHER DISEASES OF THE NERVOUS SYSTEM.	27	13	21	21	18	33	35	36	29	37	36	63	369
87	Other Diseases of the Nervous System	..	..	..	..	..	..	..	..	..	1	..	..	1
87-b	Neuritis	1	1	..	..	..	..	..	..	..	..	1	..	2
87-d	Disseminated Sclerosis	..	..	..	..	..	..	..	..	..	..	..	..	1
87-e	Angioneurotic Oedema	..	1	..	2	..	..	..	..	2	..	..	2	1
	Fits (age 5 and above)	..	..	..	..	1	1	..	1	..	..	..	..	7
	Hysteria	..	..	..	..	..	..	..	..	..	..	..	..	2
88	Neurasthenia	..	..	..	..	1	..	..	1	..	..	..	1	1
89	Diseases of the Eye and Annexa	..	..	1	1	3	..	..	..	..	1	..	..	4
	Diseases of the Ear and of the Mastoid sinus.	..	..	..	1	..	..	..	..	..	..	..	..	5
89-a	Chronic Otorrhoea	..	..	1	..	..	..	..	..	..	..	..	..	1
	VII. DISEASES OF THE CIRCULATORY SYSTEM.	..	..	..	..	..	..	..	..	..	..	..	..	..
90	Pericarditis	..	..	..	..	..	..	1	..	..	..	..	..	1
91	Acute Endocarditis	..	..	2	11	19	17	17	21	18	7	12	28	2
92	Chronic Endocarditis (Valvular disease)...	14	16	14	..	..	..	..	..	..	..	..	..	194
93-c	DISEASE OF THE MYOCARDIUM. Myocarditis not distinguished as Acute or Chronic.	16	20	23	6	13	16	8	9	7	17	8	23	166

Annual Form No. XX.—Table of Deaths for 1936 arranged in accordance with the International List (Fourth Revision 1929)
as adopted for use in England and Wales, Scotland and Northern Ireland.

Classification No.	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
94	DISEASE OF THE CORONARY ARTERIES, ANGINA PECTORIS.													
	Angina Pectoris	2								1		1		2
	Coronary Thrombosis													4
	OTHER DISEASES OF THE HEART.													
	Heart Block		1											1
	Heart disease (Undefined)		3											28
	Cardiac asthma													6
	Cardiac dropsy													1
	Aneurysm													2
	Arterio-Sclerosis													20
95-a	Gangrene	1	1			1	1	1	6	1	1	2	1	16
96	Cancrum oris	4							5					9
97	Gangrene Scrotum								1					1
100-1	OTHER DISEASES OF THE ARTERIES.													
	Aortitis					1							1	2
	Other disease of the arteries				1									1
	DISEASES OF THE VEINS.													
	Hæmorrhoids	1	1	2	1	4	3	4	1	1	1	1	2	22
	Thrombophlebitis													1
	Other diseases of the Lymphatic System.													1
	Hypertropia													2
	Epistaxis		1											2
	Internal hæmorrhage													1

Diseases of the Circulatory System

105-2	VIII. DISEASES OF THE RESPIRATORY SYSTEM. DISEASES OF THE LARYNX. Oedema of larynx	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...</
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Diseases of the Respiratory System.

Diseases of the Digestive System.

Annual Form No. XX.—Table of Deaths for 1936 arranged in accordance with the International List (Fourth Revision 1929) as adopted for use in England and Wales, Scotland and Northern Ireland.

Classification Number.	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
116	DISEASES OF THE OESOPHAGUS. Stricture of oesophagus	1	...	1	...	1	...	...	...	...	...	...	...	3
117-a	ULCER OF THE STOMACH OR DUODENUM. Ulcer of the Stomach	1	7	7	3	6	11	6	4	3	4	4	3	59
117-b	Ulcer of the Duodenum Perforation of Duodenum	3	1	...	1	...	1	1	1	3	3	...	...	14
118-1	OTHER DISEASES OF THE STOMACH. Gastritis	...	1	...	3	1	1	1	...	2	1	2	...	13
111-2	Dilatation of Stomach Dyspepsia (age 2 & over) Obstruction of Pylorus Stenosis of Pylorus	6	4	2	8	6	5	3	7	4	8	5	7	65
119 & 120	DIARRHOEA AND ENTERITIS. Other Diarrhoea and Enteritis	54	60	41	55	54	49	56	79	47	31	42	69	637
119 & 120 (a)	Colitis	2	...	...	2	...	1	3	3	1	4	4	3	23
119 & 120 (a)-1	Green stools	...	1	1	1	8	...	1	1	1	...	1	1	10
119 & 120 2	Infantile Diarrhoea Intestinal colic Intestinal toxæmia	17	8	11	18	23	22	37	28	20	12	11	22	229
121	APPENDICITIS. Appendicular abscess	1	1	...	...	3	3	1	2	3	6	...	1	20
		1	1	...	...	...	...	...	...	...	2	...	1	5

Diseases of the Digestive System.

122-a	HERNIA, INTESTINAL OBSTRUCTION. Hernia	...	...	...	...	...	...	...	...	...	...	...	...	9
122-a (1)	Strangulated Hernia	...	2	...	...	...	...	...	...	...	...	...	...	31
122-b	Intestinal Obstruction Intussusception Paralytic ileus Volvulus	...	3	...	7	...	...	...	...	...	...	...	...	50
123-1	OTHER DISEASES OF THE INTESTINES. Constipation, Intestinal Stasis	...	...	1	...	...	...	...	...	...	1	...	...	2
123-3	Faecal Fistula Fistula in Ano Ischio-rectal Abscess Prolapse of Rectum Cirrhosis of the Liver	...	...	...	...	...	...	...	...	...	...	...	...	1
124		...	13	...	19	...	18	...	15	...	12	...	...	183
125-1	OTHER DISEASES OF THE LIVER. Acute yellow Atrophy	...	...	...	...	...	...	...	...	...	...	...	...	13
125-2	Abcess of liver Cholaemia Enlargement of liver Hepatitis Jaundice Acute Infective jaundice Gallstones Cholecystitis	1	4	...	...	...	...	...	...	...	...	...	...	8
126		1	...	...	...	...	...	...	...	...	...	...	...	3
127		...	...	...	...	...	...	...	...	...	...	...	...	35
128	DISEASES OF THE PANCREAS. Acute Pancreatitis	...	...	...	...	...	...	...	...	...	...	...	...	40
129	PERITONITIS WITHOUT STATED CAUSE. Peritonitis	4	1	5	2	...	3	5	2	2	4	...	...	44
		...	...	...	...	...	...	...	...	...	...	...	...	3
		...	...	...	...	...	...	...	...	...	...	...	...	1
		...	...	...	...	...	...	...	...	...	...	...	...	4

Diseases of the Digestive System.

Annual Form No. XX.—Table of Deaths for 1936 arranged in accordance with the International List (Fourth Revision 1929) as adopted for use in England and Wales, Scotland and Northern Ireland.

Classification Number.	Causes of death.	January	February	March	April	May	June	July	August	September	October	November	December	Total
Diseases of the Genito-Urinary System.														
130	X. NON-VEREAL DISEASES OF THE GENITO-URINARY SYSTEM & ANNEXA.	17	10	10	10	13	9	14	11	9	10	14	16	143
	Acute nephritis	...	...	...	...	2	...	2	2	5	...	2	1	17
	Acute Bright's disease	33	42	29	34	35	29	37	38	28	35	34	37	411
	Chronic nephritis	...	3	4	8	4	2	4	5	...	4	1	4	39
	Chronic Bright's Disease	...	...	...	...	...	...	1	...	...	...	...	...	1
131	Nephritis not stated to be Acute or Chronic.	10	3	7	4	7	3	3	8	4	3	2	7	61
132	Renal dropsy	1	1	4	7	1	3	7	1	3	6	5	5	44
133-a	Uraemia	...	...	...	...	...	...	...	...	...	...	...	...	...
133-b	OTHER DISEASES OF THE KIDNEY AND ANNEXA.	...	...	...	...	2	1	...	...	...	...	...	2	5
	Pyelitis	...	...	1	...	1	...	...	2	...	...	...	...	3
	Pyelo-nephritis	...	...	...	...	...	...	...	...	...	1	...	...	3
134-a	Haematuria	...	...	...	...	...	...	...	...	...	...	...	...	...
135-a	CALCULI OF THE URINARY PASSAGES.	...	...	...	...	...	...	...	1	...	...	...	...	1
	Renal calculus	...	...	...	...	...	...	...	...	...	...	...	...	...
	DISEASES OF THE BLADDER.	...	...	...	...	...	...	...	...	...	...	...	...	...
135-b	Cystitis	1	1	...	...	...	...	1	...	...	1	1	1	3
	Retention of Urine	...	...	...	...	...	...	...	...	...	...	...	...	3

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Diseases of the Genito-Urinary System.														
136-a	DISEASES OF THE URETHRA, URINARY ABSCESS, ETC.	...	...	...	...	...	...	...	...	...	...	...	...	5
	Stricture of the Urethra	...	...	...	...	...	...	...	...	...	...	...	...	6
	Extravasation of Urine	...	...	...	...	...	...	...	...	...	...	...	...	1
	Peri-Urethral abscess	...	...	...	...	...	...	...	...	...	...	...	...	...
	DISEASES OF THE PROSTATE.	...	...	...	...	...	...	...	...	...	...	...	...	4
137	Adenoma of Prostate	...	1	...	...	...	...	1	...	...	...	...	...	...
138	DISEASES OF THE MALE GENITAL ORGANS.	...	...	...	...	...	...	...	...	...	...	...	...	1
	Hydrocele	...	...	...	...	...	...	...	...	...	...	...	...	...
	DISEASES OF THE FEMALE GENITAL ORGANS.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pyosalpinx	...	...	...	...	...	...	1	...	...	...	...	...	1
	Pelvic Cellulitis	...	...	...	...	...	...	...	...	...	...	...	...	3
139-a (2)	Dysmenorrhoea & Endometritis	...	...	...	...	...	...	...	...	...	...	...	...	3
139-a (3)	Metrorrhagia	...	...	...	...	...	...	...	...	...	...	...	...	3
139-b	Infective Granuloma	...	...	...	...	...	...	...	...	...	...	...	...	1
139-d	XI. DISEASES OF PREGNANCY, CHILD BIRTH AND THE PUERPERAL STATE.	...	...	...	...	...	...	...	...	...	...	...	...	...
140	Septic Abortion	...	1	...	...	...	...	1	...	2	1	...	1	14
141-2	Abortion (Unqualified)	...	...	...	...	...	...	...	...	...	...	...	1	1
142	ECTOPIC GESTATION.	...	...	...	...	...	2	...	...	...	...	...	1	3
144-a	Tubal Abortion	...	...	...	...	...	...	...	...	...	...	...	...	...
	PUERPERAL HAEMORRHAGE.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Placenta Praevia	...	1	...	...	1	...	1	...	1	1	1	1	5
	Accidental Haemorrhage (Unqualified)	...	...	...	...	...	...	...	...	...	...	...	...	5
	Post-Partum Haemorrhage	...	...	...	...	...	2	...	...	1	1	2	1	7
144-b	Retention of Placenta	...	...	...	...	...	1	...	...	...	...	...	...	6
145	Puerperal Sepsis	...	9	14	13	12	18	21	19	13	16	15	11	188

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Annual Form No. XX.—Table of Deaths for 1936 arranged in accordance with the International list (Fourth Revision 1929) as adopted for use in England and Wales, Scotland and Northern Ireland.

Classification Number.	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
146-1 146-2	PUERPERAL ALBUMINURIA AND CONVULSIONS.	...	...	1	...	2	2	1	1	...	2	...	2	19
	Eclampsia	6	...	...	...	...	1	1	...	...	1	...	...	3
147	Albuminuria of Pregnancy	...	...	...	...	...	1	1	...	...	1	...	...	...
	OTHER TOXAEMIAS OF PREGNANCY.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Anaemia of Pregnancy	...	1	2	1	1	1	1	1	2	...	...	1	11
	Hyperemesis Gravidarum	...	...	1	1	...	...	...	...	...	...	1	...	3
149	Other Toxaemias of Pregnancy	...	1	...	...	1	1	1	1	...	1	1	1	8
	OTHER ACCIDENTS OF CHILD BIRTH.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Prolonged Labour	...	...	...	...	...	...	...	1	...	...	...	1	2
	Rupture of Uterus	...	...	1	2	2	...	1	1	2	1	...	...	10
151 152-1 152-2	Other Accidents of Child Birth	...	...	2	2	...	...	1	...	1	1	1	1	9
	XII. DISEASES OF THE SKIN AND CELLULAR TISSUE.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Carbuncle	1	1	1	2	4	2	4	4	3	6	4	3	35
	Cellulitis	...	3	4	6	4	3	2	4	3	4	3	7	43
153	Acute Abscess and Ulcer (Unqualified)	15	3	6	5	12	7	11	6	3	6	4	7	85
	OTHER DISEASES OF THE SKIN AND ITS ANNEXA.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other diseases of the Skin including Elephantiasis (unqualified.)	2	...	2	...	1	1	1	..	...	...	...	...	7

Diseases of Early Infancy.	Diseases of the Bones & Organs of Locomotion.
XIII. DISEASES OF THE BONES AND ORGANS OF LOCOMOTION.	
154 Osteomyelitis	1
156-a Acute arthritis	1
Synovitis	2
Chronic arthritis	..
XIV. CONGENITAL MALFORMATIONS.	
157-b Meningocele	..
Spina Bifida	..
MONSTROSITIES.	
157-d Acephalic Monster	1
OTHER CONGENITAL MALFORMATIONS.	
157-e 2 Hare lip	..
157-e 3 Imperforate Anus	4
157-e 4 Diverticulum of Bladder	..
157-e 5 Congenital Deformity	..
XV. DISEASES OF EARLY INFANCY.	
158 Congenital debility	2
Hydranmios	..
Inanition	17
Malnutrition	10
Marasmus	27
Premature birth	168
INJURY AT BIRTH.	
160 Prolapse of Umbilical cord	3
Other injury at birth	..

Annual Form No. XX.—Table of Deaths for 1936 arranged in accordance with the International List (Fourth Revision 1929)
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Classification No.	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diseases of early Infancy.	OTHER DISEASES PECULIAR TO EARLY INFANCY.	3	4	3	2	3	8	9	9	5	6	6	12	70
	Atelectasis	...	1	7	1	2	3	4	7	3	4	5	5	45
	Asphyxia neonatorum	4	...	...	2	1	1	1	...	...	1	6	5	17
	Secondary Asphyxia	...	...	...	...	...	...	...	...	...	...	1	...	4
	Icterus neonatorum	3	5	9	3	3	7	8	10	7	6	1	15	80
161-c (3)	Infantile Biliary Cirrhosis	...	...	...	1	...	...	...	...	...	1	...	...	2
161-c (3)	Hæmorrhage of New born	...	...	...	...	...	...	...	...	...	...	...	...	...
162	XVI. OLD AGE. Old Age	282	220	299	254	224	236	244	264	229	229	259	420	3160
Deaths from Violence.	XVII. DEATHS FROM VIOLENCE.	...	1	1	...	2	...	1	1	...	2	3	...	5
	Suicide by Arsenic or Drug Poison	...	...	...	...	...	...	5	3	1	1	...	...	16
	Suicide by other solid or liquid Poisonous and Corrosive substances	...	...	...	...	...	...	...	...	...	...	...	...	...
	Suicide by hanging	4	4	1	1	5	...	1	2	5	...	1	2	26
	Suicide by drowning	2	2	1	...	...	1	2	4	2	1	2	2	19
167	Suicide by firearms	...	...	1	...	...	...	...	...	...	...	...	...	1
168	Suicide by cutting or piercing instruments.	...	...	...	1	...	...	...	...	...	...	...	...	1
174 175	SUICIDE BY OTHER MEANS. Homicide by cutting or Piercing Instruments Homicide by other means	...	...	...	1	...	...	...	...	...	...	...	1	2 1

Deaths from Violence.	ATTACK BY VENOMOUS ANIMALS.	...	...	...	...	...	...	2	1	...	...	...	...	2
	Insect Bite	...	...	...	...	...	...	...	...	...	...	...	...	1
	Monkey Bite	...	...	...	...	...	...	...	...	...	...	...	...	4
	Snake-bite	...	...	...	...	...	...	...	...	...	...	...	...	8
	Sting of Scorpion	...	2	2	1	...	...	1	...	...	...	...	...	2
177	Opium Poisoning	...	...	...	...	...	...	...	...	...	...	...	...	1
178	Accidental absorption of irrespirable or poisonous gas.	...	...	...	7	...	...	1	...	...	...	...	...	1
181	Accidental burns	...	...	3	...	5	6	2	5	4	...	5	...	53
182	Accidental mechanical suffocation by foreign body in the Bronchus.	...	...	...	...	...	...	...	...	...	...	...	...	4
183	Accidental drowning	...	3	...	4	5	...	...	1	...	1	...	...	25
184	Accidental injury by fire arms	...	...	...	...	...	...	...	1	...	...	...	...	2
185	Accidental injury by cutting or piercing instruments	...	1	...	...	...	...	...	...	...	1	...	...	2
186	ACCIDENTAL INJURY BY FALL, CRUSHING, ETC.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Accidental injury by fall, Crushing, etc.	...	1	1	...	1	1	...	1	1	1	...	...	5
	Motor Accident	...	...	...	...	...	2	...	...	...	...	...	...	9
	Tram Car accident	...	...	...	...	...	...	...	...	...	...	...	...	2
	Other Train accidents	...	...	1	...	...	...	...	...	...	...	...	...	3
188	Cart Accident	...	...	1	...	...	...	...	...	...	...	...	...	1
	Gored by Bull	...	...	...	...	...	...	...	...	...	...	...	...	1
189	HUNGER OR THIRST. Starvation (not malnutrition)	...	...	...	...	...	...	...	...	...	...	...	1	1
	...	...	...	...	...	...	...	...	...	...	...	...	...	...
191	EXCESSIVE HEAT. Sunstroke	...	...	...	...	...	1	...	...	...	...	...	...	1

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Classification No.	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
193	ELECTRICITY (LIGHTNING EXCEPTED).	..	1	..	..	..	..	..	..	..	..	..	..	1
	Electric Shock	..	..	..	..	..	..	..	..	..	..	..	..	..
	OTHER AND UNSTATED FORMS OF ACCIDENTAL VIOLENCE.	..	..	..	..	..	..	..	..	..	..	..	..	..
	Accidental cranial fracture	1	2	1	1	..	1	..	..	3	1	..	..	10
	Accidental fracture of spine	..	..	..	..	..	1	..	..	1	..	..	..	3
194-2	Accidental fracture of other bones	..	..	1	..	..	1	..	..	..	..	1	..	3
	Other unstates forms of accidental violence.	..	..	1	..	..	1	..	..	..	..	1	..	4
	Foreign body Respiratory tract	..	..	1	..	..	..	..	..	1	..	1	..	5
	Other unstates form of local and general injuries.	2	..	3	..	..	1	..	..	..	..	1	..	7
	Execution (Legal)	..	..	..	..	..	..	..	..	1	..	..	..	1
198	XVIII. ILL-DEFINED DISEASES.	..	..	..	..	..	..	..	..	..	..	..	..	..
199	Sudden death (Syncope)	..	..	1	..	..	4	3	5	3	2	2	2	22
	CAUSE OF DEATH UNSTATED OR ILL-DEFINED.	..	..	..	..	..	..	..	..	..	..	..	..	..
200-1	Heart failure	51	34	58	38	53	32	34	48	39	39	53	52	538
	Acute Abdomen	2	1	1	1	1	1	1	3	5	3	2	1	22
	Anasarca	1	1	3	1	1	2	1	..	..	..	..	1	11
	Ascites	2	2	1	4	1	..	3	..	..	..	1	2	18
	Coma	1	1	..	1	..	1	1	1	1	1	..	1	9
200-2	Debility (Age 10 to 70)	8	6	2	6	1	8	7	7	8	10	17	18	98
	..	..	..	..	..	..	..	..	..	..	..	..	..	..
200-3	Dentition	..	..	6	6	2	1	..	..	..	..	2	..	20
	Dropsy	..	1	6	6	2	..	2	2	..	..	..	3	34
	Inanition (10 years and over)	..	..	2	2	4	..	1	..	..	..	..	2	14
	Oedema	..	..	..	..	..	..	..	..	..	..	..	..	..
	Pyrexia of uncertain origin	..	122	121	96	113	121	112	112	87	105	122	125	1390
	Post-operative shock	..	2	..	1	2	4	..	1	3	1	1	3	18
	Surgical Shock	..	2	..	1	..	..	..	..	2	1	..	..	11
	Natural Causes	..	1	2	..	2	1	1	1	..	..	1	3	11
	Unknown	..	1	6	..	..	1	4	4	4	7	3	6	47
	..	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE—C.

Table of Births, Deaths and Infantile Death-rates for different communities in the city of Madras for 1935 and 1936.

Race or Caste.	Population according to the census of 1931.	1936					1935						
		Total No. of Births.	Birth Rate.	Total No. of Deaths.	Death Rate.	Infantile Deaths.	Infantile Death Rate.	Total No. of Births.	Birth Rate.	Total No. of Deaths.	Death Rate.	Infantile Deaths.	Infantile Death Rate.
Europeans	3,581	47	13.1	22	6.1	3	63.8	39	10.9	29	8.1	1	25.6
Anglo-Indians	10,657	378	35.5	241	22.6	38	100.5	377	35.4	284	26.6	44	116.7
Indian Christians	39,884	1,425	35.8	1,077	27.0	342	240.0	1,570	39.4	1,126	28.3	295	187.9
Hindus	5,20,176	24,218	46.6	19,551	37.6	5,102	210.7	25,561	49.1	20,524	39.5	5,748	224.9
Mahomedans	70,031	3,120	44.6	2,764	39.5	833	267.0	3,484	49.7	2,991	42.7	860	246.8
Others	2,901	1	0.3	5	1.7	...	...	...	...	1	0.3	...	...
Total	6,47,220	29,189	45.1	23,660	36.6	6,318	216.5	31,031	47.9	24,955	38.6	6,948	223.9

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TABLE—D.

Table of Birth and Death rates of principal sub-divisions of Hindu Community for 1935 and 1936.

Name of Community.	Population.	1936.				1935.			
		Total Births.	Birth Rate.	Total Deaths.	Death Rate.	Total Births.	Birth Rate.	Total Deaths.	Death Rate.
Brahmins	58,761	2,138	36.4	1,278	21.8	2,222	37.8	1,450	24.7
Chetties	37,949	1,671	44.0	1,204	31.7	2,104	55.4	1,744	46.0
Vellalah or Mudaliars	86,716	3,161	36.2	2,751	31.7	4,143	47.8	3,260	37.6
Baliyah or Naidus	60,263	2,167	35.9	1,878	31.2	2,256	37.4	1,839	30.7
Vannia or Naickers	69,659	3,336	47.9	2,914	41.8	4,121	59.2	3,160	45.4
Adi-Dravidas	73,701	3,390	46.0	3,453	46.9	4,013	54.5	3,523	47.8
Patnavars	11,309	748	66.1	478	42.3	387	24.2	398	35.2
Yadaval or Idayars	17,022	1,077	63.3	998	58.6	1,010	59.3	939	55.2
Viswakarma Brahmins or Kammalars	15,670	848	54.1	737	47.0	954	60.9	751	47.9

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TABLE—A.

Comparative Statement of deaths from some of the principal diseases during the past 12 years.

Year.	Births.		Deaths.		Cholera.		Small-Pox.		Malaria.		Other Fevers.		Other Infectious diseases.		Plague.		Dysentery and Diarrhoea.		Respiratory diseases.		Infantile mortality under 1 year.		Children between 1 and 5 years.		Deaths.
	No. of Births Registered exclusive of Still Births	Birth-rate.	No. of Deaths Registered exclusive of Still Births	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.
1925	23,070	43.6	25,006	47.3	203	0.4	763	1.4	198	2.5	1339	2.0	682	1.3	...	...	4631	7.6	6416	12.1	6431	278.8	4656	112.9	1335
1926	22,300	41.6	23,776	45.0	98	0.2	60	0.1	1342	2.6	1343	2.7	565	1.1	...	...	3867	7.3	6470	12.2	6145	279.3	4120	100.0	1105
1927	24,760	46.8	22,364	42.3	512	1.0	32,006	1367	2.6	1259	2.1	...	...	...	...	...	3268	6.2	6816	12.9	5888	237.6	3805	92.3	1253
1928	23,729	44.9	26,715	50.5	708	1.3	251	0.5	1599	3.0	1732	3.2	1052	2.0	...	...	3921	7.4	8631	16.4	6805	286.8	4864	118.0	1321
1929	13,124	43.7	22,115	42.4	16	0.03	596	1.0	681	1.3	1861	3.5	612	1.2	...	...	3127	5.9	6395	12.7	5933	256.3	3875	91.0	1251
1930	25,662	48.5	22,839	43.2	43	0.06	188	0.4	283	0.5	2027	3.9	411	0.8	...	...	3056	5.8	6331	12.0	6258	243.9	3633	88.1	1260
1931	25,738	39.8	23,162	35.8	153	0.2	24,004	277	0.4	1914	3.0	1914	3.0	1317	2.1	...	2746	4.2	5743	8.9	6331	248.3	3767	50.3	1318
1932	27,996	43.3	22,290	34.4	5	0.08	176	0.3	165	0.3	1747	2.7	1403	2.2	1	0.002	2644	4.1	5509	8.5	6622	236.5	3609	48.2	1226
1933	28,533	44.1	24,500	37.9	62	0.1	137	1.3	146	0.2	2185	3.3	519	0.8	...	...	2670	4.1	5967	9.2	7540	264.4	4154	67.7	1380
1934	28,149	43.5	23,653	36.6	165	0.3	131	0.2	193	0.3	2242	3.4	1163	1.8	...	...	2098	3.1	6905	10.6	6424	223.2	3833	63.4	1378
1935	31,631	47.9	24,955	38.6	145	0.22	59	0.09	167	0.26	2491	3.89	607	0.9	...	...	2320	3.6	7463	11.6	6948	223.9	4280	71.3	1414
1936	29,189	45.1	23,660	36.6	140	0.22	3	0.005	113	0.18	1799	2.8	601	0.9	...	...	2208	3.4	7546	11.7	6318	216.5	3990	65.0	1415

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TABLE—B.

Rainfall.

Years.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total.
	January to March.	Inches.	April to June.	Inches.	July to September.	Inches.	October to December.	Inches.	
1931	...	0.05	6.76	17.94	33.78	58.53	...	...	...
1932	...	0.69	2.31	7.28	36.31	46.59	...	...	...
1933	...	3.42	0.98	5.20	30.53	40.18	...	...	...
1934	...	2.05	2.54	11.20	20.87	36.66	...	...	...
1935	...	0.57	1.23	14.26	24.28	40.34	...	...	...
1936	...	3.70	3.53	12.39	24.63	44.25	...	...	...

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TABLE—E.
Table of Birth, Death & Infantile Death rates by months for 1935 & 1936.

Months.	1936.						1935.			
	Total No. of Births.	Birth rate.	Total No. of Deaths.	Death rate.	Infantile Deaths.	Infantile Deaths on 1,000 live Births.	Total No. of Births.	Birth rate.	Total No. of Deaths.	Death rate.
January	2,114	39.2	1,967	36.5	498	235.6	2,009	37.2	2,100	38.9
February	1,820	33.7	1,775	32.9	417	229.1	2,103	39.0	1,763	32.7
March	2,051	38.0	1,841	34.1	453	220.8	2,112	39.2	1,869	34.7
April	2,176	43.0	1,783	33.0	449	206.3	2,345	43.5	1,781	33.0
May	2,376	44.1	1,822	33.8	490	206.2	2,741	50.8	2,060	38.2
June	2,195	40.7	1,912	35.4	481	218.9	2,378	44.1	1,893	35.1
July	2,452	45.5	2,008	37.2	592	241.4	2,381	52.5	2,269	42.1
August	2,671	49.5	2,020	37.4	566	211.9	3,133	58.1	2,290	42.5
September	2,920	54.1	1,786	33.1	517	177.0	2,844	52.7	1,943	36.0
October	2,818	52.2	1,824	33.8	499	177.1	3,097	57.4	2,405	44.6
November	2,699	50.0	1,948	36.1	558	206.7	2,778	51.5	2,365	43.8
December	2,897	53.7	2,974	54.5	798	275.4	2,660	49.2	2,217	41.1
Total	29,189	45.1	23,660	36.6	6,318	216.5	31,031	47.9	24,955	38.6
										223.9

TABLE—F.

Ratio of deaths among Children under one year of age per 1000
Live Births registered in each division for 1935 and 1936.

Divisions.	1936		1935.	
	Infantile Mortality.	Infantile Death-rates.	Infantile Mortality.	Infantile Death-rates.
1	236	265.8	243	237.1
2	270	197.5	283	192.0
3	303	212.6	354	246.0
4	307	221.3	324	241.1
5	105	283.8	90	263.9
6	82	173.0	89	167.9
7	103	190.4	122	217.1
8	55	263.2	49	236.7
9	159	187.9	207	248.5
10	183	238.3	198	251.9
11	48	247.4	65	314.0
12	212	224.6	272	271.2
13	195	295.9	197	260.2
14	36	279.1	42	233.3
15	160	248.8	186	270.7
16	487	238.0	503	216.4
17	314	226.2	367	243.0
18	226	205.0	284	224.2
19	173	204.3	224	246.7
20	267	167.2	295	180.0
21	211	210.6	187	180.2
22	197	182.1	237	201.4
23	247	197.4	289	232.5
24	293	196.4	371	217.6
25	155	180.0	171	186.5
26	188	235.0	168	209.7
27	225	253.4	245	247.5
28	312	222.1	352	238.2
29	376	222.6	347	200.6
30	193	215.9	187	201.3
Total ...	6,318	216.5	6,948	223.9

TABLE—G.

Table of Infantile Mortality by months in the year 1936.

1936	Small-pox.	Measles.	Malaria.	Other fevers.	Dysentery and Diarrhoea.	Premature Birth.	Debility.	Nervous system.	Respiratory system.	All other causes.	Total of 1936.			Total of 1935.
											Males.	Females.	Total.	
January	...	...	...	23	37	168	4	23	158	79	254	244	498	547
February	...	...	...	24	33	144	2	8	157	49	221	196	417	440
March	...	...	...	17	31	160	5	17	180	42	243	210	453	455
April	...	...	...	14	37	124	3	20	186	65	254	195	449	466
May	...	1	...	21	54	124	2	18	198	72	257	233	490	555
June	...	...	...	23	42	137	6	31	183	59	263	218	481	557
July	...	...	...	24	68	158	4	40	208	90	312	280	592	631
August	...	...	...	26	73	156	2	36	181	92	297	269	566	653
September	...	...	...	24	41	150	...	30	171	101	266	251	517	523
October	...	...	...	22	21	169	2	36	181	68	249	250	499	761
November	...	...	...	19	19	229	4	37	181	69	305	253	558	732
December	...	...	...	23	47	261	7	51	297	112	424	374	798	598
Total	1	1	...	250	593	1,980	41	353	2,281	898	3,345	2,973	6,318	6,948

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TABLE—H.

Table of percentage of Infantile Deaths from Principal causes in the year 1936.

Age Periods.	Small-pox.		Measles.		Malaria.		Other Fevers.		Diarrhoea and Dysentery.		Premature Births.		Debility.		Nervous System.		Respiratory System.		All other Causes.		Total.	
	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.	Total.	Ratio.
Under 7 days	...	...	...	...	...	...	8	0.5	13	0.9	1090	76.3	5	0.3	77	5.4	5	0.3	231	16.1	1429	22.6
7 days and under 1 month...	...	...	...	...	...	...	14	1.6	28	3.1	625	69.7	9	1.0	47	5.2	45	5.0	128	14.3	896	14.2
1 month and under 4 months	...	...	...	...	...	...	83	6.0	124	8.9	259	18.7	20	1.5	116	8.4	554	40.1	224	16.2	1380	21.8
4 months and under 7 months	...	...	...	...	...	...	72	6.6	126	11.5	6	0.5	3	0.2	53	4.8	694	63.5	138	12.6	1092	17.3
7 months and under 10 months	...	...	...	...	...	...	65	6.9	129	13.7	...	...	4	0.4	36	3.8	592	63.9	104	11.1	936	14.8
10 months and under 1 year.	1	.17	1	.17	...	...	18	3.1	83	14.2	...	...	...	...	24	4.1	385	65.8	73	12.5	585	9.3
Total	1	.02	1	.02	...	...	260	0.4	503	7.9	1980	31.3	41	0.6	353	5.5	2281	36.1	898	14.2	6318	...

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VACCINATION STATEMENT No. I.

Statement showing the number of births (Divisional and Hospital) verified during the calendar year 1936 and the number of Infants vaccinated under one year of age.

Divisions.	Total Births excluding still births.		Still births.		Deaths under one year.		Number of infants surviving.		Number of infants vaccinated under one year.		Percentage of vaccination to Births registered.	
	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.
1	642	319	7	10	65	20	577	299	281	113	43.7	35.4
2	537	577	23	69	119	50	718	527	422	107	50.4	18.6
3	978	431	19	47	115	43	863	388	401	112	42.0	26.0
4	390	169	10	14	47	10	343	159	236	76	61.0	45.0
5	293	93	6	4	60	10	233	83	83	7	28.3	7.5
6	348	134	12	9	43	19	305	115	181	49	52.0	36.6
7	368	165	9	7	41	22	327	143	166	32	45.1	20.0
8	118	78	4	2	32	9	86	69	53	21	45.0	27.0
9	415	260	10	14	46	24	369	236	198	72	48.0	28.0
10	507	287	8	14	83	33	424	254	213	69	42.0	24.0
11	161	2	12	...	33	...	128	2	72	...	44.7	...
12	704	306	12	22	111	38	593	268	253	43	36.0	14.0
13	501	234	2	8	110	53	391	181	288	118	57.5	50.0
14	80	38	...	...	17	5	63	33	43	30	53.8	80.0
15	465	197	8	8	82	50	383	147	246	104	53.0	53.0
16	1,746	419	21	38	245	62	1,501	357	900	77	51.6	18.4
17	1,143	306	24	22	169	38	974	268	709	115	62.0	38.0
18	868	343	21	18	141	51	727	292	504	162	58.1	47.2
19	521	345	17	14	88	70	433	275	343	186	66.0	54.0
20	573	1,024	9	85	82	93	491	931	351	136	61.3	32.8
21	557	457	24	42	77	48	480	409	318	121	57.1	26.5
22	671	443	12	13	93	64	578	379	442	145	66.0	33.0
23	706	519	18	27	105	72	601	447	423	210	59.9	40.8
24	995	497	41	35	99	48	896	449	611	203	61.4	40.8
25	448	465	14	48	69	54	379	411	264	117	59.0	25.2
26	561	285	15	23	92	47	469	228	272	88	48.5	31.0
27	592	295	34	28	66	45	526	250	360	120	60.8	49.7
28	970	487	24	64	157	75	813	412	353	82	36.4	17.0
29	1,286	477	34	42	232	61	1,054	416	195	170	54.0	35.6
30	695	207	19	11	126	34	569	173	299	51	43.0	24.6
Total.	19,139	9,859	469	738	2,845	1,248	16,294	8,611	9,980	3,136	52.1	32.0

VACCINATION STATEMENT No. II.

Statement showing the number of births verified in 1936 and the number of infants vaccinated under one year of age.

Year.	Total number of Births excluding Still Births.		Number of children in column 2 who died before attaining the age of one year without being vaccinated.		Number of children in column 2 who left the City before attaining the age of one year without being vaccinated.		Number of children in column 2 who were available for vaccination (column 2 minus columns 3 & 4.)		Number of children in column 5 who were vaccinated before they attained the age of one year.		Percentage of column 6 to column 5.		Number of children in column 5 whose vaccination was postponed beyond one year of age for medical reasons.	
	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1														
1934	19,833	3,028	3,042	13,763	10,720	77.9	835	...	...	...	...	...	...	...
Hospital	8,873	1,364	2,343	5,166	2,926	55.6	281	...	...	...	...	...	...	...
1935	19,828	2,741	3,699	13,188	10,193	77.3	1,568	...	...	...	...	...	...	...
Hospital	8,990	1,254	2,878	4,858	2,955	60.8	579	...	...	...	...	...	...	...
1936	19,139	2,845	3,830	12,464	9,980	80.1	1,183	...	...	...	...	...	...	...
Hospital	9,859	1,248	3,528	5,083	3,136	61.7	524	...	...	...	...	...	...	...

Statement showing the areas in the City which have been sewered and are yet to be sewered.

Divisions.	Name of Area.	Length of Sewers in feet laid during 1936.	Length of Sewers in feet laid up to 31-12-1936.	Percentage of Sewered portions up to 31-12-1936.	Percentage yet to be Sewered.	
1	Royapuram	...	510	41,616	87	13
2	Tondiarpet	...	1,737	34,159	75	25
3	Washermenpet	...	...	56,980	97	3
4	Korukkupet	...	1,392	28,343	72	28
5	Harbour	...	...	30,771	94	6
6	Muthialpet	...	2,407	27,001	97	3
7	Katchaleeswaranpet	...	...	35,920	92	8
8	Kothawal Bazaar	...	...	23,345	100	...
9	Amman Koil	...	...	27,687	100	...
10	Seven Wells	...	539	29,305	100	...
11	Sowcarpet	...	...	18,379	100	...
12	Peddunaickenpet	...	410	33,171	99	1
13	Trevelyan Basin	...	...	32,171	97	3
14	Esplanade	...	...	10,586	90	10
15	Park Town	...	138	21,534	95	5
16	Perambur	...	2,217	35,698	65	35
17	Choolai	...	645	41,075	67	33
18	Purasawalkam	...	...	53,825	99	1
19	Vepery	...	4,654	44,337	85	15
20	Egmore	...	1,313	96,990	96	4
21	Kilpauk	...	10,341	41,843	60	40
22	Nungambakkam	...	3,734	56,772	47	53
23	Chintadripet	...	...	41,605	87	13
24	Tiruvateeswaranpet	...	3,548	52,992	89	11
25	Chepauk	...	480	22,506	91	9
26	Triplicane	...	590	28,818	88	12
27	Amir Mahal	...	392	28,768	87	13
28	Mirsahibpet	...	237	95,448	96	4
29	Royapettah	...	1,069	82,151	80	20
30	Mylapore	...	225	93,722	91	9
Total		...	36,578	12,67,518	87.43	12.57

List of un-wholesome articles of food destroyed during 1936.

Appams, Iddlies, and other Rice Preparations.	4016	
	637	Plates
	277	Baskets
Beef	... 23½	Viss.
Butter	... 10	lbs.
Butter milk	... 14	Pots.
Cheese	... 145	Balls
	70	Portions
Coffee and Tea	... 420	Kettles.
Curd	... 6	Pots.
Eggs	... 1216	
Fish	... 552	
	829½	Baskets.
Fruits	... 32,800	
	512½	Baskets.
Fruit Salad	... 75	Plates.
Goat-head	... 28	
Grains	... 4	Bags.
Milk	... 8	Measures.
Mutton	... 244	Viss.
Pork	... 517½	lbs.
Preserved Food Stuffs	... 16,118	Tins.
	2017	Packets.
Sugar	... 6	Bags.
Sweet Meats	... 86	lbs.
	1443	Plates.
Syrups and Aerated waters	... 1346	Bottles.
Trash	... 2346	
	770	Plates.
	101	Baskets.
Vegetables	... 4127	
	104	Baskets.

Statement showing the number of applications relating to licenses disposed of during 1936.

Description.	Number of cases dealt with.	Number sanctioned.	Number in which license was refused.	Number pending.
Aerated Water factory	40	39	1	...
Bakery, Sweetmeat Bazaar, Coffee Hotels	460	449	5	6
Candles & Soap	26	26	...	...
Cocoonut fibre, Flax, Hemp & Jute	9	9	...	...
Cattle-yards	2286	2075	3	208
Bones, Hoofs, Hairs, Wool and Horns.	25	25	...	...
Cartstand	14	14	...	...
Dairy produce	354	353	1	...
Flour	130	125	5	...
Guiliding, Condiment	183	173	10	...
Hack-stable	42	42	...	...
Dyeing	69	66	3	...
Onions and Garlic	80	80	...	...
Oil, Oil Mills	477	453	14	10
Lodging House	109	108	1	...
Market	47	47	...	...
Meat	278	179	99	...
Spirits, Turpentine & Chemical Rosin	155	154	1	...
Laundries	141	141	...	...
Fish, Fins	22	21	1	...
Skins, Hides & Leather	119	118	1	...
Paddy boiling	2	2	...	...
Sugar	4	4	...	...
Catgut, Offal, Tallow	4	4	...	...
Snuff	74	71	3	...
Cotton	29	29	...	...
Eating-house	1002	715	45	242
Swine	15	...	15	...
Lime-kiln	20	15	5	...
Total	6,216	5,537	213	466

Statement showing the number of cases treated in the Corporation Dispensaries during 1935 and 1936.

Serial No.	Name of the Dispensary.	Year in which the Dispensary was opened.	Total No. of cases treated.		Total No. of operations performed.		Remarks.
			1935.	1936.	1935.	1936.	
1	Royapuram	1924	88,421	91,069	210	211	
2	Washermanpet	1913	1,35,034	1,36,462	885	832	
3	Harbour	1929	1,61,827	1,58,900	393	249	
4	Mannady	1923	56,654	65,470	119	225	
5	Mahfuskhan	1923	40,017	88,416	343	355	
6	Mint Street	1923	1,49,845	1,45,666	310	306	
7	Trevelyan Basin	1919	1,26,137	1,50,760	440	386	
8	Perambur	1928	54,675	53,655	241	247	
9	Vyasarpady	1929	63,225	59,214	3,682	4,363	
10	Kosapet	1929	64,939	70,503	634	838	
11	Baliah Naidu	1893	1,52,227	2,08,941	1,201	1,152	
12	Kilpauk	1919	1,18,919	1,18,007	1,101	1,080	
13	Nungambakkam	1923	37,007	84,300	206	156	
14	Chintadripet	1909	1,37,618	1,36,636	660	682	
15	Pudupakkam	1924	1,14,413	1,01,953	712	541	
16	Triplicane	1918	56,480	61,657	351	531	
17	Teynampet	1921	50,347	53,607	416	435	
18	Mambalam	1922	48,794	53,747	142	115	
19	Mylapore	1924	64,712	1,88,765	599	510	
20	Unani Dispensary, Pulianthope.	1930	87,541	74,478	177	101	
21	Siddha Dispensary, Chulai	1931	1,27,776	1,34,751	206	159	
22	Ayurvedic Dispensary, Thousand Lights.	1930	67,786	74,618	503	194	
23	Unani Dispensary, Thayar Sahib Street.	1932	1,18,803	1,09,875	312	184	

TABLE XII.

Hydrogen ion Concentration changes (pH) in Red Hills Lake 1935.

Date.	27-1-35	24-2-35	24-3-35	28-4-35	26-5-35	30-6-35	28-7-35	25-8-35	25-8-35	29-9-35	27-10-35	1-12-35	22-12-35
Time.	12 Noon	12-30 P. M.	9-20 A. M.	11-30 A. M.	10-20 A. M.	11-0 A. M.	11-35 A. M.	9-35 A. M.	10-10 A. M.	11-5 A. M.	10-15 A. M.	11-15 A. M.	11-5 A. M.
Place.	A	A	A	A	A	A	A	B	A	A	A	A	A
Depth in Metres.	1	2	3	4	5	6	7	8	9	10	11	12	13
0.0	8.5	8.5	8.9	8.9	8.9	8.9	8.9	8.7	8.7	8.7	8.7	8.5	8.5
0.5	...	8.5	...	8.9	...	8.9	8.9	...	...	...	8.7	...	...
1.0	...	8.5	...	8.9	...	8.9	8.9	8.7	8.7	...	8.7	...	...
1.5	8.5	8.5	...	8.9	...	8.9	8.9	...	...	...	...	...	...
2.0	...	8.5	...	...	...	8.9	8.9	8.7	8.7	...	8.7	...	...
2.5	...	8.5	...	8.9	...	...	...	...	8.7	...	8.7	...	...
3.0	8.5	8.5	...	8.9	...	8.9	8.85	8.7	8.7 (2.8 m)	...	8.7	...	...
3.5	...	8.5	...	8.9	...	...	...	8.7	...	...	8.4	...	...
4.0	...	8.5	...	8.9	...	...	...	...	...	...	...	...	...
4.5	8.5	8.5	...	...	...	...	...	...	...	...	8.4	...	...
5.0	...	8.5	...	...	...	...	...	...	...	...	...	...	...

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TABLE XI—(Contd.).

Vertical and Seasonal Changes in Carbonic Acid (Results expressed as Free CO₂, CO₃, and HCO₃ ions in mg per Litre.) Red Hills Lake 1935.

Date.	25-8-35	29-9-35	27-10-35	1-12-35	22-12-35								
Time.	10-10 A.M.	11-5 A.M.	10-15 A.M.	11-15 A.M.	11-5 A.M.								
Place.	A	A	A	A	A								
Depth in Metres.	Free CO ₂	CO ₃	HCO ₃	Free CO ₂	CO ₃	HCO ₃	Free CO ₂	CO ₃	HCO ₃	Free CO ₂	CO ₃	HCO ₃	
0.0	Nil	10.5	140.3	Nil	12.0	126.6	Nil	9.6	114.7	Nil	9.0	103.7	111.1
0.5	...	...	...	...	...	...	"	11.4	111.6	...	...	...	...
1.0	Nil	13.5	132.7	...	...	...	"	11.4	110.4	...	...	...	...
1.5	...	...	...	...	...	...	...	...	...	...	...	...	...
2.0	Nil	13.5	131.2	...	...	...	Nil	10.5	112.8	...	...	...	...
2.5	"	13.5	134.2	...	...	...	"	12.0	109.8	...	...	...	...
3.0	...	...	...	...	...	...	"	10.5	112.8	...	...	...	...
3.5	...	...	...	...	...	...	...	...	...	...	...	...	...
4.0	...	...	...	...	...	...	Nil	6.0	122.0	...	...	...	...
4.5	...	...	...	...	...	...	...	...	...	...	...	...	...
5.0	...	...	...	...	...	...	Nil	6.0	118.9	...	...	...	...

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Statement of notices issued and disposed of together with

Section or By-law.	Substance of Section or By-Law.	NOTICE.						No. cancelled.
		No. pending on 1st January 1936	No. issued during the year.	Total.	No. complied with			
					Volun- tarily.	By prose- cution	By transfer to W. D. for Departmental execution and recovery of cost.	
(1)	(2)	(3)	(4)	(5)	(6)			(7)
177	Control over house drains privies and cess- pools	...	5	5	2	...	...	1
178 (4)	Occupying or allowing occupation of house without proper drainage	...	...	...	...	...	...	...
186	Failure to obey requisition to provide latrine or to remove latrine to another site and failure to keep them clean and in proper order	...	...	...	...	...	...	...
188	Failure to obey requisition to provide lat- rines for Market etc. or to keep them clean.	230	459	689	268	123	9	71
189	Failure to construct latrines so as to screen persons using them from view	...	5	5	4	...	...	...
202 (5)	Keeping rubbish or filth for more than 24 hours etc.	...	6	6	4	...	...	1
202 (6)	Prohibition against allowing sewage to flow in street	...	11	11	8	2	...	...
260	Failure to obey requisition to repair, etc, tank or other place dangerous to passers- by or persons living in neighbourhood	2	63	65	54	7	...	...
264	Failure to obey requisition to fill up, etc, tank or well, or drain of water, etc.	...	5	5	4	...	...	...
269	Failure to obey requisition to enclose, clear or cleanse untenanted premises	209	884	1093	658	84	...	78
270	Failure to obey requisition to clear or cleanse etc. building or land in filthy state or overgrown with prickly pear or other noxious vegetation	21	40	61	30	7	1	5
272	Failure to obey requisition to lime-wash or otherwise cleanse building	5	101	106	68	25	...	4
278	Failure to obey requisition to execute work or take other action with respect to insanitary buildings	66	319	385	203	...	...	28
279	Prohibition in respect of lodging house	573	2005	2578	1706	161	3	87
280 (a)	Unlawful keeping of pigs	...	...	...	...	...	...	...
283	Repairs to or demolishing of stable, cattle- shed, etc	...	...	...	...	...	...	...
284	Construction or maintenance of stable cattle- shed, etc., contrary to Act or subsidiary legislation	1	15	16	7	1	...	3
286	Failure to remove carcass of animals	2	3	5	4	1	...	...
287 (3)	Use of place without licence or contrary to licences	...	...	...	...	...	...	...
293 (2)	Washing of clothes by washermen at un- authorised place	...	2	2	1	...	...	...
297	Slaughter of animals for sale of food or skinning or cutting up carcasses without licence or contrary to licence drying skin so as to cause a nuisance	...	...	...	...	...	...	...
299	Carrying on milk trade without licence or contrary to licence	...	...	...	...	...	...	...
303 (2)	Opening private market without licence or contrary to licence	1	...	...	...	...	...	1
304	Keeping open private market without a licence or contrary to licence	...	...	...	...	...	...	...
309	Carrying on butcher's, fish-monger's or poultry's trade without licence etc.	...	...	...	...	...	...	...
310	Sale of article in public streets after pro- hibition or contrary to regulations	...	...	...	...	...	...	...
334	Failure to obey requisition to cleanse or disinfect building or article	...	...	...	...	...	...	...
345	Failure to give information of small-pox	8	313	316	310	1	...	...
280 (c)	Feeding of animals on filth	...	...	...	...	...	...	...
349 (11)	Use of place without licence or contrary to licence.	...	...	...	...	...	...	...
249 (21)	Use of place without sanitary certificate or contrary to sanitary certificate.	...	2	2	2	...	...	...
349 (13)	Use of place as a Factory without licence or contrary to licence.	...	...	...	...	...	...	...
349 (16)	Carrying on milk trade without cleanliness.	...	...	...	...	...	...	...
349 (6)	Keeping the latrines without sufficient water supply for flushing.	...	...	...	...	...	...	...

Statement of Prosecutions instituted during the year 1936.

No. pending.	PROSECUTION.									Remarks.
	No. of prosecutions pending disposal on 1st January 1936.	No. instituted during the year.	Total.	No. convicted.	Fines imposed.	No. acquitted.	No. withdrawn.	*No. in which the parties were not found.	No. pend- ing.	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
2	...	1	1	..	Rs. A. P.	...	...	...	1	
...	3	...	...	...	...	...	3	...	...	
218	51	226	277	129	98 4 0	...	85	2	61	
1	...	...	...	...	...	...	...	...	...	
1	...	...	...	...	...	...	...	...	...	
1	...	2	2	1	0 8 0	...	1	...	...	
4	1	10	11	3	2 0 0	...	7	...	1	
1	...	3	3	1	1 0 0	...	2	...	...	
273	18	122	140	64	43 12 0	...	49	...	27	
18	9	12	21	9	9 0 0	..	7	...	5	
9	7	76	83	55	76 0 0	...	10	...	18	
64	...	...	...	...	...	...	...	...	...	
621	54	283	337	164	109 4 0	2	130	...	41	
...	3	7	10	5	139 0 0	...	4	...	1	
..	3	47	50	42	155 12 0	...	3	...	5	
5	185	1350	1535	1261	4,409 0 0	2	85	...	187	
...	1	5	6	3	2 0 0	...	3	...	...	
...	...	1	1	...	...	...	1	..	...	
1	49	209	258	175	1,422 4 0	1	48	...	34	
...	...	21	21	21	17 0 0	...	...	...	...	
...	1	7	8	8	3 2 0	...	...	..	...	
...	1	17	18	13	65 12 0	...	3	...	2	
...	...	5	5	4	84 4 0	...	...	...	1	
...	5	21	26	8	9 8 0	...	9	...	9	
...	...	46	46	22	204 12 0	...	20	...	4	
...	1	107	108	82	40 8 0	...	11	1	14	
5	3	2	5	3	1 8 0	...	2	...	...	
...	...	3	3	...	...	...	3	...	...	
...	...	...	...	...	...	...	...	...	...	
...	115	773	888	664	2,235 12 0	2	116	9	97	
...	14	141	155	134	57 10 0	...	9	...	12	
...	...	1	1	1	8 8 0	...	...	...	...	
...	...	8	8	8	13 8 0	...	...	...	...	
...	...	3	3	...	...	3	...	...	...	

MEDICAL INSPECTION OF CORPORATION SCHOOLS

Quinquennial average of heights and weights of boys and girls.

No.	Age.	Average height of boys & girls.		Average weight of boys & girls.	
		Boys.	Girls.	Boys.	Girls.
1	5 years ...	39.18	39.30	32.35	32.24
2	6 " ..	42.25	40.62	35.06	34.51
3	7 " ...	43.72	42.92	37.85	36.21
4	8 " ...	45.83	44.55	40.60	40.29
5	9 " ...	47.37	47.09	43.37	43.97
6	10 " ...	49.59	48.95	47.36	47.29
7	11 " ...	51.13	51.08	51.31	52.10
8	12 " ...	52.73	52.30	54.45	57.73
9	13 " ...	54.50	54.76	58.81	63.91
10	14 " ...	55.81	56.53	63.56	71.42
11	15 " ...	57.62	57.81	68.30	76.45

Treatment Table.

Group.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. referred to Ophthalmic Hospital and Eye Sections of other Hospitals.	No. referred to Tuberculosis Institute.	No. referred to Govt. Goshala Hospital.	No. referred to Skin Department of Government Hospital, Corporation and City Leper Clinics	No. of parents met.	No. of re-visits paid to Schools.	No. of re-examinations of children.	REMARKS.
Boys	6,478	1,183	162	20	..	497	3,565	138	14,537	
Girls	3,451	501	35	7	..	66	1,080	130	4,217	
Total	9,929	1,684	197	27	..	563	4,645	268	18,754	

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Teeth and Mouth Table.

No.	Defects.	Entrants.						Regulars.						Total defective of boys and girls.	
		Boys.			Girls.			Boys.			Girls.				
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.		
1	Dirty Teeth	...	123	24	77	64	...	31	112	26	69	74	...	29	373
2	Dental Caries	...	242	157	85	127	...	59	257	152	105	126	...	84	752
3	Stomatitis	...	397	397	...	182	182	...	609	609	...	236	...	...	1424
4	Tongue Tie	...	11	...	11	...	...	...	11	...	11	1	...	1	23
5	Oral Sepsis	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Other Conditions	...	3	...	1	...	...	...	6	1	3	1	...	...	10

N.B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

Medical Inspection of Corporation Schools.

1936-37.

STATEMENT No. I.

No.	Defects.	Boys.						Girls.						REMARKS.									
		Entrants.			Regulars.			Total of Entrants and Regulars.			Entrants.				Regulars.			Total of Entrants and Regulars.					
		Defective.	Percentage.		No.	Defective.	Percentage.		No.	Defective.	Percentage.		No.		Defective.	Percentage.		No.	Percentage.				
			1936-37.				1935-36.				1936-37.					1935-36.				1936-37.		1935-36.	
			No.				No.				No.					No.				No.		No.	
1	Malnutrition	1148	17.79	13.64	1397	13.32	14.55	2545	14.33	140	2.78	1.86	3.05	2.60									
2	Dirty head, body and Nails	962	14.21	13.03	942	8.98	9.10	1904	10.72	332	6.99	6.17	2.83	4.83									
3	Teeth and Mouth	735	10.11	10.57	906	8.61	9.66	1641	9.24	371	7.37	8.57	7.88	6.95									
4	Nose and Throat	1297	19.21	20.4	1591	15.17	16.09	2988	16.82	1118	22.30	21.25	22.94	21.34									
5	Eye diseases	254	3.49	2.97	306	2.92	2.65	560	3.15	162	3.22	3.08	2.87	2.88									
6	Vision	38	0.52	0.26	127	1.21	1.66	165	0.93	6	0.12	0.18	0.31	0.15									
7	Ear diseases	115	1.58	1.75	167	1.69	1.54	282	1.69	41	0.81	0.78	1.34	0.75									
8	Hearing	...	...	0.01	8	0.07	0.04	8	0.05	2	0.04	...	0.07	0.03									
9	Speech	10	0.11	0.13	18	0.17	0.30	28	0.16	1	0.02	0.08	0.24	0.03									
10	Circulatory System	61	0.84	0.95	95	0.91	1.2	156	0.88	7	0.14	0.16	0.19	0.20									
11	Tuberculosis	9	0.12	0.10	14	0.13	0.27	23	0.13	1	0.02	0.08	0.09	0.06									
12	Respiratory System	135	1.86	2.11	13	1.11	1.92	251	1.41	44	0.87	1.00	0.52	0.74									
13	Abdominal Organs	123	1.69	1.97	152	1.45	1.68	275	1.55	25	0.50	0.42	0.43	0.43									
14	Bones and Joints	173	2.38	1.55	166	1.58	1.25	339	1.91	5	0.10	0.32	0.26	0.19									
15	Nervous and Psychic systems	5	0.07	0.10	13	0.12	0.13	18	0.10	...	...	0.02	0.04	0.01									
16	Infectious and Contagious diseases	775	10.66	11.41	1161	11.07	11.50	1936	10.30	261	5.18	5.35	5.12	5.15									
17	Other diseases and defects	392	5.39	4.53	488	4.65	3.40	880	4.95	111	2.20	3.12	3.14	2.22									
18	Vaccination	147	2.02	1.15	...	...	...	147	0.83	26	0.52	0.41	...	0.22									
19	Deformities	12	0.17	0.25	6	0.06	0.31	18	0.10	5	0.10	0.16	0.24	0.11									

Appendix to Statement No. I—1936-37.

Group.	No. on Roll.		Average daily attendance.		No. Examined.		No. defective.		Percentage defective.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Entrants ...	19,762	14,144	15,959	10,783	7,272	5,035	4,103	17,88	56.42	35.51
Regulars ...	...	...	...	...	10,489	6,580	4,978	2,378	47.46	36.14
Total ...	19,762	14,144	15,959	10,783	17,761	11,615	9,081	4,166	51.13	35.87

STATEMENT No. II—Height and Weight Table.

Age.	Boys.		Girls.		REMARKS.
	Average height in inches.	Average weight in pounds.	Average height in inches.	Average weight in pounds.	
5 years ...	40.70	42.79	39.39	30.08	
6 " ...	42.09	44.35	40.81	32.25	
7 " ...	44.08	38.33	42.62	35.29	
8 " ...	45.52	41.25	44.67	38.04	
9 " ...	47.11	46.68	46.39	40.97	
10 " ...	50.27	49.81	48.44	44.72	
11 " ...	51.67	52.81	50.40	48.26	
12 " ...	53.55	55.00	52.78	53.21	
13 " ...	56.32	57.60	54.34	58.62	
14 " ...	56.86	69.61	57.61	65.69	
15 " ...	58.13	70.31	56.89	71.25	
16 " ...	60.07	86.75	57.79	77.25	
17 " ...	61.18	82.88	59.09	82.32	
18 " ...	62.59	80.38	58.74	84.32	
19 " ...	65.78	98.39	59.94	92.98	
20 " ...	65.83	101.33	58.62	84.23	
21 " ...	66.75	114.00	59.40	91.56	
22 " ...	64.50	112.00	58.13	88.82	
23 " ...	...	...	58.75	98.00	
24 " ...	...	...	59.00	74.00	One woman
26 " ...	...	...	58.77	99.13	Two women
27 " ...	...	...	61.00	105.00	One woman
30 " ...	...	...	61.00	114.00	"
32 " ...	...	...	60.00	110.26	Two women
34 " ...	...	...	62.58	92.82	"
36 " ...	...	...	61.00	120.00	One woman

Nose and Throat Table.

No.	Defects.	Entrants.						Regulars.						Total defective of boys and girls.
		Boys.			Girls.			Boys.			Girls.			
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	
1	Nasal Catarrh	103	103	...	17	17	...	89	88	1	6	6	...	215
2	Nasal Polypus	1	...	1	2	...	2	7	...	7	...	...	...	10
3	Enlarged Tonsils	1182	1097	85	1014	945	69	1372	1238	124	1188	1036	152	4756
4	Granular Pharynx	4	3	1	...	...	...	12	6	6	...	...	...	16
5	Adenoids	63	...	63	...	...	...	90	5	85	1	...	1	154
6	Enlarged cervical glands.	112	112	...	117	110	...	109	109	...	189	177	...	527
7	Bifid & elongated uvula.	3	...	...	4	...	...	3	1	...	5	...	...	15
8	Other Conditions	1	...	1	...	...	...	5	3	1	...	...	...	6

N.B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

Eye Table.

No.	Defects.	Entrants.				Regulars.				Total defective of boys and girls.				
		Boys.		Girls.	Boys.		Girls.							
		No. defective.	No. sent to Corporation dispensaries.		No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	No. defective.		No. sent to Corporation dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.					
1	Conjunctivitis	51	48	3	63	63	...	56	43	13	50	50	...	220
2	Blepharitis	5	...	5	3	3	...	6	...	6	5	4	1	19
3	Granular lids	7	...	7	25	3	5	8	...	8	36	28	8	81
4	Corneal opacity	6	...	5	...	...	5	16	...	12	16	...	5	50
5	Corneal ulcer	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Staphyloma	...	...	...	...	...	...	2	...	2	...	...	...	...
7	Dacryocystitis	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Cataract	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Xerosis	152	152	...	39	39	...	175	175	...	41	41	...	407
10	Stye	6	3	3	2	2	2	1	1	...	3	2	...	14
11	Squint.	11	...	6	...	1	1	22	3	11	14	...	...	61
12	Keratitis	...	...	...	...	...	...	...	...	...	2	...	2	2
13	Prosis	4	...	1	...	...	...	...	...	...	...	...	...	4
14	Other conditions	13	11	2	3	3	1	22	8	13	5	...	1	43
15	Defective Vision	38	15	23	6	1	5	127	42	85	12	...	12	187

N. B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

Nose and Throat Table.

No.	Defects.	Entrants.						Regulars.						Total defective of boys and girls.
		Boys.			Girls.			Boys.			Girls.			
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	
1	Nasal Catarrh	103	103	...	17	17	...	89	88	1	6	6	...	215
2	Nasal Polypus	1	...	1	2	...	2	7	...	7	...	...	...	10
3	Enlarged Tonsils	1182	1097	85	1014	945	69	1372	1238	124	1188	1036	152	4756
4	Granular Pharynx	4	3	1	...	...	...	12	6	6	...	...	...	16
5	Adenoids	62	...	63	...	...	...	90	5	85	1	...	1	154
6	Enlarged cervical glands.	112	112	...	117	110	...	109	109	...	189	177	...	527
7	Bifid & elongated uvula.	3	...	...	4	...	...	3	1	...	5	...	...	15
8	Other Conditions	1	...	1	...	...	...	5	3	1	...	...	...	6

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N.B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

Eye Table.

No.	Defects.	Entrants.						Regulars.						Total defective of boys and girls.
		Boys.			Girls.			Boys.			Girls.			
		No. defective.	No. sent to Corporation dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	No. defective.	No. sent to Corporation dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	No. defective.	No. sent to Corporation dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	No. defective.	No. sent to Corporation dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	
1	Conjunctivitis	51	48	3	63	63	...	56	43	13	50	50	...	220
2	Blepharitis	5	...	5	3	3	...	6	...	6	5	4	1	19
3	Granular lids	7	...	7	30	25	5	8	...	8	36	28	8	81
4	Corneal opacity	6	...	5	12	...	5	16	...	12	16	...	5	50
5	Corneal ulcer	...	...	...	...	...	...	...	...	...	...	...	...	...
6	Staphyloma	...	...	...	...	...	...	2	...	2	...	...	...	...
7	Dacryocystitis	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Cataract	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Xerosis	152	152	...	39	39	...	175	175	...	41	41	...	407
10	Stye	6	3	3	4	2	2	1	1	11	3	2	...	14
11	Squint	11	...	6	14	...	1	22	3	...	2	...	...	61
12	Keratitis	...	...	...	...	...	...	...	...	...	...	...	...	...
13	Prosis	4	...	1	...	...	...	...	...	...	...	...	...	2
14	Other conditions	13	11	2	3	...	...	22	8	13	5	...	...	43
15	Defective Vision	38	15	23	6	1	5	127	42	85	12	...	12	187

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N. B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

No.	Systems or Organs.	Diseases.	No. Defective.				Total defective of boys and girls.
			Entrants.		Regulars.		
			Boys.	Girls.	Boys.	Girls.	
1	Ear.	1. Otorrhoea ...	80	25	137	38	280
		2. Otitis ...	16	12	23	8	59
		3. Other ear diseases ...	19	4	11		34
		4. Defective hearing ...	...	2	8	2	12
2	Speech	1. Stammering ...	6	1	17	2	26
		2. Lispings ...	4	...	1	...	5
		3. Dumb ...	...	...	...	1	1
3	Heart and Circulation.	1. Heart Disease (a) Organic ...	16	2	29	5	52
		(b) Functional ...	10	...	30	...	40
		2. Anaemia ...	28	5	25	11	69
		3. Other conditions ...	7	...	11	...	18
4	Lungs.	1. Bronchitis (acute and chronic) ...	128	40	107	39	314
		2. Other non-tubercular diseases (asthma, etc.) ...	7	4	9	3	23
5	Tuberculosis.	1. Pulmonary (a) Definite ...	3	...	4	...	7
		(b) Suspected ...	1	1	8	4	14
		2. Non-Pulmonary (a) Glands ...	3	...	2	2	7
		(b) Spine ...	...	...	...	...	...
		(c) Hip ...	...	...	...	...	...
		(d) Bones & Joints ...	1	...	...	...	1
		(e) Skin ...	...	...	...	...	...
		(f) Other forms ...	1	...	...	...	1
6	Abdominal Organs.	1. Enlarged Spleen ...	42	11	55	10	118
		2. " Liver ...	6	...	2	...	8
		3. " Liver and Spleen ...	...	...	2	2	4
		4. Hydrocele (a) Vaginal ...	16	...	11	...	27
		(b) Cord ...	6	...	4	...	10
		(c) Infantile ...	...	...	...	...	...
		5. Hernia (a) Inguinal ...	21	...	...	...	45
		(b) Umbilical ...	5	...	8	1	14
		(c) Femoral ...	...	...	...	...	...
		6 Stomach conditions ...	5	6	9	5	25
		7. Bowel conditions ...	10	8	21	7	46
		8. Other conditions ...	13	...	17	...	30
		9. Generative disorders in girls ...	...	...	...	...	...
7	Bones and Joints.	1. Bones (a) Fractures ...	1	1	...	...	2
		(b) Caries ...	...	...	...	...	...
		(c) Deformities ...	...	1	3	4	8
		(d) Diseases ...	...	1	1	...	2
		2. Joints (a) Dislocations & Sprains ...	1	...	1	...	4
		(b) Diseases ...	3	...	1	...	1
		(c) Deformities ...	...	...	1	...	1
		3. Rickets (a) General ...	108	...	78	...	186
		(b) Deformed chest ...	64	2	81	13	160
8	Nervous System.	1. Organic disease (Palsies etc.) ...	2	...	4	...	6
		2. Functional disorders ...	2	...	5	...	7
		3. Other conditions ...	1	...	2	1	4
9	Psychic System.	1. Mentally defective ...	...	...	2	...	2

No.	Systems or Organs.	Diseases.	No. Defective.				Total defective of boys and girls.
			Entrants.		Regulars.		
			Boys.	Girls.	Boys.	Girls.	
10	Deformities.	1. General Deformity:— (a) Spinal deformity ... (b) Talipes ... (c) Shortened limbs ... (d) Congenital dislocation hip... (e) Ankylosis of joints ... (f) Amputated limbs ... (g) Genu Varum & Valgum ... (h) Supernumerary Fingers ... (i) Flat foot ... (j) Syndactily ... (k) Dwarf ... (l) Other conditions ...	... 1 2 3 ... 1 1 1 1 ... 3	 1 1 ... 2 ... 2 ... 1	1 1 2 ... 1 1 1	3 7 2 1 5 ... 2 4 4 1 ... 14	

Infectious Diseases Table.

No.	Defects.	Entrants.						Regulars.						Total defective of boys and girls.
		Boys.			Girls.			Boys.			Girls.			
		No. defective.	No. sent to Corporation dispensaries.	No. referred to special sections of Hospitals.	No. defective.	No. sent to Corporation dispensaries.	No. referred to special sections of Hospitals.	No. defective.	No. sent to Corporation dispensaries.	No. referred to special sections of Hospitals.				
1	Skin :—	378	378	...	206	206	...	449	419	...	242	242	...	1,275
2	Scabies	77	71	6	5	5	...	96	92	4	7	7	...	185
3	Eczema	147	92	55	16	16	...	128	114	9	24	24	...	310
4	Tinea & Fungus	77	71	6	10	10	...	68	66	2	11	11	...	166
5	Lichen	3	1	2	1	1	...	6	1	4	1	1	...	10
6	Dermatitis	15	15	...	...	...	...	37	37	...	...	...	...	52
7	Pruritis	1	1	...	...	...	...	...	...	...	...	...	...	5
8	Psoriasis	...	...	...	...	...	...	...	...	...	...	...	...	...
9	Impetigo	77	...	77	15	...	...	317	...	317	51	...	...	480
10	Leprosy	8	2	6	3	...	...	10	1	9	5	3	...	26
	Other conditions	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other infectious diseases :—	...	...	...	...	...	...	...	...	...	...	...	...	...
1	Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...
2	Kala-azar	...	...	...	...	...	...	2	...	2	...	...	...	...
3	Hook-worm	6	1	5	...	...	...	7	2	5	...	...	...	13
4	Influenza	...	...	...	...	...	...	2	2	...	...	...	...	2
5	Mumps	...	...	...	...	...	...	...	...	...	...	...	...	5
6	Whooping Cough	2	2	...	...	...	...	1	1	...	2	2	...	3
7	Congenital Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...
8	Other conditions	1	...	1	2	...	...	7	6	1	1	1	...	11

N.B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

Other Diseases Table.

No.	Defects.	Entrants.						Regulars.						Total defective of boys and girls.
		Boys.			Girls.			Boys.			Girls.			
		No. defective.	No. sent to Corporation dispensaries.	No. referred to Govt. General Hospitals.	No. defective.	No. sent to Corporation dispensaries.	No. referred to Govt. General Hospitals.	No. defective.	No. sent to Corporation dispensaries.	No. referred to Govt. General Hospitals.	No. defective.	No. sent to Corporation dispensaries.	No. referred to Govt. General Hospitals.	
1	Worms	124	124	...	6	...	102	102	...	10	10	...	242	
2	Wounds, cuts, ulcers, etc	99	86	13	35	35	86	70	16	57	57	...	277	
3	Undescended Testis	7	...	...	...	...	...	...	...	...	...	...	7	
4	Phimosis	87	...	87	...	...	141	...	141	...	...	...	228	
5	Enlarged groin glands	4	1	3	25	25	8	19	1	20	20	1	13	
6	Pyrexia	12	11	1	21	21	20	15	1	23	23	...	77	
7	Boils and abscesses	17	14	3	1	...	16	...	1	...	...	...	77	
8	Keloids	...	...	...	1	...	1	...	...	...	...	...	2	
9	Warts	...	...	...	4	4	...	...	...	...	2	...	6	
10	Leucodermic patches	9	...	...	5	5	16	...	...	2	4	...	34	
11	Tumours	4	...	4	...	...	17	...	17	2	...	...	23	
12	Obesity	4	...	...	...	...	10	...	2	...	7	...	14	
13	Whitlow	...	...	...	1	1	1	1	...	...	4	...	9	
14	Xeroderma	13	13	...	3	3	26	26	2	...	...	...	46	
15	Dog bite	...	...	...	...	...	2	...	...	...	...	...	2	
16	Sinus	...	...	...	...	...	1	1	1	...	...	...	1	
17	Burns & Scalds	...	...	...	2	...	2	2	2	2	3	...	7	
18	Other conditions	19	14	5	9	9	42	19	23	14	14	...	84	

N.B.—Cases not amenable to or not requiring treatment have been omitted in the treatment column.

Statement of "Following-up" work done showing the results of Medical advice, 1936-37.

Number.	Systems or Organs.	Diseases.	Operations performed after medical advice.	No. of cases cured after treatment.	No. of cases improved after treatment.	No. of cases where treatment was continued.	Remarks.
1	...	Malnutrition	...	200	634	579	
2	Teeth & Mouth.	Dirty Teeth	29*	...	45†	31†	{ *Scaled. †Cleaned and washed daily.
		Dental Caries	84	...	13	2	
		Stomatitis	...	483	307	300	
		Glossitis	...	10	15	14	
		Tongue Tie	8	...	...	...	
3	Nose & Throat.	Nasal Catarrh and Rhinitis.	...	142	22	8	
		Enlarged Tonsils and Adenoids.	95	341	791	1,022	
		Enlarged Cervical glands.	...	124	163	93	
		Granular Pharynx...	...	7	5	1	
		Nasal Polypus	1	...	1	...	
		Elongated uvula	2	...	...	1	
4	Eye Diseases	Conjunctivitis	...	164	21	8	
		Xerosis	...	68	199	53	
		Stye	1	4	...	...	
		Granular lids	...	2	4	15	
		Blepharitis	...	3	8	3	
		Staphyloma	...	...	...	2	
		Pterygium	1	...	1	...	
		Corneal opacity	...	3	5	1	
		Keratitis	...	...	...	1	
		Squint	...	...	1	5	
		Sub-Conjunctival Haemorrhage.	...	...	1	...	
5	Defective Vision	...	29	4	14	44	
6	Ear Diseases	Otitis	...	21	10	9	
		Otorrhoea	...	74	78	63	
		Wax ear	...	22	...	4	
		Defective hearing	...	...	...	1	
7	Circulatory System.	Anaemia	...	10	26	17	
		Functional disease...	...	14	11	9	
		Organic disease	...	...	10	18	
8	Tuberculosis	Pulmonary—	...	...	...	...	
		(a) Definite	...	...	2	5	
		(b) Suspected	...	...	10	4	
		Other forms	...	...	3	6	
9	Respiratory System.	Bronchitis	...	196	40	8	
		Asthma	...	2	7	6	
10	Abdominal Organs.	Enlarged Spleen	...	34	78	6	
		" Liver	...	3	3	2	
		" Liver and Spleen.	...	...	2	2	

Statement of "Following-up" work done showing the results of Medical advice, 1935-36.—contd.

Number.	Systems or Organs.	Diseases.	Operations performed after medical advice.	No. of cases cured after treatment.	No. of cases improved after treatment.	No. of cases where treatment was continued.	Remarks.
	Abdominal Organs—contd.	Diarrhoea	...	1	...	...	
		Dysentery	...	3	6	3	
		Dyspepsia	...	2	2	...	
		Chronic constipation	...	12	...	...	
		Jaundice	...	1	1	1	
		Hydrocele	1	...	...	...	
		Inguinal Hernia	4	...	2	...	
		Umbilical Hernia	...	...	...	...	
11	Bones & Joints.	Rickety Chest and General Rickets.	...	86	123	53	
		Fracture	2	...	...	...	
12	Infectious and Contagious Diseases.	Scabies	...	841	223	43	
		Eczema	...	94	32	20	
		Tinea, Fungus and Ringworm.	...	154	43	34	
		Leprosy	...	6*	55	335	* Arrested 17 left, not traceable 7 refused 39 Indifferent 1, Excluded.
		Lichen	...	12	24	73	
		Pruritis	...	1	2	3	
		Urticaria	...	10	5	2	
		Psoriasis	...	...	1	1	
		Hook-worm	...	1	7	3	
		Mumps	...	...	1	...	
		Whooping cough	...	1	1	1	
		Dermatitis	...	2	4	2	
		Influenza	...	2	...	...	
		Filariasis	...	...	...	...	
13	Nervous and Psychic Systems.	Facial Paralysis	...	1	...	...	
		Incontinence of urine.	...	...	...	1	
14	Other diseases and defects.	Worms	...	192	10	...	
		Wounds, cuts, ulcers etc.	...	111	20	17	
		Boils and Abscesses.	3	17	...	2	
		Pyrexia	...	42	...	...	
		Phimosis	93	...	...	...	
		Leucodermic patches.	...	...	2	1	
		Burns, Scalds and Whitlow.	...	5	...	2	
		Xeroderma	...	2	2	18	
		Enlarged groin glands.	...	2	2	4	
		Warts	...	1	1	2	
		Dog bite	...	2	...	...	
		Tumours	2	...	...	...	
		Hypospadiasis	1	...	...	...	
		Ganglion	1	...	...	...	
		Cellulitis	1	...	...	...	
		Other conditions	...	11	16	28	

[illegible]

Age.	Vaccinated.											Un-vaccinated.						
	Vaccinated successfully with marks visible.								Vaccinated with marks not visible.			Total.				Un-vaccinated.		
	1	2	3	4	5	6	Total admitted.	Death.	Mortality per cent.	Total admitted.	Death.	Mortality per cent.	Admissions.	Death.	Recovered.	Mortality per cent.		
																	Admissions.	Death.
Under 1 Year	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	100	
1—2 Years	...	1	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	
2—3 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
3—4 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
4—5 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
5—10 "	1	...	...	...	...	...	1	...	...	...	...	...	*1	...	1	...	...	
10—20 "	1	...	...	...	...	...	1	...	...	2	...	...	3	...	...	...	...	
20—40 "	4	3	4	2	...	...	13	1	7.69	3	1	6.25	16	1	1	...	100	
40—60 "	2	...	...	...	...	...	2	...	...	1	...	...	3	...	...	...	...	
60 & upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total ..	8	4	4	2	...	...	18	1	5.5	6	...	...	24	1	22	4.18	66.66	

* Remained in the hospital after 31--12--1936.

Statement showing the number of cases admitted and discharged and of deaths under various diseases in the Krishnampet Infectious Diseases Hospital during 1936.

	Small-pox.	Chicken-pox.	Measles.	Cholera.	Dysentery.	Diarrhoea.	Mumps.	Whooping Cough.	Pneumonia.	Enteric Fever.	Malaria.	Pyrexia of unknown origin.	Kala-azar.	Pulmonary Tuberculosis.	Secondary Syphilis.	Cerebro Spinal Meningitis.	Diphtheria.	Other Diseases.	Total.
Patients remaining in the Hospital on 31st December 1935 at Midnight ...	1	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
Patients admitted from 1st January 1936 to 31st December 1936 ...	10	361	38	109	...	...	...	...	...	...	...	...	...	...	3	...	...	77	598
Total No. treated ...	11	365	39	109	...	...	...	...	...	...	...	...	...	...	3	...	...	77	604
" No. Discharged...	8	345	36	55	...	...	...	...	...	...	...	...	...	...	...	...	...	59	506
" No. Died ...	...	...	1	47	...	...	...	...	...	...	...	...	...	...	...	...	...	15	63
Mortality rate per cent ...	...	...	2.56	43.12	...	...	...	...	...	...	...	...	...	...	...	...	19.48	10.43	
Patients remaining in the Hospital on 31st December 1936 at Midnight ...	...	20	2	7	...	...	...	...	...	...	...	...	...	...	...	...	...	3	35

Statement showing the Vaccinal Condition of Small-Pox Patients in the Krishnampet Infectious Diseases Hospital during 1936.

Age.	Vaccinated.												Un-vaccinated.				
	Vaccinated successfully with marks visible.						Vaccinated with marks not visible.			Total.			Admission.	Death.	Recovered.	Mortality per cent.	
	1	2	3	4	5 & 6	Total admitted.	Death.	Mortality per cent.	Total admitted.	Death.	Mortality per cent.						
Under 1 year.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1 to 2 years.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 to 3 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3 to 4 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4 to 5 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 to 10 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 to 20 "	...	2	1	2	...	5	...	...	2	...	...	7	...	1	...	...	...
20 to 40 "	1	1	...	...	...	2	...	...	...	...	...	2	...	...	...	...	...
40 to 60 "	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
60 & upwards	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	1	3	1	2	...	7	...	...	2	...	...	9	...	1	...	1	...

H—27

Statement showing the admissions in the two Infectious Diseases Hospitals according to nationality and sex during 1936.

Nationality.		Tondiarpet Hospital.		Krishnampet Hospital.		Total.
		Males.	Females.	Males.	Females.	
Europeans and Anglo-Indians	...	69	31	1	3	104
Hindus	...	457	241	224	108	1,030
Muhammadans	...	33	6	69	5	113
Others	...	169	118	138	50	475
Total	...	728	396	432	166	1,722

TABLE I.

Showing the Meteorological Data for the City of Madras, 1936.
(Daily Averages).

Month.	Hours of Bright Sunshine	Percentage of cloudiness during the day.	Temperature (°F.)			Velocity of wind in miles per day.	Total Rain-fall (in inches) for the month.
			Maximum.	Minimum.	Mean.		
January	10.1	3.8	85.0	68.9	76.4	208	0.10
February	8.7	5.7	85.5	73.3	78.6	255	2.53
March	9.2	4.4	87.5	73.1	80.2	210	0.90
April	10.2	5.4	94.8	78.2	84.9	278	0.46
May	8.8	6.1	95.6	81.6	86.8	275	0.02
June	5.8	8.6	96.3	80.3	86.3	279	2.82
July	5.7	8.7	94.6	79.2	84.9	243	4.87
August	6.7	8.4	94.1	77.3	83.8	254	5.99
September	8.3	5.9	92.5	77.8	83.7	245	1.93
October	7.8	6.1	89.7	76.2	82.0	232	8.16
November	7.4	7.3	84.7	73.5	78.7	248	14.53
December	8.3	7.5	84.0	72.0	77.3	311	1.94

TABLE II

Showing the Monthly Lake Level and Rain-fall in Sholavaram and Red Hills Lakes for 1936.

Month.		Sholavaram Lake.		Red Hills Lake.			
		Total Rainfall in inches.	Lake Level in feet.	Total rain fall in inches.	Average lake level.	Average Temperature.	
						Maxi- mum.	Mini- mum.
January	...	1.84	60.29	1.47	65.36	83.8	76.8
February	...	Nil	59.91	Nil	64.39	88.0	71.6
March	...	"	56.73	"	63.49	93.8	74.0
April	...	"	53.80	"	62.06	99.0	78.4
May	...	"	48.43	"	60.38	103.5	81.0
June	...	0.84	47.14	1.64	58.67	103.0	78.5
July	...	3.06	46.70	1.92	57.14	98.0	78.0
August	...	8.76	48.32	5.80	56.40	96.5	76.3
September	...	2.90	55.64	4.36	63.15	96.6	72.4
October	...	18.88	57.94	17.91	64.89	96.0	72.7
November	...	7.74	60.31	10.25	66.16	94.4	72.5
December	...	1.38	59.90	1.52	65.79	94.6	72.6
Total	...	45.40	...	44.87	...	...	...

TABLE No. V.

Showing the Percentage Reduction of Organic matter (Tidy's 4 hours' test)
at different stages of the Water Purification System, 1936.

Month.	Raw water Kilpauk end.	Filtrates from beds.		Test Tap on the Rising Main at the Pumping Station.		Service Taps in the distribution System.	
		A. O.	% Reduc- tion over R. W.	A. O.	% Reduc- tion over R. W.	A. O.	% Reduc- tion over R. W.
January	...	0.119	0.092	22.7	0.075	37.0	...
February	...	0.137	0.109	20.4	0.093	32.1	...
March	...	0.153	0.117	23.5	0.099	35.3	0.084
April	...	0.145	0.131	9.7	0.107	26.2	0.103
May	...	0.164	0.136	17.1	0.114	30.5	0.098
June	...	0.176	0.145	17.6	0.122	30.7	0.126
July	...	0.173	0.149	13.9	0.127	26.6	0.113
August	...	0.180	0.155	13.9	0.133	26.1	0.115
September	...	0.173	0.144	16.8	0.125	27.7	0.134
October	...	0.169	0.143	15.4	0.125	26.0	...
November	...	0.147	0.111	24.5	0.098	36.7	0.084
December	...	0.148	0.116	21.6	0.093	37.2	0.086
Average	...	0.155	0.129	18.1	0.109	31.0	0.105

TABLE No. VI.

Showing the applied dose of chlorine for filtered water.

1936.	Applied dose in parts per million.	Remarks.
January	...	1.0
February	...	"
March	...	"
April	...	"
May	...	"
June	...	"
July	...	"
August	...	"
September	...	"
October	...	"
November	...	"
December	...	"
Average	...	1.0

1936	Month.	Red Hills lake			Kilpauk end of Raw-water conduit			Filtrates from beds			Test Tap K. P. S.			Distribution System		
		Ammoni- acal Nitrogen.	Albumi- noid Nitrogen.	Absorbed Oxygen.	Ammoni- acal Nitrogen.	Albumi- noid Nitrogen.	Absorbed Oxygen.	Ammoni- acal Nitrogen.	Albumi- noid Nitrogen.	Absorbed Oxygen.	Ammoni- acal Nitrogen.	Albumi- noid Nitrogen.	Absorbed Oxygen.	Ammoni- acal Nitrogen.	Albumi- noid Nitrogen.	Absorbed Oxygen.
January	...	Trace	0.029	0.106	Trace	0.028	0.119	Trace	0.025	0.092	Trace	0.025	0.075	...	...	...
February	...	Trace	0.034	0.133	0.001	0.040	0.137	0.001	0.031	0.109	0.001	0.029	0.093	0.032	0.032	0.084
March	...	...	...	...	Trace	0.044	0.153	Trace	0.036	0.117	Trace	0.033	0.099	...	...	...
April	...	0.005	0.037	0.115	Trace	0.041	0.145	Trace	0.035	0.131	0.001	0.032	0.107	0.005	0.028	0.103
May	...	...	...	...	Trace	0.049	0.164	Trace	0.033	0.136	0.002	0.031	0.114	0.002	0.027	0.098
June	...	Trace	0.045	0.177	0.001	0.046	0.176	0.003	0.038	0.145	0.003	0.034	0.122	0.008	0.034	0.126
July	...	0.001	0.048	0.184	0.001	0.046	0.173	0.003	0.043	0.149	0.003	0.037	0.127	0.005	0.032	0.113
August	...	0.002	0.050	0.166	0.001	0.056	0.180	0.006	0.047	0.155	0.008	0.042	0.133	0.024	0.035	0.115
September	...	...	...	...	0.002	0.051	0.173	0.006	0.043	0.144	0.006	0.039	0.125	0.011	0.037	0.134
October	...	...	...	...	Trace	0.057	0.169	0.002	0.048	0.143	Trace	0.035	0.093	Trace	0.037	0.084
November	...	...	...	...	Trace	0.046	0.147	Trace	0.038	0.111	Trace	0.035	0.093	Trace	0.035	0.086
December	...	Trace	0.032	0.104	Trace	0.048	0.148	Trace	0.034	0.116	Trace	0.031	0.093	Trace	0.035	0.086

TABLE
Bacteriological Results—

1936.		Red Hills Lake.								Raw-water Kilpauk end.									
Months.	Number of Samples.	Total Colonies per c.c. on Nutrient Agar at 37°C after 48 hours.	Lactose fermenters in							Number of Samples.	Total Colonies per c.c. on Nutrient Agar at 37°C after 48 hours.	Lactose fermenters in							
			—60 c.c.	+60 c.c.	+20 c.c.	+10 c.c.	+5 c.c.	+1 c.c.	+0.1 c.c.			—60 c.c.	+60 c.c.	+20 c.c.	+10 c.c.	+5 c.c.	+1 c.c.	+0.1 c.c.	
January	...	1	680	...	...	100.0	...	...	...	...	2	815	...	...	...	50.0	50.0	...	...
February	...	1	800	...	...	...	...	100.0	...	...	2	795	...	...	...	50.0	50.0	...	...
March	...	...	...	...	...	...	...	...	...	...	4	802	...	...	...	75.0	25.0	...	...
April	...	1	730	...	...	...	100.0	...	...	...	3	767	...	...	...	...	100.0	...	...
May	...	...	...	...	...	...	...	...	...	...	3	797	...	...	...	...	66.7	33.3	...
June	...	1	700	...	...	...	100.0	...	...	...	4	670	...	...	...	...	75.0	25.0	...
July	...	2	810	...	...	...	...	50.0	50.0	...	4	830	...	...	...	...	25.0	75.0	...
August	...	1	870	...	...	...	...	100.0	...	...	3	820	...	...	...	...	66.7	33.3	...
September	...	...	...	...	...	...	...	...	...	...	4	818	...	...	...	...	25.0	75.0	...
October	...	...	...	...	...	...	...	...	...	...	4	805	...	...	...	...	100.0	...	...
November	...	...	...	...	...	...	...	...	...	...	4	833	...	...	...	25.0	50.0	25.0	...
December	...	1	790	...	...	...	...	100.0	...	...	2	810	...	...	...	50.0	50.0	...	...
Average	..	1	769	...	...	14.3	28.6	50.0	7.1	...	3	797	...	...	...	20.8	56.9	22.2	...

No. III.

Percentage Averages.

Filtrates from Beds.								Test Tap, Kilpauk Pumping Station.								Distribution System.							
Number of Samples.	Total Colonies per c.c. on Nutrient Agar at 37°C.	Lactose fermenters in						Number of Samples.	Total Colonies per c.c. on Nutrient Agar at 37°C.	Lactose fermenters in						Number of Samples.	Total Colonies per c.c. on Nutrient Agar at 37°C.	Lactose fermenters in					
		—60 c.c.	+60 c.c.	+20 c.c.	+10 c.c.	+5 c.c.	+1 c.c.			+0.1 c.c.	—60 c.c.	+60 c.c.	+20 c.c.	+10 c.c.	+5 c.c.			+1 c.c.	+0.1 c.c.	—60 c.c.	+60 c.c.	+20 c.c.	+10 c.c.
33650	6.1	22.2	22.2	22.2	27.3	3.0	...	17320	76.5	23.5	...	...	...	...	...	...	...	...	...	...	...	...	
43639	2.3	11.6	37.3	27.9	18.6	2.3	...	23330	69.6	21.7	8.7	...	...	...	...	6525	...	33.3	50.3	16.7	...	...	...
43691	...	2.3	25.6	27.9	41.9	2.3	...	22424	27.5	54.6	16.1	...	...	...	...	...	...	...	...	...	...	...	
32622	...	9.4	21.9	28.1	34.4	6.2	...	17377	58.8	29.4	11.8	...	...	...	...	6417	16.7	33.3	33.3	16.7	...	...	...
43554	4.7	20.9	18.6	25.6	27.9	2.3	...	24355	25.0	75.0	...	...	...	...	...	6470	16.7	...	16.7	50.0	16.7	...	...
40458	...	22.5	32.5	17.5	20.0	7.5	...	18304	27.8	50.0	22.2	...	...	...	...	5448	20.0	40.0	...	20.0	20.0	...	...
42655	...	...	19.0	31.0	33.3	16.7	...	14373	14.3	64.3	21.4	...	...	...	...	2350	...	100.0	...	...	...	...	...
43562	2.3	2.3	41.9	13.9	34.9	4.7	...	21390	...	38.1	28.6	28.6	4.7	...	...	4570	...	25.0	50.0	...	25.0	...	...
36677	...	...	25.0	19.4	44.5	11.1	...	22407	18.2	36.4	45.4	...	...	...	...	8596	...	...	62.5	12.5	25.0	...	...
50467	2.0	16.0	32.0	20.0	23.0	2.0	...	26357	19.2	50.0	30.8	...	...	...	...	...	...	...	...	...	...	...	...
31653	...	...	19.4	25.8	45.1	9.7	...	19385	36.8	47.4	15.8	...	...	...	...	10624	...	20.0	40.0	10.0	30.0	...	...
24632	12.5	12.5	29.2	12.5	25.0	8.3	...	14281	71.4	14.3	14.3	...	...	...	...	6543	50.0	16.7	16.7	...	16.6	...	...
38605	2.5	10.0	27.0	22.3	31.7	6.3	...	20359	37.1	42.1	17.9	2.4	0.4	...	...	6505	11.5	29.8	29.9	14.0	14.8	...	...

ANNUAL REPORT OF THE CHILD WELFARE SCHEME.

In the last year's report it was stated that as a result of the *Ad Hoc* Committee's recommendations for the separation of dispensaries from the Child Welfare Scheme and the consequent transfer of 8 out of 13 Lady Doctors working in the Child Welfare Scheme to the Corporation Dispensaries, only 6 Lady Doctors were transferred to the dispensaries from 1-1-1935, while the remaining two continued in the Child Welfare Scheme. These 2 Lady Doctors were also transferred to the dispensaries from 1-5-1936. From 1-5-1936 there were only 5 Lady Doctors for the Child Welfare Scheme four of them in charge of 3 Centres each and one relieving.

Another recommendation of the *Ad Hoc* Committee regarding the appointment of Maternity Supervisors was also given effect to during the year. These Maternity Supervisors were put in charge of the work of the Midwives of the Scheme. In spite of the wide publicity given to the appointments it was not possible to secure more than 5 candidates possessing all the qualifications prescribed for the post. Two out of the 5 Maternity Supervisors who were married, resigned their jobs subsequently, as the nature of their work necessitated their residing in the quarters and they were unwilling to reside in the quarters provided for them.

Staff.—The staff of the Scheme consisted of 82 Midwives, 26 Health Visitors, 3 Maternity Supervisors and 5 Lady Doctors.

Work of the Staff.

Maternity Service.—During the year under report 13,651 cases of labour which is 46.7% of the total births in the City came under the observation of the Scheme as against 14,849 (47.8%) in the previous year. Of these 12,049 cases were conducted by the midwives of the Scheme. 773 were taken over after the labour was conducted by the barber women; 829 cases were sent to various maternity hospitals in the city, as they were mostly complicated. In a few instances even normal cases had to be sent to hospitals at the request of the patients themselves either for want of accommodation in their homes or for want of proper attendance on the destitute mothers. Of the 13,651 labour cases, 2,333 were Mohammedans and 11,318 were Non-Mohammedans as against 2,309 Mohammedans and 12,540 Non-Mohammedans for the previous year (*Vide* Statement No I).

There was a fall in the number of labour cases during the year by 1,198 as against the previous year. This is due to the fact that the Child Welfare Staff had to carry out the recommendations of the *Ad Hoc* Committee, "that there should be no maternity service by the Corporation for those whose income is above Rs. 50." As a result of this recommendation, Maternity Service had to be refused in a few cases where the income of the husbands was over Rs. 50.

At the commencement, Maternity Service was made available to all classes of public without any restrictions and irrespective of the income of the husbands. When once the popularity of the Scheme was established, some restrictions were gradually introduced. Owing to the restrictions imposed under the rules now in force which permit of free service only to the poor and lower middle classes whose family income is Rs. 50 or less, mostly middle class people whose monthly income is between Rs. 50 and Rs. 100 resort to either barber women or hospitals.

Formerly, an out-patient clinic was attached to each centre where in minor ailments of infants, expectant and nursing mothers were also treated. After the dispensaries attached to Child Welfare Centres were separated, the patients find it very inconvenient to take advice and prescription at the centres and proceed elsewhere for medicine.

The midwives paid 1,61,166 visits during the year 1936 as against 1,71,028 of the previous year. (*Vide* Statement II). To make the existing staff more efficient refresher course was given to the Midwives. The total number of visits paid by the Health Visitors was 1,36,788, as against 1,41,704 in the previous year. The total number of pre-maternity cases registered by them was 11,712 as against 12,914 in the year 1935. Of these 10,661 attended the ante-natal clinic (*Vide* Statement III).

During the year a number of Health Visitors went on leave and substitutes could not be appointed in their places owing to paucity of qualified candidates. This resulted in the decrease of the number of visits. Similarly some of the midwives also availed themselves of leave and in short vacancies, the work had to be carried on without substitutes.

As already pointed out in the Annual Report for the year 1934, there has been a fall in the number of Health Visitors from 31 to 26. Some have resigned as they pay fixed for the Health Visitors in the Corporation is lower than the scale of pay in Government. If the present scale of pay of Rs. 40-2-60 is raised to the old scale of Rs. 50-3-80 it is likely to attract qualified candidates. Owing to the shortage of Health Visiting Staff, it was not possible for the existing staff to undertake regular home visiting of all infant born in the city.

A considerable portion of the work of the Child Welfare Scheme being of an educative nature it has to be carried on more in the patient's houses than in the centres and a larger staff of Health Visitors are required, so that not only every infant born in the city should be taken on for regular visits, but older children also should be looked after till they reach the school going age.

Attention is here invited to the following extracts from G.O. No. 3901 L.S.G. dated 3-9-1936 and the remarks of the Director of Public Health on the Administration Report of the Corporation of Madras for 1934-35, the number of Health Visitors employed during the year was 7 less than that of the previous year (No. of H.Vs.—1934-31; 1935-24). The present staff of Medical women and Health Visitors cannot possibly cope with the full attendance at clinics of every infant and pre-school child born under the care of the Child Welfare Scheme. The regular attendance of these infants and children along with their mothers can be effected only by sustained home visiting by a large staff of health visitors and by adequate medical advice and supervision at the clinics. This aspect of maternity and child welfare work is important and should be borne in mind when changes are effected.

Remarks of the Director of Public Health on the Administration Report of the Corporation of Madras, 1934-35.

"Good work has been done under the Child Welfare Scheme, but there is almost unlimited scope for more. About 50% of the total births came under the care of the Scheme and 10,468 ante-natal cases were attended to during the year.

A staff 13 Medical Women is however, insufficient to deal with 14,457 pregnant women and about twice as many infants and pre-school children, and so any proposal to reduce their number should be viewed with grave concern. The present staff of medical women and health visitors cannot possibly cope with the full attendance at clinics of every infant and pre-school child born under the care of the Scheme. Moreover, the regular attendance of these with their mothers can be effected only by sustained home visiting by a larger staff of Health Visitors and by adequate medical advice and supervision at the clinics. This aspect of maternity and child welfare work is important and should be kept in mind when changes are effected".

The total number of visits paid by the 5 Lady Doctors was 5,822 as against 8,018 for 7 Lady Doctors in 1935. As already mentioned, each doctor is in charge of 3 centres and visits each centre twice a week. They hold ante-natal clinic in each centre weekly twice in the mornings, infants and toddlers clinic

weekly once in the evenings and one evening in the week is set apart for visiting puerperal cases which require their attention; and also attend to urgent calls, whenever necessary. The 5 Lady Doctors have treated 3469 morbid cases (*Vide* Statement V.) as against 3739 for 7 Lady Doctors in 1935.

Ante-Natal Work.—10,661 booked cases which is 78% of the total birth as against 10,609 for the previous year actually attended the clinic held in the various centres and sought medical advice and treatment. The Lady Doctors examine the expectant mothers and treat them according to the nature of each case. The expectant mothers are requested to attend the centres from the 12th week of pregnancy unless owing to trouble at a previous confinement they have been asked to attend earlier. They are advised to attend the clinic once a month till the 20th week, once a fortnight until 36th week and then weekly until she is confined. Certain amount of indifference to early registration of pregnancy is still traceable and this is to be attributed mainly to lack of education among the masses due to inadequate staff of Health Visitors.

Very often expectant mothers with acute toxemias of pregnancy come under the observation of the scheme. These patients require ante-natal and post-natal treatment in hospitals rather than at Child Welfare Centres of the Corporation and every effort is being made to induce the parents of such patients, and patients themselves to seek medical treatment in a hospital, where alone a strict dietetic treatment and watchful nursing necessary for such diseases of pregnancy can be enforced and obtained. There have been a few cases of toxemia of pregnancy in which the expectant mothers were unwilling to seek treatment in a hospital. There is no provision of Law by which Corporation can enforce disciplinary measures as in hospitals. It, therefore, happens that certain patients are admitted into the hospitals at the 11th hour in a moribund condition in spite of the vigilant ante-natal work of the Child Welfare Scheme. In a few instances, at the request of the relations the patients are handed over to private medical practitioners.

Maternal Mortality.—13,651 cases came under the care of the scheme. There were 51 cases of maternal mortality 37 of which were complicated cases and were sent to various hospitals, 4 were handed over to private doctors, 6 were treated by Vaidians and 1 by barber woman. Only 3 cases of death took place among the cases treated by the Scheme. This gives 3.7 per mille for the cases which come under the care of the scheme as against 3 per mille for the previous year (*Vide* Statement VI).

The City rate is 10 per mille per 1000 live births for the year 1936.

Infantile Mortality.—Since the inauguration of the Child Welfare Scheme the infantile mortality rate has gone down considerably.

14,377 babies, which came under the care of the scheme in 1935, were kept under the observation of the Scheme during the first year of life (*i.e.*) during 1936. Of those, 2219 babies left the city or were otherwise not traceable in the course of the year. The mortality among live births was 1787. This gives an infantile mortality rate of 124.2 per 1000 live births as against 138.2 per 1000 live births in the year 1935. The city rate is 216.5 per 1000 live births for the year 1936. This reduction has certainly been made possible to a fairly large extent by the silent but efficient work of the Child Welfare Scheme (*Vide* Statement No. VII).

It is gratifying to note that the infantile mortality rate of 124.2 for the year under report as against 138.2 per mille for the previous year is the lowest on record in the history of the scheme.

Infants and Toddlers Clinic.—Infants and Toddlers Clinic was conducted once a week by the Lady Doctors who examined the babies thoroughly took down their weights and gave necessary advice to the mothers regarding their diet health etc. (The attendance at the clinics was 7876 during the year 1936.)

Milk Supply.—418 deserving babies were supplied with cow's milk during 1936 as against 458 in the previous year. There is no doubt that the compulsory feeding of infants in the centres is working satisfactorily (*Vide* Statement IX). The number has, however, fallen down as the mothers find it difficult to bring the babies twice a day most of them being from working classes.

The Corporation spends annually about Rs. 6,000 on milk supply. It is hoped that the supply of milk could be extended also to ante-natal and nursing mothers, unable to get their own supply.

Bath.—69,259 babies were given warm bath during 1936. (*Vide* Statement X).

Ambulance Car.—The total number of calls answered by the ambulance car was 512 as against 270 for the previous year.

Health Propaganda.—601 lectures were delivered at the various child Welfare Centres as against 603 for the year 1935. Of these 239 lectures with cinema films and 331 were outdoor lectures. The total attendance was 25,458 (*Vide* Statement XI).

Conclusion.—Medical supervisor and advice are necessary for every child from ante-natal days through infancy and pre-school period until he or she is handed over to the School health authorities. In order to achieve an adequate measure of success, a large staff of medical women would be needed on the staff of the Child Welfare scheme to deal with not less than 30,000 children born annually in this City.

Child Welfare,
Scheme,
6-7-1937. }

H. V. KAMALAMMAL,
Lady Superintendent, C.W.S.

STATEMENT No. I.

Statement showing the cases of labour which came under the observation of the Staff of the Child Welfare Scheme from 1st January 1936 to 31st December 1936.

Centres.	How conducted.			Total Cases.	Caste.		Remarks.
	By Nurses of the C.W.S.	Taken over after the Barber Woman conducted.	Taken to Hospital		Moham-medan.	Non-Moham-medan.	
Triplicane ...	1 533	83	68	1,684	703	981	Includ- ing 18 Twins 1 trip- lets.
Nungambakkam...	314	28	35	377	44	333	Includ- ing 3 Twins.
Mirsaibpet ...	1,190	106	76	1,372	247	1,125	
Rayapettah ...	514	60	46	620	65	555	Includ- ing 10 Twins.
Royapuram ...	923	50	72	1,045	111	934	Includ- ing 10 Twins.
Washermanpet..	1,374	79	65	1,518	259	1,259	
Muthialpet ...	1,012	50	85	1,147	310	837	Includ- ing 10 Twins.
George Town ...	1,365	79	122	1,566	99	1,467	
Purasawalkam...	1,015	48	51	1,114	45	1,069	
Egmore ...	631	67	44	742	77	665	
Perambure ...	1,062	58	102	1,222	305	917	Includ- ing 13 Twins.
Choolai ...	1,116	65	63	1,244	68	1,176	
Total ...	12,049	773	829	13,651	2,333	11,318	

STATEMENT No. II.

Number of visits paid by the Staff of the Child Welfare Scheme during the year 1936.

Centres.	Visits paid by			Total.
	Midwives.	Health Visitors.	Lady Doctors.	
Triplicane ...	18,372	13,758	594	32,724
Nungambakam ...	6,276	9,128	357	15,761
Mirsaibpet ...	14,518	14,434	397	29,349
Rayapettah ...	8,783	8,115	334	17,232
Royapuram ...	12,265	8,363	405	21,033
Washermanpet ...	18,093	11,996	384	30,473
Muthialpet ...	13,072	12,501	438	26,011
George Town ...	17,731	16,002	415	34,147
Purasawalkam ...	14,075	14,356	401	27,832
Egmore ...	9,198	9,770	369	19,337
Perambure ...	14,215	8,278	559	23,052
Choolai ...	14,569	11,087	669	26,325
Total ...	1,51,165	1,36,788	5,322	3,03,276

STATEMENT No. III.

Statement showing the Number of Ante Natal cases registered and Number of Booked Cases conducted by the C. W. Scheme during 1936.

Centres.	No. of Ante Natal Cases Registered by H. Vs.	No. of Booked cases which attended the Ante Natal Cases.	No. of booked cases conducted by :						Total
			C.W. Staff.	Barber Women.	Hospital.	Private Doctors.	Cases not traceable.	Cases not confined.	
Triplicane ...	1,301	1,091	614	64	166	12	133	96	1,091
Nungambakam ...	555	385	177	55	84	7	20	42	385
Mirsaibpet ...	1,192	1,219	753	82	199	20	114	51	1,219
Rayapettah ...	629	459	227	55	67	20	24	66	459
Royapuram ...	906	790	440	73	128	5	44	100	790
Washermanpet ...	1,320	1,157	635	81	126	2	122	191	1,157
Muthialpet ...	624	1,030	511	98	160	27	90	144	1,030
George Town ...	1,534	1,384	1,034	64	137	12	63	77	1,384
Purasawalkam ...	985	908	576	62	141	4	87	38	908
Egmore ...	758	654	353	73	108	12	52	51	654
Perambure ...	897	712	375	13	41	...	167	116	712
Choolai ...	1,011	872	488	91	120	4	68	101	872
Total ...	11,712	10,661	6,188	811	1,477	125	987	1,073	10,661

TABLE No. VII.

Showing the length of runs of filters at work during 1936.

Bed No.	Total No. of runs during the year.	Total No. of days.	Average No. of days per run.	Remarks.
1	8	161	20.1	
2	9	205	22.8	
3	10	207	20.7	
4	10	203	20.3	
5	13	218	16.8	
6	13	231	17.1	
7	11	198	18.0	
8	11	228	20.7	
9	11	217	19.7	
10	11	228	20.7	
11	6	172	28.6	
12	11	210	19.1	
13	11	220	20.0	
14	12	215	18.0	
15	7	159	22.7	
16	6	180	30.0	
17	7	180	25.7	

TABLE No. VIII.

Showing the quantity of water filtered during 1936.

Bed No.	Quantity of water in million gallons filtered at		Total quantity of water filtered in million gallons.	Remarks.
	8 Inches	12 Inches		
1	160.00	222.00	382.00	
2	239.75	240.50	480.25	
3	243.00	241.50	484.50	
4	239.75	245.00	484.75	
5	252.50	258.50	511.00	
6	272.75	265.00	537.75	
7	226.00	242.00	468.00	
8	304.75	214.50	519.25	
9	252.00	260.00	512.00	
10	276.25	267.00	543.25	
11	255.00	130.00	385.00	
12	234.25	264.00	498.25	
13	195.75	193.74	389.49	
14	260.50	245.75	506.25	
15	247.97	251.00	498.97	
16	182.24	417.50	599.74	
17	251.14	326.00	577.14	

Food Analysis.

TABLE No. 2.

TABLE NO. 2.																				
Nature of sample.	Adulterated samples received and reported during 1936.			Adulterated samples of 1935 pending disposal on 1-1-1936.			Adulterated samples received in 1935 but reported in 1936.			Total number of adulterated samples dealt with during 1936.					Average fine per conviction in 1936.	Number of convictions in 1935.	Average fine per conviction in 1935.			
	Number of samples.	Number of convictions.	Number not convicted (acquittals, withdrawals, No. prosecutions, No. destroyed etc.).	Number pending disposal on 31-12-1936.	Number of samples.	Number of convictions.	Number of acquittals, withdrawals & No. prosecutions & No. destroyed.	Number pending disposal on 31-12-1936.	Number of samples.	Number of convictions.	Number of acquittals, withdrawals & No. prosecutions & No. destroyed.	Number pending disposal on 31-12-1936.	Total number of convictions.	Total No. not convicted (withdrawals, acquittals, No. prosecutions & No. destroyed).				Total number pending disposal on 31-12-1936.	Total fines.	
Choc	151	80	12	59	48	36	6	2	2	..	..	..	201	118	18	65	3,325	28	160	22
Butter	37	21	..	16	9	7	..	..	..	..	..	..	46	28	2	16	740	26	11	16
Milk	21	17	1	3	16	15	1	..	..	..	..	..	37	32	2	3	675	21	38	17
Gingelly Oil	13	12	1	..	20	14	4	2	..	..	..	..	33	26	5	2	730	28	62	23
Groundnut Oil	23	14	1	8	..	..	..	..	..	..	..	..	23	14	1	8	271	19	..	..
Coffee Powder	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tea	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other articles	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..
Total	246	144	16	86	93	72	13	8	2	2	..	..	341	218	29	94	5,741	26	271	21

STATEMENT No. VI.

A

Maternal Mortality (Puerperal) among cases treated by
Child Welfare Scheme for 1936.

Centres.	Tuberculosis.	V. D. H.	Adherent placenta.	Eclampsia.	Tetanus.	P. P. H.	Anaemia.	Total.
Triplicane	...	...	...	...	...	...	1	1
Nungambakkam	...	...	...	...	...	...	...	...
Mirsahibpet	...	...	...	...	...	...	...	...
Rayapettah	...	...	...	...	...	...	...	...
Royapuram	...	...	...	...	...	...	1	1
Washermanpet	...	1	...	...	...	...	...	1
Muthialpet	...	...	...	...	...	...	...	...
George Town	...	...	...	...	...	...	...	...
Purasawalkam	...	...	...	...	...	...	...	...
Egmore	...	...	...	...	...	...	...	...
Perambur	...	...	...	...	...	...	...	...
Choolai	...	...	...	...	...	...	...	...
Total ...	...	1	...	...	...	...	2	3

B

Deaths among cases brought to the notice of the Child Welfare Scheme
in 1936 but not under our treatment.

	Triplicane.	Nungambakam.	Mirahibpet.	Rayapettah.	Royapuram.	Washermanpet.	Muthialpet.	George Town.	Purasawalkam.	Egmore.	Perambure.	Choolai.	Total.
1. In Hospital ...	4	2	4	2	2	5	1	4	3	...	5	5	37
2. Under Private Doctors ...	...	...	...	...	...	1	...	1	1	...	1	...	4
3. Under Vydians Treatment...	1	...	...	...	...	2	1	...	...	...	2	...	6
4. Under Barber Women.	...	...	...	...	1	...	...	...	...	...	...	...	1
	5	2	4	2	3	8	2	5	4	...	8	5	48

C

Showing the causes of death among cases brought to the notice of
Child Welfare Scheme but not under our treatment in 1936.

Centres.	Anaemia.	General Anasarca.	Fever.	Enteritis.	Adherent placenta.	Eclampsia.	V. D. H.	Septicaemia.	Sepsis.	Pneumonia.	P. P. H.	Dysentery.	Shock.	Causes unknown.	Total.
Triplicane	...	1	...	...	1	...	1	...	1	...	1	...	...	...	5
Nungambakkam	...	...	1	...	...	...	...	...	...	...	1	...	...	...	2
Mirsahibpet	...	...	...	...	2	...	...	1	...	1	...	...	...	...	4
Rayapettah	...	...	1	...	...	...	...	...	...	...	1	...	...	...	2
Royapuram	...	...	...	1	...	...	1	...	...	...	...	...	...	1	3
Washermanpet	...	...	3	1	2	...	1	...	...	...	1	...	...	...	8
Muthialpet	...	...	1	...	...	...	...	1	...	...	...	...	...	...	2
George Town	...	...	2	...	2	...	...	1	...	...	...	...	...	...	5
Purasawalkam	...	1	...	...	1	2	...	...	...	...	...	...	...	...	4
Egmore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil
Perambur	...	2	...	1	1	2	...	...	...	...	...	2	...	...	8
Choolai	...	...	1	2	1	1	...	...	...	...	...	...	...	...	5
	4	10	3	5	11	1	1	2	3	2	3	2	1	...	48

STATEMENT

Ante Natal Cases registered and diseases and ailments of Pregnancy

Centres.	Constipation.	Dyspepsia.	Scanty Urine.	Dysentery.	Bronchitis.	A. P. H.	Stomatitis.	Fever.	Leucorrhoea.	Albuminuria.	Anaemia.	Diarrhoea.	Debility.	Neuritis.	Ringworm.	Swelling.	Skin affection.	Asthma.
Triplicane	556	18	...	5	38	...	39	3	...	129	253	3	...	...	...	11	2	6
Nungambakam	172	1	40	1	19	...	18	...	...	3	68	...	33	...	...	3	...	...
Mirsaibpet	805	17	181	8	25	...	27	1	...	26	28	18	24	...	1	...	...	4
Rayapettah	259	5	30	10	20	...	29	2	1	23	41	2	3	...	1	5	3	1
Royapuram	657	...	5	...	10	...	15	...	...	34	43	1	...	...	...	...	...	...
Washermanpet	378	39	89	17	54	1	34	3	...	46	115	4	...	1	2	4	1	2
Muthialpet	172	5	52	1	19	1	60	...	2	52	156	9	57	...	6	...	12	1
George Town	218	11	...	18	8	...	165	5	...	84	222	12	67	...	38	...	...	...
Purasawalkam	230	7	66	20	22	...	57	2	...	30	78	30	31	2	2	6	7	...
Egmore	334	...	45	4	31	3	38	2	...	40	57	19	50	...	...	...	...	...
Perambure	270	21	29	14	30	...	7	6	3	18	31	11	6	4	2	10	4	6
Choolai	401	27	103	4	6	...	80	...	...	58	41	13	55	...	16	...	...	2
Total	4,452	151	640	102	283	5	567	24	6	543	1,133	122	326	14	69	46	36	24

No. IV.

diagnosed and patients advised for treatment during 1936.

Varicose Veins.	Malaria.	Eclampsia.	Heart burn.	V. D. H.	Giddines.	Syphilis.	Ulcerated Vulva.	Gastritis.	Worms.	Morning Sickness.	Retention of Urine.	Breast Abscess.	T. B.	Normal.	Strangury.	Influenza.	General Anasarca.	Threatened abortion.	Rheumatism.	Other diseases.	Total.
...	...	...	...	2	...	...	...	...	...	5	17	...	...	...	...	...	2	...	...	2	1,091
...	...	...	...	2	...	...	...	...	...	...	...	1	...	51	...	3	...	...	...	6	385
...	...	...	10	6	...	...	...	...	5	...	...	...	...	...	...	6	...	...	...	26	1,219
...	...	...	...	7	...	...	...	...	...	...	...	1	3	...	...	6	...	...	...	6	459
...	...	...	...	4	...	...	...	1	...	...	1	1	...	...	...	...	2	3	...	5	790
...	...	...	...	7	...	...	...	...	...	...	4	...	...	319	2	14	...	...	...	6	1,157
...	...	...	...	4	...	...	...	3	...	...	...	...	...	278	4	...	17	...	...	79	1,030
...	1	23	...	8	7	1	...	1	5	...	2	...	...	317	...	2	17	...	...	87	1,384
...	...	70	...	18	10	...	...	...	13	...	...	...	2	180	...	10	...	...	...	36	908
...	...	4	3	...	13	...	2	...	3	65	...	...	2	...	...	9	...	...	...	2	654
...	...	...	...	1	...	...	...	...	...	...	...	...	1	203	...	3	...	...	...	16	712
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	3	8	...	22	872
...	5	...	...	8	...	...	9	...	7	...	...	...	...	...	...	...	...	...	...	293	10,661
1	106	6	18	72	12	4	10	7	35	74	24	5	8	1,321	10	54	47	3	8	293	10,661

STATEMENT

Maternal Morbidity

Centres.	Anaemia.	Albuminuria.	Malaria.	V. D. H.	Bronchitis.	Dysentery.	Influenza.	Retained Membrane.	Adherent Placenta.	Retained Placenta.	Eclampsia.	Pneumonia.	T. B.	Ulcerated Vagina.	Retention of Urine.	Syphilis.	Asthma.	Diarrhoea.	Jaundice.
Triplicane	130	71	14	3	27	19	20	1	4	1	7	3	2	20	25	...	6	24	...
Nungambakam	10	...	2	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Mirsaibpet	6	3	...	2	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Rayapettah	17	2	1	1	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Royapuram	38	16	27	...	8	15	8	2	5	...	...	...	...	...	...	...	...	...	...
Washermanpet	7	...	...	1	1	8	...	2	...	...	...	...	...	...	6	...	...	24	...
Muthialpet	19	24	...	2	6	4	...	1	1	2	...	...	...	...	1	...	...	6	...
George Town	12	15	7	2	6	7	...	2	...	3	...	...	...	...	3	...	1	2	...
Purasawalkam	70	37	21	14	23	36	19	5	1	6	4	1	19	9	29	7	...	11	...
Egmore	75	32	6	1	36	15	12	...	...	1	...	...	...	12	17	...	7	24	2
Perambure	35	8	...	...	12	15	5	...	3	...	4	...	...	...	...	...	1	17	...
Choolai	4	...	...	...	1	15	5	...	...	...	...	...	...	...	...	...	...	7	1
Total	423	208	78	26	130	135	72	9	18	9	28	8	32	46	82	7	16	123	3

No. V.

(Puerperal) 1936.

Indigestion.	Gastritis.	Constipation.	Mastitis & Breast Abscess.	A. P. H.	P. P. H.	Skin Disease.	Stomatitis.	Sepsis.	Ulcerated Vulva.	Fever & Hyperpyrexia.	After pains.	General Anasarca.	Debility.	Swelling.	Perinium tear.	Oedema.	Other diseases.	Total.
38	5	135	3	3	1	32	41	...	26	49	26	...	...	...	...	114	...	850
...	...	...	...	...	...	...	10	...	4	12	...	...	4	...	5	...	...	52
...	...	...	...	4	3	...	...	...	...	50	...	...	...	...	3	...	...	90
...	10	11	...	...	...	...	6	...	...	20	...	...	...	...	...	...	...	85
...	...	96	3	...	...	...	...	1	...	25	20	...	...	...	...	...	...	295
...	...	1	...	...	...	4	5	...	1	24	12	...	...	...	2	1	4	84
...	...	...	...	2	...	...	7	...	4	23	4	1	4	...	...	7	32	146
...	...	79	2	2	...	15	18	...	...	15	47	...	...	...	...	5	...	252
...	5	90	...	6	10	21	35	2	1	44	50	36	22	...	12	...	134	834
7	4	47	2	1	2	2	28	...	6	5	96	2	13	8	...	...	10	459
3	...	22	1	3	2	10	...	...	...	...	...	...	...	...	25	16	29	203
...	...	...	...	...	...	...	...	...	...	78	...	...	1	...	...	...	7	119
80	24	481	11	21	18	85	150	3	42	325	276	39	44	8	47	146	216	3,469

STATEMENT No. VII.

Ages at Death of infants born during 1935 and kept under observation during the 1st year of life.

From 1st January to 31st December 1935.	Total infants born in 1935.	Still born.	Died within				Total deaths excluding Still births.	Left City or otherwise not traceable	No. of living children traceable when one year old.
			1 to 3 Months.			6 to 12 Months.			
			10 Days.	3 to 6 Months.					
Triplicane	1,775	35	68	50	54	80	252	449	1,039
Nungambakam	426	13	12	18	11	10	51	23	339
Mirsaibpet	1,396	37	34	29	33	64	160	166	1,033
Rayapettah	604	28	18	8	10	14	56	28	496
Royapuram	1,228	48	43	24	31	31	122	222	829
Washermanpet	1,685	78	45	46	59	58	208	215	1,184
Muthialpet	1,164	38	28	30	54	48	160	328	638
George Town	1,811	59	64	46	50	71	231	229	1,282
Purasawalkam	1,300	27	29	19	33	48	129	147	997
Egmore	806	17	18	22	15	39	94	153	512
Perambur	1,339	43	44	29	16	23	112	219	955
Choolai	1,315	39	49	55	42	65	211	40	1,025
Total ...	14,849	472	452	276	408	551	1,787	2,219	10,371

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STATEMENT No. VIII.

Causes of death among infants born in 1935 and kept under observation during the 1st year of life.

Centres.	Total infants Born in 1935.	Still born.	Died within 10 days.	Pneumonia.	Fevers.	Enteritis.	Small-pox.	Bronchitis.	Malnutrition.	Convulsions.	Whooping cough.	Drugged with native medicine.	Dysentery.	Debility.	Measles.	Abscess.	Skin disease.	Constipation.	Rickets.	Scabies.	Jaundice.	Chicken-pox.	Causes unknown.	Total deaths.	Left City and not traceable.	No. of living children traceable.
Triplicane	1,775	35	68	...	91	48	2	2	...	11	8	...	4	...	...	5	8	4	1	...	...	...	...	252	449	1,039
Nungambakam	426	13	12	...	11	11	...	3	...	4	...	2	...	2	...	...	...	6	...	...	...	...	...	51	23	339
Mirsaibpet	1,396	37	34	8	52	27	2	1	...	7	1	...	1	12	...	2	...	...	...	...	...	...	13	160	166	1,033
Royapettah	604	28	18	...	7	13	...	3	...	1	2	...	...	...	1	...	1	2	...	...	...	...	1	50	28	498
Royapuram	1,228	48	43	1	35	28	1	6	1	4	1	...	1	...	...	3	...	1	...	...	...	...	4	129	222	829
Washermanpet	1,685	78	45	2	45	49	3	1	3	28	7	...	4	...	...	8	4	...	1	...	...	...	7	208	215	1,184
Muthialpet	1,164	38	28	3	57	19	1	6	1	3	...	...	14	1	...	...	...	...	...	...	...	1	26	160	328	638
George Town	1,811	69	64	9	23	17	4	11	33	6	11	18	8	...	...	...	513	...	...	...	...	1	8	231	229	1,282
Purasawalkam	1,300	27	29	2	43	20	...	13	...	10	1	4	2	...	...	...	2	1	...	...	...	...	3	129	147	997
Egmore	806	17	18	3	16	25	...	6	...	20	2	...	2	...	...	1	...	...	1	...	...	...	...	94	153	542
Perambur	1,339	43	44	1	10	14	...	2	3	3	1	...	...	2	...	3	1	2	1	...	...	...	25	112	219	965
Choolai	1,315	39	49	6	48	53	...	2	...	16	1	...	4	...	2	3	...	...	2	4	...	2	10	211	40	1,025
Total ...	14,849	472	452	35	137	383	13	56	41	113	35	24	40	17	325	21	29	6	4	2	4	4	97	1,787	2,219	10,371

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STATEMENT NO. XII.

Table showing details of all Births in the Municipal Divisions in which the Scheme was working for one year ending with 31st December 1935.

Centres.	Municipal Divisions.	Total No. of Births from 1-1-36 to 31-12-36.	No. of cases conducted by the Corporation Mid-wives.	Percentage to total Births.				
				1936.	1935.	1934.	1933.	1932.
Royapuram	1	888	402	45.3	46.1	47.4	38.1	57.2
Washermanpet	2	1,367	521	38.1	41.3	43.5	38.9	51.5
	3	1,425	767	53.8	58.2	55.8	49.4	70.3
	4	1,387	607	43.8	45.3	43.5	40.0	54.6
	5	370	223	60.3	58.4	65.9	64.3	73.1
Muthialpet	6	474	135	28.5	23.0	29.8	36.5	33.1
	7	541	320	59.1	56.9	58.2	62.6	78.7
	8	846	334	40.7	39.3	43.1	42.2	47.9
	9	209	56	26.8	28.0	34.2	34.2	39.4
	10	763	378	49.2	51.7	54.1	59.7	66.3
George Town	11	194	22	11.3	11.1	10.2	11.3	11.8
	12	944	402	42.6	42.9	50.2	47.7	61.3
	13	659	300	45.5	44.4	49.7	47.2	60.2
	14	129	12	9.3	11.7	27.1	26.5	50.4
	15	643	195	30.3	36.4	33.6	35.1	44.1
Perambur	16	2,045	1,062	47.0	50.2	51.7	48.9	61.5
Choolai	17	1,388	745	53.7	51.9	54.8	50.6	59.2
	18	1,103	371	33.8	33.3	39.1	33.8	43.7
Purasawalkam	19	1,002	660	65.8	59.9	56.9	58.1	61.3
	20	1,597	335	20.5	22.4	29.4	23.5	25.8
Egmore	21	1,251	327	26.5	27.9	28.1	23.2	26.4
Nungambakkam	22	1,082	304	28.0	29.1	34.5	29.9	60.3
	23	1,492	835	56.0	52.8	37.5	55.1	62.0
Triplicane	24	881	394	44.4	42.5	35.0	37.5	42.7
	25	888	394	44.4	42.5	35.0	37.5	42.7
	26	800	188	23.5	20.2	14.5	26.1	32.7
Mirshippet	27	1,405	687	48.9	47.7	50.6	49.5	60.2
	28	894	315	35.2	37.9	41.5	37.0	52.9
Rayapetah	29	1,589	514	30.4	26.0	33.4	37.3	59.6
Total	...	29,189	12,049	41.3	41.4	43.5	42.5	42.6

APPENDIX.

Report on survey of Aedes (Stegomyia) mosquitoes in Madras (half a mile round Madras Port) by Medical Officer in-charge of Malaria.

Introduction.

In 1907 Sir Patrick Manson raised a note of warning about the possibility of Yellow Fever invading the eastern countries on the completion of the Panama Canal. He apprehended that in consequence of the opening of the canal for trade traffic with the East, the Yellow Fever might pass from America into India and other eastern countries. Since then the Government of India have been collecting information about the prevalence of Aedes (Stegomyia) mosquitoes in the Indian sea-ports and considering the question of preventive measures against the spread of Yellow Fever in India.

In 1912 a conference was held by the General Malaria Committee at Madras. Captain J. H. Horne, I.M.S., read a note on the distribution and habits of Stegomyia in Madras. The note was based on 3 weeks survey undertaken to find out for the deliberation of the Conference, the species, distribution and habits of Stegomyia mosquitoes in Madras Town. This was probably the first Stegomyia survey conducted in Madras. Capt. Horne stated in his note that "the original scheme for a Stegomyia survey of the main Madras ports had not yet been taken and his note should not be taken as in any way representing the results of a complete survey". He observed that "the Stegomyia mosquitoes were found to be generally present throughout the City in varying numbers. Eight out of the nine main divisions of the town were visited and in seven of these the mosquitoes were met with. They were abundant in the harbour and the adjoining districts of George Town." Under remedial measures he suggested "Not enough has been done to allow of a definite plan of campaign being drawn up, but the following measures suggest themselves as being necessary in order to stamp out the Stegomyia fasciata:—

- (1) House to house inspection by a trained staff; the fining, after due warning, of those in whose houses or compounds Stegomyia larvae are found.
- (2) Regular flushing of drains.
- (3) Closure of all wells where a tap supply is available, roofing in other cases.
- (4) The plastering of bamboo stumps (Scutellaria being a possible carrier)".

Records are not available to show that his valuable suggestions have been adopted.

In the Regional Health Conference of the League of Nations held at Cape Town in November 1932 in which India was represented by Major-General J. W. Graham, Public Health Commissioner with the Government of India, it was agreed that further Aedes survey work was desirable and considerably more active control than at present should be undertaken against the introduction of Yellow Fever infection.

Source of Danger.

West Africa has always been an endemic home for Yellow Fever. Owing to the difficulty of communication in the past the disease could not spread from West to East Africa from where it could have spread easily into India and other eastern countries. But, during recent years, the situation in regard to communication between West and East Africa has greatly altered owing to the modern development of mechanical transport. It is therefore possible for the disease now to cross the country from West to East Africa by air, rail or motor car. By any of these means of transport the journey can be completed within the incubation period of the disease from an endemic area of Yellow Fever in West Africa to a sea-port on the eastern coast of Africa. The incubation period in man being 3 to 6 days it is possible that a person contracting the infection in West Africa may at any time land in any of the sea-ports on the eastern coast during the incubation period and develop the disease there. He is infective to the mosquito during the first three days of the disease. The Aedes mosquito prevalent in the sea-port may easily take the infection and transmit the disease. Infected mosquitoes may also be brought and these may spread the disease. Once the eastern coast is affected with the disease it will not be difficult for the infection to get into India and other eastern countries. The possibility of the introduction of Yellow Fever reaching India is by air or sea traffic.

Yellow Fever is transmitted by a species of mosquito called Aedes or Stegomyia. Aedes aegypti (Stegomyia fasciata) the commonest mosquito responsible for the transmission is widely prevalent in India. It has been proved experimentally that the Indian species can transmit the disease. India contains a non-immune population living in intimate contact with an efficient insect carrier and an abundance of susceptible animals such as the common Indian monkeys, capable of acting as a reservoir for the virus together with a climate suitable for the transmission of the disease. There can be no doubt that the introduction of Yellow Fever into India would bring about a disaster of an appalling magnitude.

Present situation.

A copy of letter No. F. 37-4/33-G dated 30th April 1935 from the Government of India on the subject of control of Stegomyia in the major sea-ports of India was forwarded to the Health Officer, Corporation of Madras, by the Director of Public Health, Madras, along with

STATEMENT No. IX.

Showing the number of cases taken on for Milk Supply
during the year 1936.

Centres.	No. taken on for milk supply.	Yearly attendance.	Average daily attendance.
Triplicane	43	11,281	30.9
Nungambakam	36	7,914	21.68
Mirsaibpet	40	9,368	25.65
Rayapettah	24	5,059	13.85
Royapuram	31	6,214	17.02
Washermanpet	23	4,446	12.18
Muthialpet	29	5,821	15.94
George Town	29	5,456	17.94
Purasawalkam	40	10,024	27.46
Egmore	47	8,612	23.59
Perambur	47	13,294	36.42
Choolai	29	10,864	29.76
	418	98,353	269.4

STATEMENT No. X.

Showing the number of Children who were given free baths
during the year 1936.

Centres.	New admissions.	No. of baths given to babies.	Average daily attendance.
Triplicane	46	6,005	16.45
Nungambakam	138	5,907	16.18
Mirsaibpet	50	3,352	9.18
Rayapettah	64	4,465	12.23
Royapuram	69	6,694	18.34
Washermanpet	44	9,093	24.91
Muthialpet	31	2,835	7.77
George Town	87	4,470	12.38
Purasawalkam	66	8,133	22.28
Egmore	243	6,676	18.29
Perambur	100	6,717	18.40
Choolai	39	4,892	13.40
	977	69,239	189.81

STATEMENT No. XI.

Showing the details of Health Propaganda Work done by the C.W. Staff in 1936.

Centres.	Subjects.				Total attendance at the lec- tures.			
	No. of out-door lectures deli- vered.	No. of lectures with the aid of Cinema shows.	No. of lectures with the aid of Magic Lantern.	Total attendance at the lec- tures.	No. of out-door lectures deli- vered.	No. of lectures with the aid of Cinema shows.	No. of lectures with the aid of Magic Lantern.	Total attendance at the lec- tures.
Triplicane	25	1	19	1,606	4	5	19	1,606
Nungambakam	27	2	23	1,882	5	4	23	1,882
Mirsaibpet	23	3	23	1,618	4	2	23	1,618
Rayapettah	25	4	19	1,809	2	2	19	1,809
Royapuram	30	2	20	1,440	5	2	20	1,440
Washermanpet	28	1	16	2,065	5	2	16	2,065
Muthialpet	32	4	18	1,965	4	3	18	1,965
George Town	23	2	22	2,544	4	3	22	2,544
Purasawalkam	35	4	18	2,163	4	3	18	2,163
Egmore	26	3	21	2,320	1	1	21	2,320
Perambur	29	3	18	2,480	1	1	18	2,480
Choolai	28	2	20	2,565	2	1	20	2,565
Total	331	31	239	25,458	41	8	239	25,458

a copy of the Government Memorandum No. 14988 Marine I dated 10th May 1935 dealing with the same subject. It states that "the Government of India are advised that sufficient information exists regarding the extent to which the major ports in India are infested with *Stegomyia* and to make it both possible and desirable to proceed forthwith with preventive work in the form of campaigns at each port directed towards the permanent removal of the breeding-places of *Stegomyia* mosquitoes. The progressive acceleration of international communications particularly by air increases the danger of an extension of Yellow Fever from West Africa to East Africa and from there to the Orient and thereby the urgency of such preventive work in India."

The Government of India also required information as regards the measures already taken to control *Stegomyia* and the measures proposed to be taken further in the same direction. The Health Officer, Corporation of Madras, replied to the Director of Public Health, Madras, in his letter H.D.C. No. 5903 dated 12th June 1935 that a limited staff was attending to the carrying out of general anti-mosquito measures in the city; that no special measures had so far been undertaken for survey and control of *Stegomyia* and that the question of enlarging the malaria staff was not given effect to on account of financial stringency.

Later on, the Commissioner, Corporation of Madras, received the Memorandum No. 33753-3 E.L.P.H. dated the 13th October 1935 from the Madras Local Self-Government Department stating "that with a view to prevent the possibility of an extension of Yellow Fever, the Government of India consider it desirable to proceed forthwith with preventive work in the form of campaigns at each port directed towards the permanent removal of the breeding-places of *Stegomyia* mosquitoes which transmit the disease" and that "the Corporation of Madras is requested to take action urgently to plan such campaigns in consultation with the Director of Public Health. Such campaigns and any preliminary surveys that they may entail should be conducted at its own cost. The expenditure, if any incurred within Port limits, will however be debited to "33 Public Health-Central". An extract from the letter of the Director of Public Health No. 13967-P.H. dated the 25th June 1935 stated that a "comprehensive survey for half a mile round the Madras Port will have to be made. The Corporation authorities may be required to appoint a suitable officer for this purpose unless they wish to get the work carried out by the Malaria Officer (Madras Presidency) whenever he is in head-quarters, on payment of a suitable honorarium. After the estimates are ready the Corporation may be required to intensify their anti-mosquito efforts in the area half a mile round the Port."

Proposals for survey and control of *Stegomyia* in the area half a mile round the Port at a cost of Rs. 5,000 were placed before the Corporation Council in accordance with the Government Memorandum. The Corporation Council accorded sanction on the 4th August 1936.

Staff for Survey and Preventive Work.

The staff for the preliminary survey consisted of 5 trained overseers drawn from the permanent staff and in their places new men were appointed on Rs. 25/- each per mensem and 5 coolies on Rs. 15/- each per mensem to assist the overseers. A laboratory attendant on Rs. 20/- per mensem was appointed to attend to the breeding of mosquito larvae.

The whole staff worked under the directions of the Assistant Health Officer in charge of the North Range.

Area.

The area half a mile round the Madras Port limits included three distinct areas viz.

(1) A portion of the City, (2) Port area under the management of the Port Trust and (3) Fort St. George and the Ordnance lines under military authorities. These are dealt with below.

Survey in the portion of the City.

The portion of the City included whole of Harbour Division, Muthyalpet Division, Katchaleswaranpet Division, Kothawal Bazaar Division and portions of Royapuram Division, Tondiarpet Division, Amman Koil Division and Esplanade Division—bounded on the east by North Beach Road, on the West by Monagar Choultry Road, Broadway up to Thatha Muthyappan Street, portion of Thatha Muthyappan Street up to Varada Muthyappan Street, Varada Muthyappan Street, Erusappa Maistry Street, Guzilee Bazaar Road, on the north by Kalmandapam Road, and on the south by South Beach Road, Wallaja Road and General Hospital Road up to its junction with Guzilee Bazaar Road.

The portion of the City for survey covered approximately 1.16 sq. miles, the area of the whole City being 29.40 sq. miles.

Population.

According to the census of 1931, the population of the City was 6,47,230 as against 5,23,791 in the previous census in 1921. Nearly one tenth of the City's population reside in the area of survey.

Climate.

The climate of Madras is frequently said to be hot for three months and hotter for nine months.

Rainfall.

The average annual rainfall during the years 1926-35 is about 47 inches. The last quarter of the year usually records the highest rainfall to the extent of 30 inches on an average annually and next comes third quarter which has an average rainfall of 11.0 inches. The 1st and 2nd quarters have average annual rainfall of about 2 inches and 3 inches respectively.

Rainfall is an important factor from the point of view of mosquito-breeding. It gives rise to pools and puddles and to collections of water in various receptacles and articles exposed to rain in the premises which become sources of breeding during the rains. The breeding thus influenced by rainfall tends to prevail at its maximum during the monsoon.

SURVEY PROPER.

General plan of the survey.

A regular survey was started on the 2nd September 1936 and completed on the 2nd October 1936.

For purposes of the survey, the area was divided into 5 blocks and one overseer and one cooly forming a squad were put in charge of each block. The hours of work were from 7 a. m. to 11 a. m. and from 2 p. m. to 5 p. m. Each squad was supplied with a larva collecting out-fit, sauce-pan, well-net and oil mixture. Inspection was made daily of a portion of each block and the area comprising the five blocks was gone round in a month.

Each overseer was given an authority signed by the Commissioner for entry into premises for inspection. The overseer entered in the mosquito record book supplied to him wells, cisterns, drains and other water-containers and the actual breeding-places met with in every premises. He collected larvae in the specimen tubes and sent them to the laboratory with information as to the address from which these were collected, the nature of the breeding place &c.

Before entering into premises, a red flag was hoisted in front. This enabled the officers to spot out the squad for the purpose of supervising and checking the work.

Method of identification.

All the specimens of mosquito larvae sent by the squads were received at the laboratory by the attendant and recorded in a special register.

The source of breeding and the description of the container were entered in that register. The larvae were transferred to small enamel basins on which the corresponding numbers in the registers were written. The dishes were examined both morning and evening and the pupae that were formed were at once collected in test tubes which were given the corresponding numbers. When the adults emerged from the pupae, they were transferred to dry tubes and afterwards identified by the medical officer as to the species. The results of such identification were posted in the book.

Principal features of the area.

The portion of the City under survey contains not only thickly populated areas but also busy centres of business and commerce. The southern portion of the area abounds with shops, bazaars, markets, firms, iron and hardware stores and godowns, colleges as the Law College, Pachappa's College and Christian College, banks such as the Imperial Bank of India, National Bank, Mercantile Bank, firms such as Binny & Co., Parry & Co., Messrs. Gordon Woodroffe, Imperial Tobacco Co., &c. and important Government Offices as the Collector's Office, Custom House, General Post Office, Office of the Inspector-General of Registration, High Court &c. Apart from these, there are also areas under the control of the South Indian Railway authorities and the Madras & Southern Maharatta Railway authorities. The chief peculiarity and northern portions are thickly populated containing dwelling houses. The absence of low lands and the presence of a very few premises with compounds. The whole area contains buildings contiguous with one another, some of them being very high.

The survey disclosed the presence of nearly 8019 premises—5301 residential houses, 936 huts, 1205 business places, 370 offices and firms and 207 premises which included schools, colleges and places of worship. All the premises were inspected by the squads except 153 premises which were locked at the time of the visit.

AEDES MOSQUITOES AND THEIR BREEDING-PLACES.

(a) Potential breeding-grounds of *Aedes* mosquitoes.

The survey party recorded the presence of 1921 wells, 8502 house-drains, 222 fire-buckets, 1687 cisterns, and 316 over-head tanks or cisterns for storage of water. A number of receptacles in which water is stored for domestic purposes has been met with. These form the potential breeding-places of *Aedes*.

9 tanks are present but these have not been found to breed mosquitoes. Generally *Aedes* mosquitoes do not resort to these places for breeding.

162 gully traps, 83 cesspools, 67 open and covered drains are present in public streets and roads in the area under survey. Aedes mosquitoes have not been found to breed in drains and cesspools. These places are regularly cleaned and oiled to prevent mosquito breeding. The underground system of drainage is present in almost all the portions of the area under survey.

(b) Distribution, Prevalence and indices of Aedes mosquitoes.

(i) Mosquito House Index.

Out of 7861 premises inspected, mosquito breeding-places were recorded in 1102 premises. The general mosquito index, worked out as the percentage of premises breeding mosquitoes to the total number of premises inspected, would be 14.0. This index has taken into account the breeding-places of all varieties of mosquitoes—Anopheles, Aedes and Culex. While this index may indicate the state of the general mosquito problem, it does not convey any idea of the extent of the Aedes (Stegomyia) problem which is the object of the present survey. But this problem can only be gauged by another index called the "Aedes (Stegomyia) House Index" which follows presently.

(ii) Aedes (Stegomyia) House Index.

This is a very valuable index from the point of view of Yellow Fever prevention. 779 premises out of 7861 premises inspected were recorded to have contained breeding-places of Aedes mosquito. The Aedes (Stegomyia) Index, worked out as the ratio of premises breeding Aedes larvae to all the premises examined, would be 9.9. It may be mentioned that, generally speaking, a Stegomyia index of 2 per cent. or less at all times may be considered as sufficient to ensure safety against the epidemic spread of Yellow Fever if introduced.

It has been possible to arrive at this index with the help of laboratory. As stated already, the larvae were collected and bred out and then identified. Otherwise it would not have been possible to compute the index. In the absence of rearing out larvae for identification, the index has to be worked out on the assumption that all culicine larvae found breeding in fresh water-containers or receptacles in or near habitation, for index purposes, have to be taken as Aedes or Stegomyia larvae. The larvae sent from 54 premises died before developing into adult mosquitoes. As they were breeding in collection of water in tins, tubs, barrels, pots, cisterns, fire-buckets &c. near human habitation they were taken into account as Stegomyia larvae.

(iii) Aedes (Stegomyia) Density Index.

The density index is also employed and is arrived at by comparing the total number of receptacles found to breed Aedes mosquito. This takes into account two or more breeding-places frequently occurring in the same premises.

The number of premises examined was 7861 and the number of deposits containing Aedes larvae was 959. The density index would therefore be 12.2.

A statement has been prepared below showing the number of premises found to contain one, two or more breeding-places of Aedes mosquito.

No. of premises with	1 Aedes breeding-place	...	685
No. " " 2 " "	...	54	
No. " " 3 " "	...	18	
No. " " 4 " "	...	15	
No. " " 5 " "	...	Nil.	
No. " " 6 " "	...	3	
No. " " 7 " "	...	1	
No. " " 8 " "	...	2	
No. " " 9 " "	...	Nil.	
No. " " 10 " "	...	Nil.	
No. " " 11 " "	...	1	
Total premises with Aedes breeding	...	779	

It will be seen from the above statement that 6 breeding-places have occurred in 3 premises. It is interesting to note that the breeding has occurred in fire-buckets kept in one of the Banks and Cinema Talkies and in the third instance the breeding has taken place in a residential house in paint tins. One premises recorded 7 breeding-places. This has occurred in a tub in a godown in Jehangir Street. In two premises, 8 breeding-places were registered in each. Here again the fire-buckets were responsible in the premises of a company and in the premises of a Government office in North Beach Road. 11 breeding-places were recorded in a bakery at Royapuram where ant-wells (antiformicas) kept underneath meat-safes were responsible.

As mentioned already, larvae of all mosquitoes were collected, bred out and identified. The indices referred to above were worked out only for Aedes mosquito which is the object of the survey.

Breeding-places of Aedes (Stegomyia) mosquito.

The number of mosquito breeding-places discovered throughout the survey was 1238 of which 959 or 77.5% were Aedes (Stegomyia) breeding-places. The Aedes were breeding in these places either alone or in association with Anopheles or Culex or both. The distribution of Aedes (Stegomyia) in the area under survey is shown in the spot map.

The details of the breeding-places are brought out in the following statement:—

Nature of breeding-places.	Number Examined.	All mosquitoes.		Aedes (Stegomyia.)		Percentage of Aedes breeding-places to total mosquito breeding places.
		Number breeding.	Percentage to the No. examined.	Number breeding.	Percentage to the No. examined.	
Wells	1921	291	15.1	134	7.0	46.1
House drains and Cesspools	8502	47	0.6	15	0.2	29.8
Fire-buckets	222	50	22.5	49	22.1	98.0
Surface cisterns	1687	98	5.8	76	4.5	77.6
Overhead storage tanks or cisterns	316	5	1.6	4	1.3	80.0
Ponds and Tanks	9	1	11.1	...	...	...
Receptacles	not available.	746	not available.	681	not available.	91.3

The above findings relate only to the inspection of the premises and do not include the results of examination of gully traps, cesspools, drains in public streets and roads which are regularly cleaned and oiled by the permanent staff. Moreover, the Aedes mosquito never breeds in such foul and dirty water.

*Each item in the above statement is further explained below.

Wells.

291 wells or 15% of the wells examined were breeding mosquitoes. Analysing further, it is noted that 134 wells or 7% contained the larvae of Aedes either alone or in association with Anopheles or Culex.

Out of 291 wells breeding mosquitoes, 134 wells or 46.1% recorded the breeding of Aedes.

This shows that the domestic wells form one of the permanent and potential breeding-places of Aedes mosquito.

House-drains and cesspools.

47 house drains including cesspits (or 0.6 per cent.) were recorded to breed mosquitoes. 15 drains (or 0.2 per cent.) contained Aedes larvae in clean water or washings from the taps in offices and business places. The percentage of Aedes breeding-places to the total mosquito breeding-places in drain comes to 29.8.

Fire-buckets.

50 fire-buckets or 22.5 per cent. of the fire-buckets examined contained mosquito larvae. Further, it is noted that 49 fire buckets (or 22.1 per cent.) contained Aedes larvae.

As 98 per cent of the fire-buckets breeding mosquitoes was found to contain Aedes larvae, it shows that they are potential breeding-grounds of Aedes.

Surface cisterns.

98 cisterns or 5.8 per cent. of the cisterns examined contained mosquito larvae. Of these, 76 cisterns or 4.5 per cent. of the cisterns examined were recorded to breed Aedes mosquito.

Of the 98 cisterns breeding mosquito larvae, 76 cisterns (or 77.6 per cent.) contained Aedes larvae. Surface cisterns also form potential breeding-places for Aedes mosquito.

Over-head Storage Tanks or cisterns.

5 over-head tanks or 1.6 per cent. of the total examined contained mosquito larvae. 4 tanks or 1.3 per cent. contained Aedes larvae.

Of the 5 storage tanks recorded to breed mosquitoes 4 tanks or 80 per cent. contained Aedes larvae.

Receptacles.

Water-containers such as surface cisterns and over-head storage tanks have been dealt with already. The receptacles which form a host of different small water-containing articles and materials were the chief and the most important breeding-places of *Aedes*.

746 receptacles were recorded to breed mosquitoes. Of these, 681 or 91.3 per cent. contained *Aedes* larvae.

The following is the list of various kinds of receptacles or containers in which *Aedes* larvae were found during the survey:—

Description of the containers.	No. breeding mosquito larvae.	No. breeding <i>Aedes</i> larvae.	Percentage.
Pots and Chatties	218	201	92.2
Grinding mortars	165	156	94.5
Tins	111	106	95.5
Ant-wells (antiformicas)	75	71	94.7
Tubs	57	50	87.7
Masonry pits and depressions	54	35	64.8
Barrels	25	23	92.0
Bottles	12	11	91.7
Dishes	6	6	100.0
Iron girders	5	5	100.0
Brass vessels	5	5	100.0
Basins	2	2	100.0
Battery cell	1	...	...
Cocoonut shell	1	1	100.0
Depression in man-hole cover	1	1	100.0
Mud guard	1	1	100.0
Jars	7	7	100.0
	746	681	91.3

From the description of the containers mentioned above, it is apparent that all these are artificial and man-made; and many of these littered about inadvertently by the people inside and outside their premises. Several such receptacles have been thrown about on the open terraces of buildings. The fact that *Aedes* mosquito has a preference for such receptacles and containers for breeding accounts for its greater prevalence in thickly populated areas.

Species of mosquitoes.

The larvae of *Anopheles*, *Aedes* (*Stegomyia*) and *Culex* mosquitoes were come across during the survey. As the object of the survey is to find out the extent of the prevalence of *Aedes* (*Stegomyia*) much attention has been paid to collect all data about this insect.

Aedes (*Stegomyia*) mosquitoes.

Three varieties of *Aedes* mosquitoes have been found in the area under survey.

1. *Aedes aegypti*
2. *Aedes albopictus*
3. *Aedes vittatus*.

Aedes aegypti is the predominating variety present all over the area and is dealt with separately. Only 5 instances of the breeding of *Aedes albopictus* were recorded. The breeding prevalent in other parts of the city breeding in garden areas.

Aedes vittatus had not been observed during the survey but on subsequent rounds by the staff for carrying out preventive measures, a few instances of its breeding were come across. It has also been observed to be prevalent in other parts of the city.

Bionomics of *Aedes aegypti*.

Aedes aegypti is the Yellow Fever-carrying mosquito. It becomes infective not before 12 days after biting on a patient of Yellow Fever. But once infective, it remains so all its life. Experimental work has shown that the Indian race of *Aedes aegypti* is as good a carrier of the virus as are the African and American races of this insect.

Aedes aegypti is a domestic or house-hold insect always associated with man and his surroundings. It prefers earthen-ware vessels as chatties and pots, grinding mortars, tins, ant-wells, barrels, tubs, bottles, brass vessels, fire-buckets, cisterns &c. as seen in the list given elsewhere.

During the subsequent round of the staff for carrying out preventive measures, it has been found to breed in disused motor tyres and flower pots.

As *Aedes* mosquito prefers such artificial water-containers, its breeding and prevalence must necessarily be influenced by rainfall as all available vessels will be filled with water and after the rains cease, these will be availed of for breeding.

Aedes mosquito has been found to breed in the wells also. The statistics have been given elsewhere about the findings in wells. It is likely that a great percentage of these wells will be resorted to by this mosquito during the hot season when it will be deprived of its artificial breeding-places which would dry up then.

The adults have been found inside premises and close to their breeding-places. They have been found to bite during day commonly. In the laboratory they have been observed to bite during the day and till the evening. After sunset the *Culex* mosquitoes have been seen to bite.

Measures for the control of *Aedes* (*Stegomyia*).

The object of the survey is to formulate a programme of campaign against *Aedes* mosquitoes and thus to keep the *Aedes* index as low as possible so that if really a case of Yellow Fever should be imported un-observed either by marine or aerial traffic, the chance of its being bitten by an *Aedes* mosquito might be remote. The survey has revealed not only the presence of *Aedes* mosquitoes which are responsible for transmitting Yellow Fever and Dengue but also the wide existence of the malaria-carrier (*A. stephensi*) and of the presence of *Culex fatigans* which is the insect host of the parasite "*Filaria Bancrofti*" causing the disease in man known as Elephantiasis. The measures of control suggested in the report would deal with all mosquitoes in general and *Aedes* mosquitoes in particular. Such measures would also solve the problem of the mosquito nuisance chiefly caused by the *Culex* mosquitoes.

The methods of control should be against the developmental stages of mosquitoes and not against the adults. These would be more easy, efficient and less costly. Our object should be wherever possible to deal radically with breeding-grounds so as to abolish water collections altogether or to render them unavailable for mosquito-breeding.

In the light of the results of the survey, which has revealed the nature of the breeding-grounds, it is necessary that measures of control should be instituted chiefly against (1) wells (2) over-head storage tanks (3) surface cisterns (4) fire buckets (5) ant-wells (6) water-containers or receptacles intended for storage of water (7) unused articles and materials which are exposed to rain and are likely to become receptacles of water during rainy weather.

(1) Wells.

Dealing with permanent breeding-places of mosquitoes the first place should be assigned to wells. Every well in the city should be considered a permanent and potential breeding-ground for *Anopheles stephensi* (reputed malaria-carrier), *Aedes aegypti* (vector for Yellow Fever, Dengue and Filariasis) and *Culex fatigans* (transmitter of Filariasis) and it will be a mistake to wait till it is found breeding before taking suitable measures for control. Referring to wells in Bombay Lt.-Col. Covell, Assistant Director, Malaria Survey of India who conducted malaria survey in Bombay in 1928 stated. "It is quite certain that malaria will not be eradicated from Bombay whilst these sources of breeding which, as we have seen, are specially favoured by *Anopheles stephensi*, not only in Bombay but throughout India, are allowed to remain in their present condition". As explained before, the condition of wells in Madras City is not better than in Bombay.

If sufficient public water-supply is available, private wells are hardly needed for the usual domestic requirements. In the absence of such supply in the City regular action to have them filled up is not therefore advisable. "Closure of all wells where a tap supply is available" has been suggested by Captain Horne in 1912 as an anti-stegomyia measure for wells in the city. Since then the water supply cannot be said to have improved to demand the use of his suggestion though almost all houses have been provided with taps. Lt.-Col. Covell's recommendation to the Bombay Corporation was that "every well in the island must be filled in or covered over with concrete, with, if desired, the provision of a pump by a certain specified date; in the event of non-compliance the Municipal Commissioner should cause the work to be carried out". This advice is from one of the best experts on the subject of malaria in India at the present day and therefore such a procedure in respect of wells may be adopted here also to save the city from the scourge of Malaria, from the impending danger of Yellow Fever, and to save the city from the effects of *Culex*, which causes severe mosquito nuisance. Setting aside the question of filling up wells in view of the defective water-supply, at least the wells may be "covered over with, if desired, the provision of a pump". In the area under survey about 40 to 50 per cent. of wells are not in daily use. All wells can therefore be hermetically covered with concrete covers and in case of emergency the cover can be broken open and reconstructed. If, inspite of covering, well water is required to be used, hand or mechanically worked pump may be installed provided the mosquito proof condition is not disturbed. But wells should be cleaned by removal of silt before being covered over and fitted with pump.

To meet with the wishes of persons who desire access of the Sun's rays to the water, permission may be granted to fix thick glasses into the concrete cover. If desired, the Corporation should undertake such work at the expense of the owner who should pay the cost in advance. It is necessary that the Corporation should have a separate staff for the execution of

such work and should see that the pumps are always maintained in good condition. This will be similar to the cleaning of ponds and tanks undertaken by the Corporation Staff at present on payment of the cost in advance by the owners.

Arguments may be put forth by persons required to cover their wells that the water is fresh and clean and that it is in constant use. On this subject it is best to quote the actual words of the Lt. Col. Covell *in extenso* :

"Anopheles stephensi requires fresh water preferably constantly renewed to breed in. This preference for fresh clean water is by no means peculiar to this species, for it is shared by most of the chief malaria-carrying mosquitoes throughout the world, the majority of which are primarily stream breeders. Anopheles stephensi will not breed in foul or stagnant water. It will breed with equal facility in dark places and in those exposed to the direct rays of the sun and the larvae will flourish in any depth of water from a fraction of an inch to 20 feet or indeed probably to any depth. The breeding-place may be situated below the level of the ground or on the roof of a building 80 to 100 feet in height. Frequent disturbance of the water such as produced for instance by drawing from a well by means of a bucket will not prevent breeding."

Further, arguments raised against closed wells may be met by the following extract from Dr. Bentley's Report about malaria in Bombay:—

"As regards the supposed necessity for ventilating wells, it may be pointed out that the fact that a well is quite open and uncovered does not necessarily ensure its ventilation. The only way to ventilate many wells is by drawing out a considerable volume of water from them and a well entirely covered may be better ventilated if water is being continually pumped out from it than a well the mouth of which is quite open. Other things being equal the water from a well that is entirely covered will be cleaner and much purer than that from an open well specially one in the midst of a populous city exposed to dust and all sorts of contamination. At the present time very few of the wells in Bombay supply water that is fit for potable use and the covering of the majority of these wells would be a great sanitary improvement even apart from the question of malaria prevention". In spite of this, if there be persons who desire the wells to be ventilated, permission may be granted to insert in the concrete cover brass plates with fine holes in them not more than 1/20" in diameter. As many wells in this city are situated in dark rooms and in verandahs underneath tiled roofing, there may not be much objection about the question of ventilation and sunlight.

It is however feared that the method of control exercised over wells for the solution of the mosquito problem may not be accepted by the public, unless they are imbued with a spirit of civic co-operation and welfare. The results that will follow from such control are incalculable. The citizens may no doubt have to spend some amount but that is nothing considering the dangers arising from mosquitoes in the shape of Malaria, Dengue Fever, Filariasis and Yellow Fever.

In the face of such dangers confronting the public health of the city, the method of control suggested is indispensable and it has also taken into consideration the religious sentiments and feelings of the various communities. The wells which are in places of public worship and are used for the purpose of such worship need not be filled up or covered. But if there be more than one well in such places, one well at least may be allowed to be provided with trap-door, which must be kept closed except when water is drawn from it, and others filled up or covered. There may be some people who may refuse to adopt this measure and insist upon using well water drawn by their own hands by ropes and buckets. In such cases it should be considered impossible to comply with their wishes without abandoning all hope of eradicating or even substantially abating the mosquito dangers.

The Corporation has been introducing larvicidal fish into wells for purposes of mosquito control. It is found that the conditions in wells, especially the disused wells which form a large number, are not favourable for the fish to thrive in. Moreover, this method of control is not a permanent measure to solve the mosquito problem. The method suggested above will be a permanent solution and to adopt it, the Corporation should in the first instance obtain the approval of the Standing Committee. Otherwise if objections are sent to the Commissioner by persons who refuse to carry out the measure in accordance with the section 264 (2) of the City Municipal Act of 1919, the committee to whom such objections should be referred to can decide in any way it deems fit. Thereby uniform action cannot be taken in every case. The section of the Act referred to above states "If a person on whom a requisition is made under Section 264 (1) to fill up, cover over, or drain off a well, delivers to the Commissioner within the time fixed for compliance therewith, written objections to such requisition, the Commissioner shall report such objections to the Standing Committee and shall make further enquiry into the case and he shall not institute any prosecution for failure to comply with such requisition except with the approval of the Standing Committee &c." It is therefore necessary that the previous approval of the committee should be obtained before enforcing this method of control. This method may be enforced in the area of survey at present and if successful it may be extended throughout the city.