

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

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# Annual Report

of the

Health Department  
(Corporation of Madras)

## For the Year 1931

By

C. S. Govinda Pillai  
M. B. Ch. B., L. R. C. P. & S., D. P. h. (Edin.)

Health Officer.

MADRAS :  
PRINTED BY THOMPSON AND CO., LTD.

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## INTRODUCTION.

*Commissioner.*

Sir,

I have the honour to submit the Annual Report on the Health of the City for the year 1931.

**Population:**—The decennial census was due during the year under review and the enumeration was actually made on the night of February 26th. The population of the Municipal area was 6,47,230 as against 5,26,911 in 1921 with an excess of 35,216 males. This records an intercensal increase of 1,20,319 or 22·8 per cent. A scrutiny of the Vital Statistics of the previous 10 years shows that this phenomenal increase in the population has been the result of migration of a large number of persons into the City seeking employment. The enlightened policy of the Corporation in providing amenities in the divisions at the outskirts of the City and in launching the Mambalam extension scheme has facilitated the transference of such a vast population into the City. Marked increase is noticed in the case of Perambur, Royapettah, Tondiarpet, Korukkupet, Meer-saibpet and Tiruvateeswaranpet divisions which are inhabited by the labouring classes. There has been very little transference from the congested George Town and Triplicane areas to the suburban Districts with the exception of Muthialpet.

**Births** :—The total number of births (25,738) shows an increase of 76 as compared to the births in 1930. The birth-rate was 39·8.

**Deaths** :—The total number of deaths (23,162) shows an increase of 323 as compared to the deaths in 1930. Death-rate for the year was 35·8. As mentioned in my last report, rates prepared on the recent census population alone represent the correct state of Public Health. In the absence of a quinquennial enumeration intercensal rates are subject to the fallacies associated with the estimated population in any given year. It is very pleasing to note that the death-rate, high as it is, is less by 2·7 when compared to the death-rate of 38·5 in 1921. Conditions affecting Public Health in the City have decidedly improved over 1921. Moreover, the total number of deaths registered during the year includes 860 deaths of persons dying in the City but not belonging thereto. The Government Hospitals are attracting thousands of patients from the Mofussil whose deaths under the existing arrangements have to be registered in the divisions where the Hospitals are located. As the number of Madrassees who died outside the City and whose deaths have been registered elsewhere is not known, no attempt has been made to correct the death-rate on this score.

**Divisional Death-Rates** :—Four definite areas record death-rates above the annual death-rate of 35·8 for the whole City. These are (1) Royapuram, Tondiarpet, Washermanpet, Korukkupet and Harbour divisions, (2) Choolai and Purasawalkam, (3) Chintadripet, Amir Mahal, Tiruvateeswaranpet and Mirsaibpet, (4) Seven Wells. It is precisely in these areas that the bulk of the poor labouring classes inhabit. Housing conditions being extremely unsatisfactory and inadequate, congestion is very acute. Some of these divisions, notably Royapuram, Tondiarpet and Choolai, have received some attention in the past. These efforts have to be doubled and similar relief extended to other divisions mentioned above. The high death-rate noticeable in these divisions closely associated with the prevailing bad housing conditions can only decrease proportionately to the improvements effected in this behalf.

**Infantile Mortality** :—The infantile mortality-rate was 248·3. This gives an increase of 4·4 as compared to 1930. A dramatic decline in infantile mortality as in the West cannot be expected so long as the fundamental causes remain unaltered. A great deal more, however, can be achieved if the citizens make a greater use of the existing organisations. Ante-Natal clinics, mothercraft classes and indeed all other branches of the varied and extensive work

grouped under Maternity and Child Welfare have to be brought within easy reach of every one who cannot afford to pay for these services. It is of utmost importance for the promotion of general health to give the greatest care and attention to the children from their birth.

**Infectious Diseases** :—The City has been comparatively free from epidemics during the year. There is a reduction in mortality from the principal infectious diseases except Enteric and Cholera ; the latter accounted for 153 deaths. The infection started in December 1930 after the heavy rains continued during the first quarter. Under efficient measures the infection was very soon eradicated. Mortality from Diarrhoea and Dysentery is definitely on the decline. The incidence of small-pox has been very low. Only 24 persons died of the disease. Vaccination was conducted with great vigour throughout the year. The number of primary vaccinations performed was the highest on record. Progress can again be reported with regard to the mortality from Malaria. The reduction noticed last year has been maintained.

**Tuberculosis** :—There is a slight decline in the mortality from Tuberculosis which is still high. Like the general death-rate the problem of Tuberculosis is intimately associated with the question of housing and nutrition. In addition to the efforts now made to improve the housing conditions in the City, relief has to be given to many persons who are suffering from advanced Tuberculosis and who are without suitable accommodation and treatment. With the insufficient accommodation at the hospitals it is not possible to cope with all the cases that require isolation and treatment. Patients suffering from Tuberculosis do not like to remain at our infectious diseases hospitals, even though there is no risk of cross infection. The question of converting Krishnampet Isolation Hospital to serve this much felt need or in the alternative of opening another Hospital will have to be considered in the immediate future.

**School Medical Service** :—Much useful work has been done by the Medical Inspectors as noted elsewhere in the report. The charge that the Medical Inspection of Schools is altogether a waste, since the doctor who inspects the children only records defects, is not true. 7,035 defectives underwent treatment as a result of Medical inspection. 122 operations were performed on pupils on the advice of the school doctors. Improvements were effected in a large number of cases under malnutrition, enlarged tonsil, defective vision, ear-diseases and leprosy. The considerable amount of health defect noticed at the first medical inspection is likely to continue until more attention is paid to the pre-school child by the community in general. In order to reap the full benefits of school medical service the co-operation of the parents is most essential. The fact that only 4,517 parents were present during the medical inspection shows that the parents are not doing their share. School medical service is of the greatest value to the community as it affords an opportunity to fit the child for its education. There is a fear that the service may be scrapped in view of the stoppage of Government grant. I trust the Corporation will find funds to maintain the school medical service that has done good work in the past. The Corporation dispensaries are located most conveniently to suit the requirements of our Elementary Schools. Abolition of school medical service will result in the with-holding of medical and surgical relief to a very large number of children whose parents are too poor to pay for this relief.

**Food Inspection** :—Work in connection with Food Inspection was in operation throughout the year. There was a decline in the percentage of adulterated samples as compared to 1930. Adulteration is still high with regard to ghee, coffee and milk. It is expected that with the enforcement of rules regarding labels now pending with the Government greater improvements will be effected.

**Sanitary Improvements** :—The most outstanding feature under this head was the conversion of 1829 dry latrines in dwelling houses into flush-out latrines. In addition, 11 public flush-out latrines were constructed during the year. 3,392 dwelling houses were improved. It is gratifying to note that the difficulties regarding Madras Water Supply are about to be solved. Corporation

has approved the recommendation of the Water Filtration Committees. It is hoped that the aerating filters will soon be introduced and the scheme pushed forward so as to ensure a supply free from sulphurated hydrogen and the unsightly growth.

**Health Education of the Masses:**—Considerable volume of work was done by the staff to spread the knowledge of Hygiene amongst citizens and kindle interest for a better living. The work organised by me a few years ago was expanded during the year. The staff adhered to an advance programme of lantern lectures, cinema shows and other lectures. The work was done with enthusiasm and success.

**Conservancy:**—The work of this department has been one of great activity throughout the year. All the dumping grounds received special attention. The tipping platforms installed during recent years have been functioning satisfactorily. A larger number of Conservancy lorries were on road during the year than previously. The decline noted under diarrhoea and dysentery could only have been possible with improved conservancy.

**Slums and Slum Improvement:**—As mentioned in previous reports, housing conditions of the poor continue to be extremely unsatisfactory. Congestion and overcrowding have increased to such an extent that all the available space near busy centres have become cramped with houses built back to back. Narrow lanes have taken the place of streets and roads. Most of the houses are without any means of ventilation and lighting. A fourth of the population of Madras live in such one roomed dwelling houses, while a good many are even without these shelters.

A comparative study of the conditions existing in cheries shows;—(1) the housing conditions are extremely unsatisfactory in the vast majority of cases, (2) metal roads and surface drainage are absent except in very few cases, (3) though located in sewered areas, many cheries are without sewers, sullage being allowed to stagnate in cess-pools, (4) latrine accommodation is either primitive or inadequate, and (5) water supply is inadequate. The same remarks apply to lighting.

During the year under report the subject continued to engage the attention of the authorities and the various social services organisations in the City. There has been a steady growth of public opinion urging the necessity for ameliorating the conditions of slum dwellers. There are three ways of getting over the present impasse;—1. Compel the landlord to develop the area. 2. Acquisition of all private slums by the Corporation and provision of sanitary dwelling houses and other amenities. 3. Co-ordination of the activities of the various agencies responsible for the health of the workers. The first method has been a failure as the landlords could not carry out improvement schemes which involved enormous expenditure. In the absence of adequate funds municipalisation of slums can only remain an ideal. On the other hand the third method, if pursued in right earnest with the co-operation of the landlords, is bound to give good results in a reasonable period. In the case of cheries in sewered areas with houses facing the streets, the Corporation should not grudge to introduce sewers, roads, taps, flush-out latrines, bath rooms, and lights. The plea that Corporation will be spending money for improving private properties can be applied with equal force to all sewered areas in the City. Once the sewers are introduced, more taps and latrines can be put up without nuisance.

Despite the severe financial stringency and the difficulties involved, slum improvement has been kept in the forefront. Mackeys Garden, Angalammen Coil Hutting grounds, Tondiarpet Chery and Kuruseddy Chery have been improved during the year. Bogypalayam Scheme and Cochrane Basin plinth scheme have been in progress. Further, schemes are under consideration to provide housing accommodation to the homeless harbour coolies and to improve the sanitary condition of Roshan Chery, Sundara Mudali Chery, Oddarpaliam, Scavengers' Hutting grounds in old Slaughter House Road and Subramania Mudali Garden.



With the increase in population and the development of new areas the work of the Health Department has enormously increased in all directions. In the interest of efficient administration, the staff of Assistant health Officers, which is now quite inadequate, has to be increased so that every branch of the Health Administration may receive closer attention and supervision. It is hoped, the Corporation will consider the desirability of appointing a third Assistant Health Officer, as soon as its financial conditions improve.

In conclusion, I wish to thank my assistants and all the members of the staff for their whole-hearted co-operation and zeal in the discharge of their duties.

I have the honour to be

Sir,

Your most obedient Servant,

C. S. GOVINDA PILLAI,

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

*Health Officer.*

Madras, }

*Dated* 19-8-32. }

Forwarded to the Council.

D. D. WARREN,

*Commissioner,*

23-8-32.

## SUMMARY OF VITAL STATISTICS FOR 1931.

Area	...	19,728	acres.		
Population (Census 1931)	...	6,47,230			
Average Density per acre	...	32.8			
Inhabited houses (Census 1931)	...	73,845			
Births	... 25,738	Birth-rate	39.8	per 1000	population.
Deaths (all causes)	... 23,162	Death-rate	35.8	"	"
Natural Increase	... 2,576	Rate of increase	4.0	"	"
Deaths of infants under one year of age.	} 6,391	Infantile mortality-rate.	} 248.3	per 1000	births.
Deaths due to childbirth.	299	Maternal death-rate.	} 11.6	per 1000	births.

### Deaths from Principal Diseases.

Cholera	... 153	Death-rate	0.2	per 1000	population.
Small-Pox	... 24	"	0.04	"	"
Measles	... 3	"	0.006	"	"
Malaria	... 277	"	0.4	"	"
Enteric Fever	... 166	"	0.3	"	"
Phthisis	... 843	"	1.3	"	"
Dysentery & Diarrhoea	... 2,746	"	4.2	"	"
Respiratory Diseases	... 5,743	"	8.9	"	"

**Vital Statistics.**—The outstanding features of the state of Public Health during 1931, as drawn from the statistical returns of Births and Deaths and compared with the previous year 1930 are:—

- i. decrease in the birth-rate from 48.5 in 1930 to 39.8 in 1931.
- ii. decrease in the death-rate from 43.2 in 1930 to 35.8 in 1931.
- iii. increase in the infantile mortality-rate from 243.9 in 1930 to 248.3 in 1931.
- iv. increase in the mortalities under :—
  - (a) Cholera ... (+110)
  - (b) Enteric Fever ... (+ 40)
  - (c) Respiratory Diseases ... (+487) and,
- v. decrease in the mortalities under :—
  - (a) Small-Pox ... (—164)
  - (b) Malaria ... (— 6)
  - (c) Diarrhoea & Dysentery ... (—310)
  - (d) Pulmonary Tuberculosis ... (— 81)
  - (e) Other Fevers ... (—213)

These are dealt with in detail in the report.

**Meteorology.**—A statement showing the atmospheric conditions recorded during 1931 is given in the Annual Form A (page 54). The maximum temperature varied from 100.3° F in June to 82.0° F in December. The minimum temperature varied from 68.9° F in February to 82.4° F in June. The lowest degree of humidity was recorded in June (62 degrees) and the highest in November and December, both of which recorded 82 degrees.

**Rainfall.**—The total rainfall recorded during the year 1931 was 58.53 inches as compared with 78.69 inches in 1930. There was rainfall in all the months of the year excepting February and March. The highest rainfall was recorded in October (12.09 inches) and the last quarter ending December returned 33.78 inches which is the highest rainfall of all the other quarters. During the whole year there was rainfall on 114 days (*Vide* Table B on page 81).

**Population.**—The year 1931 was marked by the decennial census. The enumeration was conducted in the month of February. According to this census, the population of Madras was 6,47,230 as against 5,26,911 in 1921. A comparative statement of the population of Madras enumerated decennially since 1871 is as follows :—

Census.	Population.
1871	3,97,552
1881	4,05,848
1891	4,52,518
1901	5,09,346
1911	5,18,660
1921	5,26,911
1931	6,47,230

A statement showing the absolute and the percentage decennial increase is given below :—

Decennium.	Absolute decennial increase of population.	Percentage decennial increase of population.
1871-1881 ...	8,296	2.1
1881-1891 ...	46,670	11.5
1891-1901 ...	56,828	12.6
1901-1911 ...	9,314	1.8
1911-1921 ...	8,251	1.6
1921-1931 ...	1,20,319	22.8

A survey of the above statement reveals that there has been a phenomenal increase in the population during the decennium 1921-31. In ordinary circumstances, this increase will be ascribed to the natural growth or increase of population *i.e.*, excess of births over deaths and to the balance between immigration and emigration. But a careful scrutiny of the vital statistical records will show that natural increase had

little or nothing to do with the growth of population in Madras. The statement given below shows that, excepting for the intercensal period 1921-31 which recorded a natural increase of 1687, all the other decennial periods reported excess of deaths over births. The growth of population should therefore be attributed to the migration of people into the city from the rural areas. Factories and mills, and schools and colleges have drawn many from all parts of the presidency and even from the other provinces of India.

Intercensal Period.	Births.	Deaths.	Increase or Decrease.
1871-1881	1,18,548	1,80,589	-62,041
1881-1891	1,60,830	1,61,196	- 366
1891-1901	1,84,112	1,88,521	- 4,409
1901-1911	1,96,864	2,24,334	-27,470
1911-1921	2,01,076	2,23,096	-22,020
1921-1931	2,29,432	2,27,745	+ 1,687

A perusal of the above statement will suggest that lack of suitable and sufficient sanitary conditions has been responsible for the heavy number of deaths in the city. Overcrowding, congestion, bad housing and density of population increased as immigrants poured into the city and swelled the population. Dirt, disease and death easily came into existence under such conditions.

The census enumeration having revealed the magnitude of the human contents of the city, a comprehensive scheme involving city extensions, housing schemes, improvement of slum areas and hutting grounds, and extensions of underground drainage to areas not already sewered has to be taken up seriously as a sanitary necessity for the city. Unless this is done, mortality cannot be reduced and ideal sanitary conditions expected. What has hitherto been done in the improvement of the city has only touched the fringe of the sanitary problem. Progress and improvement in the sanitation of the city should run *paripassu* with the rate of growth of the population.

According to the census enumeration, the Perambur Division recorded the highest number of population (43,817) and next in order were Royapettah division (33,203) and Tiruvatteeswaranpet Division (31,371). The lowest was returned by the Esplanade Division (3,906).

As compared with the previous census, 26 divisions showed increase in population, the maximum increase having occurred in Perambore Division (14,358) due to definite industrial extensions, Royapettah division (11,888) due to Mambalam extension, Tondiarpet Division (9,012), Korukkupet Division (8,898), Mirsahibpet Division (8,712) and Tiruvatteeswaranpet Division (7,176). The minimum increase was recorded in Seven Wells Division (666). The four divisions which recorded decreases were Muthyalpet Division (-1,374), Park Town Division (-361), Katchaleeswaranpet Division (-348) and Sowcarpet Division (-266).

Among 6,47,230 persons enumerated, 3,41,223 or 52.7% were males and 3,06,007 or 47.3% females as against 52.4% and 47.6% respectively in the previous census. The ratio of males to 100 females was 111.5 as compared with 110.1 in 1921.

#### 1931—Census Population in Age-Groups.

	Under	1	5	10	15	20	30	40	50	60	Total
	1	to	to	to	to	to	to	to	to	and	
	Year	5	10	15	20	30	40	50	60	above	
Males.	6,702	30,814	35,600	33,863	33,738	71,868	59,529	37,844	19,408	11,857	3,41,223
Females.	6,767	30,585	33,961	32,220	33,801	68,389	46,289	28,136	16,112	9,747	3,06,007
	13,469	61,399	69,561	66,083	67,539	1,40,257	1,05,818	65,980	35,520	21,604	6,47,230

It is seen that the highest number of persons is at the age-group of 20-30 and next in order is the age-group of 30-40 both the groups being periods of great economic value in life. The males are in excess of females in all the age-groups excepting in the age-groups of 0-1 and 15-20 where the difference is only very little.

#### 1921 and 1931 Censuses compared in Age-Groups.

Census	Under 1 year	1 to 5	5 to 10	10 to 15	15 to 20	20 to 30	30 to 40	40 to 50	50 to 60	60 and above	Total.
1921	12,581	40,958	56,521	51,612	49,987	1,11,464	85,680	58,805	34,724	24,579	5,26,911
1931	13,469	61,399	69,561	66,088	67,539	1,40,267	1,05,818	65,980	35,520	21,604	6,47,230
Increase or Decrease	+888	+20,441	+13,040	+14,471	+17,552	+28,793	+20,138	+7175	+796	-2975	+1,20,319

With the exception of the age-group (60 and above) which records a decrease of 2,975, all the other age-groups have shown increase, the maximum having occurred in the age-group 20-30 and the minimum in the age-group 50-60.

The vital statistical rates throughout this report are based on the census return of population and may therefore be considered to represent a more correct picture of the state of Public Health in the City during the year under report than in the intercensal years.

**Registration of Statistics.**—The staff for registration of births and deaths was the same as in the previous year.

**Prosecutions.**—Seven prosecutions were made during the year 1931 for failure to register death, and of these, prosecutions in 6 cases were subsequently withdrawn and the remaining one was convicted with a fine of Re. 1. Another prosecution was made for failure to register birth which was also subsequently withdrawn.

**Births.**—The number of births recorded during the year 1931 was 25,738 equal to a rate of 39.8 per 1000 of the population, the average of the previous five years being 36.9. The births and rate for 1930 were 25,662 and 48.5 per mille of population respectively.

Of the total births in 1931, 13,299 were males and 12,439 females. The ratio of males to 100 females was 106.9 against 106.8 in 1930. Preponderance of male births was recorded in 25 divisions, the variations ranging from 101.0 to 118.3 while in one division the births were equal in both sexes. In the remaining four divisions where the female births exceeded the male births, the ratio of males to 100 females varied from 89.3 to 97.5.

1930.	...	1931.		
		Legitimate.	Illegitimate.	Total.
13,252	Males.	13,121	178	13,299
12,410	Females.	12,262	177	12,439
25,662	Total	25,383	355	25,738
48.5	Rate per 1000 living.	39.2	0.6	39.8

The number of illegitimate live births was 355 or 1.4% of the total births as compared with 480 in 1930.

**Seasonal Variation.**—The largest number of births was recorded in July (2,387) and the lowest in February (1,569). The distribution of births during the different quarters of the year is as follows— (Page 84).

Quarters.	No. of births Registered.	Percentage of total.
First Quarter.	5,571	21.64
Second Quarter.	6,802	26.43
Third Quarter.	6,646	25.82
Fourth Quarter.	6,719	26.11
Total	25,738	100.00

**Local Variations in the Birth-Rate.**—The highest birth-rate (50·7) was recorded in Egmore Division and the lowest in Sowcarpet Division (25·7). Eleven Divisions returned birth-rates above the annual birth-rate of 39·8 per mille of the City. In Sixteen divisions the rates ranged between 30 & 39 and in the remaining three, the lowest was 25·7 as mentioned above.

The birth-rates exceeded the death-rates in 22 divisions, the difference of increase ranging from 0·8 in Amir Mahal Division to 16·7 in Egmore division. In seven divisions where the birth-rates fell below the death-rates, the maximum decrease of 6·8 was recorded in Seven Wells Division. The birth and death-rates of Esplanade Division remained the same. (Annual Form I on Page 55).

**Birth-rates in communities.**—The birth-rates in the different communities and among the principal sub-divisions of the Hindu Community are shown in tables C & D on pages 82 and 83.

As in previous years, the Mussalman and the European communities returned the highest and the lowest rates respectively,

Communities.	Rate per 1,000 living.	
Mussalman	...	41·6
Hindu	...	40·4
Indian Christian	...	34·2
Anglo-Indian	...	35·8
European	...	13·4
		39·8
All communities	...	39·8

**Still births.**—The number of still births registered was 1318 against 1260 in the preceding year 1930. This represented 51·2 per 1000 live births.

**Deaths.**—The total deaths registered in the city during the year numbered 23,162 against 22,839 in 1930. The annual death-rate calculated on the census population of 1931 works out to 35·8 per 1000 of the population as compared with 43·2 in 1930 calculated with reference to 1921 census population, the quinquennial average being 36·5. As stated elsewhere the rates based on the recent census population may be taken with greater confidence to represent a more exact state of the public health than the rates in the intercensal period. The death-rate in 1921 was 38·5 per mille based on the then existing population as enumerated by the census of 1921. A comparison of the death-rates of 1931 and 1921 taking these figures with greater impunity to represent the real state of the public health would show that the state of public health in 1931 had decidedly improved over 1921. Moreover, if the general mortality-rate (38·5) experienced in 1921 had been applied to the population of the city during the year 1931 under report, there would have been 24,918 deaths instead of 23,162—the number actually recorded—a saving of 1,756 lives being thereby effected.

Of the total deaths registered during the year 1931, 11,879 were males and 11,283 females. The ratio of males to 100 females was 105·3 compared with 106·1 in 1930 (Annual Form II on page 56).

**Seasonal Variations.**—The highest number of deaths occurred in January (2,841) and the lowest in September (1,588). The incidence of mortality in the different quarters of the year is as follows:—

Quarters.	Deaths registered.	Percentage to total.
First Quarter	6926	29·90
Second Quarter	6028	26·03
Third Quarter	5078	21·92
Fourth Quarter	5130	22·15
Total	23,162	100·00

The mortality was highest in the first quarter during which Cholera prevailed in a mild epidemic form. There were a large number of deaths from Respiratory Diseases. Children and the aged died in largest numbers—pointing out that the un-favourable atmospheric conditions after the heavy storm in the last quarter of the previous year 1930 continued to prevail during this period affecting public health.

**Local Variations.**—Twelve divisions returned death-rates above the annual death-rate of 35.8 for the city. Among these, four divisions, namely, Tondiarpet, Seven Wells, Amir Mahal and Mirsahibpet divisions recorded death-rates above 40 per 1,000 living and of which the Seven Wells Division returned the highest death-rate (43.4). The death-rates in the remaining divisions (Royapuram, Washermanpet, Korukkupet, Harbour, Choolai, Purasawalkam, Chintadripet and Tiruvatteeswaranpet Divisions) ranged between 36 and 40. As explained in previous reports, high death-rates in these divisions are due to congestion, overcrowding, bad housing conditions, poverty and economic distress of the lower classes.

Among 18 divisions which showed death-rates below the annual death-rate, the lowest (22.7) was returned by the Muthyalpet Division, as in previous years. Ammen Koil and Perambore Divisions which in previous years returned death-rates above the annual death-rate recorded this year death-rates below it.

**Mortality-rate in Communities.—**

Community.	Death-rate per 1000 living in each community.
Mussalman	39.9
Hindu	36.5
Indian Christian	26.8
Anglo-Indian	25.0
European	6.7
Others	1.0
All communities	35.8

As in previous years, the death-rate is highest among Mussalman Community. The cause of such persistently high death-rate has been explained in the previous report.

**Mortality in Age-Groups.**—The following statement shows the number of deaths and percentage to the total deaths at each age-group in different quarters of the year :—

Age-Groups.	Quarters ending				Year 1931.	Percentage to total deaths.
	March.	June.	September.	December.		
Under 1 Year.	1709	1595	1533	1554	6391	27.6
1 to 5	1235	957	844	731	3767	16.3
5 to 10	293	209	152	133	787	3.4
10 to 15	135	132	86	84	437	1.9
15 to 20	198	199	129	146	672	2.9
20 to 30	565	576	407	402	1950	8.4
30 to 40	550	490	391	405	1836	7.9
40 to 50	481	441	341	314	1577	6.8
50 to 60	469	436	365	389	1659	7.2
60 and above.	1291	993	830	972	4086	17.6
Total ..	6926	6028	5078	5130	23,162	100.0

The deaths under 5 years and above 60 years of age represent 61.5% of the total deaths at all ages. The highest number of deaths has occurred in the first quarter ending March in all but the age-groups of 15 to 20 and 20 to 30.

**Mortality rate in age and sex.**—Age and sex influence death-rate as much as any other factor. The specific death-rates at different age-groups and in sexes are given in the following statement :—

Age-Groups.	Death-rate in 1931 per 1000 living in each age-group.		
	Males,	Females.	Both Sexes.
Under 1 Year.	258.6*	237.3*	248.3*
1 to 5 ...	60.2	62.5	61.4
5 to 10 ...	11.3	11.3	11.3
10 to 15 ...	6.2	7.0	6.6
15 to 20 ...	7.6	12.3	9.9
20 to 30 ...	11.8	16.1	13.9
30 to 40 ...	16.1	18.9	17.4
40 to 50 ...	24.9	22.5	23.9
50 to 60 ...	50.1	42.6	46.7
60 and above.	167.9	214.9	189.1
All ages ...	34.8	36.9	35.8

\*Calculated on 1000 births registered during the year.

There has not been any deviation in the trend of the mortality-rates in the sexes either combined or separate as compared with the previous year.

**Infantile Mortality.**—The number of deaths under one year of age was 6,391 as compared with 6,258 in 1930. The infantile mortality-rate expressed as the number of deaths of infants under one year of age to 1000 live births registered during the year was 248.3 as against 243.9 in the preceding year, the average of the previous five years being 260.8.

The following statement shows the number of deaths and rates from 1921 to 1931 :—

Deaths under one year.	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931
Number.	5408	6669	5837	6148	6431	6145	5888	6806	5933	6258	6391
Rate per 1000 Births.	281.9	308.0	254.0	264.1	278.8	279.3	237.6	286.8	256.6	243.9	248.3

During the years under reference the infantile death-rates have been fluctuating in contrast to the western countries where there has been a steady and progressive decline on account of intensive maternity and child welfare work which runs concurrently with improvement in general sanitation and housing. The conditions here are adverse to the well-being of infants due to ignorance, prejudice, poverty, and economic distress of the parents living in squalid and ill-ventilated homes and being indifferent to make the best use of maternity and child welfare assistance available in the city. The total number of deaths among infants formed 27.6 per cent. of the total deaths at all ages during the year as compared with 27.4 per cent. in the preceding year.



The distribution of the infant deaths in the different periods of first year of life is as follows :—

Age-Periods.	No. of deaths.	Proportion to total deaths in 1931.
Under 7 days ...	1418	22.2
7 days & under 1 month ...	879	13.8
1 month & under 4 months...	1086	17.0
4 months & under 7 months.	1226	19.2
7 months & under 10 months.	951	14.8
10 months & under 1 year ...	831	13.0
	6391	100.0

The highest toll of death has occurred during the first week of life and the total deaths within one month of life represent 36.0 per cent. of the total deaths among infants.

**Causes of Infantile Mortality.**—The chief causes of infantile deaths were from Respiratory Diseases (1910), Premature births (1670) Dysentery & Diarrhoea (661), Fever and Convulsions (881) and also deaths from debility, marasmus etc. The ignorance of the mother, improper feeding, exposure to all insanitary surroundings form the exciting causes for respiratory and bowel complaints.

**Seasonal variations.**—During the month of January, the highest infantile mortality-rate (386.4) was recorded and the lowest in October (191.3) (Table E Appendix Page 84).

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

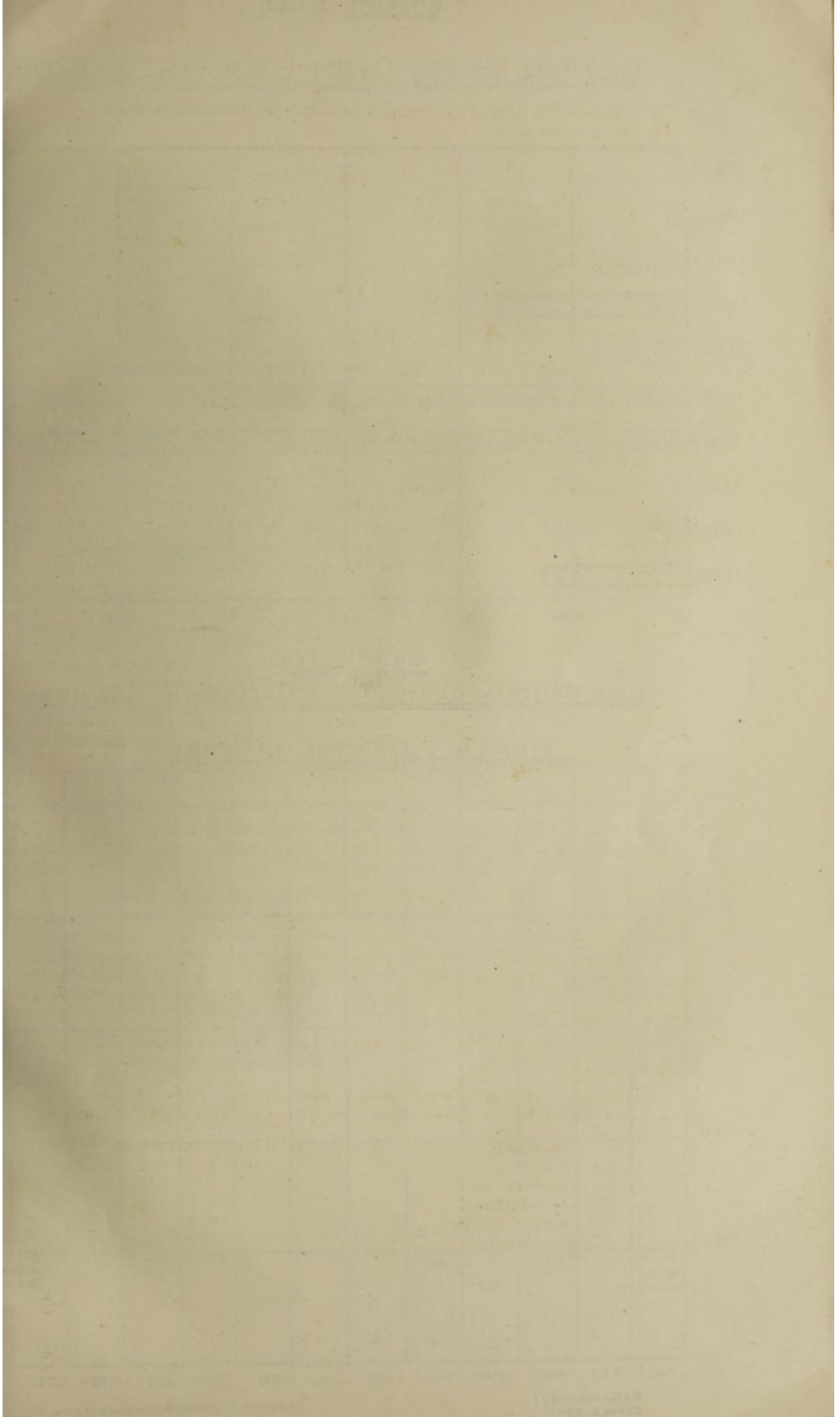
Quarters.	Infantile deaths in 1931.	Percentage to total infant deaths.
First Quarter ...	1709	26.74
Second Quarter ...	1595	24.96
Third Quarter ...	1533	23.99
Fourth Quarter ...	1554	24.31
	6391	100.00

**Local Variations in the infantile death-rate.**—The Harbour and Kothawal Bazaar Divisions recorded the highest rates of 366.0 and 357.5 respectively. The lowest death-rate was returned by the Egmore Division (178.0)—(Table F on page 85).

Compared with 1930, 13 divisions recorded decreases in infantile death-rates.

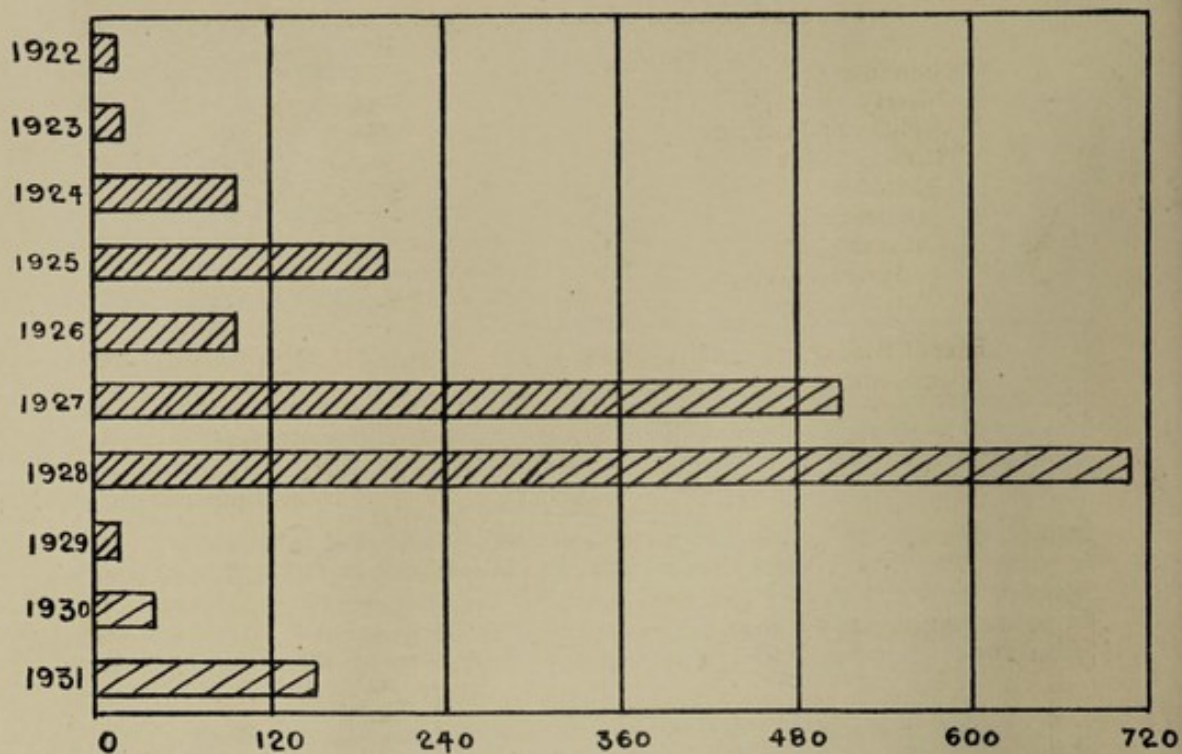
**Infantile mortality-rate among communities.**—The infantile death-rates among the different communities during the year 1931 are as follows :—

Community.	Infantile death-rates per 1000 births.
European ...	78.1
Anglo-Indian ...	99.7
Indian Christian ...	186.2
Mussalman ...	257.0
Hindu ...	254.4



GRAPH 1 (a)

DEATHS FROM CHOLERA 1922-1931

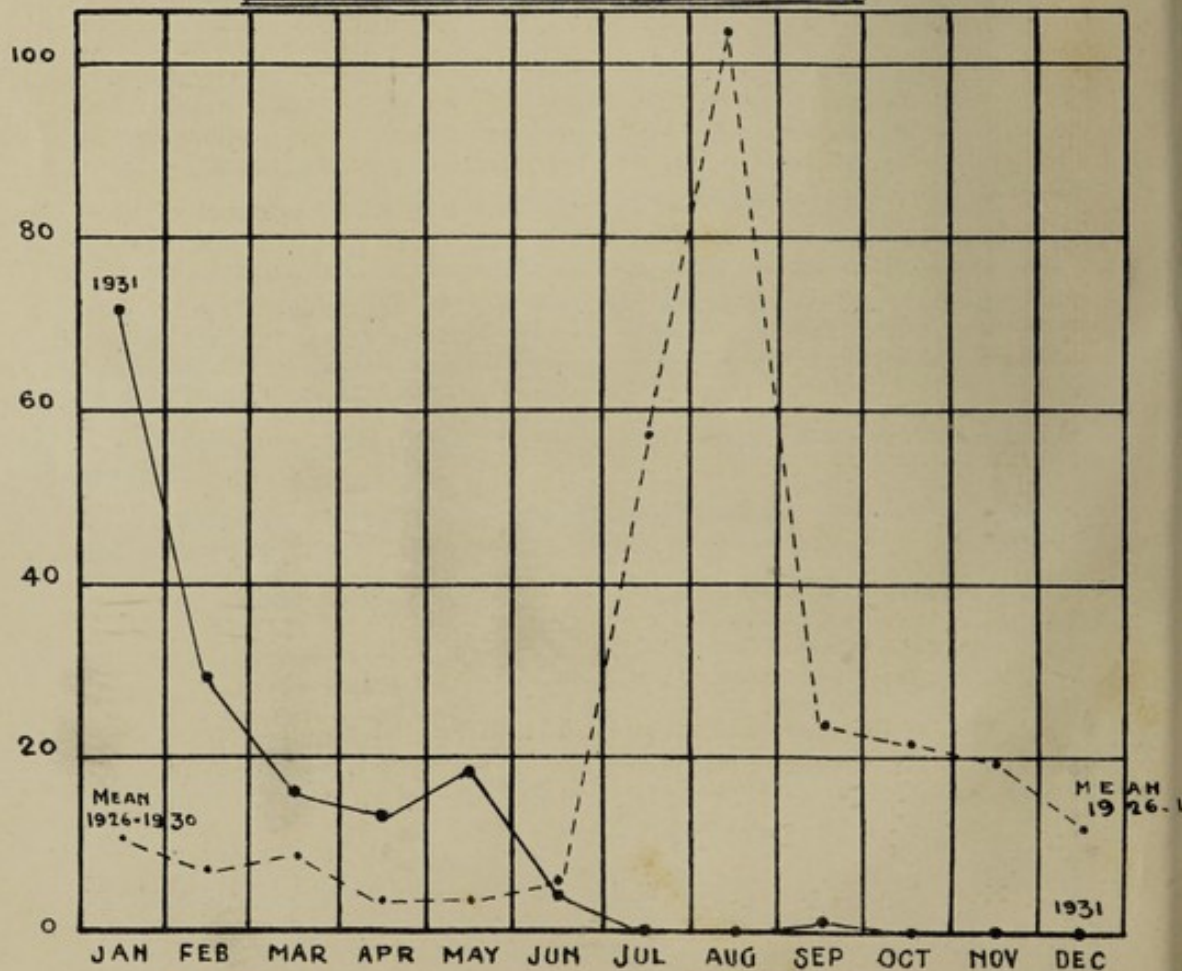


GRAPH 1 (b)

MEAN MONTHLY DEATHS FROM CHOLERA IN 1926-1930

&

MONTHLY DEATHS IN 1931



The infantile death-rates for the sub-castes of the Hindu Community are as follows :-

Caste.	Infantile death-rates per 1000 births.
Brahmin	... 175.4
Chetty	... 354.1
Vellala or Mudaliar	... 238.2
Baliya or Naidu	... 233.0
Vannia or Naicker	... 268.5
Adi Dravida	... 276.7
Patnavar	... 120.0
Yadava or Eddyar	... 234.4
Viswa-Brahmin	... 395.5

**General History of Chief Diseases.**—The following statement furnishes the deaths from some of the principal diseases during the last five years :—

Diseases.	Deaths in					Increase or decrease in 1931 as compared with 1930.
	1927	1928	1929	1930	1931	
Cholera	512	708	16	43	153	+ 110
Dysentery & Diarrhoea.	3263	3931	3127	3056	2746	— 310
Small-Pox	32	251	506	188	24	— 164
Measles	5	59	68	16	3	— 13
Malaria	1367	1599	681	283	277	— 6
Enteric Fever	164	177	130	126	166	+ 40
Other Fevers	1095	1555	1731	1961	1748	— 213
General Respiratory Diseases	5035	6879	5324	5256	5743	+ 487
Tuberculosis	1781	1812	1371	1075	1020	— 55
Deaths from child birth.	293	366	304	328	299	— 29
All other causes	8817	9378	9157	10,507	10,983	+ 476
Total	22,364	26,715	22,415	22,839	23,162	+ 323

The increase of 323 deaths over the previous year 1930 is more than accounted for by the decrease in the number of deaths from Dysentery and Diarrhoea, Small-Pox, Measles, Malaria, Tuberculosis and other fevers.

**Cholera.**—The outbreak of Cholera in the city in December of the previous year 1930 has been described in the annual report for 1930 and during the year under report which followed it, the infection continued to prevail accounting for 380 attacks and 153 deaths giving a fatality rate of 40.3 per cent. against 125 attacks and 43 deaths or 34.4 per cent. in 1930. The death-rate was 0.2 per mille of population in 1931 and 0.08 in 1930, the quinquennial average being 0.4 (Annual Form VI on page 60).

The mortality from Cholera for the last five years is furnished below and further illustrated in Graph I (A) and the seasonal incidence is shown in Graph I (B).

Year.	Deaths from Cholera.
1927	... 512
1928	... 708
1929	... 16
1930	... 43
1931	... 153

The incidence of Cholera occurred in all but the last quarter of the year. The highest number of attacks (183) and deaths (72) was in January

indicating that the incidence was only due to the continuance of the infection from the previous year as mentioned above. The distribution of attacks and deaths during the different quarters of the year is as follows :—

Year.	Attacks from Cholera.	Deaths from Cholera.
First Quarter	... 284	117
Second Quarter	... 85	35
Third Quarter	... 11	1
Fourth Quarter	... ...	...
Total	... 380	153

The first quarter was the worst affected of all the quarters of the year.

**Mortality in Districts.**—The infection which was limited to certain divisions in the previous year, spread to all the divisions and though attacks from Cholera occurred in all the divisions, there were no deaths in four divisions, namely, Muthyalpet, Ammen Koil, Trevelyan Basin and Park Town.

Mirsaibpet Division reported the highest number of attacks (41) and the highest number of deaths (20). Its death-rate of 0.7 per mille stands the highest recorded of all the divisions. Including this, 13 other divisions recorded either the annual death-rate of 0.2 or above it. The rest of the divisions returned death-rates below 0.2 excepting the four divisions mentioned above which returned no deaths from Cholera.

The preventive measures were vigilantly and vigorously carried out by the Sanitary and Medical staff of the department. The former attended to the prompt removal of patients to the infectious hospitals, disinfection of infected houses, soiled bedding, clothings etc. and kept the contacts under observation. House to house inspection, propaganda lectures, and distribution of pamphlets on Cholera were also done. The medical staff inoculated 17,698 persons with anti cholera vaccine as a prophylactic measure.

**Diarrhoea and Dysentery.**—Under this group of causes, 2,746 deaths were registered during the year 1931 as against 3,056 in 1930. These correspond to the rates of 4.2 and 5.8 per mille of population respectively in the two years, the average of the quinquennium being 5.3 (Vide page 66).

The mortality during the past five years is herewith furnished and illustrated in Graph II (A).

Year.	Deaths.
1927	... 3263
1928	... 3931
1929	... 3127
1930	... 3056
1931	... 2746

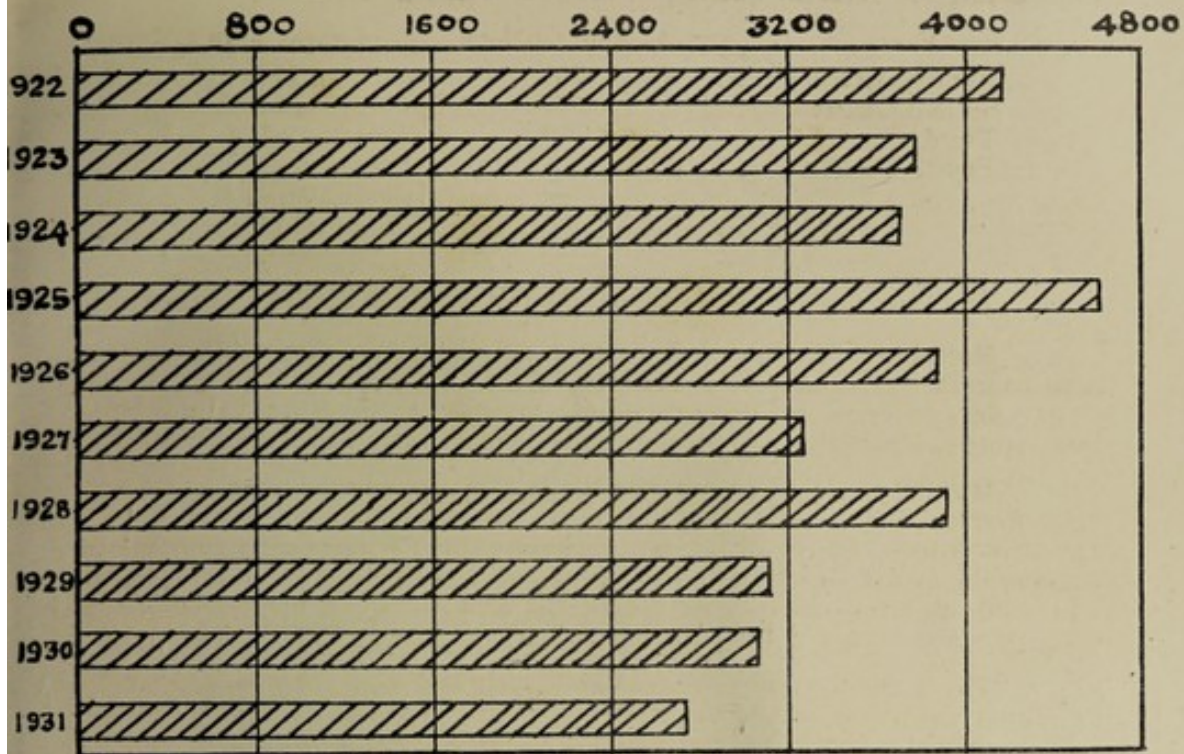
A gradual decline in the mortality from Diarrhoea and Dysentery is noted since 1928.

The seasonal incidence of mortality from diarrhoea and dysentery is given below and is further illustrated according to months in Graph II (B).

Quarters.	Deaths.
First Quarter	... 883
Second Quarter	... 669
Third Quarter	... 652
Fourth Quarter	... 542
Total	... 2,746

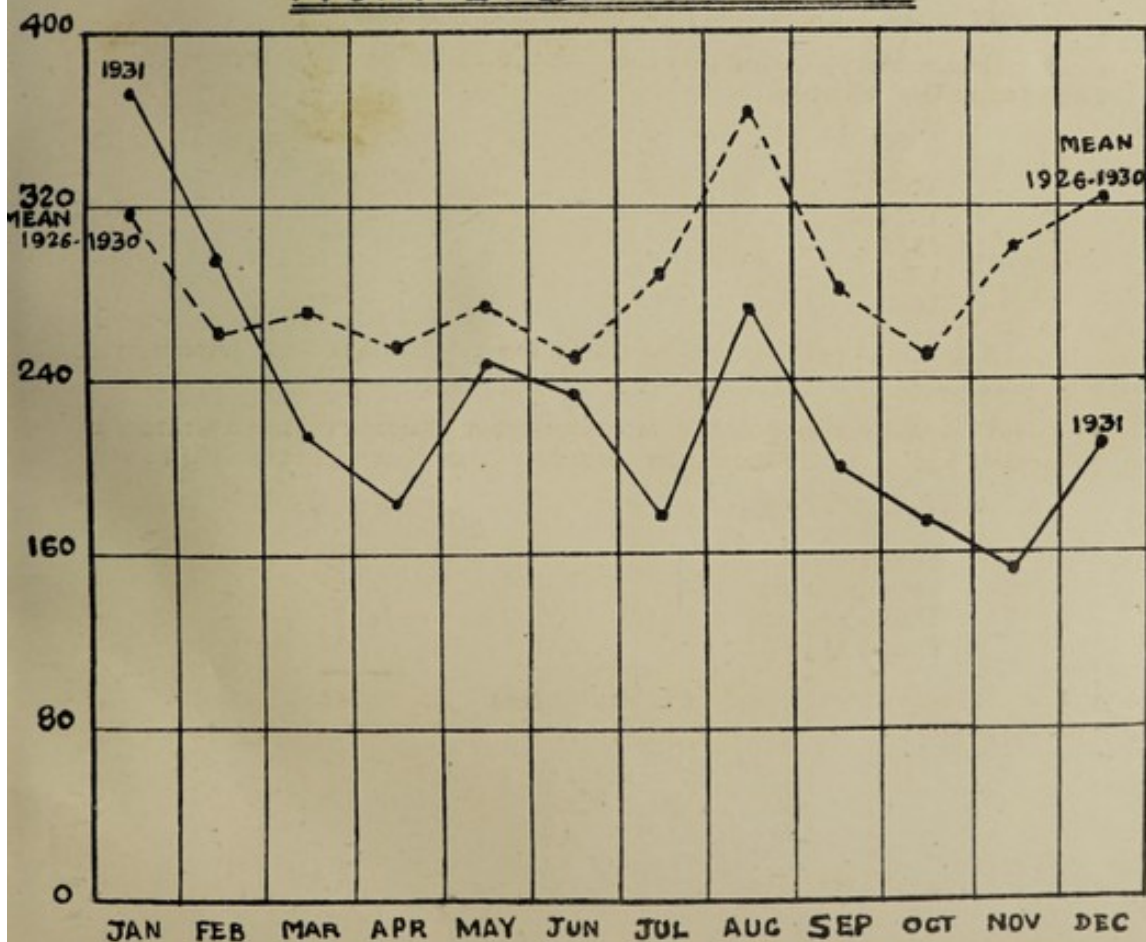
GRAPH II (a)

DEATHS FROM DIARRHOEA & DYSENTERY 1922-1931



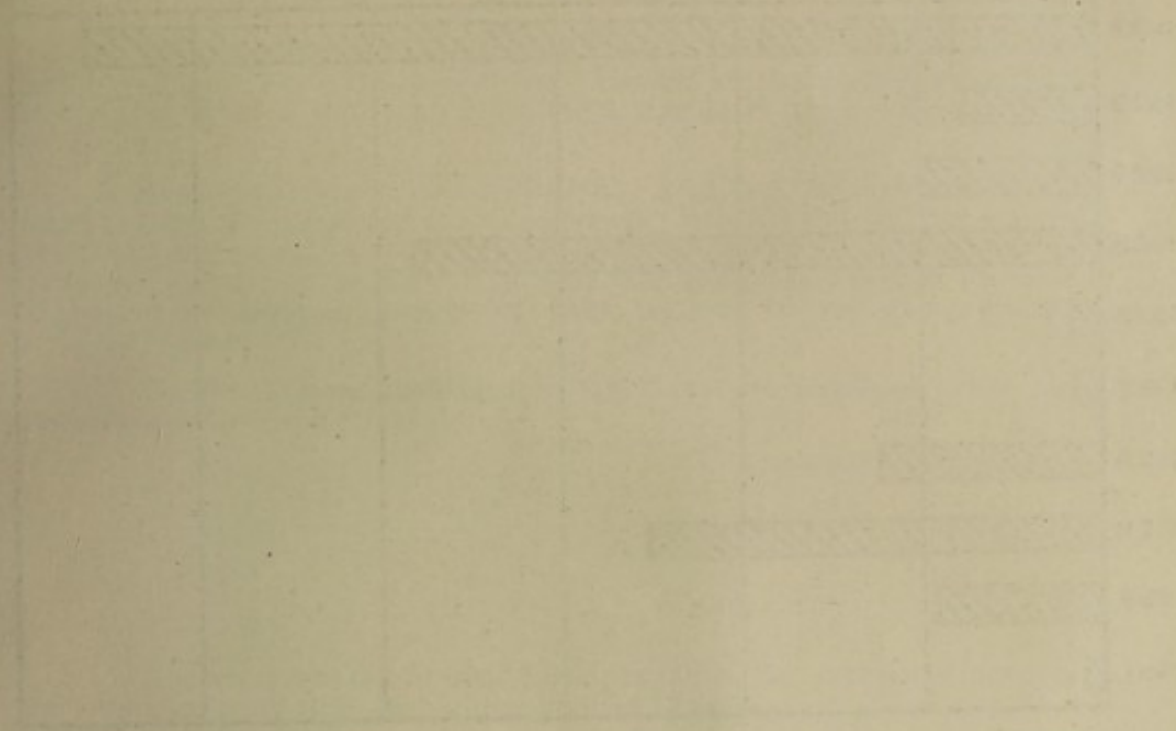
GRAPH II (b)

MEAN MONTHLY DEATHS FROM DIARRHOEA & DYSENTERY IN 1926-1930  
&  
MONTHLY DEATHS IN 1931

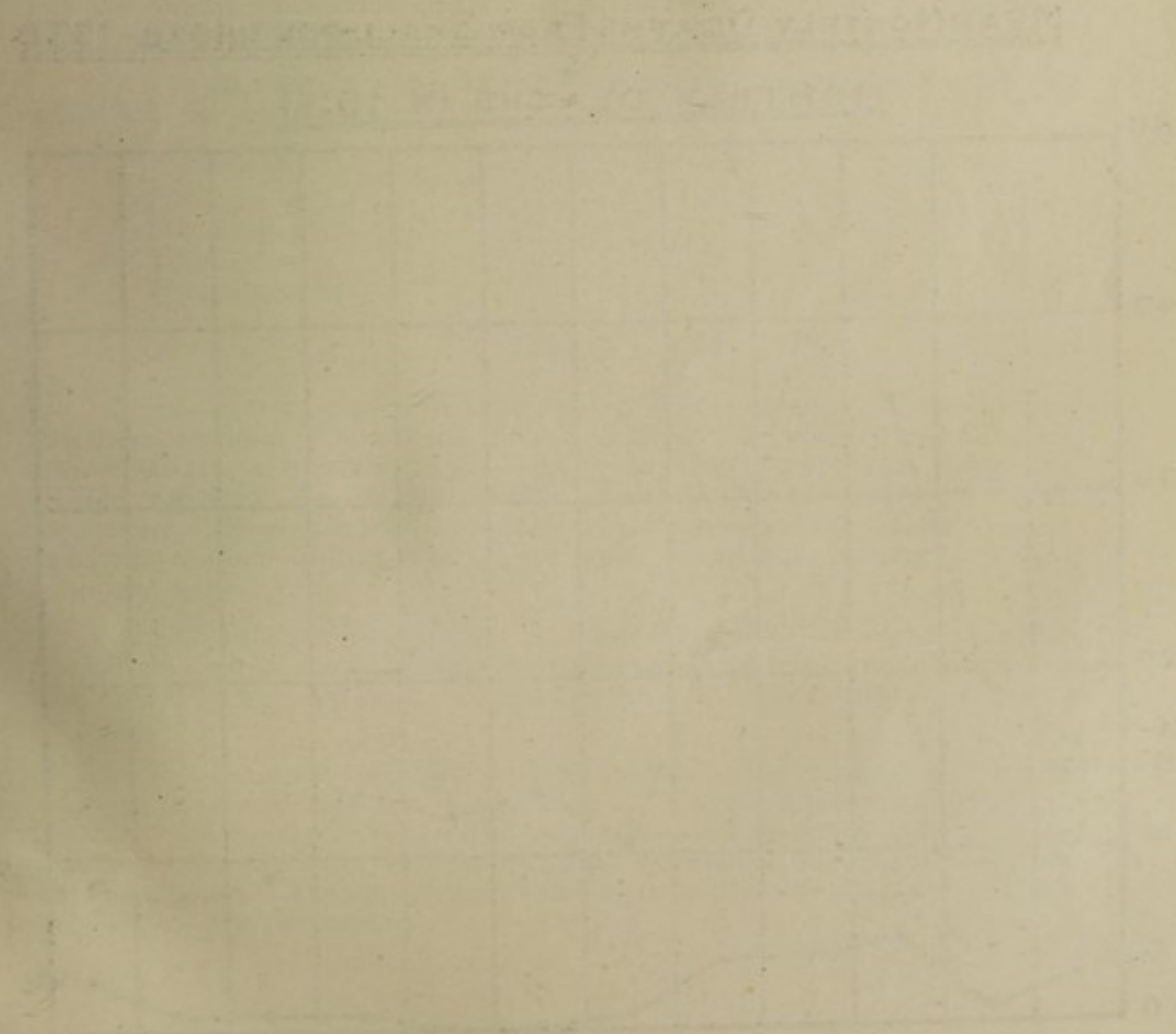




GRAPH I  
BEATING FROM SMALL FOX 1924-1925



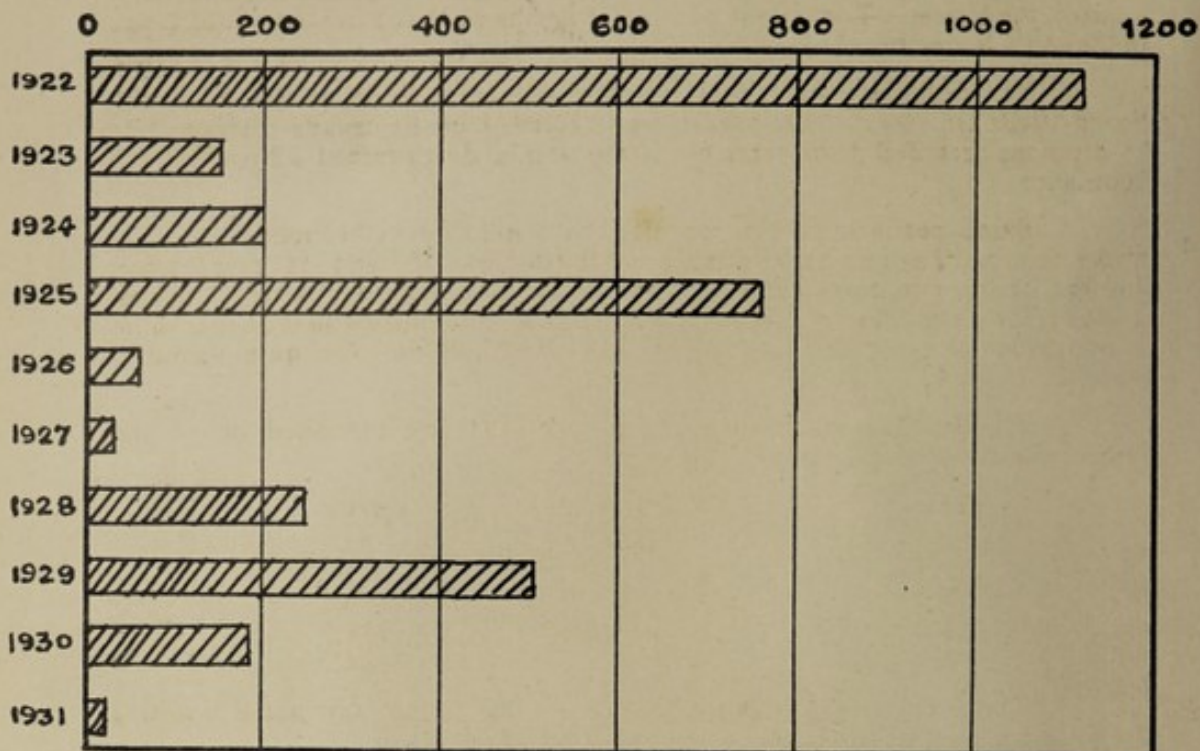
GRAPH II



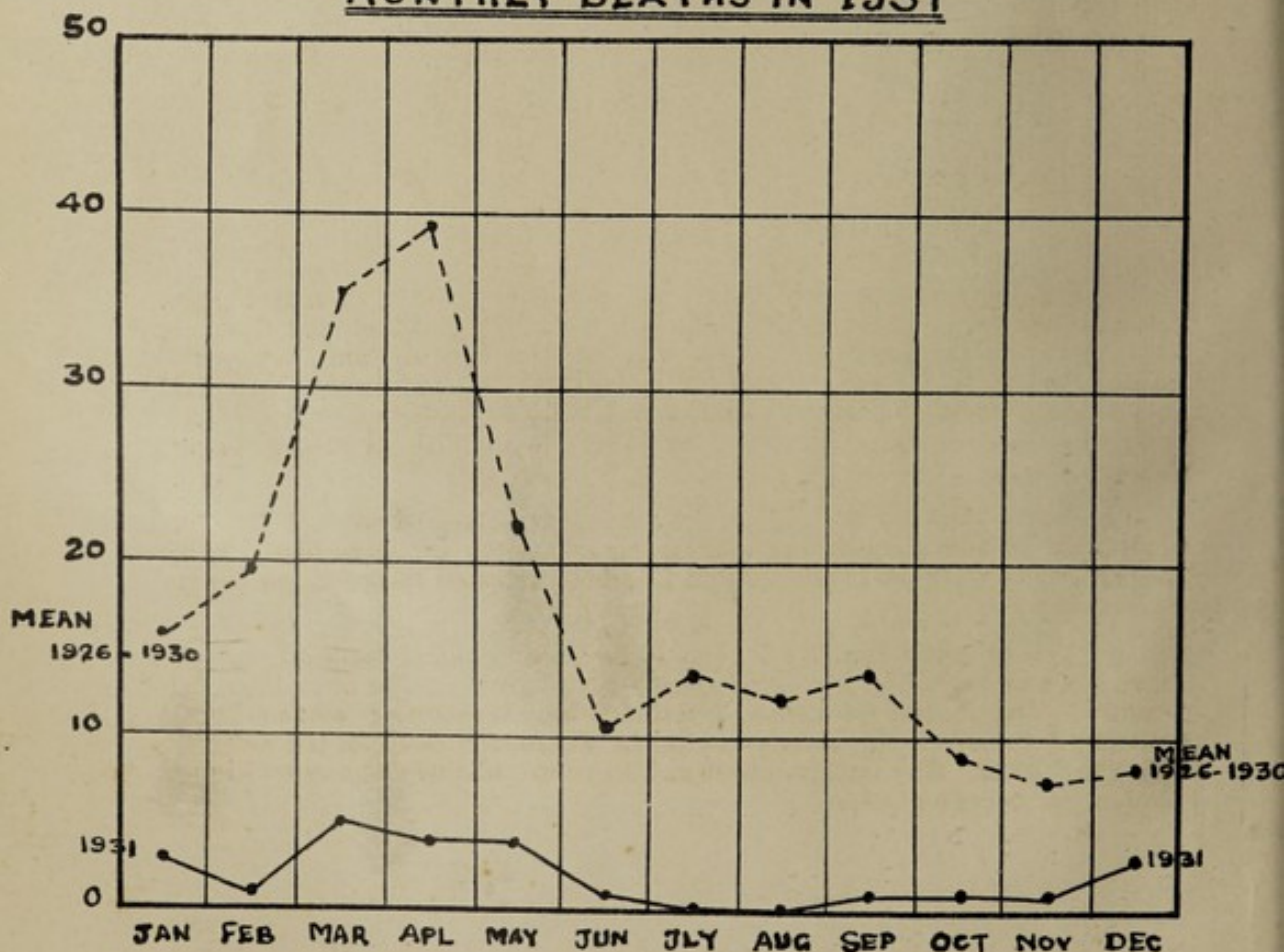
THE END OF THE LINE IS NOT TO BE DRAWN



GRAPH III (a)  
DEATHS FROM SMALL-POX 1922-1931



GRAPH III (b)  
MEAN MONTHLY DEATHS FROM SMALL-POX IN 1926-1930  
&  
MONTHLY DEATHS IN 1931



The first quarter recorded the highest number of deaths and the fourth quarter the lowest. The largest number of deaths occurred in January (372) and the least in November (154).

The death-rate was highest in Mirsahibpet division (6.8), and in the Seven Wells Dn. (6.4). The lowest was recorded in Esplanade division (1.5). 18 divisions recorded death-rates below the annual death-rate of 4.2 per mille of population,

**Small-pox.**—Small-pox occurred in a mild form throughout the year under report. The number of attacks and deaths was 109 and 24 respectively and the fatality rate works out to 22.0 per cent. as against 877 attacks and 188 deaths or 21.4 per cent. in 1930. The death-rate corresponds to 0.04 per mille of population as compared with 6.4 in 1930, the rate for the quinquennium being 0.3 (page 61).

The deaths from Small-pox from 1927–1931 are furnished below and further shown in Graph III (a).

Year.	Deaths.
1927	32
1928	251
1929	506
1930	188
1931	24

The number of deaths from Small-pox during the year under report is the lowest on record since 1908 which reported 13 deaths.

As regards seasonal incidence, the month of March reported the largest number of attacks (26) and deaths (5) and both June and August the lowest attack of one. Deaths were recorded in all the months of the year excepting July and August which returned no death. The seasonal incidence of mortality from this disease is given in Graph III (b).

The distribution of attacks and deaths from small-pox in the different quarters of the year is:—

Quarter.	Attacks.	Deaths.
First quarter.	51	9
Second quarter.	22	9
Third quarter.	16	1
Fourth quarter.	20	5
Total	109	24

As regards local variations, six divisions namely Washermanpet, Katchaleeswaranpet, Seven Wells, Trevelyan Basin, Chintadripet, and Chepauk returned no attacks from small-pox. Among the remaining divisions, Royapettah division recorded the largest number of attacks (23) and deaths (9). The Royapuram division reported 15 attacks and 3 deaths and the Choolai division 10 attacks and one death. In other divisions, the number of attacks ranged between 1 to 7.

The death-rate was highest in the Royapettah division (0.3). The Royapuram division recorded the next highest rate (0.1). In eleven divisions the rates ranged between 0.03 and 0.09 and 17 other divisions recorded no deaths from small-pox.

It is observed that 75 per cent. of the total attacks occurred in ages above 10 years indicating that small-pox is no longer a disease of children but of adults. The need for systematic re-vaccination is therefore evident as the immunity conferred on children by infant vaccination does not last for more than 5 to 7 years. The importance of making re-vaccination compulsory cannot therefore be over-emphasised.

The Sanitary Inspectors carried out the preventive measures as detection and removal of patients to the infectious hospitals, disinfection of infected houses and clothes etc. The Medical Staff attended to the vaccination of unprotected children in the neighbourhood and re-vaccination of the contacts (*Vide* vaccination statement III on pages 90 & 91) Besides these, oral and lantern lectures were delivered on the dangers and prevention of small pox and also leaflets on this disease distributed.

**Measles.**—Three deaths were registered from measles against 16 in 1930. The death-rate of 0.006 per 1000 population is less than the rates of the previous year (0.03) and the quinquennium (0.05) *Vide* page 62.

The mortality from measles during 1927–1931 is as follows:—

Year.	Deaths.
1927	5
1928	59
1929	68
1930	16
1931	3

**Malaria.**—The total number of deaths from Malaria in 1931 was 277 as compared with 283 in 1930. The death-rate was 0.4 per mille of population being 0.1 less than the previous year and 1.2 less than the quinquennial average. (page 63).

The mortality from Malaria from 1927–1931 is as follows and is also shown in Graph IV (a):—

Year.	Deaths.
1927	1367
1928	1599
1929	681
1930	283
1931	277

The mortality from Malaria during the year 1931 is probably the lowest on record.

The seasonal incidence of mortality from this disease is as follows:—

Quarters.	Deaths.
First quarter.	92
Second quarter.	83
Third quarter.	51
Fourth quarter.	51
	277

The highest number of deaths was registered in January (36) and the lowest in September (11). The seasonal incidence of mortality from Malaria according to months is illustrated in Graph IV (b).

As regards local variations, the highest death-rate was recorded in the Chintadripet division (1.3). In other divisions the death-rates ranged between 0.04 to 0.9 with the exception of the Kothwal Bazaar division which returned no deaths from Malaria.

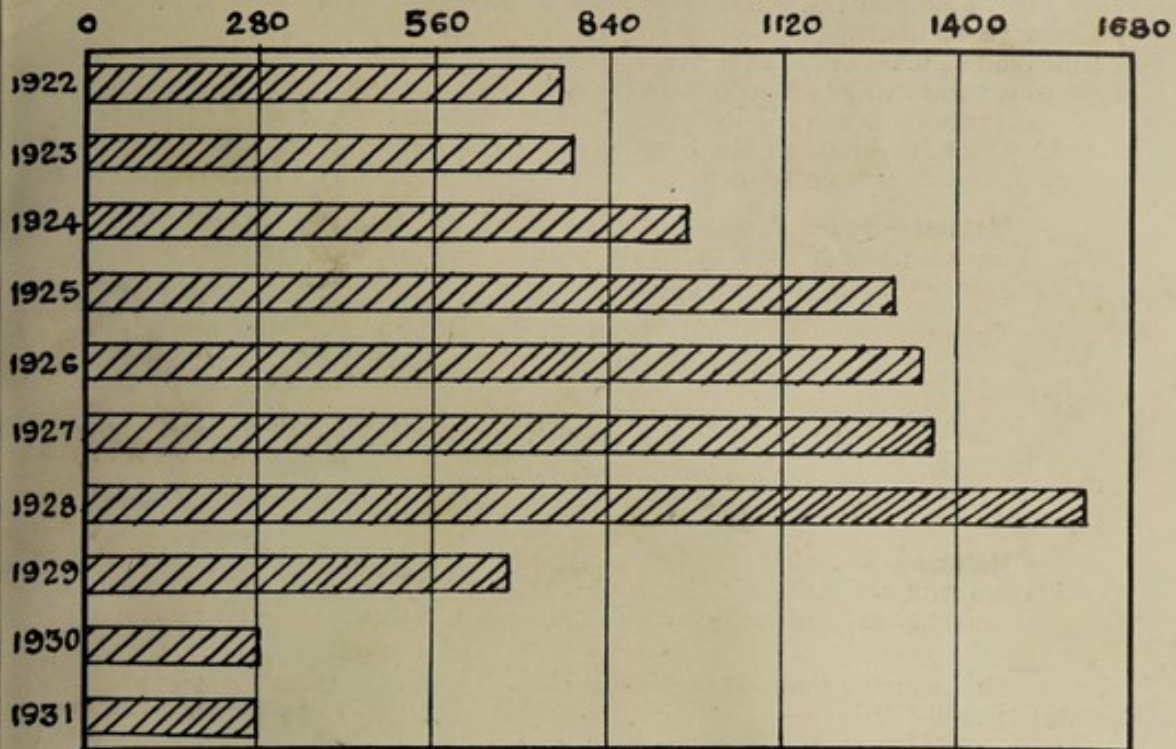
Seventeen divisions recorded death-rates below the annual death-rate of 0.4 per mille of population during the year (Annual Form X on page 63).

The Anti-Malarial operations were carried out by the Special Staff as in previous years and the report of such work is given on page 37.

**Enteric fever.**—166 deaths from Enteric fever were registered during 1931 as compared with 126 in 1930. The death-rate was 0.3 per 1000 of population as against 0.2 in 1930, the mean of the past five years being 0.2. (page 64).

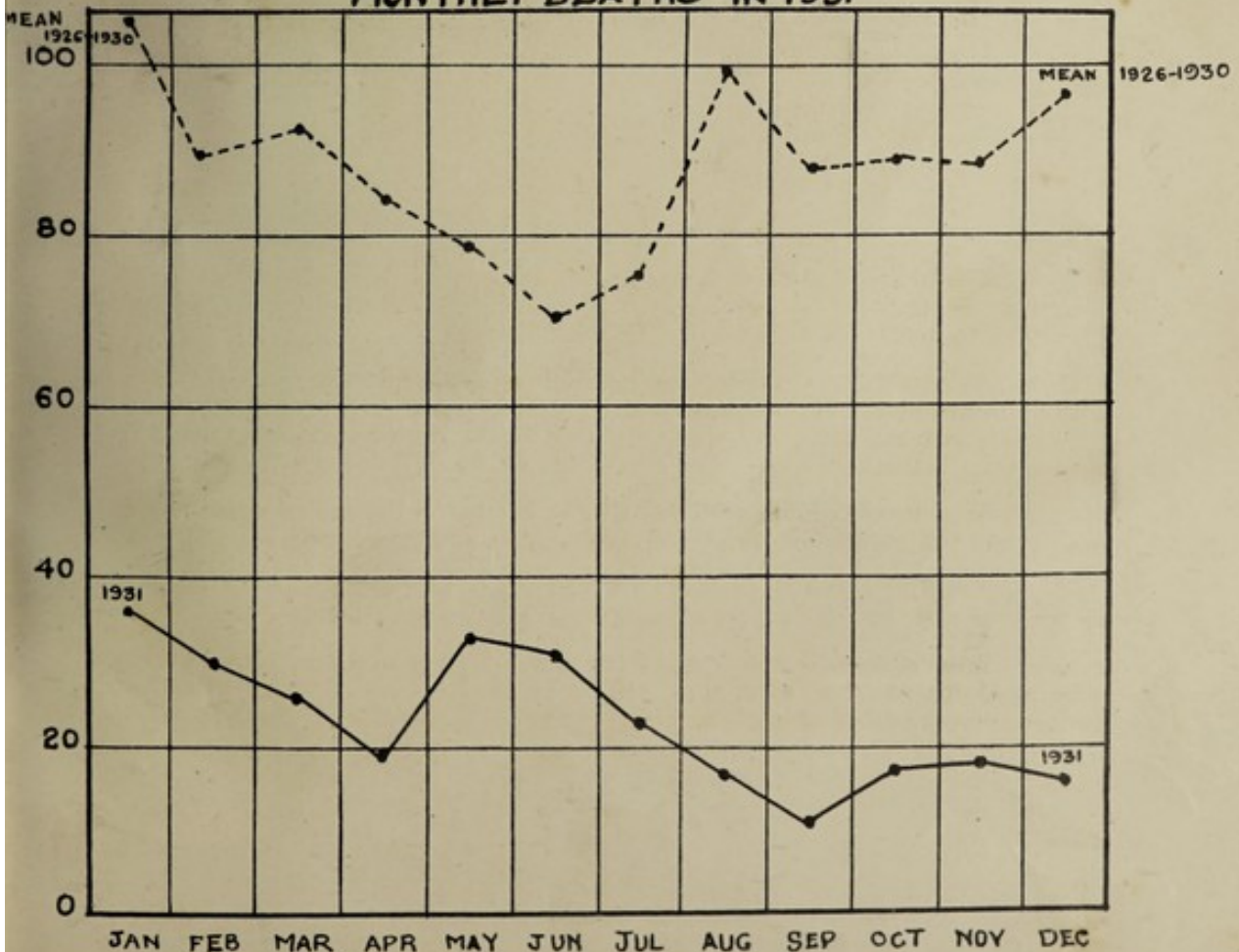
GRAPH IV (a)

DEATHS FROM MALARIA 1922-1931



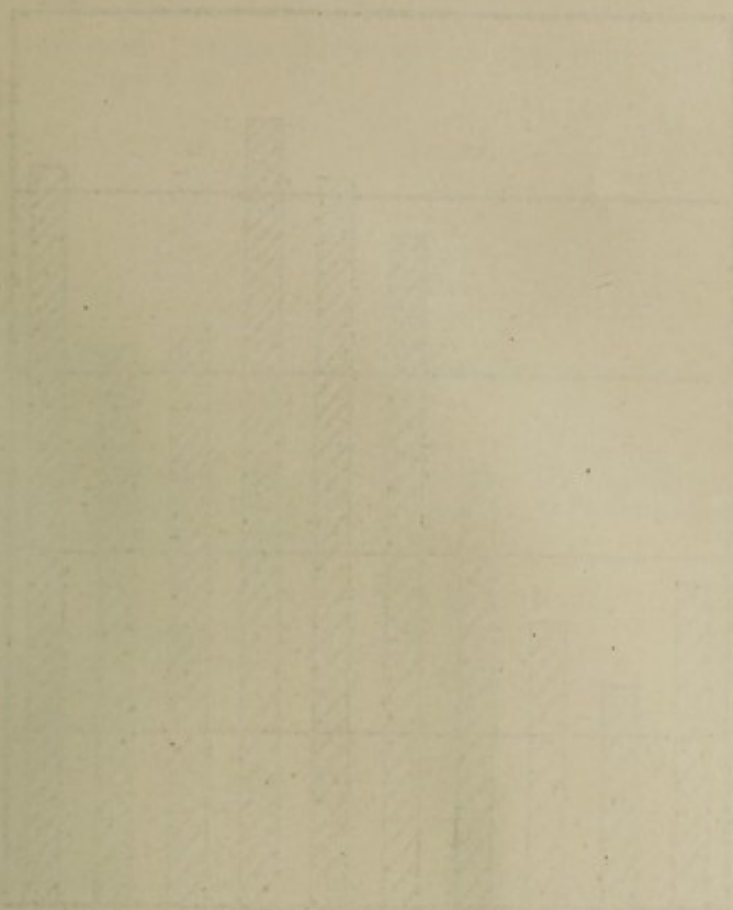
GRAPH IV (b)

MEAN MONTHLY DEATHS FROM MALARIA IN 1926-1930  
&  
MONTHLY DEATHS IN 1931



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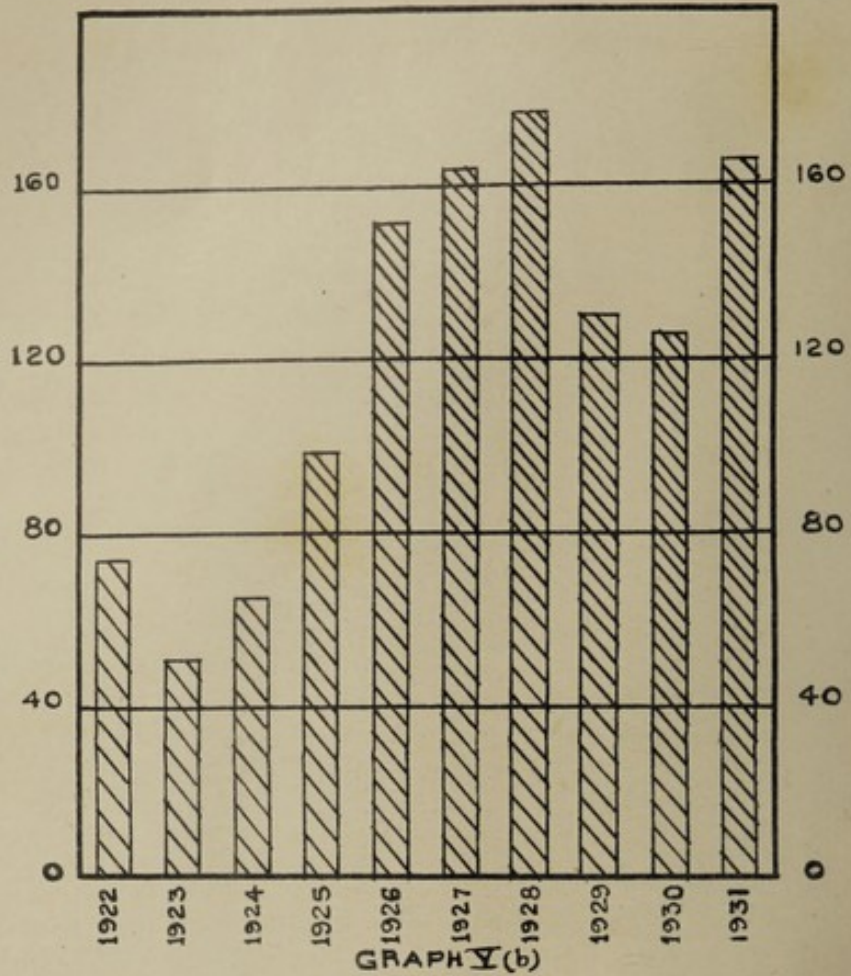


Bar chart showing data for four categories.

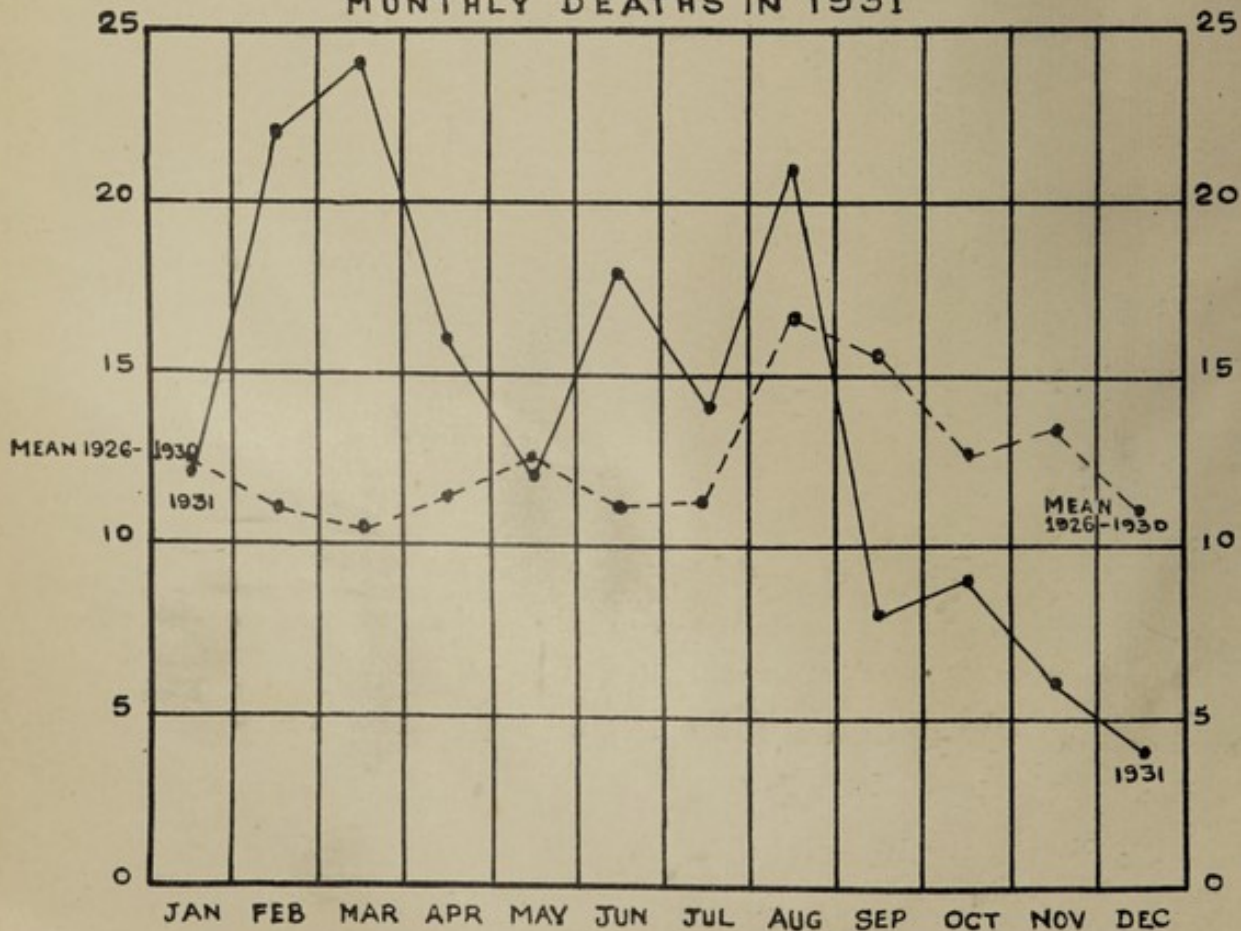


Line graph showing data for four categories.

**GRAPH V (a)**  
**DEATHS FROM TYPHOID 1922-1931**



**GRAPH V (b)**  
**MEAN MONTHLY DEATHS FROM TYPHOID IN 1926-1930**  
**&**  
**MONTHLY DEATHS IN 1931**



The mortality from Enteric fever for the last five years is given below and also furnished in Graph V (a).

Year.	Deaths.
1927	164
1928	177
1929	130
1930	126
1931	166

A gradual decline noted from 1928 is upset by the rise in the number of deaths recorded during the year under report.

The deaths from Enteric Fever occurred in all the months of the year. February and March recorded the highest number of deaths (22 and 24 respectively), while December returned the lowest (4). The distribution of mortality during the quarters of the year is furnished below :—

Quarters.	Deaths.
First quarter.	58
Second quarter.	46
Third quarter.	43
Fourth quarter.	19
Total	<u>166</u>

Graph V. (b) illustrates the seasonal mortality from Enteric fever.

As regards local variations, nine divisions recorded death-rates above the annual death-rate of 0.3 per mille, the highest death-rate having occurred in the Esplanade division (2.0). Six other divisions returned death-rates same as the annual rate and among the remaining divisions the rates ranged between 0.03 and 0.2, the lowest having occurred in the Royapettah division. The Sowcarpet division returned no deaths from Enteric Fever.

The incidence of Enteric Fever has always been observed to occur in a sporadic form in the City. In the absence of an epidemic suggestive of wide infection of water or food supplies, it is probable that Typhoid Carriers whom it is very difficult to detect and control may be responsible for the occurrence of sporadic cases here and there. Limited infection of food-supply may also be possible. Though this is a notifiable disease, it is regrettable that all the general Medical Practitioners do not notify cases treated or attended upon by them so that this department may take all preventive measures early to prevent the spread of infection. Any preventive measures adopted after cognizance of a death would be too late as the infection would have already spread. Therefore the Medical Practitioners are reminded to extend their co-operation with this Department to the fullest extent.

The usual preventive measures were carried out in the infected houses and 1065 persons were inoculated with anti-typhoid vaccine as a prophylactic measure.

**Other fevers.**—Under this head are registered all deaths other than Malaria, Tuberculosis and Enteric Fever which are shown separately. Deaths from Kala-Azar are included in deaths under 'Other Fevers' and the number of Kala-Azar deaths registered during the year was 30 against 32 in 1930. The death-rate from 'Other Fevers' works out to 2.7 per 1000 population which is 1.0 less than the rate of the preceding year, the mean of the previous five years being 2.3 (page 65).



The deaths registered under 'Other Fever' from 1927 to 1931 are :—

Year.	Deaths.
1927	... 1095
1928	... 1555
1929	... 1731
1930	... 1961
1931	... 1748

The number of deaths during 1931 shows a decrease of 213 over 1930. Graph VI (a) illustrates the mortality statistics from this cause.

The seasonal distribution of these deaths are given below and further shown in Graph VI (b).

Quarter.	Deaths.
First Quarter	... 564
Second Quarter	... 482
Third Quarter	... 373
Fourth Quarter	... 329
	Total ... 1748

The highest death-rate was reported by the Royapuram division (5.6) and Tondiarpet division (4.9). The lowest rate of 1.0 was recorded by the Puraswalkam and Mylapore Dns. The death-rates of 16 divisions were below the annual rate.

**General Respiratory diseases.**—5743 deaths or 8.9 per 1000 population were registered under this group of causes as compared with 5256 deaths or 9.9 per 1000 population in the previous year, the quinquennial average being 8.5. Among these, 1910 deaths or 33.3 per cent. of the total deaths from Respiratory causes were among children under one year of age. (page 68).

The mortality from Respiratory diseases for the past five years is given below :

Year.	Deaths.
1927	... 5035
1928	... 6879
1929	... 5324
1930	... 5256
1931	... 5743

Graph VII (a) shows the mortality statistics from Respiratory diseases. The seasonal incidence of mortality is as follows and is also illustrated in Graph VII (b).

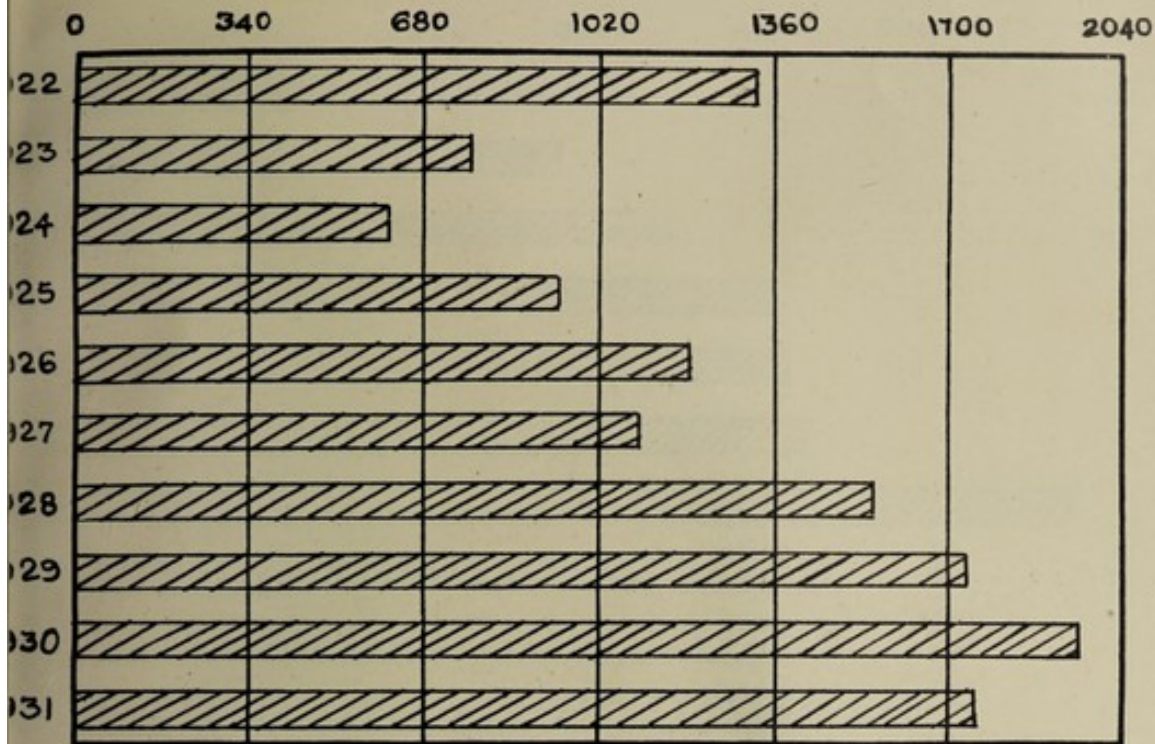
Quarter.	Deaths.
First Quarter	... 1642
Second Quarter	... 1611
Third Quarter	... 1217
Fourth Quarter	... 1273
	5743

Seventeen divisions returned death-rates below the annual rate of 8.9 from Respiratory diseases. The Choolai division and the Kothwal Bazaar divisions recorded the highest (12.0) and the lowest (4.4) death-rates respectively.

**Tuberculosis.**—Tuberculosis accounted for 1020 deaths including Tuberculosis of lungs as against 1075 deaths in 1930. The death-rate for 1931 was 1.6 per 1000 population as compared with 2.0 in 1930 and 2.3 for the

GRAPH VI (a)

DEATHS FROM "OTHER FEVERS" 1922-1931

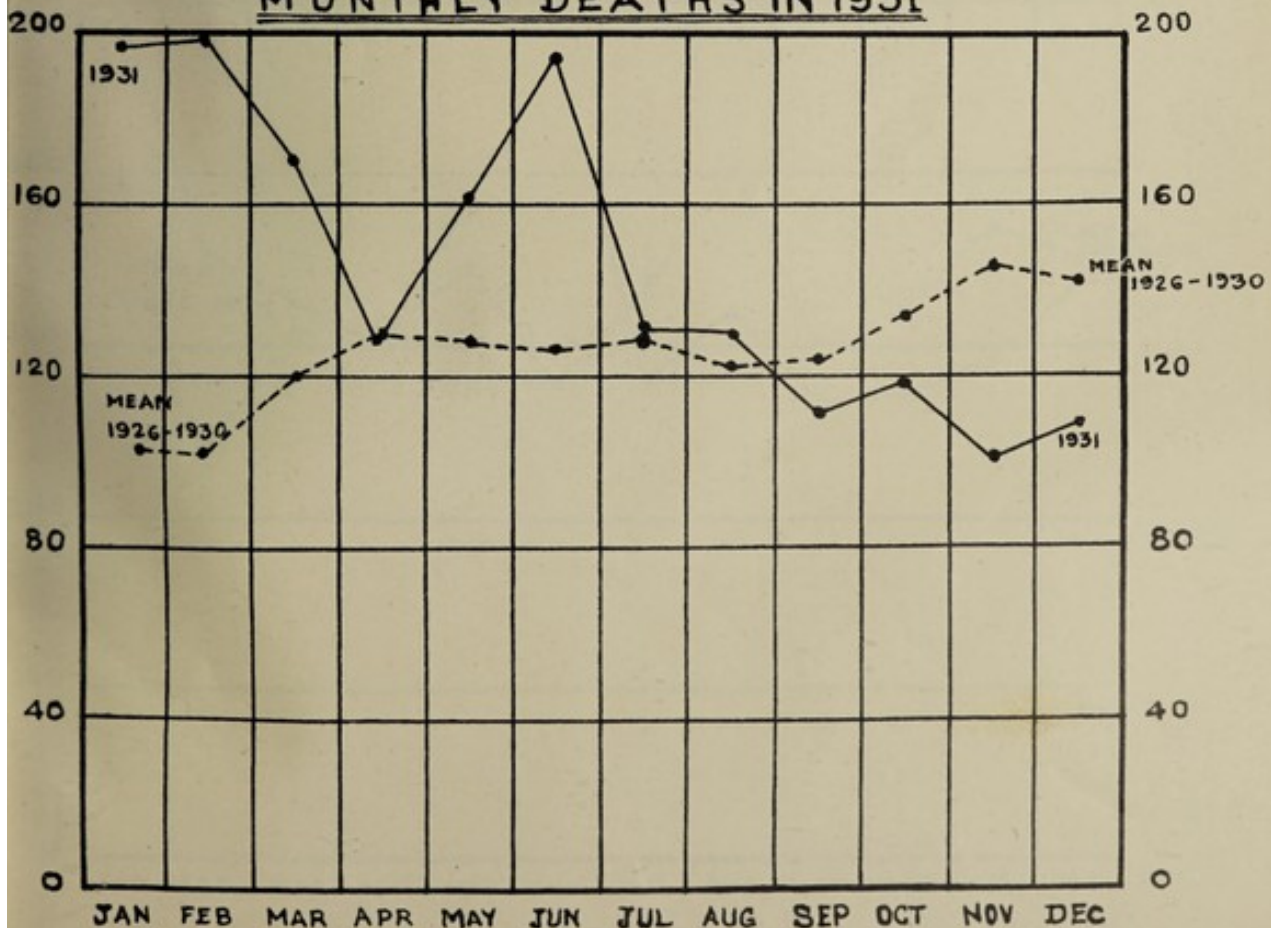


GRAPH VI (b)

MEAN MONTHLY DEATHS FROM "OTHER FEVERS" IN 1926-1930

&

MONTHLY DEATHS IN 1931



DEATH RATE FROM DYSENTERY 1922-1927

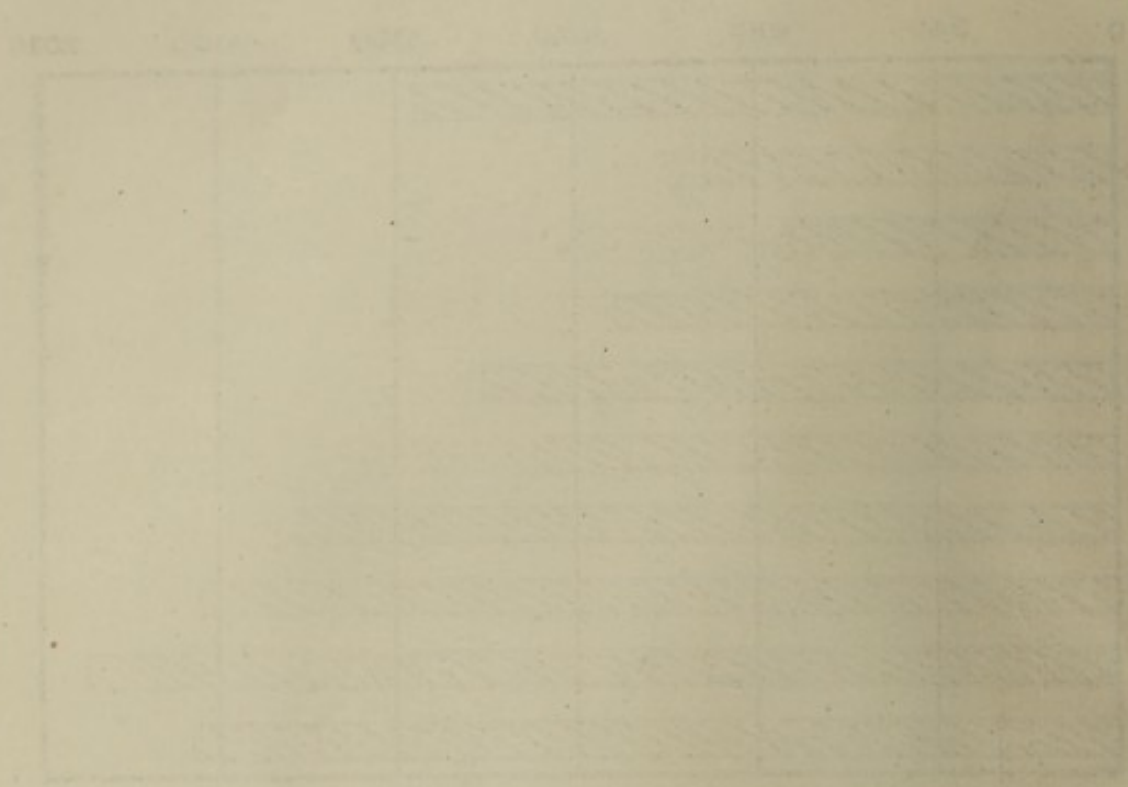


FIG. 1

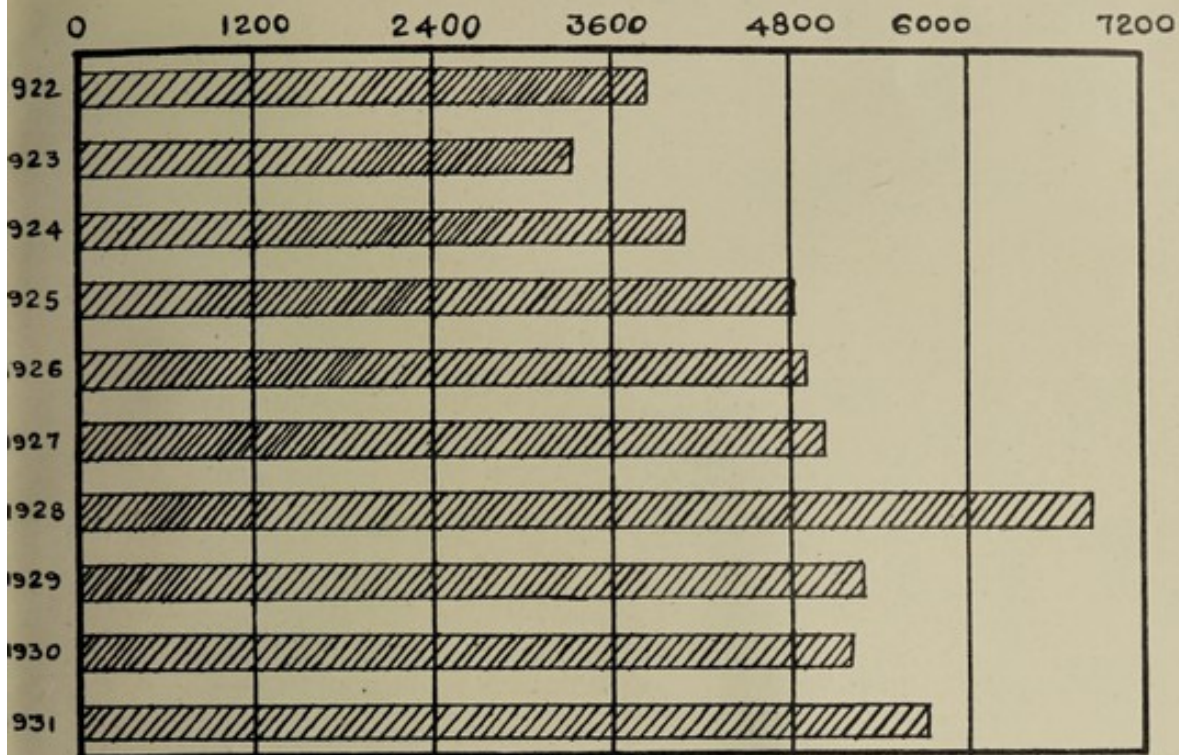
DEATH RATE FROM DYSENTERY 1922-1927



FIG. 2

GRAPH VII (a)

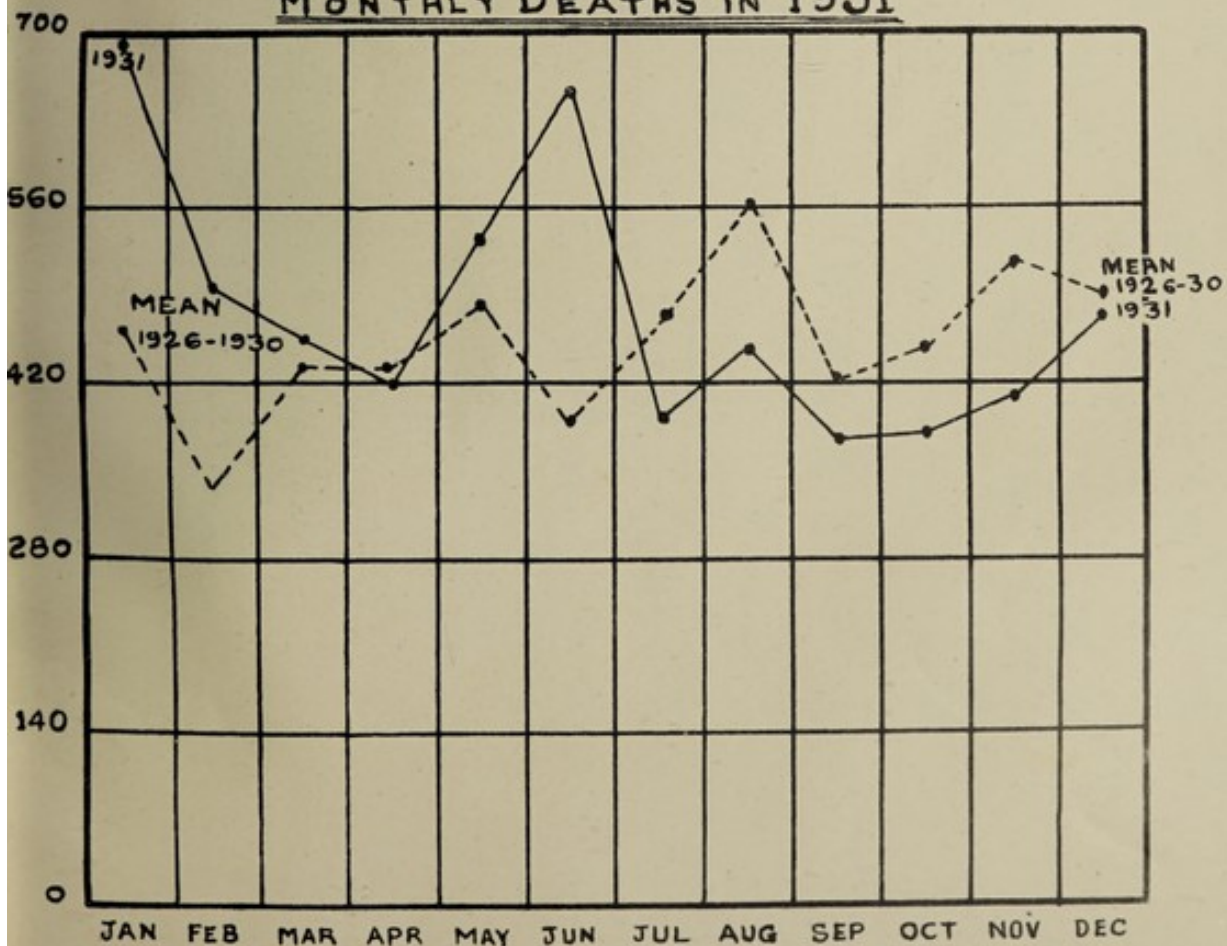
DEATHS FROM RESPIRATORY DISEASES 1922-1931



GRAPH VII (b)

MEAN MONTHLY DEATHS FROM RESPIRATORY DISEASES IN 1926-1930

& MONTHLY DEATHS IN 1931



DEATHS FROM RESPIRATORY DISEASES

Year	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Deaths	10	12	15	18	20	22	25	28	30	32	35	38	40	42	45	48	50	52	55	58	60

DEATHS FROM RESPIRATORY DISEASES

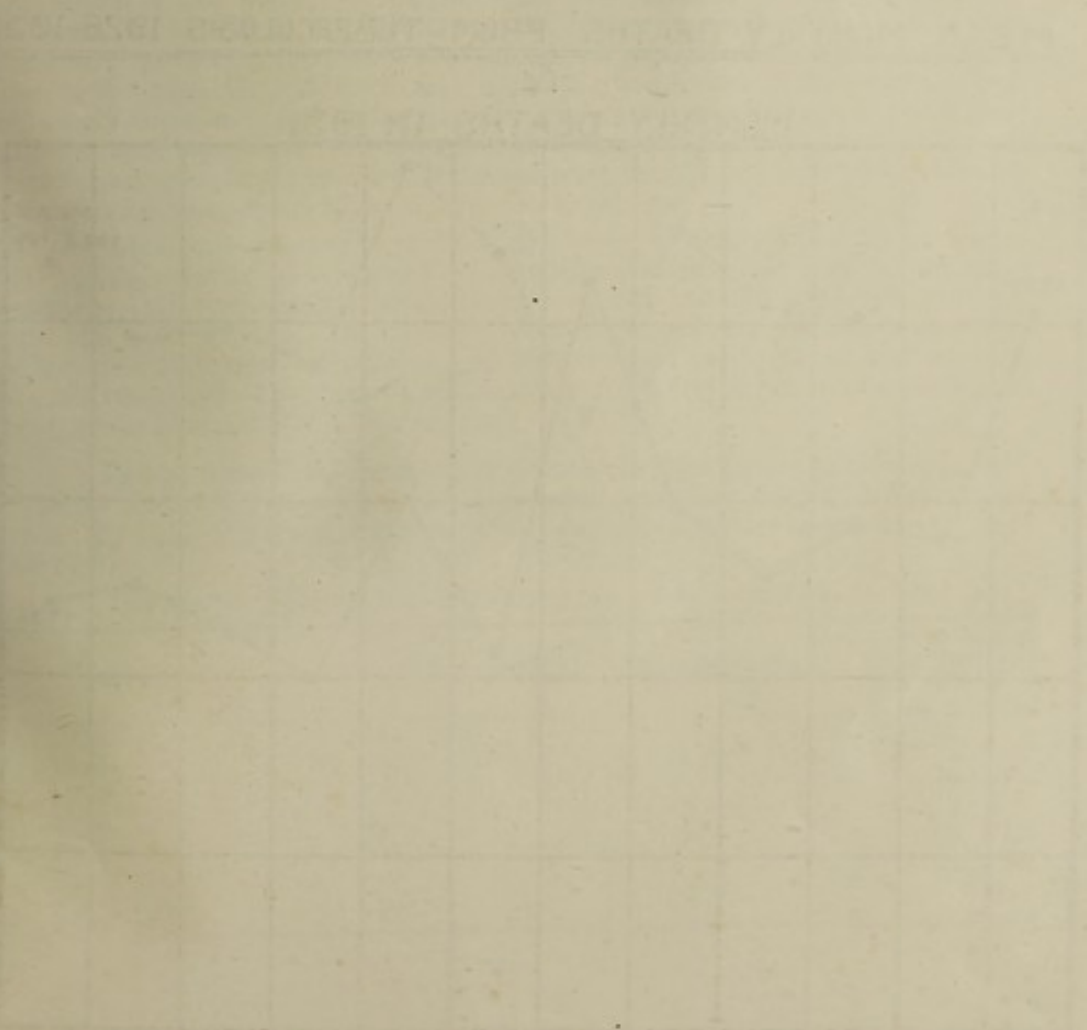
Year	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930
Deaths	10	12	15	18	20	22	25	28	30	32	35	38	40	42	45	48	50	52	55	58	60

GRAPH (1901)

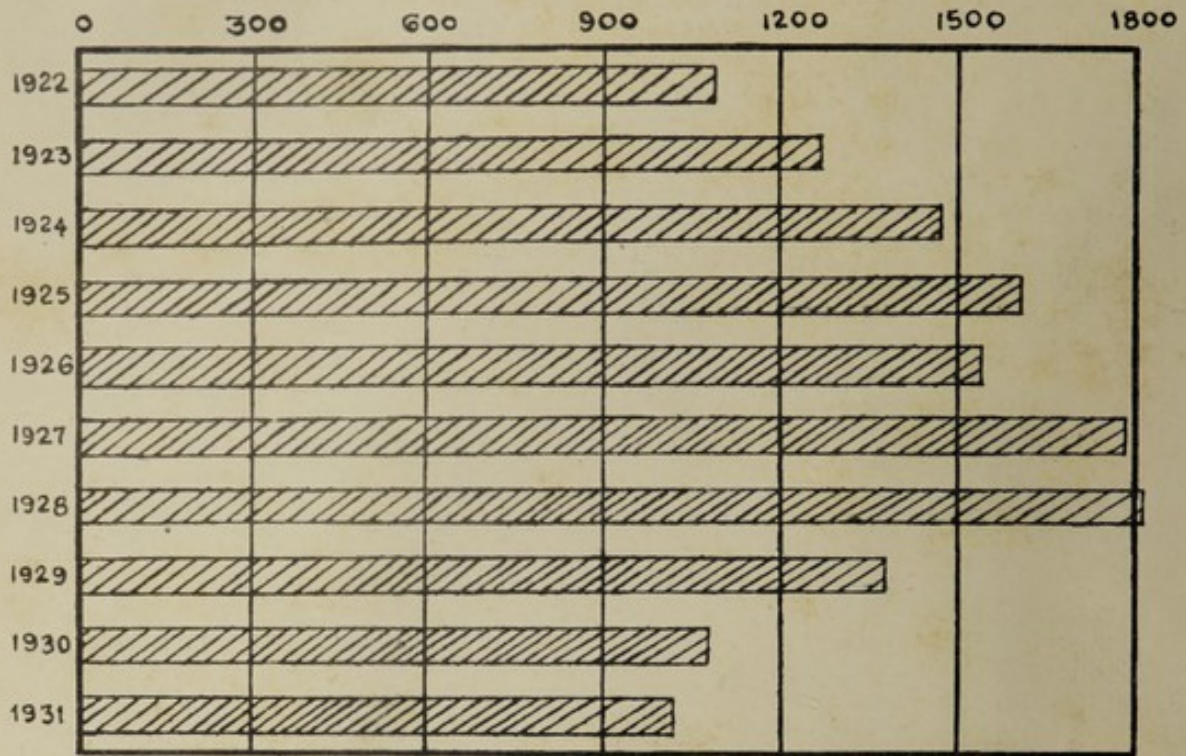
DEATHS FROM TUBERCULOSIS 1891-1901



GRAPH (1902)



GRAPH VIII (a)  
DEATHS FROM TUBERCULOSIS 1922-1931

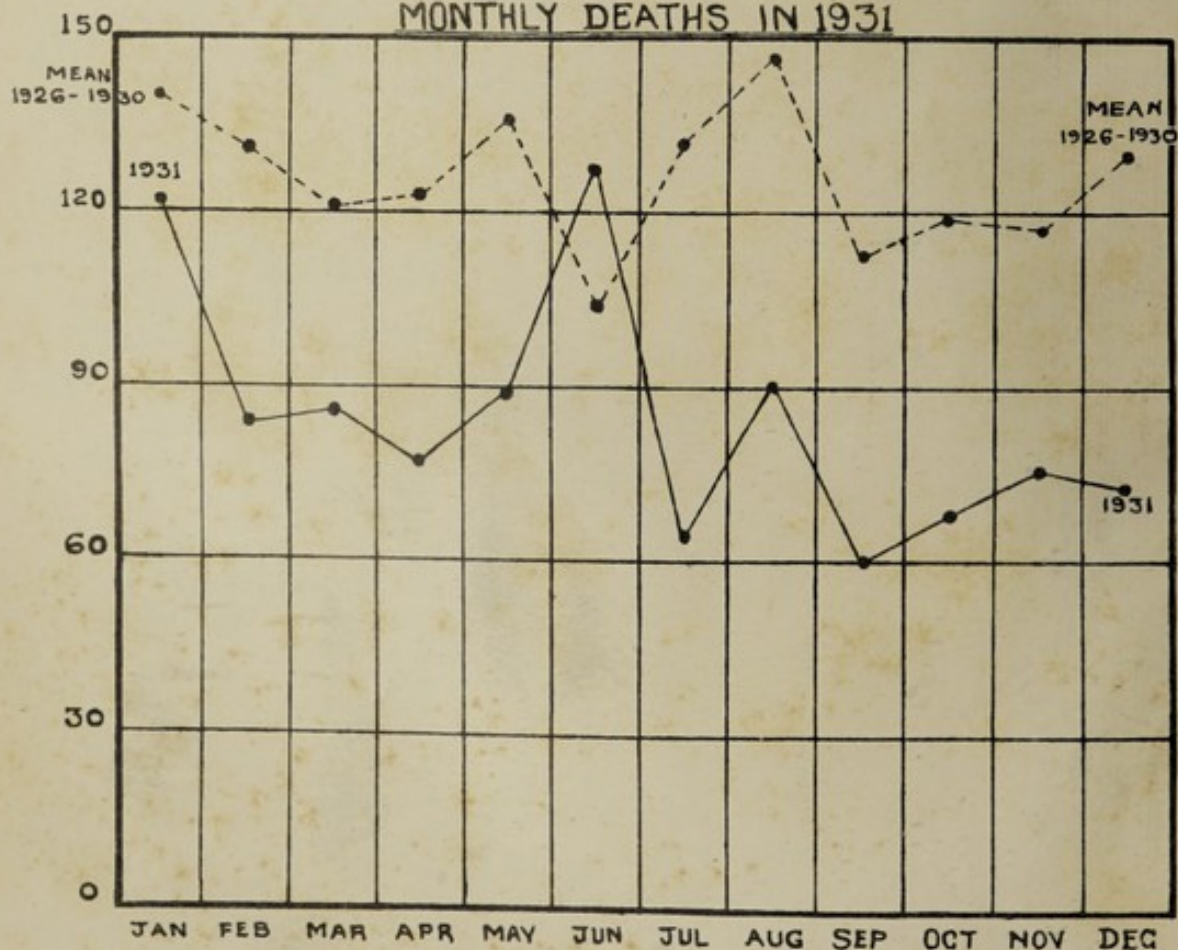


GRAPH VIII (b)

MEAN MONTHLY DEATHS FROM TUBERCULOSIS 1926-1930

&

MONTHLY DEATHS IN 1931



quinquennium 1926-30. The deaths due to Tuberculosis of lungs were 843 or 1.3 per mille of population against 924 deaths or 1.7 per mille of population in 1930, the mean of the previous five years being 2.1 (page 67).

The mortality from Tuberculosis for the past five years is given below and is further illustrated in Graph VIII (a).

Year.	Deaths.
1927	... 1781
1928	... 1812
1929	... 1371
1930	... 1075
1931	... 1020

A gradual decline during the last four years is noticeable.

The seasonal mortality in the year 1931 is furnished below and further shown in Graph VIII (b).

Quarters	Deaths.
First Quarter	... 292
Second Quarter	... 295
Third Quarter	... 216
Fourth Quarter	... 217
	1020

The death-rate of the Seven Wells division was the highest recorded (3.4) and the lowest was returned by the Trevelyn Basin and Park Town divisions (0.4). In 21 divisions the rates were below the annual death-rate from Tuberculosis.

Though the mortality from Tuberculosis has shown a gradual decline, the extent or any reduction of morbidity from this disease is not known as notification is not vigorously carried out here. But it is reckoned that the incidence of disease is approximately ten times its death-rate. There is no doubt that the occurrence of Tuberculosis in any place or community is an index to the housing, industrial and economic conditions of the people. The suffering, sorrow and economic distress caused by this disease can be better imagined than described. Its spread from 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.

If the problem is to be tackled effectively, it behoves that all attention, from health point of view should be concentrated in improving the housing conditions, relieving congestion and over-crowding and about which much has been said and written. In addition, it should be remembered that early notification, diagnosis, segregation and treatment of the infective and last but not least education of the masses are measures to bring down the incidence of Tuberculosis (Annual Form XIV on page 67).

**Deaths from Child birth.**—299 women died during the year from causes connected with child-bearing giving a maternal mortality-rate of 11.6 per 1000 births. In 1930, 328 women died of this cause with a mortality-rate of 12.7 per 1000 births.

The mortality from Child-birth is given below from 1925 to 1931:—

Year.	No. of maternal deaths.	Mortality-rate per 1000 births.
1925	344	14.9
1926	352	16.0
1927	293	11.8
1928	366	15.4
1929	304	13.1
1930	328	12.7
1931	299	11.6



A gradual decline in the maternal mortality-rate is noted during the last four years. The deaths of 299 women from child-birth during the year are classified below according to age and causes of death:—

Causes of death.	Deaths in Age-periods.					Total.	Percentage to Total.
	10 & under. 15.	15 & under 20	20 & under 30	30 & under 40	40 and under 50		
Puerperal Sepsis ...	4	40	94	56	7	201	67.2
Abortion ...	—	2	8	3	—	13	4.3
Other accidents & diseases ...	1	16	40	25	3	85	28.5
<b>Total ...</b>	<b>5</b>	<b>58</b>	<b>142</b>	<b>84</b>	<b>10</b>	<b>299</b>	<b>100.0</b>

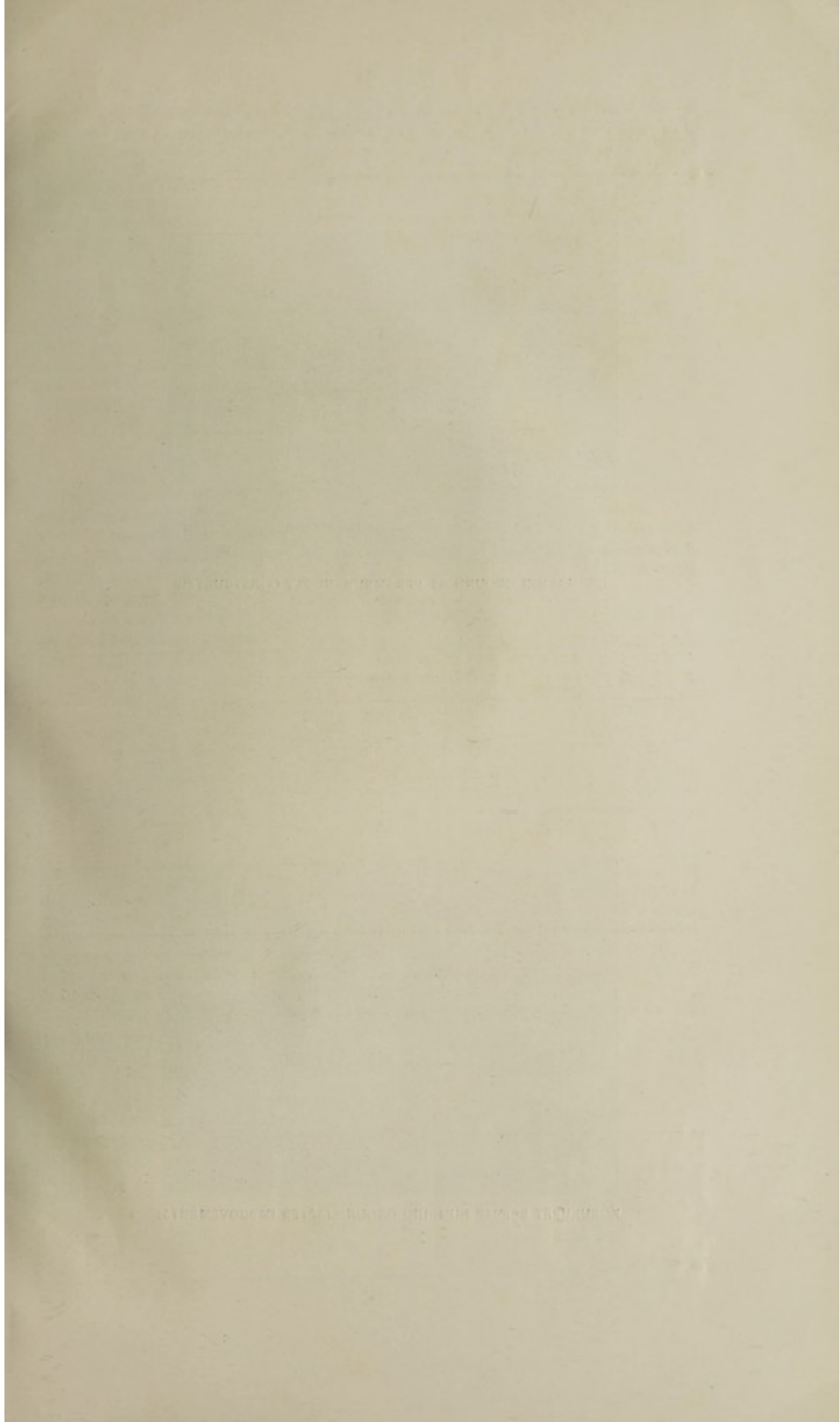
As regards the causes of death, Puerperal sepsis has accounted for 67.2 per cent. of the total deaths from child-birth during the year under report. Calculated with reference to births registered during the year, the death-rate from puerperal sepsis is 7.8 per 1000 births.

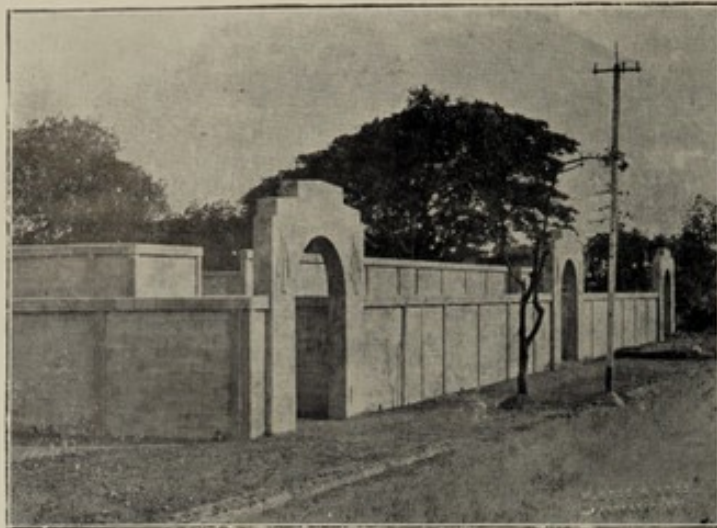
It is seen from the above statement that the highest number of deaths (142) has occurred in the age-group 20-30 which represents 47.5 per cent. of the total deaths from child-birth and it is further observed that the deaths from Puerperal sepsis in this age-period are the largest of all the deaths from puerperal sepsis in any of the age-periods under reference.

Age-group.	Deaths from child-birth.	Percentage to total deaths.
10-15 ...	5	1.7
15-20 ...	58	19.4
20-30 ...	142	47.5
30-40 ...	84	28.1
40-50 ...	10	3.3
	299	100.0

The conditions productive of a high rate of mortality among mothers should also suggest of a high rate of morbidity among mothers which is unfortunately not known. The need for effective arrangements for the care and supervision of expectant mother is no doubt a matter of great importance. But ignorance, prejudice and apathy of the mothers work against any propaganda done to enlighten and enlist the expectant mothers to attend the ante-natal clinics in the City whose care is the welfare of the expectant mother and her coming infant.

**Deaths from "other causes."** :—The deaths under 'Other causes' during 1931 were 10,708, excluding 275 deaths from injuries shown separately in the Annual Form XIX on page 72 as against 10,258 in 1930. The death rates for the two years were 16.5 and 19.4 per mille of population respectively, the quinquennial average being 14.0. The term 'Other causes' includes deaths from a host of diseases which relate to circulatory, digestive, nervous, genito-urinary and other systems excepting Respiratory system. The diseases under this group of 'Other causes' are given in detail in the Annual Form XX on page 74 to 79.





CREMATION GROUND AT PERAMBUR (NEWLY CONSTRUCTED)



KORUKUPET REFUSE DUMPING GROUND (AFTER-IMPROVEMENTS)

**Certified deaths** :—934 and 2439 deaths were certified by the General Medical Practitioners and by the various hospitals in the City respectively as to the causes of death. The certified deaths represented 14·6 per cent. of the total deaths registered during 1931 as compared with 15·9 per cent. in 1930. The number of deaths certified by the Medical Practitioners in the City is far below the the actual number of persons attended or treated during the last days of illness. This department regrets to note that the practitioners have not been fulfilling the duties expected and required of them in this respect.

The deaths which were not certified, were verified by the Medical Registrars as to the causes of death.

**Burial and Burning Grounds** :—These were inspected by the Sanitary Inspectors. Out of the total number of deaths registered excluding still-births, 18,168 corpses were buried and 4994 corpses burnt. 98 licensed diggers worked during the year. 314 applicants were granted plots of ground for erection of tombs and the amount realised therefrom was Rs. 993/14/0. 872 applicants were given extracts of Births and Deaths and the amount realised was Rs. 1130.

## VACCINATION.

**Staff**:—During the year 1931, the Vaccination staff was the same as in the previous year—15 Sub-Assistant Surgeons assisted by 34 Vaccinators, including 2 female Vaccinators to work in Gosha and Mussalman localities.

**Operations**:—During the year under report, 36,637 Vaccinations were performed of which 27,260 were primary vaccinations and 9,377 re-vaccinations. Besides, 581 re-vaccinations were reported to have been done in Government Penitentiary of which 303 were successful and 278 unsuccessful.

The Vaccination figures for the years 1930 and 1931 are compared in the following statement:—

	1930.	1931.	Increase or decrease.
Primary vaccination ...	25,958	27,260	+1302
Re-vaccination ...	33,257	9,377	-23,880
Total ...	59,215	36,637	-22,578

The decrease in the total number of Vaccinations was mainly due to the fall in the number of re-vaccinations consequent on the low incidence of small-pox throughout the year. On the other hand there was a marked increase under Primary Vaccinations. The number of Primary vaccinations performed in 1930 was mentioned in the last year's Report as the highest recorded since 1911; but the number of primary vaccinations done during the year under review is the highest recorded in the City.

The following statement furnishes the vaccination statistics for the past five years:—

Years.	Primary Vaccinations.	Re-vaccinations.	Total
1927 ...	20,763	11,875	32,638
1928 ...	22,051	29,591	51,642
1929 ...	23,250	43,356	66,606
1930 ...	25,958	33,257	59,215
1931 ...	27,260	9,377	36,637

A steady and well marked improvement under Primary Vaccination year after year is evident, and the increase in the year under review over the previous year is significant. The number of Primary Vaccinations performed during the year is the highest on record.

The marked achievement in the primary vaccination work, as explained in my previous report, is due to the intensive Vaccination Campaign carried out by the Vaccination Staff throughout the year irrespective of the presence of small-pox in the City. Not less than 20 houses are inspected daily by each of the staff for detection and vaccination of un-protected children born in the City or Mofussil evading vaccination in some way or other.

The fall in the number of re-vaccinations, as previously stated, is ascribed to non-intensity of the prevalence of small-pox throughout the year and to the fact that re-vaccination is purely voluntary.

**Number of successful Vaccinations:**—The number of successful vaccinations during the last five years is set forth in the following statement:—

Year.	Primary Vaccination.	Re-vaccination.	Total.
1927 ...	20,588	3,311	23,899
1928 ...	21,762	7,932	29,694
1929 ...	22,272	10,860	33,132
1930 ...	25,201	6,492	31,693
1931 ...	27,042	1,997	29,039

**Success-rate:**—The success-rates for the previous five years are as follows:—

Year.	Percentage of success in primary vaccinations.	Percentage of success in re-vaccinations.
1927 ...	99.7	33.7
1928 ...	99.7	36.3
1929 ...	98.5	30.1
1930 ...	99.0	23.6
1931 ...	99.6	26.7

The percentage of success under primary vaccinations during the year shows a decided improvement and records an increase of 0.6 per cent. over the previous year.

**Number of persons successfully vaccinated per 1000 population:**—Calculated with reference to population, the rate of successful vaccination per mille of population for the year 1931 is 44.9 as compared with 59.9 in 1930, the rate for this year having been calculated on the increased population reported by the recent census.

**Infantile vaccinations:**—The total number of vaccinations performed in infants under one year of age was 19,823 in 1931 as compared with 18,187 in 1930 and the number successful was 19,703 against 17,774, thus recording

an increase of 1929 over the previous year. The figures for the previous five years are as follows:—

**Vaccinations under one year of age.**

Year.	No. of primary vaccinations performed.	No. of successful primary vaccinations.
1927 ...	16,219	16,097
1928 ...	17,357	17,182
1929 ...	16,420	15,929
1930 ...	18,187	17,774
1931 ...	19,823	19,703

Among 19,823 infants vaccinated, 14,735 were born in Madras and 5,088 in Mofussil against 14,434 and 3,753 respectively in the preceding year. The vigilance and alertness of the Vaccination Staff in detecting and vaccinating a large number of mofussil births is therefore commendable.

**Vaccination in districts:**—Perambur division recorded the highest number of vaccinations (3492) and came after it Royapettah division (2316) and the Vepery division (2096). The lowest was recorded in the Esplanade division (220).

As compared with 1930, only two divisions *viz.* Nungambakam and Royapettah showed increase of 388 and 781 respectively in the total number of vaccinations performed during the year 1931. The decrease in other divisions was due to fall in the number of re-vaccinations.

Nevertheless, the number of primary vaccinations returned by the divisions has more than compensated for the general fall. In 21 divisions increases were recorded over the previous year, the most marked being in Royapettah division (302), Washermanpet division (235), Nungambakam division (211), Perambur division (208), Korukkupet division (140), Mylapore division (123), Chintadripet division (111) and Choolai division (100). In other divisions the increase ranged below 100 and the minimum increase was shown by Trevelyan Basin Division (8). Among the 9 divisions which showed a decrease, the maximum decrease was noted in Royapuram division (156) and minimum in Kilpauk division (6), the reason being that un-protected children were not sufficiently available owing to the intensive vaccination campaign carried out in previous years.

**Verification of Births:**—In 1931, 26,293 births were verified for purposes of vaccination as against 25,643 in 1930. 4,252 children died before attaining the age of one year and without vaccination. 4,831 children left the City without being vaccinated and the number available for vaccination was 17,210 of which 12,674 or 73.6 per cent. were vaccinated against 72.9 per cent. in the previous year (*vide* Vaccination Statement II on page 89).

**Postponement of Vaccination in children:**—1498 medical certificates were received during the year for postponement of vaccination in children against 1267 in 1930.

**Inspection of vaccinated persons:**—The Health Officer, the two Asst. Health Officers and the Medical Vaccinators, as usual, inspected the vaccinated persons. The results of 27,149 or 99.6 per cent. of the total primary vaccinations and 7310 or 77.9 per cent. of the total re-vaccinations were verified by them during the year.

**Lymph:**—The lymph was supplied, as usual, by the King Institute of Preventive Medicine, Guindy. The Medical Registrar Vaccinator in charge of

**Chintadripet Vaccination Depot** received the supply and distributed it to all the depots in the City. The lymph received was for 40,125 cases during the year and the total number of persons vaccinated was 36,637.

**Prosecutions:**—A parent was prosecuted for failure to vaccinate his child but the prosecution was withdrawn subsequently.

**Training of Vaccination pupils:**—73 students were trained in Vaccination work by the Medical Vaccinators during the year under report.

**Cost of Vaccination:**—The cost of each successful vaccination was Rs. 1-3-9 as against Rs. 1-7-2 in 1930.

### REPORT OF THE PORT HEALTH OFFICER, MADRAS FOR THE CALENDER YEAR 1931.

**Incoming Vessels:**—796 vessels arrived here during the year from different ports with 64,073 crew and 1,00,477 passengers as against 796 vessels with 74,541 crew and 1,24,959 passengers in the previous year.

**Out-going Vessels:**—266 vessels with 29,991 crew and 15,223 passengers were inspected and granted Bills of Health during the year as against 333 vessels with 38,466 crew and 30,825 passengers in the previous year.

**Epidemic and Infectious Diseases:**—14 cases of Chicken-Pox and 1 case of Measles were landed from ships and sent to the Isolation Hospital, Tondiarpet.

Disinfection of bedding and clothing of deck passengers and crew landing and embarking here is carried on at the disinfection shed at the discretion of the Port Health Officer as usual. 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.

## SANITATION.

The administration of the Health Department was carried on by the Health Officer assisted by two Assistant Health Officers for the North and South Ranges. The conservancy continued to be under the charge of the Drainage Superintendent working under the Health Officer. The Lady Superintendent in charge of the Child Welfare Scheme was working under the control and directions of the Health Officer till 7th October 1931 when she was placed in independent charge of the scheme.

The Office of the Assistant Health Officer, South Range was shifted back to the Ripon Buildings on 1-4-1931 from Pudupakam where it had been located as an experimental measure.

**Drainage:**—There has been a steady progress in the extension of the underground sewers. 45,061 feet of underground drainage were laid during the year under report making a total length of 10,24,655 ft., upto 31-12-31 (*vide Statement on page 92*).

The water-carriage system is being introduced in the sewered areas. 1829 Flush-out latrines were installed during the year.

**Water supply:**—The supply of water continued to be tested daily at the Kilpauk water works laboratory, the samples thereof being systematically taken from different parts of the City. A separate report of the Water Analyst is appended to this report.

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT





BOGIPALAYAM (BEFORE IMPROVEMENTS)



BOGIPALAYAM (AFTER IMPROVEMENTS)

The Corporation maintains two Dhobikanas, one at Chetput and the other at Robinson Park, which draw water from the Water supply of the City. There is need for more of these.

A bathing fountain was provided for the convenience of the poor. More bathing fountains should be put up in all crowded parts and slums of the City in the interest of the health of poorer classes of people living in poor tenements devoid of these facilities.

**Slums and Housing** :—The Corporation with the co-operation of the Government is doing its best as far as possible and practicable in the matter of providing sanitary dwellings to the poor. It is very necessary that the Co-operative Department of the Government should extend its activities in this behalf.

House to house inspection was carried on systematically and action taken wherever necessary. During the year 13,598 houses were inspected. Action was taken in respect of 4,462 dwellings and the improvements notified were carried out in 3,392 premises. (*Vide* pages 96 to 99 for statement.)

As usual, all plans with applications for construction or reconstruction of buildings were referred to this department by the Works Department for scrutiny, and suggestions from a sanitary point of view. The number of applications so scrutinized were 2,487.

Hycol was the chief disinfectant used in connection with the disinfection of houses. The number of premises disinfected was 1,728 out of a total number of 13,871 inspected with reference to detection of epidemic diseases and the quantities and the kinds of disinfectants used were :—

Hycol	...	245 gallons and 5 bottles.
Phenyle	...	34 " and 3 "
Phenodyne	...	5 "
Bleaching powder	...	3 cwt.
Chunam	...	12 paras.

**Factories** :—The Health Officer and the two Asst. Health Officers continued to inspect the factories as Additional Inspectors of Factories. Defects noted were intimated to the Chief Inspector of Factories. As a result of the action taken by this department flush-out latrines were introduced in 6 Factories in the place of dry latrines

**Offensive and Dangerous trades** :—Sanitary control is being exercised over the places where these trades are carried on and bylaws governing them have not yet been sanctioned as stated in the last year's report. During the year, 4,873 applications for licenses were received of which 4,596 were sanctioned : licenses were refused in 155 cases and the rest were pending. The corresponding figures for the previous year were 4,147, 3,831 and 128. In 2,232 cases, improvements were found necessary and were carried out in 1,742 cases. Prosecutions were launched in 923 cases of which 279 were for breach of conditions of the license.

The Corporation maintains two Model Cattle Yards at Basin Road and Chintadripet and the number of animals housed was 296. The Cattle Yard in Purasawalkam has just been built.

The question of milk supply remains still unsolved. The proposal that the Corporation should maintain a dairy farm of its own with extensive pasturage for the cattle could not materialise owing to the financial stringency.

The Corporation maintains two cart stands. One of these at the Elephant Gate is under the control of this Department and was leased out on contract.

The Corporation maintains the Slaughter Houses at Perambur where cattle, sheep and pigs are slaughtered. In the absence of any municipal conveyance, the enforcement of sanitary regulations in the matter of removal of meat from the slaughter houses is being carried out as far as practicable.

The right of collecting rents and fees from the cattle and sheep slaughter houses was sold in auction for Rs. 20,000 and Rs. 57,250 respectively. The blood from the Slaughter Houses is being removed and trenched departmentally.

As regards slaughter of animals for religious purposes in places other than the Slaughter Houses, the Corporation has been permitting the same free and on payment of fees. The amount collected during the year was Rs. 105-2-0

**Food Control**—The Corporation maintained three markets, the Moore Market, the Smith Field Market and the Vegetable Market at Purasawalkam. Special attention, however, was given to the inspection of food stuffs in the various private and public markets and other places in the City. The unwholesome articles exposed for sale were destroyed and the parties concerned warned not to repeat the offence. (*Vide* statement on page 94 and 95.)

### PREVENTION OF FOOD ADULTERATION.

The work started in 1930 was pushed on. Samples of ghee, butter, coffee powder, tea, milk, gingelly-oil and cocoanut oil were taken and sent for analysis.

During the year, 820 samples were sent to the Public Analyst, Guindy, for analysis, and reports of tests were received in 730 cases (including a few samples taken in the previous year) of which 426 (58.30 per cent.) were genuine and 304 (41.64 per cent.) adulterated. The statement showing the number of samples taken and the results of analysis received and the percentage of adulterated samples to those sent for analysis is given below.

Articles.	No. of samples sent up for analysis.	No. of samples for which certificates were received up to 31-12-31.	No. of samples found genuine.	No. of samples found adulterated.	Percentage of adulterated samples to samples analysed in '31.	Percentage of adulterated samples to samples analysed in '30.
Ghee ...	318	294	129	165	56.12	88.5
Butter ...	24	19	15	4	21.05	33.3
Coffee powder ...	149	128	44	84	65.62	96.2
Tea ...	126	117	104	13	11.11	14.0
Milk ...	87	70	42	28	40.0	29.2
Gingelly Oil ...	113	99	89	10	10.1	100.0
Cocoanut Oil ...	3	3	3	...	...	...
Total ...	820	730	426	304	...	...

**Ghee.**—The above statement will indicate that 318 samples of ghee were sent for analysis and reports were received in 294 cases, including those sent towards the close of the last year. 165 samples or 56.12 per cent. were certified as adulterated, the adulterant being foreign fat. The percentage of adulteration varied from 20 to 90 per cent. In 141 cases the results of analysis revealed adulteration to the extent of 50 per cent. and over.

**Butter.**—4 out of 19 samples analysed were found adulterated. Water was the adulterant and its presence varied from 6 to 22 per cent.

**Milk.**—28 samples or 40 per cent. of the samples analysed showed admixture of water and the extent of adulteration ranged from 7 to 55 per cent.

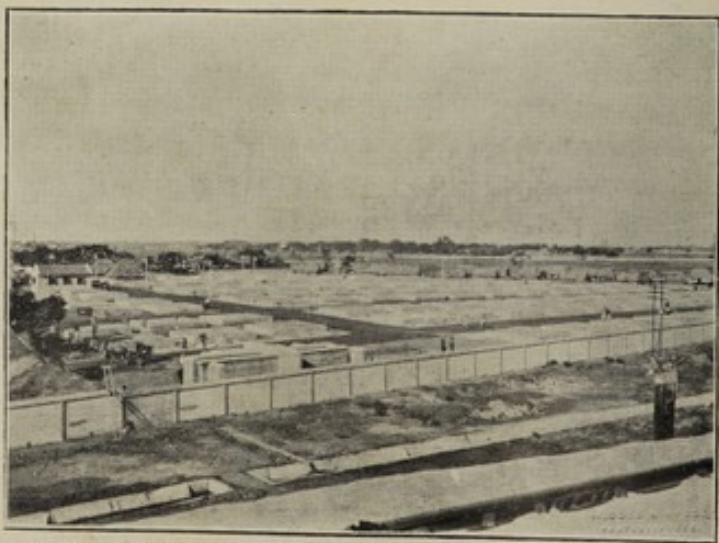
**Coffee Powder.**—The reports of analysis of 128 samples were received during the year. Of these 84 samples or 65.62 per cent. were certified as adulterated. The chief adulterant was exhausted coffee and chicory and it varied from 20 to 75 per cent.

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INMATES OF THE CORPORATION POOR HOUSE AT THEIR MEALS



PLINTHS CONSTRUCTED AT COCHRANE BASIN SETTLEMENT

**Tea.**—The results of analysis of 117 samples of tea showed that 13 samples or 11.1 per cent. were adulterated, the chief adulterant being imitation tea which was present from 13 to cent per cent.

**Gingelly Oil.**—During the year, 113 samples of gingelly oil were sent for analysis. Results of analysis were received in 99 cases, of which 10 samples 10.1 per cent. were certified as adulterated chiefly with groundnut oil, and the extent of adulteration ranged from 10 to 100 per cent.

Prosecutions were launched in 278 cases of adulterated samples, and convictions obtained in 199 cases and the fines collected amounted to Rs. 1,677. There were 181 withdrawals and 26 were pending at the end of the year. The following statement gives details of the above under various heads.

#### Prosecution Statement.

Articles.	No. of adulterated cases prosecuted.	No. of cases convicted.	Amount of Fines levied.	No. of cases withdrawn.	No. of cases pending.
			Rs.		
Ghee ..	154	75	935	169	13
Butter ...	3	3	20	1	...
Coffee Powder ...	66	68	380	8	6
Tea ...	19	20	113	2	...
Milk ...	27	24	120	1	6
Gingelly Oil ...	9	9	109	...	1
Total ...	278	199	1,677	181	26

N.B.—The above table includes cases of 1930 disposed of in 1931.

It may be noted from comparing the percentage of adulterated samples to total samples analysed during 1930 and 1931, that there is a marked fall in the percentage of adulterated samples during 1931 except in the case of milk. This is due in a large measure to the realization on the part of traders of the risk they run in adulterating food stuffs. The amendments to the Food Adulteration Act now under the consideration of the Government will soon make the Act up-to-date and comprehensive.

**Weights and Measures**—Much useful work was done by the two Inspectors of Weights and Measures who carried out systematic inspection of all markets, bazaars, shops, hawkers etc., during the year with reference to the Weights, Seales and Measures. A systematic campaign was conducted against the milk men who were in the habit of using unstamped short measures. In 221 cases, the weights, measures and scales found defective were seized. In many cases the vendors were let off with a warning that defective weights noticed again would be seized and they would be dealt with as per bylaws. Prosecutions were launched in 73 cases during the year, and 67 were disposed of including five pending of the previous year. The total fine collected was Rs. 296. As a result of the activities of the Inspectors, the Vendors have been made to realise that they could no longer use false weights, scales, and measures to deceive the public.

**Medical Relief.**—In addition to the two Infectious Diseases Hospitals, 19 allopathic dispensaries and two dispensaries affording Unani and Ayurvedic treatment were continued to be maintained by the Corporation. One more Sidha dispensary at Kosapet was opened on 24-1-31. The last three institutions are placed in charge of medical men passed out of the Indian School of Medicine. *Vide* statements of the cases treated in the institutions on page 100.

**Poor House.**—The Poor House continued to be maintained and has become very popular. The need for legislative enactments to prevent begging

in the streets and to facilitate the compulsory removal of the beggars to the poor house with the aid of the Police has been stressed in the previous reports. It is hoped that the provisions of the City Police Act and the Children's Act in this behalf will soon be amended to meet the requirements. The year opened with 113 inmates and during the period under report the number of inmates admitted was 152, number discharged 82, number died 19, number absconded 8, leaving a total of 156 on 31-12-31.

**Anti-rabic measures** :—The Corporation maintains an electrocuting chamber at Basin Road, where the most up-to-date method is adopted in the destruction of stray and unclaimed dogs. During the year 7,707 stray dogs were admitted into the Chamber of which 6,763 were destroyed, 180 dogs were returned to the owners, the amount collected being Rs. 551-4-0 and two unclaimed dogs which were found to be valuable were sold in auction.

**Zoo** :—The Zoological gardens maintained by the Corporation has been improved in recent years. During 1931, a cage for the baboons was constructed out of Rs. 1000 presented by Mr. Cunniah, Proprietor of the Royal Theatre. Besides this, some other improvements were carried out. Owing to the financial stringency much money could not be spared for the improvements to the Zoo.

The right of collecting the entrance fee and for keeping bazaars, were sold in auction for Rs. 17,000 and Rs. 1,350 respectively. The right of plying boats in the lake was sold for Rs. 500.

#### REPORT ON THE WORKING OF THE INFECTIOUS DISEASES HOSPITAL, TONDIARPET, FOR THE YEAR 1931.

##### Staff:—

1. Medical Officer (Asst. Surgeon)	...	1
2. Sub-Assistant Surgeon	...	1
3. Senior Sick Nurse	...	1
4. Sick Nurses	...	3
5. Nurses (Midwives)	...	2
6. Clerk	...	1
7. Compounder	...	1
8. Wireman	...	1
9. Ambulance driver	...	1
and other menial staff.		

The total number of admissions during the year was 781. 92 contacts were also admitted. The total average daily number of patients was 24.4. The case mortality for all diseases was 9.6 per cent.

##### Diseases:—

**Cholera** :—There were 172 admissions also 30 remaining from previous year of whom 39 died. The mortality was 19.3 per cent. Of these 4 were moribund cases. The highest number of admissions 88 was in January (*Vide* Table II page 102).

**Chicken-pox** :—There were 264 admissions and no death.

**Measles** :—There were 42 admissions and no deaths.

**Small-pox** :—There were 46 admissions also 2 remaining from previous year and 8 deaths, case mortality per cent being 16.7.

A statement showing the vaccinal condition of these 46 cases classified under different age group is appended (*Vide* table V page 104).

15 were not vaccinated and there were 6 deaths among these. Among 4 cases in children under 1 year, 3 were below 6 months and the other 11 months old. (Table VI on page 105).

31 were vaccinated of which only 18 showed satisfactory marks of vaccination and none of these proved fatal. Of the remaining 13 who were alleged to be vaccinated there was no evidence of successful vaccination and 2 of them proved fatal.

It may also be mentioned that among the 13 successfully vaccinated none were re-vaccinated and all these were in the age groups above 10 years.

Bacteriological examinations were done by the King Institute, Guindy.

Final year Medical students and Health Officer's class students of the Madras Medical College continued to attend the Hospital for clinical instructions in Infectious Diseases.

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### REPORT ON THE WORKING OF THE KRISHNAMPET ISOLATION HOSPITAL, FOR THE YEAR 1931.

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1. **Staff:**—The permanent staff of the hospital consists of one Medical Officer, Two Nurses, One compounder, two male and two female ward attendants, one peon and one motor ambulance car driver.

2. **Statistics:**—The total number of admissions excluding contacts during the year was 482, of whom 88 died. The largest number of admissions were for cholera, being 183 of which 39 were admitted moribund especially those that were sent from distant places outside the city limits. Except a few, all the cases of the above infection, were in a condition of collapse on admission and required on an average from two to three saline transfusions. The total mortality rate for the year is 15.88 per cent. as compared with 10.09 of the previous year, the increase being the result of continued admissions for cholera during the first six months of the year.

The daily average number of patients was 13 as compared with 26.58 for 1930.

3. **Vaccinal Condition:**—34 small-pox cases were treated during the year with one death in an adult with primary vaccination but with no re-vaccination. The largest number of attacks was in the vaccinated group being 19, and in the non-vaccinated group being only 6. The anomaly is only apparent, as the relative proportion between the protected and unprotected individuals in a community with compulsory primary vaccination has to be considered in assessing the value of vaccination against Small-pox.

Again in the vaccinated group none of the patients was below 9 years of age, being only another example of the phenomenon, that small-pox has in modern times become a disease of adults in communities where there is primary vaccination, but no compulsory re-vaccination every 7 to 10 years, while in unprotected aggregates of humanity, it is a disease of infancy and childhood.

4. **Accommodation:**—There are six wards fitted with electric installation. The two male and female wards are in addition provided with fans.

5. **Ambulance:**—The hospital is fitted with telephone connections and one ambulance car is permanently stationed for conveying cases of infectious disease to the hospital at all hours of the day and night.



### HEALTH PROPAGANDA, 1931.

The education of the citizens especially the masses on subjects relating to personal hygiene and public health continued to engage the attention of this department throughout the year. This was done by means of lectures, demonstrations with the aid of magic lanterns, cinema shows and exhibitions. The work was carried on daily according to a regular and systematic programme drawn up beforehand and advertised in the local newspapers. During the year, 1719 open air lectures, 1702 talks, 1046 demonstrations with the aid of magic lanterns, and 74 cinema shows were conducted to a total audience of about 205811.

In addition to the above, the City Health and Baby Week organised under the joint auspices of the Corporation of Madras and the National Health Association of Southern India was celebrated on a grand scale at the S.I.A.A. Grounds for a week from the 13th January 1931, and a report of the same is given hereunder. There were further three divisional Health Exhibitions conducted during the year, one in Teynampet, Royapettah Division for three days from 27th July 1931, another at Tiruveteeswaranpet for 3 days from 26th September 1931 and the third in Triplicane for 4 days from 16th October 1931. In all these, special arrangements were made for ladies and one day or afternoon was set apart exclusively for ladies according to the localities.

#### City Health and Baby Week Celebrations 1931.

The eighth Health and Baby Week was celebrated at the S. I. A.A. Grounds for a week commencing from Tuesday the 13th January 1931. It was organised under the joint auspices of the Corporation of Madras and the National Health Association of Southern India, the Health Officer being the Joint Honorary Secretary. The Health Week though an annual function is not a detached one but is the climax of the series of the activities of this department in the matter of bringing home to the minds of citizens facts concerning the Public health and maternity welfare. The celebrations this year while focussing the attention of the people to all matters relating to the health and welfare had the co-operation of all institutions working for similar ends.

With the necessary funds sanctioned by the Council and the co-operation of the National Health Association and the Government departments, the Health Exhibition of 1931 was organised on a very grand scale and the activities were more numerous than those of the previous years. In view of the experience gained in the past years considerable attention was devoted to present before the public at large in as exhaustive a manner as possible the ways and means by which the public can preserve health and look to the maternity welfare.

As in the last year, a Directory was printed in connection with the Health and Baby week. A message of felicitation was received from Her Excellency Lady Beatrix Stanley whose sympathy in this direction is wellknown and affords a great encouragement to those engaged in this work. The Directory furnishes particulars about the various activities of the Corporation and photographic illustrations of important features. It contains also the programme of the events of the week and the different items of competition, names of the exhibitors at the grounds, description of the exhibits by the Corporation under the various sections, special articles on health and allied subjects by experts for the benefit of the educated classes and other matters of interest are also included in it and copies were issued to the public free of cost. Besides this, handbills on health subjects were distributed.

In addition to the articles in the press published from time to time about the health week and the exhibition, their importance, their place in the health and well-being of the people, handbills in English and Vernacular were distributed. The exhibition was well advertised to the public by means of hand bills and wall posters in English and Tamil. The response from the public was very satisfactory. The gathering at the exhibition during the week

was thoroughly representative. The exhibits were so arranged as to bring out in a practical manner the existing state of affairs in the matter of public health and the need for educating the public in this behalf.

During the exhibition week the spacious grounds of the S.I.A.A. Ltd., placed at our disposal were well decorated with flags, festoons, buntings and banners. Stalls were arranged in a quadrangle north of the Moore Pavillion with the entrance just to the east of the same. A few tents kindly lent by the Military Secretary to H. E. the Governor of Madras were also pitched on the site of the main grounds. On the western side a big shamiana was put up with a dais to receive Their Excellencies and to provide accommodation for lectures in the evening. Special accommodation was also provided for cinema shows and demonstrations with the aid of magic lanterns on health subjects. Radio music was also arranged for the entertainment of the public after the evening lectures. In the centre of the main grounds the Educational Department put up a stage whereon the pupils of the Corporation schools took part in staging select scenes.

The illumination of the grounds was as usual in the charge of the Electrical Engineer who spared no pains to make it the characteristic feature that it used to be. Several commercial firms applied for stalls in the grounds to exhibit their goods and they were provided with the same on payment of rents for the space occupied by them which was a departure from the routine procedure this year.

As regards the exhibits of this department a number of charts were prepared under the supervision and as per instructions from the Health Officer and the old ones repaired and repainted. They were all arranged in the specially decorated stalls. The exhibition of these charts serves admirably as the best method of instruction of the principles of sanitation, hygienic living, and elimination of causes that lead to disease, spread of infection and premature deaths.

In addition to the above arrangements, the staff of this department medical and sanitary and the Child Welfare staff were posted by turns in stalls to explain the charts, models exhibits etc., to the visitors in English and vernaculars.

A brief description of the stalls and exhibits is given below:

#### **Maternity and Child Welfare Section.**

**Out-Patient Clinics:**—for expectant and nursing mothers, puerperal cases and children under 10 years of age.

Ante-natal clinics—for pregnant woman.

The baby stall.

Clean midwifery as contrasted with the barber midwifery.

#### **Public Health.**

Intestinal parasites—actual specimen of round worm, hook worm, tape worm, thread worm, whip worm, etc., Pictures showing various stages of small-pox, chicken-pox, measles and the progress of a case of vaccination.

Diseases carrying insects—Mosquitoes conveying Malaria, Filaria, Yellow Fever, Dengue etc.

Fleas—Rat and human.

Lice, Bugs.

Flies.

**Dwellings:**—Models of good and bad dwelling houses showing arrangements for lighting, ventilation and drainage.

**Latrines:**—Various types of latrines, sanded, masonry, flush-out, combined with septic tank system etc.

Refuse disposal:—Rubbish cart, nightsoil cart, rubbish bins, hand cart, incinerators, pail depots, sewage farms, conservancy depots etc.

Cow houses, Dairy Farm—Veterinary Hospitals.

**Markets:**—Different kinds.

Sweetmeat stalls, coffee hotels, bake houses hopper bazaar etc., good and bad types—hospitals and centres. Model showing the newly constructed hospital at Tondiarpet. A. Municipal Health Centre showing the activities of the Health Department.

General Sanitation—Knights models.

Disinfection—Practical disinfection and disinfectants.

Sanitary fittings—latest types, crematoriums—open, covered etc.

#### Poster Section.

Air, Ventilation—Natural and Artificial.

Water—Source, Storage, distribution, impurities, means of pollution etc.

**Food—**Nature and use of food stuffs—

Soil sites and buildings—Dwelling houses Sanitary-insanitary.

Disposal of refuse and excreta.

Dental Hygiene.

School Hygiene.

Infection and disinfection—Cholera, Small-pox, Malaria, Vaccination.

Tuberculosis.

Vital Statistics.

Temperance.

**Madras Water Works:**—Dealing with the Engineering and analytical aspects—plans and models.

Electrical section—Model of a traffic controller, lethal chamber, loud speaking equipment, electric fountains etc.,

**Educational Department:**—exhibits, charts etc.

The undermentioned Government Departments took part in the exhibition and exhibited their propaganda materials:—

1. The Director of Public Health.
2. The King Institute, Guindy.
3. The Director, Town planning.
4. Government General Hospital—Venereal Department and X-ray department.
5. Civil Veterinary department.
6. Department of Fisheries.
7. Department of Agriculture.
8. Sanitary Engineering Department.

As stated at the outset, the Health and Baby Week commenced on 13-1-31. The opening day witnessed the marching of the boys and girls of the Corporation Schools to the Exhibition grounds. A very large gathering of spectators and distinguished ladies and gentlemen assembled before the hour fixed for opening. Exactly at 4-30 P. M. Their Excellencies Sir George Frederick Stanley and Lady Beatrix Stanley arrived in the grounds. The President, Corporation of Madras and the Commissioner received Their Excellencies who inspected the guard of honour furnished by the boy scouts and girl guides and were then led to the decorated rostrum. The president Rao Bahadur P. T. Kumaraswamy Chettyar in a short speech tracing the origin

of the Health Week Celebrations invited His Excellency to open the Exhibition. His Excellency then in a very elegant speech stressing the importance of such celebrations declared the exhibition open. Major-General C. A. Sprawson the Surgeon-General with the Government of Madras thanked Their Excellencies for having consented to perform the opening ceremony amidst their multifarious engagements. Then the distinguished visitors went round in the exhibition grounds and inspected all the charts, models and exhibits.

There were physical exercise demonstrations, cinema shows and lectures on health subjects with the aid of magic lanterns by the staff of Health Department.

The function of the second day was presided over by the Hon'ble Dewan Bahadur B. Munuswamy Naidu Garu, Chief Minister and Mr. T. P. Meenakshisundaram Mudaliar delivered a lecture in Tamil on "Your part in the promotion of general health". Ambulance display and competition were included in the programme and the Chief Minister distributed prizes to the winners in the competitions. This was followed by cinema shows and magic lantern lectures.

The Surgeon-General with the Government of Madras was the President on the third day, when Rao Bahadur Dr. A. Lakshmanaswamy Mudaliar, M. D., delivered an instructive lecture on "Infant Welfare". Then the cinema and lantern shows conducted at 6-30 P. M. concluded the activities of the day.

The 4th day of the week was presided over by Mrs. Conran Smith. The first item in the programme was the Baby competition which lasted from 8 to 11 A.M. After 11 A.M. commenced the feeding of the poor, one of the items specially arranged for the benefit of the ladies and poor women who brought their babies and children for competition. The poor feeding was conducted free by the Proprietor of the Arya Bhavan who played the host to the poor mothers. In the evening at 5 the President distributed prizes to the winners in the competition which was followed by cinema shows and lantern demonstrations.

The 5th day's function was presided over by Rao Bahadur Dr. C Natesa Mudaliar. As per programme the various exhibits were inspected by the Judges in the morning (7-30 to 9-30 A.M.). The Boy Scouts gave a fine display in the evening. The President then distributed prizes to the winners in the various items of the day. As usual there were cinema and lantern shows thereafter.

The 6th day (Gosha day) was specially set apart for ladies. Several prominent ladies were pleased to grace the occasion with their presence. Their hearty co-operation and interest in the activities of the day made it the success that it was. There were cinema and lantern shows in the evening.

The last day in the week was presided over by Her Excellency Lady Beatrix Stanley. There was physical exercise demonstration at 5 P.M. immediately after the arrival of Her Excellency. Her Excellency then distributed prizes to the winners in the competitions. This was followed by an expression of grateful thanks to Her Excellency. Cinema shows and magic lantern demonstrations were then conducted.

The Health and Baby Week opened by Their Excellencies on 13-1-31 came to a close on the night of Monday the 19th January 1931. Their willingness to perform the opening ceremony and their presence on the occasion were a source of encouragement to all the workers and the success of the show was due in no small measure to the inspiration drawn from them and their interest in the welfare work of this presidency under their charge. Thanks are also due to the various gentlemen who presided over the functions of the week and delivered lectures on interesting subjects of Public Health, to the Military Secretary to the Government, the Commissioner of Police, the Heads of Government Departments who took part in the Exhibition by exhibiting the activities of their departments, the Boy Scouts, the Executive Engineer, North Presidency division and others for all the help rendered by them to make the function a complete success. Thanks are also due to the Officers and officials of Corporation who

worked hard to make the Health and Baby Week the success that it has been. Once again, I record here my appreciation of the services rendered by them.

#### AIDED INSTITUTIONS.

A brief summary of the Public Health work done by various institutions based on their annual reports (This is incorporated in accordance with the G. O. No. 653 P. H. Mis dated 10-6-1921).

**The Arya Vysia Ayurvedic Children's Free Hospital.**—This institution situated in Vepery is rendering medical aid free of charge to children only. The total number of patients treated during 1931 is 10,718.

**The Buckingham & Carnatic Mills Welfare Committee.**—This Committee which has completed a decade of its existence carried on, during 1931, its social welfare activities. Instead of organising the usual Health week, a campaign of sustained health propaganda was conducted during the year. A series of cinema demonstrations and magic lantern lectures on health subjects were given by the National Health Association of Southern India for the benefit of the workmen. The village Dispensary afforded medical help to the workmen and grew more popular with them.

**The Chengalvaraya Naicker's Free Ayurvedic Dispensary.**—This Dispensary continued to render free medical aid and 1,98,539 patients were treated during 1931 as against 1,86,331 for the previous year.

**The Chennapuri Annadana Samajam.**—The main public activity of this Samajam is to feed the poor and provide them with clothing as far as funds permit. During the year 1930-31, the number of poor fed was 59,452.

**The Friend-in-Need Society.**—The object of this Society is to relieve deserving poor and to suppress mendicity amongst the European and Anglo-Indian Christians. During 1931 there were 1992 individuals and 268 families representing 670 persons who applied for help.

**The Government Victoria-Caste and Gosha Hospital.**—The number of maternity cases treated in this hospital during 1931 was 2095 as against 1715 for the previous year. A new Ante-Natal ward and Children's Ward were opened this year.

Women Sub-Assistant Surgeons and Lady Apothecaries in Government in the moffusil and midwives from local bodies were sent for refreshed courses to this hospital.

**The Kalyani Hospital.**—The total number of patients treated in this hospital and its two dispensaries was 16,305 of whom 1935 were in-door and 14,370 out-door patients. The number of maternity cases was 663 as against 649 in 1930.

**The Madras Society for the Protection of Children.**—This institution has completed its twenty-fourth year of its existence. On 1-1-1931 there were 65 boys and 25 girls; and 34 boys and 5 girls were admitted during the year.

Magic Lantern Lectures were given on several occasions to the inmates by the National Health Association of Southern India.

Medical inspection of the boys was done by a qualified doctor from the Government Royapuram Hospital and of the girls by a Lady Doctor from the Rainy Hospital.

**The Madras Seva Sadan.**—This institution for women has come to occupy a prominent place in the social life of this city.

Besides literary training and instruction in arts and handicrafts, the girls are also trained to become nurses, mid-wives and teachers. For this purpose, a training course has been opened in the Royapettah Hospital.

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GOPALAPURAM (EASTERN EXTENSION)



MACKAY'S GARDENS (AFTER IMPROVEMENTS)



MACKAY'S GARDENS (A VIEW OF THE INTERIOR  
AFTER IT WAS SEWERED)

**The Raja Sir Ramaswamy Mudaliar's Lying-in-hospital.**—In this hospital the total number of deliveries attended to during 1931 was 2361, of which 487 were complicated labour cases. 1109 patients were admitted for ante and post-natal treatment. The total number of out-patients treated was 11,576. 25 pupils were granted diplomas as mid-wives. 93 final year students of the Royapuram Medical School underwent clinical training.

**The Ramakrishna Mission Students Home.**—This institution for poor and deserving boys had a strength of 134 at the end of 1930 and 138 at the end of 1931. It has a medical ward for the inmates with a doctor in daily attendance. The annual medical examination of the boys was conducted according to the scheme laid down by the Government.

**The Ramakrishna Math Charitable Dispensary.**—The total number of patients treated in this dispensary during 1931 was 58,905 as against 54,567 for 1930.

**The San Thome Dispensary.**—The total number of patients treated in this dispensary during 1931 was 12,975 as against 12,717 for 1930.

**The San Thome Convent Dispensary.**—The number of patients treated in this dispensary during 1931 was 32,025.

**Sri Kanyaka Parameswari Devasthanam Dispensary.**—The total number of patients treated in this dispensary during 1931 was 75,319 as against 60,649 for 1930.

**The Unani-Dar-Ush-Shifa.**—The total number of patients treated in this Unani Dispensary during 1931 was 1,30,489 as against 1,25,015 for 1930.

## CONSERVANCY.

Mr. W. L. Edwards, the Drainage Superintendent continued to be in charge of conservancy work during the year under report, assisted by the two Supervisors. The Veterinary Officer lent by the Government also continued in office during the year. There were 2313 men, 185 women and 114 boys employed in the cleaning of streets and drains with 160 peons to supervise their work.

550 bullock drawn carts and 38 Motor lorries were maintained during the year for the removal of rubbish and filth in the City.

**Animals** :—There was a heavy shortage of bullocks in the Conservancy Depots and the Council at its meeting held on 15-5-31 sanctioned the grant of Rs. 20,000 for the purchase of bullocks.

### Live stock in 1930 and 1931.

	1930	1931
No. of animals at the commencement of the year	... 805	644
No. of animals purchased during the year	... 40	161
No. of animals that died during the year	... 201	117
No. of animals remaining at the end of the year	... 644	688

There was a reduction in mortality among the animals. Of the 688 animals remaining at the end of the year, 5 were condemned and maintained at the Sewage Farm, Tondiarpet. All the animals except a few kept at the F. Depot were protected against Rinderpest.

There was no outbreak of Rinderpest or Anthrax during the year. There were two casualties due to Trypanosomiasis and 11 to Piroplasmiasis.

There was a severe outbreak of Foot and Mouth Disease and all the depots were affected by it. By segregation and timely treatment the virulence of the disease was aborted and controlled in a short time.



There were 15 casualties due to Tuberculosis and they were among animals previously tested for the disease.

The Veterinary Hospital could not be opened for want of additional improvements which were found necessary and for which a supplemental grant was applied for. An ambulance cart for the transport of sick bullocks was manufactured during the year.

The system of feeding the animals was revised during the year. Galvanised zinc buckets were introduced in the place of wicker baskets for feeding.

**Motor Lorries**:—During the year under report there were 38 motor vehicles in use for the removal of rubbish and filth. Two Federal Trucks purchased by the Works Department in connection with Bogipalayam Scheme were transferred to the Health Department. 3 Studebaker and 4 Willys Trucks were purchased and 4 old lorries were condemned and sold in auction. The Council also sanctioned the purchase of a motor lorry for the prompt clearance of sewage from cesspools in unsewered areas.

**Tipping Platforms**.—The two model tipping platforms constructed at Basin Bridge Depot and Langs Garden Pumping Station continued to serve very satisfactorily. The platform at Triplicane was also used during the year for the temporary deposit of rubbish.

**Disposal of rubbish**:—About 4,51,485 cartloads of rubbish were removed from the City against 4,29,964 cart loads in the previous year. 1,20,198 cartloads were disposed of at the Incinerators by separation and incineration. 69,436 cartloads of rubbish were used in reclamation works. The balance was removed to the dumping grounds at Korukkupet, Otery, Rifle Range, Mylapore and Salt Cottairs Railway land. Work at the Krishnampet Incinerator was stopped during November and December of the year for repairs.

**Disposal of filth**:—During the year under report about 1,22,680 cartloads of filth were removed from the City, of which 94803 cartloads were flushed into sewers at the Pail Depots at DeMellows Road, Langs Garden and Ice House Road. The balance was trenched at the Korukkupet and Otery Night soil Depots.

**Public Latrines**:—144 flush-out, 41 masonry and 24 sanded latrines were maintained during the year. A list of new latrines constructed and old latrines converted is furnished in the appendix (page 111).

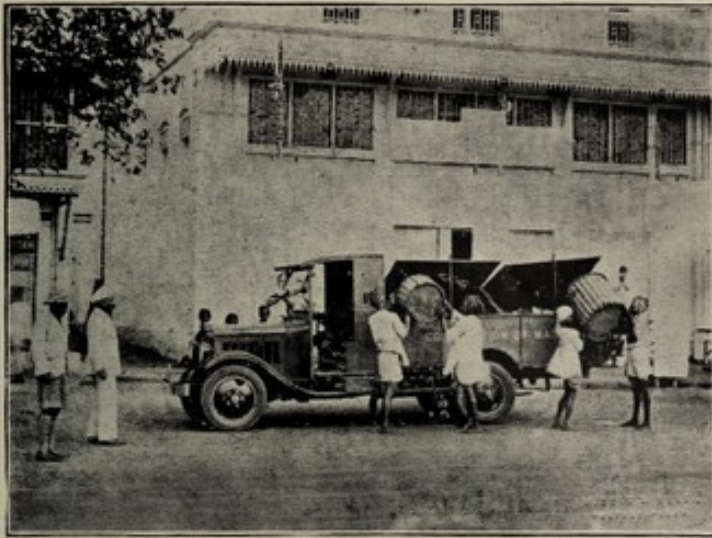
**Festivals**:—As usual, special arrangements were made for efficient cleaning and disinfection during all the important festivals in the City. The conservancy of the S. I. A. A. Grounds was attended to departmentally during the Park Fair (1931-32) on payment of fees.

**Private Scavenging**:—A sum of Rs. 23,680-10-8 was derived as charges for conservancy services rendered to private institutions under section 197 of the Act. In view of the scheme of flush-out latrines which is in progress the problem of scavenging of private dry latrines in the City has been kept in abeyance.

**Nuisance**:—Much of the untidiness of the streets of Madras is due to the committal of nuisance by the public. In spite of the rapidly developing civic conscience of the citizens the evil practice continues.

Police prosecutions which are put up mostly at the instance of the Corporation tend to abate the nuisance for a short time. Unless the Corporation sanitary staff is given police powers there seems to be no hope of improvement in this direction. Public latrines and urinals are being constructed wherever suitable sites are available.

**Disinfection**:—528 gallons of Hycol, 153 gallons of Phenyle and 2690 parabs of chunam were used for the disinfection of drains, street corners and dustbins and nightsoil buckets.



REMOVAL OF RUBBISH BY MOTOR LORRY



REMOVAL OF CESS POOL CONTENTS BY MOTOR VAN

REMOVED FROM COLLECTION BY CONGRESS

REMOVED FROM COLLECTION BY CONGRESS



PLAN OF THE POSITION OF THE GREAT BRITAIN SHIP TO GUNBOAT



A VIEW OF THE POSITION OF THE GREAT BRITAIN SHIP TO GUNBOAT



FLUSHING OF THE WATER-TABLES BY MOTOR VAN



A VIEW OF THE RECLAMATION OF LOWLAND AT CHOLAI

**Labour:**--For some time past the conservancy coolies had been agitating for increase of wages. The wages were last increased in 1927. During the year the agitation became stronger and on 27-7-31 they struck work. Though the main issue was increase of wages, there were other grievances also in the matter of housing, sale of rice, hours of work, and reinstatement of some of the dismissed scavengers. The strike was terminated on the afternoon of 28-7-31.

The Council appointed a Committee to go into the question of wages and other grievances, as a result of which a time scale of wages was fixed and approved by the Council at its meeting held on 1-9-31. The Commissioner enquired into the cases of dismissed employees and reinstated some of them.

As regards the sale of rice, it was decided by the Council that the coolies who did not want rice should be given the option of taking advance wages of Rs. 2 per fortnight in lieu of rice.

301 conservancy coolies are occupying houses in Corporation Model Lines and 159 live in huts on Corporation land. A portion of the old Tipping Platform at A Depot was laid out for erecting about 40 huts with a view to relieve the congestion at Tondiarpet Hutting Ground. The acquisition of land in Pudupet Hutting Ground was completed during the year.

Some of the scavengers hutting grounds are very much congested. More Model Lines have to be constructed as soon as funds permit.

**General:**--The Council sanctioned the grant of Rs. 7000 for laying roads in the Otery Dumping Ground. The Council also sanctioned the acquisition of land to extend the dumping ground and has provided Rs. 25,000 in the budget for 1932-33.

The efficiency of conservancy work during the year is evidenced by the absence of flies and epidemic diseases in the city. Slum areas in the city received special attention. New colonies have sprung up in different parts requiring increase of carts and lorries. The night conservancy by motor lorries in Nungambakkam, Triplicane and Kothawal Bazaar areas was continued during the year. 616 dustbins and 450 nightsoil buckets were manufactured during the year.

The total expenditure on account of conservancy for the financial year 1931-32 was Rs. 8,91,749 (Rs. 66,505 Capital and Rs. 8,25,244 ordinary) against Rs. 9,49,730 for 1930-31 (Rs. 69,185 capital and Rs. 8,80,545 ordinary). The amount spent on wages of conservancy coolies was Rs. 4,92,603 against Rs. 4,89,589 for 1930-31.

A sum of Rs. 10,000 was derived as income by the sale of manure from Korukkupet and Ottery Nightsoil Depots in 1931-32.

## ANTI-MALARIAL WORK FOR THE YEAR 1931.

A Senior Sanitary Inspector was in charge of the entire operations working directly under the Assistant Health Officers. He was assisted by one Sanitary Inspector exclusively in charge of 3 & 4 divisions, where, as many as 210 tanks exist and by 2 Supervisors, one for the North Range and the other for the South Range, with 3 gangs of nine coolies each for each range for cleaning, oiling the tanks, ponds, wells and drains and introducing larvacidal fish into wells and tanks. A Motor Lorry was engaged with 12 coolies for reclamation work. The Senior Sanitary Inspector under-went training at Karnal during the year at the Ross Field Experimental Station for Malariology.

The chief breeding grounds for mosquito larvae were surveyed and prompt action was taken to destroy the larvae by cleaning and oiling the tanks, ponds, wells and drains. Large storm-water drains such as Kelly's drain, drains in Anna Pillai Street, Audiappa Naick Street, Thatha Muthyappan

Street, Parish Venkatachala Iyer Street, Chirra Bazaar Road, Mint Street, Wall Tax Road, Triplicane High Road, Peters Road, etc., were fumigated and oiled periodically.

#### Anti-Malarial Measures Adopted.

1. Cleaning of tanks, ponds, and wells.
2. Petrolising.
3. Clearing of rank vegetation.
4. Introduction of larvacidal fish into wells and tanks.
5. Reclamation.

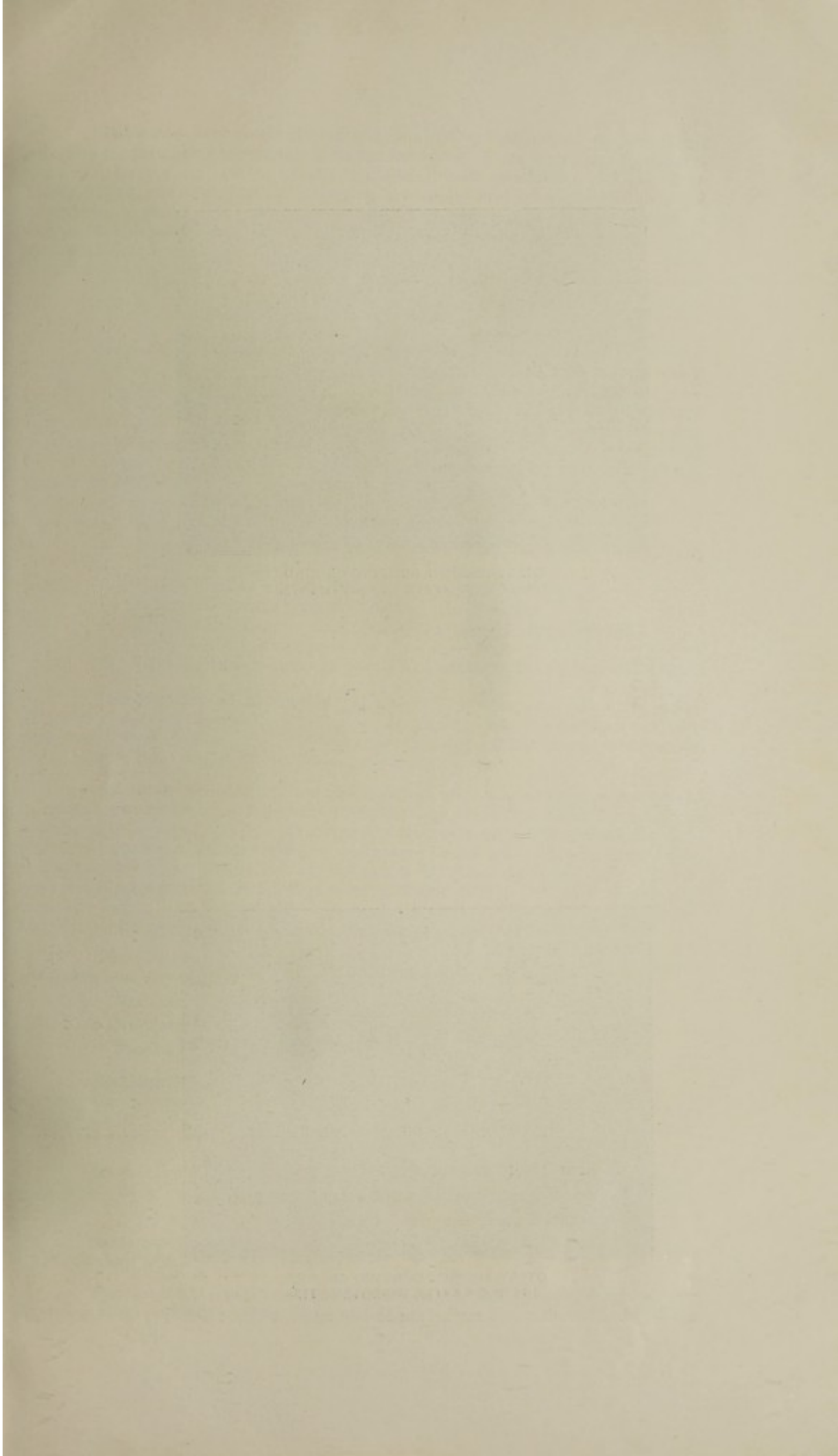
**Tanks and Ponds**—Generally tanks and ponds which are not used for purposes of irrigation and are mostly shallow, covered with moss, and horizontal growth of weeds become breeding places for anopheline larvae. There are at present 502 tanks in the city and these were inspected constantly by the sanitary staff and action taken wherever necessary. Tank registers for each division are maintained and entries are made by the Supervising Officers. Divisional Sanitary Inspectors inspect them frequently, and enter the results of inspection in the registers and the number of times the tanks are cleaned.

Owners of 147 tanks paid the estimated cost for cleaning and oiling their tanks during the year to the Corporation and work was done departmentally. The total amount collected from the owners of these tanks during the year was Rs. 1,746-8-2. A statement showing the names of the tanks with the owners, and the amounts paid with challan numbers is attached for information—(Vide statement B on pages 113 and 114).

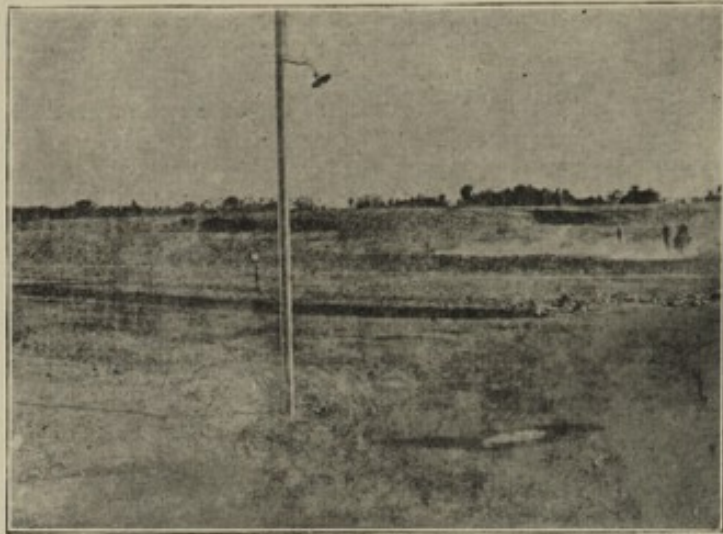
**Petrolising**—The only satisfactory and economical method for the destruction of mosquito larvae, and pupae of both *Anopheles* and *Culex* is by petrolising frequently. A dilution of liquid fuel with kerosene oil was sprayed by knapsack sprays on to the surface of stagnant waters to form a film to cut air supply to the mosquito larvae. Generally after monsoons a large number of temporary puddles and pools formed and became breeding grounds for mosquito larvae. Petrolising was then conducted on a large scale by the division staff with good results. As it is not possible to reclaim such lowlands at present, the only remedy is to keep them free from mosquito larvae by systematically petrolising them.

Some of the chief localities where such pools and puddles were petrolised systematically are given below:—

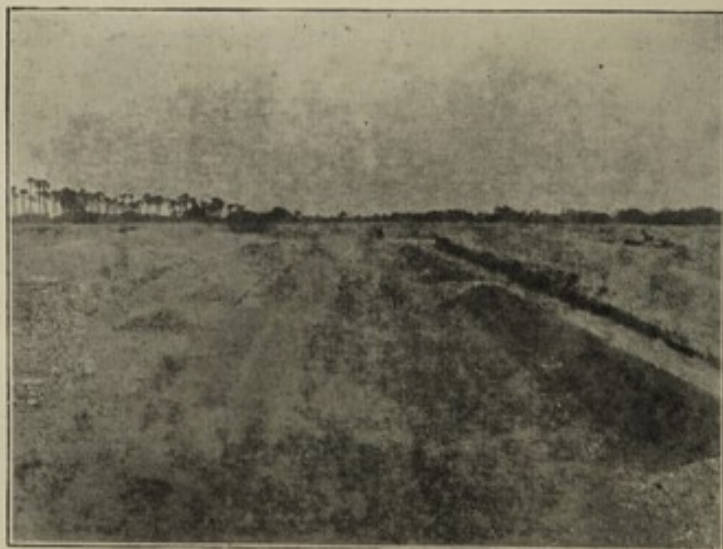
1. Royapuram near Railway Bridge and some low lands in S. N. Chetty Street, 1st & 2nd Divisions.
2. Kathiwalkam High Road and Tondiarpet where there are a number of lowlands on either side.
3. Cochrane Basin and Anti-Malarial drain close to Washermanpet Burial Ground, 4th Division.
4. Ottery Nulla, including Anti-Malarial drain in DeCosta Road, DeMellows Road and Powder Mills Road. A separate gang of coolies were attending to this drain, 16th Division.
5. Errukancherry Road and the lake in Vyasarpady, 16th Division.
6. Modavakkam Tank, 21st Division.
7. Marshy lowland behind Government Record Office in Male Asylum Road, 20th Division.
8. Spur Tank, 20th Division.
9. Storm-water drain in Royapettah, 29th Division.
10. Ditch drain in Gopalapuram, 29th Division.
11. Ditch drain near Admiralty House, 29th Division.
12. Lowland south of Mylapore from Rifle Range to Adyar.
13. Portion of the Cooum and Buckingham Canal.
14. All cesspools and drains in the city.







OTERY RUBBISH DUMPING GROUND  
(FRONT VIEW AFTER IMPROVEMENTS)



OTERY RUBBISH DUMPING GROUND  
(INTERIOR AFTER IMPROVEMENTS)

It is necessary to mention in this connection that petrolising was found effective in destroying the mosquito larvae in places, where water was found unused and stagnating. In the case of the tanks, ponds and wells which are constantly in use, petrolising was objected to, because of its deleterious effect on the vegetable growth. In such cases periodical cleaning and introduction of larvacidal fish were resorted to. Mere petrolising and stocking with fish are not enough to keep off the mosquito larvae so long as the tanks contain moss, weeds etc. which afford shelter to the larvae.

#### Rank Vegetation and Bush Cutting.

Generally rank vegetation is found close to tanks, ponds, and marshy places affording comfortable lurking places for adult mosquitoes, which breed in the stagnant waters closeby. In private places the clearing of rank vegetation is primarily the work of the house owners or tenants. Sanitary Inspectors were instructed to issue notices to the owners to remove such vegetation wherever found. A considerable quantity of it was thereby removed by the owners. The anti-malarial staff cleared about 5,78,399 sq. ft. of rank vegetation from the following places:—

1. S. N. Chetty Street, 2nd Division.
2. Mohamedan Burial Ground, 2nd Division.
3. Beggar Home, 2nd Division.
4. Infectious Diseases Hospital, 4th Division.
5. Hindu Burial Ground, Washermanpet, 4th Division.
6. Sides of the Anti-Malarial Channel, 4th Division.
7. Choolai Burning Ground, DeMellows Road, 16th Division.
8. Taylors Road, 21st Division.
9. Greams Lane, Haddows Road, 7 Anderson Road, 22nd Division.

**Introduction of Larvacidal Fish.**—All the domestic and public wells in the city were stocked with larvacidal fish—Before the introduction of fish these wells were cleaned. Weeds and other floating matter were removed in order to give free scope for fish to feed on the larvae.

As many as 11,097 wells were stocked with larvacidal fish; every well so treated was carefully watched from time to time to see that the fish introduced continued to live and thrive. This was repeated systematically introducing fish wherever necessary. In places where wells were found unused, the owners were notified to cover and make them air-tight or to fill them up completely. There are various specimens of fish found to be of considerable utility in destroying mosquito larvae. At present we are using "Haplochilus Melanostigma", Chela and Minno. (In tamil "Munda Cunno, Namakannoo, and Kulla Kande).

The re-survey of wells stocked with fish during the year 1931 disclosed as follows:—

Number of wells examined	...	11,097
Number in which fish introduced were alive	...	7,116
Number in which fish introduced perished	...	3,981.

**Reclamation Work.**—The best and the most successful method of stopping the mosquito nuisance is to fill up the lowlands where water stagnates and also to fill up the unused wells, tanks and ponds where mosquito larvae breed.

As mentioned in previous reports serious opposition was noticed against the filling up of unused wells. 518 such wells were cleaned and closed air-tight.

Reclamation work was done at Rifle Range, Hope Lodge, Choolai Burial Ground and Zoological Gardens.

Statement (A) shows the notices and prosecutions under section 264 (1) regarding tanks and wells—(Vide page on 112.)

### General.

In addition to the action taken with regards to the tanks, ponds, wells and shallow waters as above-mentioned, attention had to be paid to the thousands of breeding places caused by the carelessness of the citizens, namely, cisterns used in building constructions, leakages from reservoirs, vessels used in dyeing yards in which water stagnated and paddy soaking cisterns etc. A systematic campaign was conducted to destroy the larvae in these places and to minimise the mosquito nuisance as far as possible.

### MEDICAL INSPECTION OF CORPORATION SCHOOLS FOR THE YEAR 1931-32.

**Staff:**—There has been no change in the personnel of the staff during the year under report.

**Findings of Medical Inspection:**—A larger number of school children was examined during the year under report than in the previous year. 17821 boys out of 19936 on the rolls and 10180 girls out of 12433 on the rolls were examined. This works to a percentage of 89.39 among boys and 81.88 among girls, while the corresponding percentages for the previous year were 87.77 and 76.57 respectively. The average attendance of children during the time of inspections was 16266 in boys and 9390 in girls.

10540 boys or 59.14% and 5966 girls or 58.61% were found to be defective in health requiring treatment, the percentages for the previous year being 62.20 in the case of boys and 68.63 in the case of girls. There has been a decline in the percentages of defectives over the previous year, indicating general improvement in the health of children. A definite reduction is noticed under most of the important headings especially under mal-nutrition, teeth and mouth, personal hygiene of the children, eye diseases, ear diseases, circulatory system and abdominal organs. An increase has been noted under the items, nose and throat and respiratory diseases, which are common among children especially of the poorer classes who are easily affected by seasonal variations. The increase noted under 'The Infectious Diseases' in boys is mainly due to increased prevalence of scabies which is often marked in certain seasons.

**Cleanliness, condition of the skin of the scalp, body and nails:**—2466 boys (13.28 per cent) and 1125 girls (11.05 per cent) were found to be dirty in their person and clothing as against 17.25 per cent and 15.47 per cent respectively in 1930-31—a reduction over the previous year. Most of these children came from the poorer classes and were unable to equip themselves with sufficient and clean clothing. Dirty children were advised baths in the school premises daily to habituate themselves in the methods of healthy living. Children who had vermin in the head were advised shaving their heads or combing their hairs daily after an application of kerosine and vinegar emulsion. Steps were taken to isolate these.

**Malnutrition:**—3761 boys (21.10 per cent) and 415 girls (4.08 per cent) were found to be undernourished, the percentages for previous year being 22.22 and 8.43 respectively. Parents who could afford were advised to purchase Cod liver Oil and other tonics, while in other cases the children were directed to attend Corporation dispensaries. Very many of the former purchased and administered Cod liver Oil to their children.

**Teeth and Mouth:**—3090 boys (17.34 per cent) and 2199 girls (21.60 per cent) were suffering from oral and dental complaints as compared with 21.59 per cent and 24.89 per cent respectively in the preceding year. The chief defects found were decayed teeth and ulceration of the mouth and tongue, the causes for which have been amply explained in the previous reports.

Defects.	Boys.	Girls.
Dirty teeth	803	637
Dental caries	861	1210
Stomatitis	1639	416
Tongue tie	10	3
Oral sepsis	31	15
Harelip and cleft palate	2	1
Other conditions	3	2

The parents and the school staff were advised about the importance of clean teeth for maintaining sound health. Cases with extensive decay were advised removal of the offending teeth, while in milder cases filling of the cavities was advised. Stomatitis was found mainly among under-nourished and rickety children. All these children were given relief at the Corporation dispensaries.

**Nose and Throat**—4353 boys (24·43 per cent.) and 1749 girls (17·18 per cent.) had nasal and throat complaints as against 24·23 per cent. among boys and 16·86 among girls in the previous year, the slight increase being due to the larger prevalence of respiratory diseases which are always associated with these.

Defects.	Boys.	Girls.
(a) Nose.		
Nasal Catarrh	... 203	331
Nasal Polypus	... 5	4
(b) Throat.		
Enlarged Tonsils	... 3,735	1,351
Enlarged cervical glands	... 1008	43
Adenoids	... 54	4
Granular Pharynx	... 44	12
Bifid and Elongated Uvula	... 29	50
Other conditions	... 5	—

Enlarged Tonsils and glands of the neck formed by far the bulk of the defects found in school children. These were largely due to dental caries, stomatitis and oral sepsis. Generally these extra growths of glands tend to disappear as age advances though they leave behind bad effects on the general health of the children. In all these cases the School Medical Officers aimed at improving the general nutritional state in addition to local treatment. Where the enlargement of the tonsils was large and associated with other complications, operative treatment was suggested. The parents were seen and advised in such cases and the teachers instructed to persuade them to carry out the advice.

**Eye diseases**:—531 boys (2·98 per cent) and 278 girls (2·73 per cent) had diseases of the eye as against 3·20 per cent and 3·77 per cent respectively in the previous year, recording a decrease of 0·22 per cent and 1·04 per cent.

Defects.	Boys.	Girls.
Conjunctivitis	... 133	86
Blepharitis	... 2	3
Granular lids	... 71	58
Corneal opacity	... 66	18
Corneal ulcer	... —	1
Staphyloma	... 1	1
Dacryo-cystitis	... 3	—
Cataract	... 5	1
Xerosis	... 139	59
Stye	... 29	21
Squint	... 76	22
Keratitis	... 2	1
Ptosis	... 10	—
Other conditions	... 11	8

Minor complaints were advised treatment at the Corporation dispensaries, while others requiring the care of a specialist were referred to the Government Ophthalmic Hospital, Egmore. Most of the cases of squint were advised early correction for errors of refraction.

**Vision** :—230 boys (1·29 per cent.) and 21 girls (0·21 per cent.) had defects of vision as against 1·15 per cent. and 0·22 per cent. respectively in the previous year. In certain cases where the defects in vision were associated with malnutrition and rickets, cod liver oil and other tonics were advised, to improve

the general nutritional state as this had been found to bring the eyes to emmetropic condition. Others were advised correction of vision at the Government Ophthalmic Hospital.

**Ear diseases** :—272 boys (1.53 per cent.) and 239 girls (2.35 per cent.) had affections of the ear. There is a decline of 0.21 per cent. among boys and an increase of 0.77 among girls over the previous year. The percentages of defectives for the previous year were 1.73 and 1.58 respectively. Simple cases of discharging ears were treated at the Corporation dispensaries while chronic and resistant types were advised treatment by the specialist at the Government General Hospital.

Defects.	Boys.	Girls.
Otorrhoea	... 239	156
Otitis	... 29	86
Other ear diseases	... 6	—

**Hearing** :—14 boys (0.08 per cent.) and 19 girls (0.19 per cent.) were short of hearing as against a percentage of 0.11 and 0.06 respectively in the previous year.

**Speech** :—95 boys (0.53 per cent.) and 21 girls (0.21 per cent.) had defects of speech, mainly stammerers. The percentages of defectives for the previous year were 0.50 and 0.16 respectively.

Defects.	Boys.	Girls.
1. Stammering	... 85	11
2. Lispings	... 9	6
3. Dumb	... 1	4

The teachers were advised to be sympathetic to such children. The condition of their general health was attended to.

**Circulatory system** :—221 boys (1.24 per cent.) and 61 girls (0.60 per cent.) were defective under this heading, the percentages for the previous year being 1.68 among boys and 1.30 among girls.

Defects.	Boys.	Girls.
Anaemia	... 110	40
Functional irregularities of heart	... 84	5
Organic diseases of heart	... 32	17

Suitable advice and treatment were suggested in all these cases. Some children requiring institutional treatment were advised to resort to hospitals. The parents of these children were seen and personally advised.

**Tuberculosis** :—Pulmonary and other forms of this disease were detected in 25 boys (0.14 per cent.) and 19 girls (0.19 per cent.) as against 0.14 per cent. and 0.34 per cent. respectively in the preceding year.

Defects.	Boys.	Girls.
Pulmonary Tuberculosis		
(a) Suspected	... 16	10
(b) Definite	... 1	3
Tubercular glands neck	... 8	5
Other forms	... —	1

Among the conditions that favour the incidence of tuberculosis among school children the two dominant factors are, ill-ventilated and poor housing conditions and poor diet. Tuberculosis is a disease due to dirt and poverty and its greatest enemies are fresh air, sun-light and good food. Every opportunity was taken to explain to the parents and teachers by means of talks and lectures the root cause of the disease and the methods of its spread and prevention among children. Special stress was made on the importance of early treatment.

All these children were directed to attend the Government Tuberculosis Institute.

**Respiratory diseases**:—735 boys (4.12 per cent.) and 492 girls (4.83 per cent.) were having respiratory affections as against a percentage of 2.80 and 3.43 respectively in 1930-31, the increase being mainly due to Bronchitis, a condition that children especially ill-nourished are prone to suffer from during seasonal changes of weather.

Defects.	Boys.	Girls.
Bronchitis	... 713	479
Bronchial Asthma	... 27	13

Excepting the chronic cases, all were sent to the Corporation dispensaries. Chronic cases were advised institutional treatment.

**Abdominal organs**:—365 boys (2.05 per cent.) and 73 girls (0.72 per cent.) were defective as against 3.07 per cent. and 0.75 per cent. in the previous year. A decrease is noted during the year under report.

Defects.	Boys.	Girls.
Enlarged spleen	... 118	15
"    liver	... 1	5
"    spleen and liver	... 5	1
Hydrocele (Vaginal & cord)	... 68	—
Inguinal hernia	... 77	...
Umbilical "	... 40	1
Stomach conditions	... 7	7
Dysentery	... 14	1
Diarrhoea	... 13	6
Intestinal colic	... 25	25
Prolapse of the anus	... 1	...
Nephritis	... 1	...
Other conditions	... 1	3
Generative disorders in girls	... ...	9

The incidence of Enlarged spleen has gone down this year. Special steps were taken to revisit as many times as possible, the schools where such cases were detected and note the progress in the health of these children. Wherever the children discontinued the treatment the parents were seen and persuaded to renew the treatment for a sufficient length of time. In such cases the objections for continuance of the treatment were bitter taste of the mixture, the tedious course of treatment and the distance of the treatment centre. In one instance, it was experimentally tried to procure the mixture from the dispensary and distribute it to the affected children mainly with the help of the teachers. At the commencement this procedure was met with success, but later due to the prolonged nature of the treatment some of the boys absented themselves having this as a pretext. In such of the children as had continued the treatment, reduction in the size of the spleen was noticed. The results of the revisits and the improvements noted have been shown in the following-up statement.

The anti-malarial staff continued to work during the year in and around the schools and anti-malarial measures taken, had beneficial effects on the control and spread of the disease. In one locality the school doctor and the senior Sanitary Inspector in charge of Anti-Malarial Campaign inspected the houses of the affected children for the presence of anophelene larvae in wells. In a few houses where the larvae were found, the wells were cleaned and larvicidal fish introduced.

A definite history of malarial attacks was not available in all the spleen cases recorded during the year though the children had beneficial effects in the reduction of spleen by the treatment.

**Bones and joints** : 641 boys (3.60 per cent.) and 45 girls (0.44 per cent.) were defective under this head, the respective percentages for the previous year being 3.25 and 0.31.

Defects.	Boys.	Girls.
Rickety deformed chest	622	31
General rickets	11	...
Fractures	4	...
Deformities of bones	3	3
Diseases of bones	5	1
Dislocations and sprains	4	6
Diseases of joints	...	6
Deformities of joints	16	...

Most of these children were found to be under-nourished and weak. They were prescribed cod liver oil and other medicines. Remediable defects were sent to the General Hospital for early rectification.

**Nervous and Psychic systems** :—49 boys (0.27 per cent.) and 17 girls (0.17 per cent.) were having functional or organic defects as against a percentage of 0.22 and 0.10 respectively.

Defects.	Boys.	Girls.
Paralysis (infantile)	9	6
Incontinence of urine	4	1
Epilepsy	7	—
Hysteria	—	4
Neuralgia	3	—
Herpes	1	—
Mentally defective	25	8

Suitable advice and treatment were suggested.

**Infectious and contagious diseases** :—During the year under review 2345 boys (13.16 per cent.) and 954 girls (9.37 per cent.) had infectious diseases including skin conditions as against 11.60 per cent. and 9.55 per cent. respectively in the previous year. An increase of 1.56 per cent. in boys and a decrease of 0.18 per cent. were noticed over the previous year. The increase among boys was mainly due as previously explained to the greater incidence of scabies. Special steps were taken to combat this. Children having scabies were advised daily baths in the schools, the parents were seen and advised on the need for personal cleanliness of their children.

Such children were sent to the Corporation dispensaries for treatment and the teachers were instructed to watch the progress of these children and isolate them in the class or exclude them from the school for a suitable period wherever necessary.

Frequent re-inspections were arranged and these children received special attention. The results of these revisits showed a definite improvement in the skin condition of the children as could be seen from the statement showing the results of the following-up work.

Defects.	Boys.	Girls.
Scabies	1,817	803
Eczema	156	7
LEPROSY	92	13
Ring-worm	134	32
Lichen	67	—
Dermatitis	4	6
Pruritis	2	—
Taenia	4	—
Phemphigus	1	—
Acne	1	—

105 children showed clinical signs and symptoms of early leprosy. The type of leprosy met with was of the nerve type. They were advised treatment at Government Royapuram Hospital—Leprosy out-patient section. The parents of these children were specially called for ascertaining the family history. The nature of the disease and the course of treatment to be adopted were made known to them. The Head Teachers were instructed to send these children for bacteriological examination and treatment and if reported infective to exclude them from school till such time as the medical authorities certified them to be fit to mix in the schools.

In all the cases where bacteriological examinations were made by the Government Royapuram Hospital, the reports, however, revealed that these were only of the nerve type and non-infective. The teachers were advised to allow the children to attend the schools provided they continued the treatment.

The results of the medical advice offered are given in the statement showing the results of following-up work.

Other infectious and contagious diseases found were :—

Defects.	Boys.	Girls.
Malaria	91	31
Hook-worm	15	41
Whooping cough	12	12
Influenza	5	1
Mumps	5	2
Filariasis	2	1
Kala-Azar	-	1
Typhoid	-	1
Gonorrhoea	-	3

Except the last four conditions all the other cases were sent to the Corporation dispensaries for treatment. The last four conditions required institutional treatment and the children were advised to resort to the Hospitals, and the parents also instructed suitably. Children who suffered from contagious diseases as Whooping cough, mumps etc., were excluded from the school till recovery.

**Other diseases and defects** :—1632 boys (9.16 per cent.) and 764 girls (7.50 per cent.) were defective as against a percentage of 10.54 and 6.40 respectively in the previous year. The chief defect under this was worms.

Defects.	Boys.	Girls.
Worms	690	589
Wounds, cuts, ulcers etc	480	82
Undescended testis	64	-
Phimosis	146	-
Enlarged groin glands	138	-
Pyrexia	83	58
Boils and Abscesses	91	57
Keloids	8	-
Warts	2	6
Leucodermic patches	38	19
Lipoma	2	-
Cyst	2	-
Obesity	4	-
Whitlow	-	1
Salivary fistula	-	1
Alopecia	6	-
Orchitis	1	-
Burns	-	1
Tumours	-	3
Cellulitis	-	1
Other conditions	19	-



All minor cases were dealt with in the Corporation dispensaries while other serious defects were advised treatment at hospitals. The improvement noted during the revisits have been separately shown in a statement.

**Deformities** :—94 boys (0.53 per cent.) and 27 girls (0.27 per cent.) had physical and structural deformities, the respective percentages for the previous year being 0.40 and 0.26.

Defects.	Boys.	Girls.
Spinal deformity	10	2
Talipes	11	5
Shortened limbs	19	—
Congenital dislocation hip	3	—
Ankylosis of joints	4	2
Amputated limbs	1	1
Genu Valgum and Varum	11	—
Supernumerary fingers	6	3
Flat foot	5	3
Syndactily	3	1
Dwarf	1	—
Other conditions	18	9

Remediable defects were advised treatment at Government General Hospital.

**No. bearing no marks of vaccination.** During the course of medical examination the vaccinal condition of the school children was looked for and 95 boys (0.53 per cent.) and 83 girls (0.82 per cent) had no visible marks of vaccination against 0.51 per cent. and 0.65 per cent. respectively in the previous year. All these were vaccinated.

In addition re-vaccinations were performed after lectures on the dangers and prevention of Small-Pox. 1070 children submitted to re-vaccination after such lectures.

**Medical Treatment.** 14483 were advised to seek treatment at the various dispensaries and hospitals in the City the details of which are as follows:—

	Boys.	Girls.
1. Cases sent to Corporation dispensaries	8956	4088
2. Cases referred to hospitals		
(a) General Hospital	534	457
(b) Gosha	—	8
(c) Ophthalmic Hospital	233	63
(d) Tuberculosis Institute	25	14
(e) Royapuram Hospital (Leper Out-Patient Section.)	92	13
<b>Total</b>	<b>9840</b>	<b>4643</b>

**Re-inspections.** During the year special efforts were taken to make as many re-inspections as possible to persuade the parents to carry out medical advice and also to note the results of the advice. 306 such revisits were made and following up data collected which have been brought up in the form of a statement on pages 123 & 124. Children who either refused or did not improve in health were persuaded to continue the treatment till recovery.

**Results of the following-up work.** There is a tendency to belittle the importance of school medical service. It is often believed to be no more than a mere recording of the defects among children. Just like education the returns of the investments on school medical inspection are slow in realisation but none the less sound. Along with the development of the intellect it is necessary to take care of the health also of the children as the child of to-day is the citizen of tomorrow. As the strength and greatness of any country depend

primarily upon its inhabitants being strong and verile both in mind and body it is necessary to take as much care of the health of the people as of their educational and other conditions. Just as the child learns in the school the three R's. and acquires the spirit of 'esprit de corps' and team work and is made to develop those finer qualities which go to make it the worthy citizen of the future it is necessary to inculcate in the children habits of clean living and impart to them sound ideas of health and the necessity for personal hygiene. How can this be done any better than by close association with the medical inspection staff? The school children of to-day having had the benefit of this system of education will during their adult life be more ready to act upon advice and to welcome assistance in regard to health questions generally.

The medical inspection is also important in another way. In a country like India where the general mass of the people are steeped in superstition and fatalism and attribute their difficulties to the wrath of Gods, it is absolutely necessary that all diseases and defects should be detected and remedied in their incipient stages before they assume serious proportions.

The immediate results of these activities so far as could be seen towards the healing of the sick were collected to show how far the children followed the medical advice and were benefitted by it. This was done during the revisits paid to the schools after the routine inspections were over. The results so far collected cover a period of three months in general in respect of each school, though in certain important cases children were kept under continuous observation for longer periods. The "following up" statement Vide pages 123 and 124 shows in detail how many were operated, cured, improved or continued treatment on the Medical Inspectors' advice. There were refusals also in many cases and in such, the Medical Inspectors in their revisits persuaded the school staff to continue to use their influence on the parents. The leakage between the number defective and the number that obtained treatment is not much when the fact that the results shown cover a period of only three months in most of the cases, is taken into account. A policy of "try and try" has to be followed before one could win the parent to his side. Tact and patience are required to meet the ignorant objections of parents and make them realise the truth of our advice and the necessity for following it. The results shown in the statement are summarised below :—

**Malnutrition.** 323 children classed as undernourished regained their normal health after medical treatment. In 605 children improvement in general health was noticed within the period of reinspections but required continuance of the treatment for a more prolonged period. In 108 cases improvement could not be seen and they were advised continuance of the treatment. This was also partly due to their not having undergone the treatment regularly.

**Teeth and Mouth.** Improvements noted under this head are given in the statement already referred to. It may be mentioned that five children had their teeth cleaned by the Dentist and in 9 others the teeth were extracted for bad caries. One child had his carious cavity filled up. Another child had his tongue tie clipped.

**Enlarged Tonsils.** 38 of the children advised Tonsillectomy underwent the operation and the Medical Inspectors prescribed Cod liver oil for these children to build up the general health. In 557 children the enlargement disappeared after medical treatment. In 675 cases improvement was seen in the reduction of the size of the tonsils while in 58, no improvement was perceptible.

**Defective Vision.** 10 children were prescribed glasses after the necessary tests at the Eye Institution. Among these six wore glasses while 4 could not do so due to poverty. It is regrettable to note that these children after having been subjected to the tedious test could not get their defects remedied due to utter poverty. Any allotment of funds either private or public for the purpose would go a great way in helping humanity. 34 of the children who were advised Cod liver oil took the same and in 13 the eyes became emmetro-

pic, in another 13 there was visible improvement and in 8 children no improvement was noticeable. In the latter two cases advice was given to continue the treatment.

Two children who had infantile cataract underwent necessary operations resulting in improvement in their vision. One having Dacryocystitis was operated and cured.

**Ear Diseases.** In 177 of the children having chronic Otorrhoea 119 were cured, 47 were much improved and 11 obtained no relief. One child having mastoid abscess was operated upon at the General Hospital and was cured. Another was operated for Polypus ear at the same hospital.

**Circulatory system:**—66 of the anaemic children obtained treatment at the various dispensaries. 30 were cured, 35 improved and in one child further treatment was found necessary before improvement could be seen. Limited exercise was suggested to suit the individual cases of organic diseases of the heart found among the children.

**Tuberculosis:**—26 children who were weak and suspected to be suffering from Tuberculosis underwent treatment. 11 put on weight and got back to normal health. 7 children were very much improved in general health within the short period of 3 months and in 8 more, improvement could not be seen. The latter were advised to continue treatment. 4 children who had definite signs of pulmonary infections were reported to have left the schools at the re-inspections.

**Respiratory Diseases:**—251 Bronchitic children obtained necessary treatment. 241 of them were cured, 9 were improved being cases of chronic bronchitis and no improvement was seen in one child.

**Abdominal organs:—Spleen:**—55 children having enlarged spleen were cured after treatment. 35 got the spleen reduced in size after treatment. Two required prolonged treatment. They were left under the care of the teachers who were requested to follow them further till they were cured.

Out of the 6 children who had enlarged Liver and Spleen, two were treated privately and 4 at the hospitals. All these were cured excepting one child who continued treatment, the condition having slightly improved.

**Hernia:**—Three cases of Inguinal hernia were radically operated upon and two others were wearing trusses as a palliative measure of treatment after advice. One case of Umbilical hernia was also operated and cured.

One boy who had retention of urine was admitted at the Government Royapuram Hospital and was discharged after treatment.

### Infectious & Contagious Diseases.

1145 children having scabies and dirty condition of the skin were cured after treatment. In 31 children having the same condition but of a chronic nature, improvement was noticed after treatment.

**Leprosy:**—Among the 105 cases of leprosy detected during the year three underwent prolonged treatment. As the anaesthetic patches regained sensation and colour, treatment was discontinued by the hospital authorities who advised the children to appear before them periodically for observation. In 28 children who continued the treatment, partial return of the sensibility and colour was noticed after a number of injections. Continuance of the treatment was advised in these cases. Improvement was not perceptible in 37 children due either to the fact that the injections were started late or to the infection being of a resistant type. Among these, three were under the treatment of private medical practitioners. 9 children left the school after detection and advice. Some among these had received a few injections while in some others information was given that native medicines were being tried in their villages.

There were 15 refusals and any amount of advice and persuasion was futile in these cases. Parents of 13 children were indifferent in getting their children treated. These attended the clinic irregularly.

As the type of leprosy in them was not of an infectious nature these could not be excluded from the schools, neither treatment insisted upon in the absence of specific rules to deal with such cases. Rule 27 (a) of the Madras Educational Act lays down that "no pupil shall be permitted to attend the school who is found to be suffering from venereal diseases or leprosy in a contagious form or from Small-Pox or from any other serious contagious or infectious diseases."

As there is a possibility of these non-infectious cases running on to the infectious stage at any time either due to devitalising influences or a continuous and heavy infection, exclusion of these then and there at such stages becomes a matter of great importance though detection of these at such stages may not be practically possible due to the children not reporting themselves at the clinic either for treatment or observation. It is therefore necessary that rules regarding exclusion of school children suffering from leprosy in a contagious form be so amended that even children suffering from the disease in the non-infectious stages should be excluded from school unless they underwent treatment in a recognised institution.

While investigating into the family history of the children for detecting the possible source of infection, the father and mother of a boy and the mother of another were found to suffer from Leprosy. The former two were of the skin type (infectious) and the latter was of the nerve type (non-infectious). As advised they underwent treatment along with their children regularly. The nerve type of case mentioned was almost cured by treatment while in the other two, the progress was found to be slow.

**Hookworm Disease:**—6 children showed a definite cure after a course of the treatment. In 33 improvement was noted. These were advised to continue Iron Tonic.

**Gonorrhoea:**—Among the three girls detected suffering from Gonorrhoea, two were treated and cured while one refused treatment and left the school.

**Enteric Fever:**—One girl with clinical signs and symptoms of typhoid fever was advised admission at the hospital. During the re-visit it was reported that the girl was admitted and cured.

**Phimosis:**—46 children underwent circumcision operation for Phimosis after medical advice.

**Co-operation of parents.**—During the course of medical examination of children the medical inspection staff met the parents of 4517 children. The personal and family history were enquired into and any defects found in them were pointed out to the parents with necessary medical advice. Special stress was laid on the importance of personal cleanliness of the children. The number of parents met in the previous year was 3663. There has been an improvement in the attendance of parents at the inspections showing that they are taking increased interest in the medical inspection and treatment of their children. In certain cases the parents themselves and their infants were examined and advised at their own request. From a perusal of the statement showing the results of re-visits one could easily judge as to how far the parents availed themselves of the benefits of medical advice. Whenever the parents required help in the admission and treatment of their children in the hospitals, the school staff in certain cases gave the necessary help. Linking a well organised social working scheme with the medical inspection activities will really go a great way in supplying the wants in this direction. The social workers to whose care these cases will be entrusted for carrying out the medical advice can devote themselves to the duties of advising, persuading and taking children to hospitals for treatment. The advantages of such a system will be that the

'following up' work now done by the Medical Inspectors and school teachers necessarily limited in its scope will be more frequent and continuous.

**Co-operation of Teachers** :—The school staff maintained registers of defective children during the year and to the best of their abilities and to the extent co-operation was available from the parents, made the children attend the various treatment centres. The Medical Inspectors explained the common diseases occurring among the children. Arrangements are being made to print and distribute to all the schools an explanatory note on the common diseases of children. Some among the teachers with a social bent of mind also helped the parents in taking their children to the hospital.

**School Sanitation** :—The sanitary condition of the school building is of prime importance in the proper upbringing of children as the better part of the day is spent there. The environment of the school building received the careful attention of the Medical Inspectors. 17 school buildings were reported as unsuitable for school purposes for want of proper accommodation, lighting, ventilation and latrine arrangements. In the case of 31 schools, suggestions were given either to improve the accommodation, ventilation etc. or if possible to change the premises.

**School Latrines** :—The latrines in 57 school buildings were found to be inadequate and wherever possible those of the flush-out type were suggested. 30 schools were provided with flush-out latrines. Two schools had no separate or proper latrines for use. Provision of latrines was recommended in these schools.

**Water Supply** .—A sufficient number of taps has been provided in all the schools. Children as in previous years are supplied with strained tap water for drinking. Early provision may be made for supplying boiled water at least to such of the schools as receive midday meals.

**Play Ground** :—49 schools have no facilities for play and recreation. It is necessary that all the schools should be provided with suitable playgrounds.

**School Equipment** :—All the schools have adequate furniture.

**Bathing Classes** :—Bathing rooms were available in 61 schools. The teachers were advised to arrange for the periodical bathing of dirty children at the school bath-rooms.

During the inspection of the schools this year, repairs and extensions of buildings or other improvements were noted to have been done in 6 schools. Extension was started in one model school (Korukkupet Boys' School) recently at the end of the year. Four schools in addition had latrine accommodation provided. Urinal was added to another school.

Five schools situated in buildings reported as unsuitable for school purposes last year were removed to buildings having better accommodation, ventilation etc.

**Midday Meals** :—The supply of midday meals was continued this year also. As mentioned in the report of the previous year meals were cooked and distributed under the management of the Corporation. 14 schools were additionally provided with midday meals this year, the total number of schools receiving the supply being 52 as against 38 in the previous year. 3500 children were fed daily in these schools as against 2500 in the previous year. The Medical Inspectors inspected the schools daily at the time when meals were served.

**Propaganda** :—167 lectures were delivered in the schools and 47 talks arranged with the parents and pupils during the course of the inspections. The total attendance at these lectures was 18231. In addition to this, charts relating to school hygiene were exhibited in the booth reserved for the health section in the Industrial Exhibition during the Park Fair Season.

The details of propaganda work done are given below :—

Subject.	Lectures.	Talks.
1. Small Pox and Vaccination	... 27	—
2. Cholera	... 15	—
3. Tuberculosis	... 10	—
4. Malaria	... 21	5
5. Hookworm disease	... 14	8
6. Leprosy	... 10	1
7. Flies	... 3	1
8. Personal Hygiene	... 45	9
9. Ventilation and Housing	... —	11
10. Diseases of children	... 4	—
11. Infectious Diseases	... 1	—
12. Filariasis	... 2	6
13. Mosquitoes	... 3	—
14. Domestic Hygiene	... 3	—
15. Water Supply	... 2	4
16. Worms	... 7	2
	167	47

(For Statistical Tables see pages 115 to 124.)

### REPORT ON THE WORKING OF THE WATER ANALYSIS LABORATORY, FOR THE YEAR 1931.

#### General.

During the year under review the lake water was effectively chlorinated as in last year at the Kilpauk end of the raw water conduit and then filtered through sand filters working at 6" or 8" vertical per hour. The filtered water as supplied to the City was bacteriologically inferior to the chlorinated raw water throughout the year. Sulphuretted hydrogen was noticed as usual in the filtered water chambers and at the inlets to the underground filtered water reservoirs especially in hot weather. The colourless sulphur bacteria—*Beggiatoa* and *Thiothrix* were also found growing in all those places, where hydrogen sulphide was produced.

Nitrites were occasionally found in samples drawn from the test tap at K.P.S., in filtrates from some beds, and in samples drawn from the City. That they were not due to any sewage contamination was evident from the fact that they were detected in filtered water samples drawn from different places within the water-works, where there is no possibility of any sewage contamination taking place. They are formed most probably as a result of the imperfect oxidation of "free ammonia" present in filtered water.

The average daily consumption of water in the City was 19.46 million gallons.

#### Scientific.

(a) The work done at the laboratory during the year is shown in Table I. (page 125.)

(b) **Red Hills Lake:**—The lake water was of maximum purity (l. f. in 5 c. c. and upwards) during January, April, May, June, July, August, September and December (Table III page 126). The average total colonies per c. c. was 984 for the year. Chemically the lake water contained less organic matter than last year (Table IV page 127). The average yearly lake level was also lower (Table II). The total rainfall in the lake region was 56.12' as against 75.29" in 1930 (Table II page 125.)

(c) **Raw water at the Kilpauk end:**—Raw water was of a fair quality bacteriologically almost throughout the year (Table III page 126). Chemically a

slight increase in "free ammonia", marked reduction in "albuminoid ammonia" and "absorbed oxygen" occurred when compared with the corresponding results of last year (Table IV page 127). Organic matter as represented by the figures for "absorbed oxygen" was highest in May and lowest in December while the lake level was highest in January and lowest in July (*vide* graph).

(d) **Chlorinated raw water**.—Raw water was effectively chlorinated throughout the year. From January to 13th August the dose of chlorine was kept at 1.5 parts per million after which it was reduced to 1.0 part per million.

(e) **Filtrates from Beds**.—The yearly average percentage of first class samples (l.f. in 60 c. c and upwards) was nearly the same as in last year (Table III page 126). Chemically the figures for organic matter showed a distinct reduction over the results of last year (Table IV page 127). The average life of a sand filter was 46 days per run as against 44 days in the previous year (Table VI page 128).

(f) **Filtered water from Central conduit and the test tap**.—The number of first class samples (l.f. in 60 c. c and upwards) showed a distinct increase (Table III page 126) while the chemical figures for organic matter were lower than in last year (Table IV page 127).

(g) **Distribution system**.—The number of first class samples (l. f. in 60 c.c. and upwards) as in the previous case showed a definite increase while the average bacterial colonies per c. c. showed a reduction (Table III page 126) Chemically an all round reduction in the figures for organic matter was observed over the results of last year (Table IV page 127).

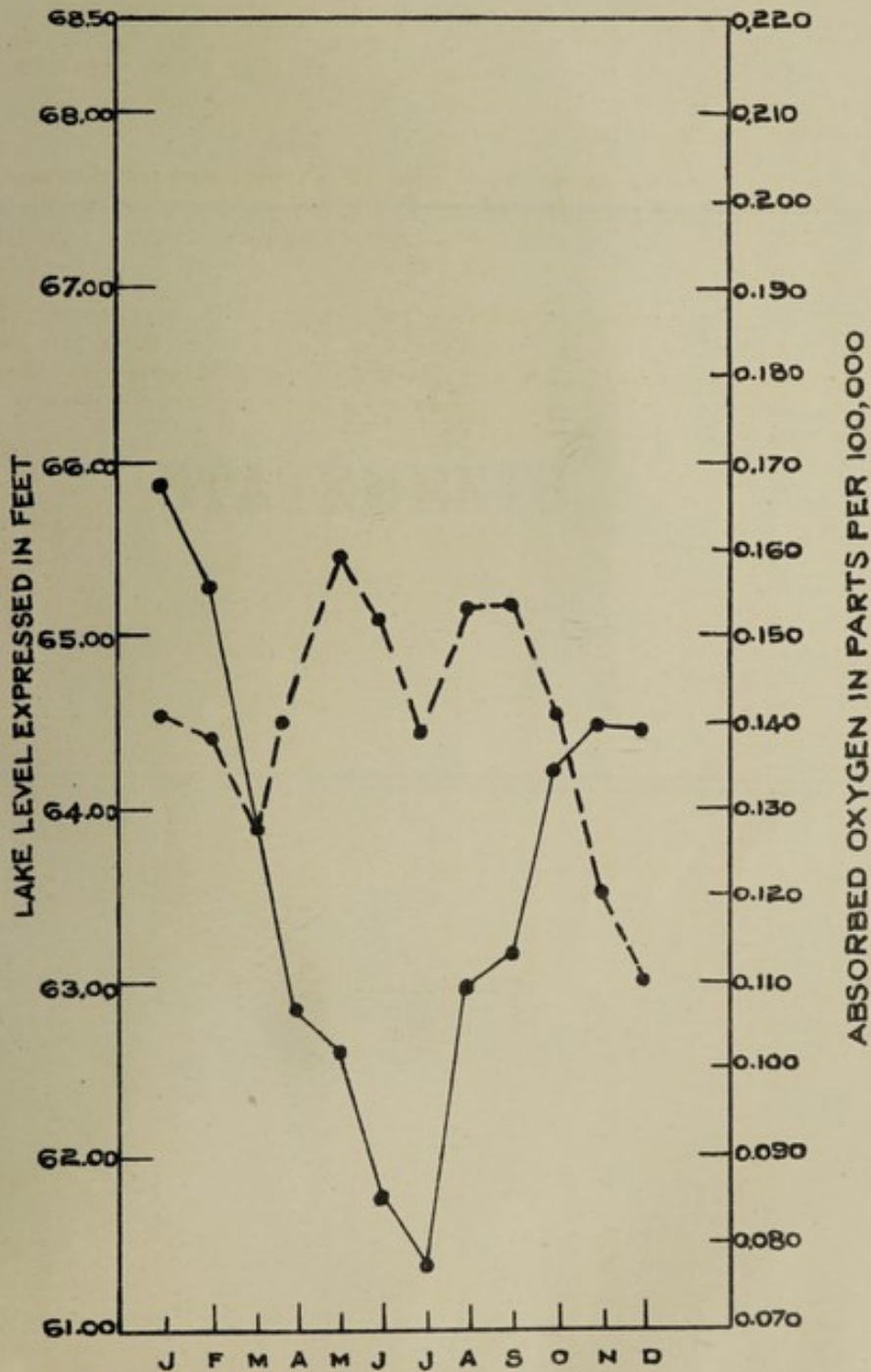
S. V. GANAPATI, B.A., M.Sc.

*Water Analyst.*

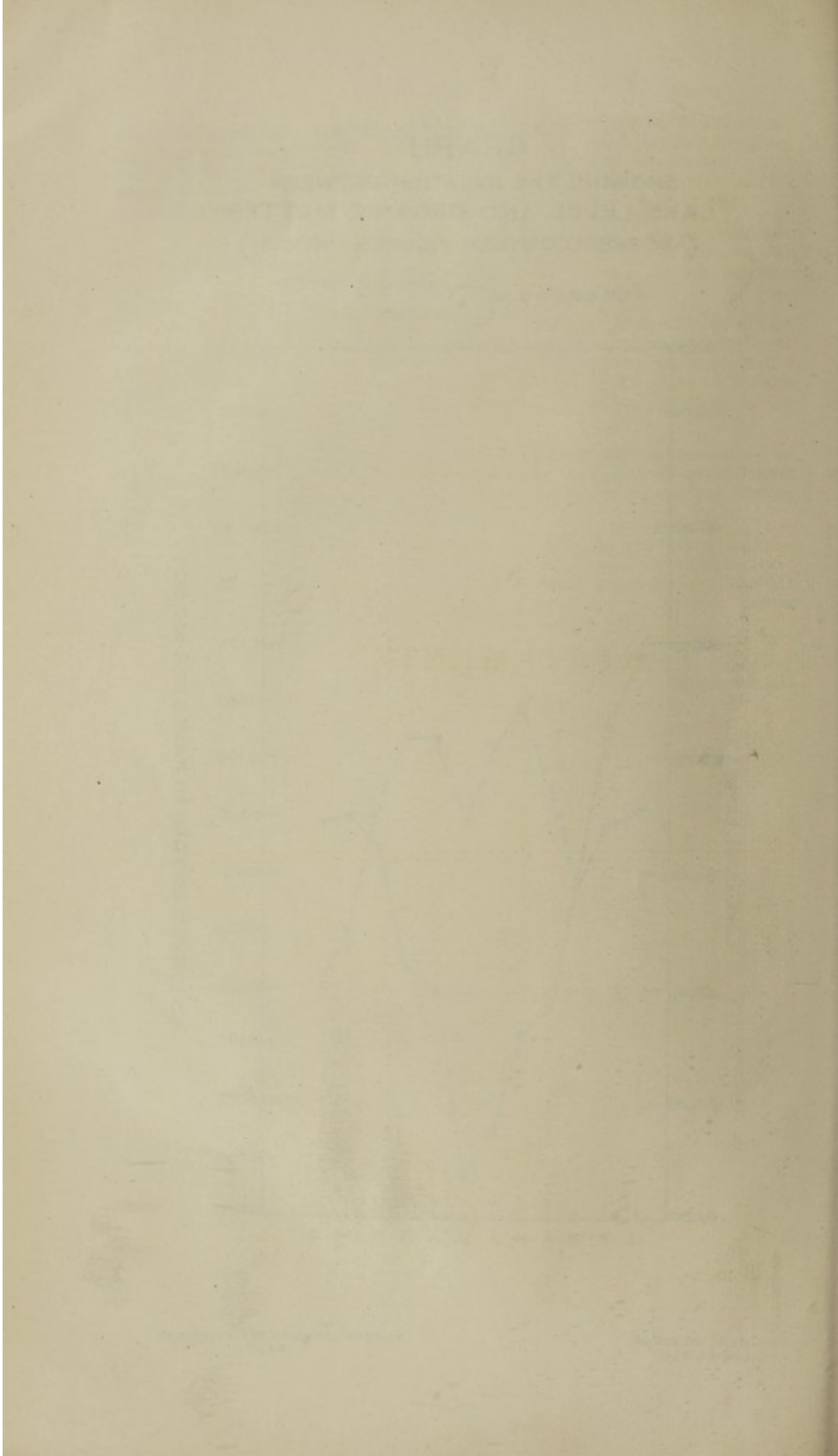
# GRAPH

SHOWING THE RELATION BETWEEN  
LAKE LEVEL AND ORGANIC MATTER  
(ABSORBED OXYGEN FIGURES FOR 1931)

REFERENCE { - - - ORGANIC MATTER.  
— LAKE LEVEL.







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**STATEMENTS.**

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## VITAL STATISTICS (STATEMENTS).

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

Latitude :—13° 4 North.

Longitude :—80° 15 East.

Months 1931.	Barometer.		Reading of Thermometer.						Difference between dew point temperature and Mean air temperature.	Degree of humidity complete Saturation being 100.	Prevailing directions of wind.	Number of days on which rain fell.	Rainfall.	
	Mean daily reading reduced to 32° F.	Maximum.	Dry.			Dew point.		Mean Maximum Solar radiation.					Total fall of rain during the Month.	Maximum fall of rain during 24 hours.
			Minimum.	Mean daily range.	Mean daily value.	Mean daily value.								
January	29.990	84.3	69.0	15.5	76.4	65.3	...	11.1	71	NE by N	2	0.05	0.03	
February	.960	86.4	68.9	17.5	77.8	67.3	...	10.5	72	E	...	...	...	
March	.924	89.8	72.7	17.1	81.1	69.7	...	11.4	71	SE	...	...	...	
April	.826	92.9	78.7	14.2	84.8	74.7	...	10.1	76	SE by S	4	1.51	1.17	
May	.724	98.2	81.5	16.7	87.6	75.1	...	12.5	70	S by E	4	1.77	1.67	
June	.679	100.3	82.4	17.9	88.5	71.4	...	17.4	62	SW by S	10	3.48	2.37	
July	.727	94.4	78.6	15.8	84.6	71.7	...	12.9	69	SW by S	13	5.50	2.16	
August	.689	94.8	78.6	16.2	85.1	71.6	...	13.5	67	SW by S	21	3.91	0.65	
September	.747	92.0	77.7	14.3	83.3	72.6	...	10.7	74	S by W	13	8.53	3.43	
October	.819	90.7	76.5	14.2	82.5	66.2	...	16.3	75	W S W	14	12.09	5.49	
November	.929	84.2	73.3	10.9	78.1	71.3	...	6.8	82	NE by E	19	11.52	2.06	
December	.939	82.0	72.4	9.6	76.5	69.7	...	6.8	82	N by E	14	10.17	2.41	
Annual	29.829	90.8	75.9	14.9	82.2	70.5	...	11.7	73	SE by S	114	58.53	1.79	

Annual Form No. I.—Births registered by divisions during the year 1931.

Divisions.	Districts.	Population according to the Census of 1931.		No. of births registered		Ratio of births per 1000 of Population.		Number of Males born to every 1000 Females born.	Excess of deaths over 1000 of population.	Deaths over 1000 of population.	Excess of births over 1000 of population.	Mean ratio of births per 1000 during previous 5 years.		Still births.	* Illegitimate births.			
		Males.	Females.	Total.	Males.	Females.	Total.					Males.	Females.					
1	Royapuram	10,949	11,903	21,952	454	417	871	41.5	37.9	39.7	108.9	...	0.2	41.4	37.6	39.5	41	14
2	Tondiarpet	13,189	12,722	25,911	657	639	1,296	49.8	50.2	50.0	102.8	8.6	...	41.8	42.7	43.8	129	9
3	Washermanpet	13,064	12,599	25,663	691	511	1,202	45.2	40.6	42.9	115.7	3.7	...	41.8	41.8	41.8	36	8
4	Korukkupet	13,191	12,347	25,538	449	440	889	34.0	35.6	34.8	102.0	...	3.9	34.4	35.2	34.8	27	3
5	Harbour	5,483	3,221	8,704	125	140	265	22.8	43.5	30.3	89.3	...	5.6	23.9	37.6	29.0	19	2
6	Muthialpet	8,377	5,880	14,257	210	232	442	25.1	39.5	31.0	90.5	...	...	22.0	31.3	25.8	31	14
7	Katchaleswarpet	6,856	5,851	12,707	238	216	454	34.7	36.9	35.7	110.2	3.5	...	33.5	35.7	35.0	25	3
8	Kothawal Bazaar	4,013	2,537	6,550	97	82	179	24.2	33.3	27.3	118.8	...	0.3	18.7	29.6	22.9	9	9
9	Ammen Koil	10,078	9,124	19,202	394	394	788	39.1	43.2	41.0	103.0	9.3	...	36.1	38.1	37.1	38	3
10	Seven Wells	10,414	9,880	20,294	383	359	742	36.8	36.3	36.6	106.7	...	6.8	33.0	33.1	41	22	
11	Sowcarpet	4,160	3,034	7,194	97	88	185	23.3	29.0	25.7	110.2	...	4.2	20.2	24.7	22.1	2	4
12	Peddunaickenpet	11,135	10,412	21,547	465	408	873	41.8	39.2	40.5	114.0	5.6	...	35.6	37.0	36.2	49	7
13	Trevelyan Basin	9,581	9,235	18,816	362	336	698	37.4	36.4	36.9	107.7	1.2	...	33.7	32.5	33.1	41	11
14	Esplanade	2,323	1,581	3,906	62	53	115	26.7	33.5	29.4	117.0	...	...	22.4	27.2	21.3	8	1
15	Park Town	9,615	7,568	17,183	313	331	644	32.5	43.7	37.5	94.6	3.3	...	30.4	34.4	32.1	30	5
16	Perambur	23,176	20,641	43,817	837	731	1,568	35.7	35.4	35.6	113.1	2.5	...	31.1	36.6	35.3	51	62
17	Choolai	14,249	13,239	27,488	668	572	1,240	46.8	43.2	45.1	116.8	7.9	...	41.1	42.1	41.6	53	7
18	Purasawalkam	13,968	13,086	27,054	540	520	1,060	38.7	39.7	39.1	103.8	2.5	...	35.9	38.1	37.4	36	11
19	Vepery	12,373	9,764	22,137	385	395	780	31.1	40.5	35.2	97.5	...	0.3	33.8	42.3	37.6	44	20
20	Egmore	15,363	14,022	29,385	764	725	1,489	49.7	51.7	50.7	195.4	16.7	...	45.0	48.2	46.6	138	16
21	Kilpauk	13,075	11,259	24,334	422	418	840	32.3	37.1	34.5	101.0	2.5	...	29.8	34.4	31.9	44	10
22	Nungambakam	14,512	12,725	27,238	516	480	996	35.6	37.7	36.6	107.5	7.9	...	31.4	33.9	32.6	38	31
23	Chintadripet	13,917	12,928	26,845	596	543	1,139	42.8	42.0	42.4	109.8	4.8	...	41.5	42.2	41.8	38	10
24	Tiruvateeswarpet	16,223	15,148	31,371	810	754	1,564	49.9	49.8	49.9	107.4	10.1	...	42.4	44.1	43.2	66	10
25	Chepauk	9,394	7,698	17,092	406	399	805	43.2	51.8	47.1	101.8	13.1	...	38.6	45.7	41.8	50	9
26	Triplicane	10,301	9,213	19,514	394	361	755	38.2	39.2	38.7	109.1	7.0	...	34.6	36.1	35.3	36	29
27	Amir Mahal	10,135	9,480	19,615	427	381	808	42.1	40.2	41.2	112.1	0.8	...	40.8	39.0	40.0	41	5
28	Mirshahipet	13,860	13,483	27,343	632	558	1,190	45.6	41.4	43.5	113.3	2.6	...	40.8	40.7	40.7	83	13
29	Royapettah	17,284	15,919	33,203	653	604	1,257	37.8	37.9	37.9	108.1	7.3	...	31.0	31.3	31.1	51	7
30	Mylapore	10,863	10,407	21,270	362	352	714	33.3	33.8	33.6	102.8	4.4	...	33.3	32.9	33.1	32	8
		3,41,223	3,06,007	6,47,230	13,299	12,489	25,738	39.0	40.6	39.8	106.9	4.0	...	35.8	38.0	36.9	1318	364

\* Included in the total Births shown in column 4 and 10.

Annual Form No. II—Statement of Deaths by Divisions during the year 1931.

Divisions.	Districts.	Area in acres.	Density per area.	Population according to the Census of 1931.		No. of deaths registered		No. of deaths of males to every 100 deaths of females.	Deaths per 1,000 of population from													All causes.		Mean ratio of deaths per 1,000 during previous five years.				
				Males.	Females.	Total.	Males.		Females.	Total.	Cholera.	Small-pox.	Measles.	Plague.	Malaria.	Enteric fever.	Other fevers.	Dysentery and Diarrhoea.	Tuberculosis.	Other respiratory diseases.	Injuries.	Deaths from child birth.	All other causes.	Males.	Females.	Males.	Females.	
1	Royapuram	557	89.4	10,949	11,003	21,952	438	876	1,000	0.5	0.1	...	0.05	0.8	5.6	3.6	0.7	8.8	5	10.8	20.1	40.0	39.8	39.9	41.1	37.6	39.4	
2	Tondiarpet	464	66.7	18,189	12,722	25,911	529	1,073	97.2	0.3	0.04	...	0.3	0.2	4.9	3.4	1.2	9.3	4	18.5	20.6	40.2	42.8	41.4	41.4	43.5	42.5	
3	Washermanpet	321	79.9	13,064	12,629	25,693	516	1,007	165.1	0.1	...	...	0.3	0.08	4.2	4.4	3.2	8.8	4	9.1	16.6	39.5	39.0	39.2	46.5	48.5	47.0	
4	Korukupet	2,093	12.2	13,191	12,347	25,538	528	461	114.6	0.1	0.04	...	0.8	0.2	4.2	5.2	2.5	7.5	4	16.1	16.9	40.0	37.5	38.7	35.6	39.8	38.9	
5	Harbour	114	76.8	5,483	8,221	13,704	173	141	123.7	0.1	...	...	0.1	0.5	3.7	3.6	0.8	9.8	7	37.1	16.2	31.0	43.8	36.1	31.5	49.7	40.2	
6	Muthalpet	985	67.1	8,377	5,880	14,257	162	161	323	100.6	...	...	0.1	0.4	2.4	2.0	0.7	7.0	4	11.3	10.7	19.3	27.4	22.7	22.3	31.0	25.9	
7	Kavalaeswarampet	112	119.5	6,856	6,851	12,707	200	410	95.2	0.07	...	...	0.2	0.7	3.9	3.1	1.3	7.0	4	15.4	15.0	29.1	35.9	32.3	33.8	35.2	34.5	
8	Kothawal Bazaar	96	68.2	4,013	2,537	6,550	94	181	108.0	0.2	...	...	0.6	0.3	2.9	4.3	0.6	10.1	2	6.0	12.6	30.3	33.3	31.7	35.2	41.5	38.2	
9	Amman Koll	110	174.6	10,078	9,124	19,202	305	304	609	100.3	...	...	0.6	0.6	2.6	6.3	3.4	10.9	3	12.1	18.0	48.4	43.4	43.9	51.2	46.4	48.8	
10	Seven Wells	123	168.0	10,414	9,880	20,294	452	429	81	105.4	0.05	...	0.7	0.6	2.6	6.4	3.4	10.9	3	27.0	16.9	32.0	27.0	29.9	29.8	39.6	33.9	
11	Sowcarpet	58	130.8	4,160	3,084	7,244	133	82	215	162.2	0.1	...	0.4	0.4	1.1	2.8	0.7	7.4	4	9.2	14.1	38.3	36.7	34.9	37.4	41.6	39.4	
12	Peddurackkoppet	155	139.0	11,185	10,412	21,547	371	383	753	97.1	0.09	...	0.6	0.3	2.5	5.3	0.9	10.2	4	21.0	14.0	31.6	41.1	35.7	35.7	38.9	37.3	
13	Travelyan Basin	114	168.0	9,581	9,235	18,816	306	370	676	82.7	...	...	0.1	0.3	3.7	3.0	0.4	9.7	3	21.0	14.0	31.6	41.1	35.7	35.7	38.9	37.3	
14	Esplanade	139	28.1	2,925	1,581	3,906	70	45	115.7	153.5	0.3	...	...	3	2.0	3.1	1.6	8	6.9	5.9	16.9	32.3	28.5	29.4	...	...	...	
15	Park Town	120	143.2	9,615	7,568	17,183	320	268	588	119.4	...	0.06	...	0.2	0.5	3.1	2.7	0.4	9.3	5	12.4	17.0	39.3	35.4	34.2	39.9	38.7	34.3
16	Perrambur	2,028	17.3	23,476	20,541	43,317	725	723	1,450	100.0	0.3	...	0.2	0.2	3.2	4.7	0.9	9.2	3	14.1	13.0	31.3	35.7	33.1	31.2	34.2	32.6	
17	Choolai	230	119.0	14,249	13,239	27,488	561	462	1,223	121.4	0.5	0.04	...	0.5	0.1	1.5	4.0	2.2	12.0	3	7.8	15.8	39.4	24.9	37.2	40.1	42.6	41.3
18	Perraisalwakkam	259	101.9	13,968	13,086	27,054	492	301	993	98.2	0.1	0.04	...	0.4	0.3	1.0	5.0	2.4	10.9	3	9.4	15.8	33.2	38.3	35.1	33.4	36.1	34.7
19	Vepery	450	49.2	12,373	9,764	22,137	405	381	786	106.3	0.2	0.05	...	0.2	0.2	1.9	3.3	1.3	11.8	10	2.6	15.6	32.7	39.0	35.6	34.8	42.1	33.5
20	Egmore	698	42.1	15,363	14,022	29,385	476	621	997	91.3	0.5	0.03	...	0.7	0.2	2.1	4.2	1.5	7.9	3	19.5	15.6	31.0	37.2	33.9	30.1	35.4	32.6
21	Kilpauk	1,099	37.1	13,075	11,239	24,314	430	350	780	123.9	0.5	0.04	...	0.04	0.4	1.1	3.3	1.6	7.5	14	7.1	16.0	32.5	31.1	32.1	28.6	30.8	29.6
22	Nungambakam	1,996	18.6	14,312	12,725	27,037	366	395	781	97.7	0.04	...	0.04	0.8	0.1	1.4	3.7	1.6	8.1	5	15.1	11.8	26.6	31.0	28.7	24.2	28.3	26.1
23	Chintadrpet	201	133.6	13,917	12,928	26,845	509	502	1,011	101.4	0.1	...	0.3	0.2	2.8	3.7	2.6	10.1	1	10.5	15.4	36.6	38.8	37.7	35.9	39.8	37.8	
24	Tiruvateeswarampet	833	81.4	16,223	15,148	31,371	642	606	1,248	105.9	0.1	0.03	...	1.3	0.2	2.8	3.7	2.6	7.6	4	6.4	20.4	39.6	40.0	39.8	38.6	41.5	40.0
25	Chepauk	705	24.2	9,394	7,698	17,092	268	313	581	85.6	0.1	...	0.1	0.8	1.5	3.6	1.8	8.5	6	14.9	16.1	28.5	40.7	33.9	26.7	35.2	30.6	
26	Triplicane	168	16.1	10,301	9,213	19,514	308	314	619	97.1	0.2	0.05	...	0.3	0.3	1.1	3.8	1.2	6.5	5	4.0	17.7	29.6	34.1	31.7	29.9	31.5	30.6
27	Amir Mahal	680	40.2	13,860	13,483	27,343	563	556	1,119	101.3	0.7	0.04	...	0.3	0.3	1.1	6.8	1.5	10.0	2	10.1	19.8	40.6	41.2	40.9	36.2	37.3	36.8
28	Mirshabpet	3,115	40.6	17,281	15,919	33,200	511	495	1,006	103.2	0.3	0.3	...	0.06	0.03	1.9	5.2	1.4	7.8	2	8.8	12.8	29.6	31.1	30.3	28.2	27.2	
29	Royapettah	1,625	14.0	10,863	10,407	21,270	317	303	620	104.2	0.3	0.09	...	0.2	0.08	1.0	4.9	0.6	5.3	0.9	7.0	15.1	29.2	29.1	29.1	30.5	30.7	
30	Mylapore	19,738	32.8	3,41,223	3,06,007	6,47,230	11,879	11,283	23,162	105.3	0.2	0.04	...	0.4	0.3	2.7	4.2	1.6	8.9	7.9	11.6	16.5	34.5	36.9	35.8	35.2	38.0	36.5
	Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

\*Includes 345 deaths in the Government General Hospital of patients admitted from madras and destitute.

## Annual Form No. III.—Deaths Registered by Divisions during each month of the year 1931.

1	2	3												4
		Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	
1	Royapuram	...	76	68	60	78	77	66	72	59	57	63	79	876
2	Tondiarpet	...	99	94	89	91	100	91	83	67	67	103	65	1,073
3	Washermanpet	...	113	77	70	73	106	67	101	67	64	78	71	1,007
4	Korukkupet	...	95	86	84	95	101	69	76	65	58	69	76	989
5	Harbour	...	23	28	21	30	27	15	33	24	26	19	25	314
6	Muthialpet	...	19	25	33	27	43	21	17	21	21	20	35	323
7	Katchaleswaranpet	...	33	39	26	31	46	29	45	22	31	25	25	410
8	Kothawal Bazaar	...	18	20	7	14	24	14	5	18	15	17	15	181
9	Kothawal Bazaar	...	36	52	44	74	55	41	53	36	34	53	66	609
10	Amman Koil	...	78	70	60	80	81	39	81	70	61	63	74	881
11	Seven Wells	...	21	20	15	11	17	19	21	14	18	19	15	215
12	Sowcarpet	...	57	56	56	58	83	45	68	54	58	61	77	753
13	Peddunaickenpet	...	68	53	55	56	76	59	55	48	41	42	52	676
14	Trevelyan Basin	...	29	35	38	38	54	29	36	88	46	34	37	460
15	Espanade	...	54	44	33	45	55	58	47	46	38	42	49	588
16	Park Town	...	77	77	113	97	130	91	107	97	113	99	91	1,450
17	Perambur	...	167	116	87	70	99	72	85	74	76	53	94	1,023
18	Choolai	...	76	87	70	81	99	92	85	68	62	65	77	993
19	Purasawalkam	...	88	66	73	92	96	76	105	68	62	65	77	993
20	Vepery	...	66	62	50	83	71	55	72	53	61	55	67	786
21	Egmore	...	98	82	73	104	99	61	74	68	76	78	67	997
22	Kilpauk	...	65	52	56	73	65	51	67	48	68	42	74	780
23	Nungambakam	...	79	55	57	62	86	57	56	61	52	65	51	781
24	Chintadripet	...	103	78	86	87	95	70	91	65	52	82	87	1,011
25	Tiruvateeswaranpet	...	119	135	68	113	115	107	62	85	87	96	115	1,248
26	Chepauk	...	66	60	50	41	65	32	39	40	37	36	48	581
27	Triplicane	...	59	64	44	62	59	35	38	31	52	41	52	619
28	Amir Mahal	...	78	74	55	89	96	55	52	44	56	46	68	793
29	Misahibpet	...	104	105	74	102	111	83	82	83	74	77	75	1,119
30	Royapettah	...	97	89	88	95	82	68	63	76	72	74	84	1,006
30	Mylapore	...	57	52	49	73	71	32	50	43	36	45	48	620
			2,841	2,141	1,944	1,697	2,055	2,276	1,629	1,861	1,609	1,662	1,859	23,162

Annual Form No. IV—Deaths registered according to age by divisions during the year 1931.

Divisions.	Districts.	3		4		5		6		7		8		9		10		11		12	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	Royapuram	157	124	72	95	15	17	8	4	3	8	20	31	24	34	28	18	33	18	78	89
2	Tondiarpet	160	141	100	98	20	24	14	15	5	24	37	59	37	42	27	22	39	39	90	94
3	Washermanpet	140	133	76	94	25	24	7	10	15	19	39	39	48	33	45	32	41	32	85	75
4	Korukkupet	160	107	73	77	20	19	15	8	11	16	41	46	43	43	39	27	45	27	81	94
5	Harbour	55	42	29	20	3	5	3	2	4	5	12	17	16	12	4	4	12	10	27	24
6	Muthialpet	50	56	25	29	3	3	3	...	6	9	16	18	10	4	4	4	14	10	21	28
7	Katchaleswaranpet	57	47	29	34	3	3	3	4	7	7	19	32	15	12	14	10	17	12	36	43
8	Kothawal Bazaar	32	32	9	9	2	3	1	2	2	5	7	8	14	5	5	4	10	3	12	13
9	Amnen Koil	93	75	48	50	6	8	3	6	13	13	20	33	25	26	31	13	20	27	53	53
10	Seven Wells	99	83	44	41	12	7	11	12	9	15	52	55	55	53	44	44	37	34	77	85
11	Sowcarpet	31	22	12	5	...	1	3	1	3	7	6	11	16	5	20	7	21	5	21	19
12	Peddanaickenpet	115	99	63	69	16	11	7	9	11	22	19	44	30	32	26	18	30	18	54	60
13	Trevelyan Basin	89	106	54	45	10	10	5	14	4	12	32	35	24	21	19	19	32	32	37	75
14	Esplanade	17	16	15	13	11	4	7	2	14	3	74	22	67	21	72	7	40	9	32	14
15	Park Town	91	76	56	39	10	5	4	3	4	22	25	22	24	18	30	17	29	23	47	45
16	Perambur	236	194	132	154	36	25	15	19	16	22	32	70	46	49	40	31	60	35	112	126
17	Choolai	172	131	90	75	18	14	8	11	11	14	42	36	41	30	39	24	48	31	92	96
18	Perasawalkam	146	135	89	89	19	12	9	7	8	18	34	49	34	39	39	22	34	41	80	89
19	Vepery	100	103	60	69	10	9	10	7	7	16	35	23	32	28	35	27	36	27	80	72
20	Egmore	101	134	76	87	13	12	4	6	10	25	32	67	41	48	29	34	45	32	88	76
21	Kilpauk	100	83	57	58	14	12	6	4	11	10	29	27	48	34	46	27	41	31	78	65
22	Nungambakkam	130	97	63	77	8	17	10	5	12	12	10	34	24	27	26	29	30	23	73	64
23	Chintadripet	153	140	75	90	12	17	8	10	12	20	43	44	35	32	41	36	41	21	88	92
24	Tiruvateeswaranpet	174	151	92	101	28	26	11	14	25	25	35	48	49	50	54	32	49	36	125	123
25	Chepaik	93	74	44	51	6	7	6	6	6	11	15	43	22	26	17	11	24	23	35	62
26	Triplicane	91	91	53	50	14	11	7	3	4	7	10	30	16	23	20	16	25	10	65	73
27	Amir Mahal	114	111	57	56	12	11	2	12	9	15	26	40	41	30	35	13	26	13	91	79
28	Mirshahibpet	190	134	110	104	20	27	8	10	13	10	31	51	42	27	35	47	35	39	78	107
29	Royapettah	165	128	92	83	27	19	8	14	7	17	43	50	25	38	36	27	28	32	80	87
30	Mylapore	98	87	59	51	11	14	5	6	2	7	10	21	16	20	12	12	30	10	74	65
	Total	3,439	2,952	1,854	1,913	404	383	211	236	257	415	847	1,103	961	875	943	634	972	687	1,991	2,095
	Ratio per 1,000	258.6	237.3	60.2	62.5	11.3	11.3	6.2	7.0	7.6	12.3	11.8	16.1	16.1	18.9	24.9	22.5	50.1	42.6	167.9	214.9

In the case of children under one year of age, the ratios are calculated on live births during the year, in all other cases on the number living at the time of the Census of 1931.

Annual Form No. V.—Deaths registered according to class by divisions during the year 1931.

Divisions	Population as per Census of 1931.				Number of deaths registered.				Ratio of deaths per 1,000 of population.						
	Christians.	Hindus.	Mohammedans.	Others.	Total.	Christians.	Hindus.	Mohammedans.	Others.	Total.	Christians.	Hindus.	Mohammedans.	Others.	Total.
1 Royapuram	5,797	14,840	1,149	166	21,952	162	653	71	...	876	27.6	43.3	61.8	...	39.9
2 Tondiarpet	1,300	22,616	1,914	81	25,911	43	921	109	...	1,073	33.1	40.7	56.9	...	41.4
3 Washermanpet	888	23,636	1,728	11	25,663	28	914	65	...	1,007	31.5	39.7	37.6	...	31.2
4 Korukkupet	976	20,557	3,957	48	25,538	18	839	132	...	989	18.4	40.8	33.4	...	38.7
5 Harbour	503	3,491	4,587	23	8,704	1	116	196	1	314	2.0	33.2	41.8	43.5	35.1
6 Muthialpet	1,236	12,308	697	16	14,257	3	296	24	...	323	2.4	21.0	34.4	...	22.7
7 Katchaleswaranpet	1,838	9,822	995	52	12,707	62	320	28	...	410	33.7	32.6	28.1	...	32.3
8 Kothawal Bazaar	185	5,292	1,087	46	6,550	2	167	12	...	181	10.8	31.9	11.0	...	27.6
9 Amman Koil	2,259	12,937	3,839	107	19,292	53	430	126	...	609	33.2	33.2	32.8	...	31.7
10 Seven Wells	1,571	17,329	1,265	129	20,294	60	766	55	...	881	38.2	44.2	43.5	...	43.4
11 Sowcarpet	14	6,658	34	488	7,194	...	215	...	...	215	...	32.8	...	...	29.9
12 Peddunaickenpet	75	21,141	305	26	21,547	2	744	7	...	753	26.7	35.2	23.0	...	31.9
13 Trevelyan Basin	38	18,500	86	292	18,916	2	671	3	...	676	52.6	36.3	31.9	...	35.7
14 Esplanade	275	3,387	161	80	3,906	...	114	1	...	115	...	33.7	73.2	...	22.4
15 Park Town	665	16,189	219	110	17,183	13	571	4	...	588	19.5	35.3	18.3	...	31.2
16 Perambur	2,175	33,024	8,409	209	43,817	50	1,102	298	...	1,450	23.0	33.4	35.4	...	33.1
17 Choolai	1,427	22,525	507	29	27,488	33	964	26	...	1,023	23.1	37.8	51.3	...	37.2
18 Purasawalkam	4,088	22,347	528	91	27,034	100	871	22	...	993	24.7	39.0	41.7	...	36.7
19 Vepery	4,116	15,922	1,940	159	22,137	103	626	57	...	786	25.0	39.3	29.4	...	32.6
20 Egmore	5,080	21,313	2,902	90	29,385	151	754	89	...	997	30.3	35.4	31.0	...	33.9
21 Kilpauk	3,584	20,002	726	22	24,331	56	701	23	...	780	15.6	25.0	31.7	...	31.5
22 Nungambakam	4,365	23,556	1,220	114	27,238	84	632	65	...	781	19.2	30.0	37.7	...	28.7
23 Chintadripet	1,95	13,616	1,220	121	26,845	65	899	47	...	1,011	33.3	38.2	28.5	...	37.7
24 Tiruvateswaranpet	1,071	13,616	1,220	76	31,371	35	732	478	...	1,248	33.6	37.3	45.2	26.3	39.8
25 Chepauk	603	12,817	3,565	7	17,992	10	395	176	...	581	16.1	30.8	48.0	...	33.9
26 Triplicane	94	19,002	391	21	19,514	1	601	17	...	619	10.6	31.7	43.5	...	31.7
27 Amir Mahal	785	11,314	7,505	11	19,615	28	476	289	...	793	35.7	42.1	38.6	...	40.4
28 Mirsahibpet	1,145	20,846	5,271	81	27,343	28	840	251	...	1,119	24.5	40.3	47.6	...	40.9
29 Royapettah	2,481	28,612	1,956	154	33,203	55	876	75	...	1,006	22.2	30.6	38.3	...	30.3
30 Mylapore	3,507	17,117	581	32	21,210	77	513	30	...	620	21.0	29.1	51.4	...	29.1
Total	54,123	5,20,176	79,081	2,901	5,47,230	1,359	19,068	2,792	3	23,162	25.1	36.5	39.9	1.0	35.8

\* Includes Deaths in the Government General Hospital of patients admitted from mofussil and destitute.



Annual Form No. VI—Deaths registered from "CHOLERA" by Divisions during each month of the year 1931.

Divisions.	3												4			5		6
	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 previous years.	
1 Royapuram	3	2	2	1	2	..	..	..	..	..	..	..	6	4	10	0.5	0.4	0.5
2 Tondiarpet	5	1	..	..	1	..	..	..	..	..	..	..	2	5	7	0.2	0.4	0.5
3 Washermanpet	3	..	..	..	..	..	..	..	..	..	..	..	3	3	6	..	0.2	0.5
4 Korukkupet	3	..	2	1	..	..	..	..	..	..	..	..	3	5	8	0.2	0.4	0.6
5 Harbour	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	0.3	0.5
6 Muthialpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.3
7 Katchaleswaranpet	..	..	..	..	1	..	..	..	..	..	..	..	..	1	1	..	0.2	0.6
8 Kothawal Bazaar	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..	0.4	0.3
9 Ammen Koil	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.1
10 Seven Wells	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	0.1	..	0.5
11 Sowcarpet	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	0.3	0.1
12 Peddunaickenpet	2	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	0.2	0.4
13 Trevelyan Basin	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.3
14 Esplanade	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	0.4	..	0.8
15 Park Town	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.3
16 Perambur	11	2	..	..	..	..	..	..	..	..	..	..	7	6	13	0.3	3	0.5
17 Choolai	13	..	..	..	..	..	..	..	..	..	..	..	7	6	13	0.5	0.5	0.8
18 Parasawalkam	3	..	..	..	1	..	..	..	..	..	..	..	2	3	5	..	0.3	0.1
19 Vepery	5	..	..	..	..	..	..	..	..	..	..	..	6	8	14	0.4	0.6	0.4
20 Egmore	3	2	1	1	7	..	..	..	..	..	..	..	5	7	12	0.3	0.6	0.4
21 Kilpauk	9	..	..	3	..	..	..	..	..	..	..	..	5	7	12	0.3	0.6	0.4
22 Nungambakam	1	..	..	..	3	..	..	..	..	..	..	..	3	1	4	..	0.1	0.2
23 Chintadripet	1	..	..	..	2	..	..	..	..	..	..	..	2	1	3	0.1	0.1	0.3
24 Tiruvateeswaranpet	..	1	..	..	..	..	..	..	..	..	..	..	2	2	4	..	0.1	0.4
25 Chepauk	..	..	..	2	..	..	..	..	..	..	..	..	..	2	2	..	0.3	0.3
26 Triplicane	..	1	2	..	..	..	..	..	..	..	..	..	2	1	3	..	0.1	0.4
27 Amir Mahal	4	..	..	..	..	3	..	..	..	..	..	..	2	5	7	0.2	0.5	0.5
28 Mirsahibpet	3	8	3	4	1	1	..	..	..	..	..	..	10	10	20	0.7	0.7	0.7
29 Royapettah	..	8	2	..	..	..	..	..	..	..	..	..	5	5	10	0.3	0.3	0.3
30 Mylapore	..	4	2	..	..	..	..	..	..	..	..	..	2	4	6	0.2	0.4	0.2
Total	72	29	16	13	18	4	..	1	..	..	..	..	66	87	153	0.2	0.3	0.4

Annual Form No. VII.—Deaths registered from 'SMALL-POX' by divisions during each month of the year 1931.

Divisions.	3												4			5		6
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Ratio of deaths per 1000 population.	Mean ratio per 1,000 during previous five years.	
1 Royapuram	..	1	..	..	..	..	..	..	1	..	..	..	1	2	3	0.09	0.2	0.7
2 Tondiarpet	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1	..	0.08	0.3
3 Washermanpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.3
4 Korukkupet	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	0.08	..	0.4
5 Harbour	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.3
6 Muthialpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.2
7 Katchaleswaranpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.6
8 Kothawal Bazaar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.5
9 Ammen Koil	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.4
10 Seven Wells	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.2
11 Sowcarpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.4
12 Peddunaickenpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.3
13 Trevelyan Basin	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.4
14 Esplanade	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.3
15 Park Town	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	0.1	..	0.4
16 Perambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.2
17 Choolai	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	0.08	0.4
18 Purasawalkam	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	0.08	0.4
19 Vepery	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	0.08	..	0.3
20 Egmore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.07
21 Kilpauk	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	0.09	0.2
22 Nungambakam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.07
23 Chintadripet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.2
24 Tiruvateeswaranpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0.06	..	0.5
25 Chepauk	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	0.2
26 Triplicane	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	0.4
27 Amir Mahal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.3
28 Mirsahibpet	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1	0.07	..	0.6
29 Royapettah	..	1	..	3	1	1	..	..	..	..	..	..	6	3	9	0.3	0.2	0.2
30 Mylapore	..	..	..	..	1	..	..	..	..	..	..	..	1	1	2	0.09	0.1	0.3
Total	3	1	5	4	4	1	..	1	1	1	3	13	11	24	24	0.04	0.04	0.3

Annual Form No. VIII. --Deaths registered from 'MEASLES' by divisions during each month of the year 1931.

1 Divisions.	2												3			4			5		6 Mean ratio per 1000 during previous five years.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.			
1 Royapuram	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.05		
2 Tondiarpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.04		
3 Washermanpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
4 Korukkupet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.04		
5 Harbour	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
6 Muthialpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.07		
7 Katchaleswaranpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.08		
8 Kothawal Bazaar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
9 Ammen Koil	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.05		
10 Seven Wells	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.05		
11 Sowcarpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
12 Peddumaickenpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.1		
13 Trevelyan Basin	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
14 Esplanade	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
15 Park Town	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
16 Perambur	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
17 Choolai	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
18 Purasawalkam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.05		
19 Vepery	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.04		
20 Egmore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.04		
21 Kilpauk	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.04		
22 Nungambakam	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.05		
23 Chintadripet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.07		
24 Tiruvateeswaranpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.03		
25 Chepauk	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
26 Triplicane	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.04		
27 Amir Mahal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.05		
28 Mirsahibpet	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.04		
29 Royapettah	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.09		
30 Mylapore	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.09		
Total	1	..	..	1	..	..	..	..	..	..	1	..	1	2	3	0.003	0.007	0.006	0.05		

Annual Form No. IX—Deaths registered from Plague--Nil.

Annual Form No. X.—Deaths registered from "MALARIA" by Divisions during each month of the year 1931.

Divisions.	3												4			5		Mean ratio per 1,000 of Population.	
	Districts.												Total.			Ratio of deaths per 1,000 of population.			
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.		Total.
1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	0.09	...	0.05	2.2
2	1	1	1	...	...	...	...	...	...	...	...	...	5	4	9	0.4	0.3	0.3	2.0
3	5	3	3	...	...	...	...	...	...	...	...	...	11	12	23	0.8	1.0	0.9	2.8
4	4	3	2	3	2	4	...	1	...	1	...	...	10	11	21	0.8	0.9	0.8	1.7
5	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1	0.2	...	0.1	3.7
6	1	...	...	...	...	...	...	1	...	...	...	...	1	1	2	0.1	0.2	0.1	2.4
7	1	...	...	1	...	...	...	...	...	...	...	...	2	1	3	0.3	0.2	0.2	2.7
8	...	...	...	...	...	...	...	...	...	...	...	...	...	7	...	0.5	0.8	0.6	3.4
9	...	1	...	...	1	2	4	...	...	3	1	...	5	7	12	0.5	0.8	0.6	1.7
10	1	2	...	1	2	2	3	1	2	...	1	...	10	5	15	1.0	0.5	0.7	2.0
11	1	1	1	...	1	...	...	...	...	...	...	...	3	...	3	0.7	...	0.4	1.6
12	2	1	1	2	1	2	3	...	...	...	...	...	7	7	14	0.6	0.7	0.6	1.6
13	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	0.2	...	0.1	2.3
14	2	...	1	1	...	...	...	...	...	...	...	...	2	...	1	0.4	...	0.3	3.6
15	1	...	...	...	1	...	...	...	...	...	...	...	1	...	4	0.1	0.4	0.2	1.5
16	...	...	...	1	1	2	...	1	...	...	...	...	3	4	7	0.1	0.2	0.1	1.6
17	1	...	5	1	3	...	...	...	1	...	...	...	7	6	13	0.5	0.5	0.5	2.3
18	...	...	1	1	4	1	...	...	1	...	...	...	2	8	10	0.1	0.6	0.4	1.5
19	1	...	1	...	1	2	...	...	2	...	...	...	3	1	4	0.2	0.1	0.2	1.8
20	3	4	3	...	1	2	...	...	2	...	...	...	11	9	20	0.7	0.6	0.7	0.6
21	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	0.08	...	0.04	0.8
22	5	1	...	...	2	3	1	3	1	1	3	...	8	13	21	0.6	1.0	0.8	0.8
23	5	7	5	1	5	1	1	3	2	1	2	15	21	36	1.1	1.7	1.3	0.9	
24	2	2	...	2	3	2	...	1	2	6	2	11	11	22	0.7	0.7	0.7	1.9	
25	...	1	1	...	1	...	...	...	...	...	...	...	1	1	2	0.1	0.1	0.1	0.5
26	1	...	...	3	1	...	...	...	...	...	...	...	4	2	6	0.4	0.2	0.3	0.6
27	...	...	...	...	1	...	...	...	...	...	...	...	5	1	6	0.5	0.1	0.3	1.6
28	...	2	...	1	1	...	...	...	1	...	...	...	3	4	7	0.2	0.3	0.3	1.6
29	...	1	...	...	...	...	...	...	...	...	...	...	2	...	2	0.1	...	0.06	1.1
30	...	...	...	...	1	...	...	...	1	...	...	...	4	...	4	0.4	...	0.2	1.1
	Total	35	30	26	19	33	17	11	17	18	16	145	132	277	0.4	0.4	0.4	1.6	

\* Includes deaths in the Government General Hospital of patients admitted from meffual and destitute.

Annual Form No. XI.—Deaths registered from "ENTERIC FEVER" by divisions during each month of the year 1931.

Divisions.	2												3			4			5		6
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Ratio of deaths per 1000 of the Population	Mean ratio per 1,000 during previous five years.	
1 Royapuram	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	0.1	...	0.05	0.2		
2 Tondiarpet	...	1	1	1	...	...	...	...	...	...	1	...	1	...	4	0.1	...	0.2	0.1		
3 Washermanpet	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	0.2	0.1	0.2		
4 Korukkupet	...	...	2	...	...	...	...	...	...	...	...	...	...	1	1	...	0.2	0.1	0.1		
5 Harbour	...	1	...	...	...	...	2	...	...	...	...	...	...	2	2	0.4	0.6	0.5	0.2		
6 Muthialpet	...	1	...	...	...	...	1	...	...	...	...	...	...	2	4	0.4	0.3	0.4	0.3		
7 Katchaleswaranpet	...	...	4	1	2	...	1	1	...	...	...	...	3	6	9	0.4	1.0	0.7	0.3		
8 Kothawal Bazaar	...	1	...	...	...	...	1	...	...	...	...	...	...	1	1	...	0.4	0.1	0.3		
9 Ammen Koil	...	...	1	...	...	...	1	...	...	...	...	...	4	2	6	0.4	0.2	0.3	0.3		
10 Seven Wells	...	2	1	...	1	3	1	1	1	...	...	...	6	6	12	0.5	0.6	0.6	0.4		
11 Sowcarpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.4	0.4	
12 Peddunaickenpet	...	1	...	...	...	...	1	2	...	...	...	...	5	1	6	0.4	0.1	0.3	0.3		
13 Trevelyan Basin	...	1	...	...	...	1	...	...	2	1	...	...	3	3	6	0.3	0.3	0.3	0.2		
14 Esplanade	...	...	...	...	1	...	3	1	...	...	...	...	6	2	8	2.6	1.3	2.0	2.6		
15 Park Town	...	...	...	1	...	1	1	...	2	...	...	...	4	4	8	0.4	0.5	0.5	0.3		
16 Perambur	...	1	1	1	...	1	...	...	...	2	...	...	5	2	7	0.2	0.1	0.2	0.1		
17 Choolai	...	1	1	...	...	...	...	1	...	...	...	...	3	...	3	0.2	...	0.2	0.1		
18 Purasawalkam	...	1	...	2	1	...	...	1	...	...	...	...	4	4	8	0.3	0.2	0.3	0.1		
19 Vepery	...	...	1	1	...	...	1	...	...	...	...	...	2	2	4	0.2	0.2	0.2	0.3		
20 Egmore	...	1	3	...	...	2	1	...	1	...	...	...	7	...	7	0.5	...	0.2	0.4		
21 Kilpauk	...	1	1	2	...	2	...	...	2	...	...	...	7	3	10	0.5	0.3	0.4	0.2		
22 Nungambakkam	...	...	...	...	...	...	1	1	...	...	...	...	3	...	3	0.2	...	0.1	0.1		
23 Chintadripet	...	1	...	...	1	...	1	...	...	...	...	...	2	3	5	0.1	0.2	0.2	0.3		
24 Tiruvateeswaranpet	...	1	2	...	3	2	1	2	...	1	...	...	4	8	12	0.2	0.5	0.4	0.2		
25 Chepauk	...	1	6	1	...	2	1	...	...	...	...	...	5	8	13	0.5	1.0	0.8	0.3		
26 Triplicane	...	...	...	...	2	2	1	...	...	...	...	...	3	2	5	0.3	0.2	0.3	0.4		
27 Amir Mahal	...	2	...	...	1	1	1	...	...	...	...	...	1	5	6	0.1	0.5	0.3	0.2		
28 Mirsahibpet	...	1	1	1	...	...	1	...	...	...	...	...	2	2	4	0.1	0.1	0.1	0.2		
29 Royapettah	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	0.1	...	0.1	0.2		
30 Mylapore	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	0.1	...	0.03	0.2		
													93	73	166	0.3	0.2	0.3	0.2	0.2	
Total	12	22	24	16	12	18	14	21	8	9	6	4	93	73	166	0.3	0.2	0.3	0.2	0.2	

Annual Form Vo. XII.—Deaths registered from "OTHER FEVERS" by divisions during each month of the year 1931.

Divisions.	3												4			5		6	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.		Total.
1 Royapuram	...	...	...	...	...	...	...	...	...	...	...	...	62	61	123	5.7	5.5	5.6	4.5
2 Tondiarpet	...	...	...	...	...	...	...	...	...	...	...	...	61	60	127	4.6	5.2	4.9	4.8
3 Washermanpet	...	...	...	...	...	...	...	...	...	...	...	...	48	61	109	3.7	4.8	4.2	1.9
4 Korukkupet	...	...	...	...	...	...	...	...	...	...	...	...	55	52	107	4.2	4.2	4.2	1.8
5 Harbour	...	...	...	...	...	...	...	...	...	...	...	...	16	16	32	2.9	5.0	3.7	2.6
6 Muthialpet	...	...	...	...	...	...	...	...	...	...	...	...	20	14	34	2.4	2.4	2.4	2.2
7 Kanchaleswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	22	28	50	3.2	4.8	3.9	2.9
8 Kothawal Bazaar	...	...	...	...	...	...	...	...	...	...	...	...	9	6	15	2.2	2.4	2.3	2.4
9 Ammen Koil	...	...	...	...	...	...	...	...	...	...	...	...	28	27	55	1.8	3.0	2.9	2.5
10 Seven Wells	...	...	...	...	...	...	...	...	...	...	...	...	19	34	53	3.4	3.4	2.6	3.1
11 Sowcarpet	...	...	...	...	...	...	...	...	...	...	...	...	8	3	11	1.9	1.0	1.5	2.6
12 Peddunaickenpet	...	...	...	...	...	...	...	...	...	...	...	...	19	64	83	1.7	3.3	2.5	2.4
13 Trevelyan Basin	...	...	...	...	...	...	...	...	...	...	...	...	34	36	70	3.5	3.9	3.7	2.3
14 Esplanade	...	...	...	...	...	...	...	...	...	...	...	...	10	2	12	4.3	1.1	3.1	3.3
15 Park Town	...	...	...	...	...	...	...	...	...	...	...	...	33	20	53	3.4	2.6	3.1	2.2
16 Perambur	...	...	...	...	...	...	...	...	...	...	...	...	62	78	140	2.7	3.8	3.2	1.3
17 Choolai	...	...	...	...	...	...	...	...	...	...	...	...	27	15	42	1.9	1.1	1.5	1.1
18 Purasawalkam	...	...	...	...	...	...	...	...	...	...	...	...	13	15	28	0.9	1.1	1.0	0.9
19 Vepery	...	...	...	...	...	...	...	...	...	...	...	...	25	18	43	2.0	1.8	1.9	2.3
20 Egmore	...	...	...	...	...	...	...	...	...	...	...	...	28	35	63	1.8	2.5	2.1	2.0
21 Kilpauk	...	...	...	...	...	...	...	...	...	...	...	...	12	15	27	0.9	1.3	1.1	1.2
22 Nungambakam	...	...	...	...	...	...	...	...	...	...	...	...	20	19	39	1.4	1.5	1.4	1.9
23 Chintadripur	...	...	...	...	...	...	...	...	...	...	...	...	39	36	75	2.8	2.8	2.8	2.9
24 Tiruvateeswaranpet	...	...	...	...	...	...	...	...	...	...	...	...	78	69	147	4.8	4.6	4.7	4.6
25 Chepauk	...	...	...	...	...	...	...	...	...	...	...	...	8	17	25	0.9	2.2	1.5	1.6
26 Triplicane	...	...	...	...	...	...	...	...	...	...	...	...	12	10	22	1.2	1.1	1.1	1.4
27 Amir Mahal	...	...	...	...	...	...	...	...	...	...	...	...	33	40	73	3.3	4.2	3.7	4.6
28 Mirsalibpet	...	...	...	...	...	...	...	...	...	...	...	...	18	12	30	1.3	0.9	1.1	2.0
29 Royapettah	...	...	...	...	...	...	...	...	...	...	...	...	35	28	63	2.0	1.8	1.9	1.4
30 Mylapore	...	...	...	...	...	...	...	...	...	...	...	...	8	14	22	0.7	1.3	1.0	1.6
Total	196	198	170	128	161	193	131	130	112	118	101	110	866	882	1748	2.5	2.9	2.7	2.3

\* Includes deaths in the Government General Hospital of patients admitted from mofussil and destitute.

Annual Form No. XIII.—Deaths Registered from "DYSENTERY and DIARRHOEA" by Divisions during each month of the year 1931.

Divisions.	3												4			5		6		
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.		Total.	Ratio of Deaths per 1,000 of population.
1 Royapuram	18	11	7	4	4	7	5	6	3	4	4	6	39	40	79	36	36	72	3.6	6.3
2 Tondiarpet	12	14	10	4	4	8	9	5	6	3	7	5	38	49	87	21	3.9	3.4	7.2	5.4
3 Washermanpet	12	10	6	4	6	11	6	21	8	8	7	15	56	58	114	4.3	4.6	4.4	5.2	4.7
4 Korukkupet	11	13	13	13	9	17	12	11	7	9	9	8	71	61	132	5.4	4.9	5.2	3.6	5.2
5 Harbour	6	4	5	1	2	3	...	4	2	1	...	4	20	11	31	3.6	3.4	3.6	2.0	2.1
6 Muthialpet	9	4	1	4	1	1	...	3	...	...	...	3	17	12	29	2.0	2.0	2.0	1.9	3.5
7 Katchaleswaranpet.	8	2	1	...	3	3	6	4	...	5	1	3	13	26	39	1.9	1.4	3.1	3.5	2.6
8 Kothawal Bazaar	2	2	2	1	4	3	1	...	3	...	...	2	8	9	17	2.0	3.5	2.6	3.7	4.5
9 Ammen Koil	14	7	5	6	14	3	5	9	9	5	14	10	62	67	129	6.0	6.8	6.4	6.4	6.4
10 Seven Wells	15	18	8	7	12	10	9	9	9	1	2	1	9	11	20	2.2	3.6	2.8	2.4	2.4
11 Sowcarpet	3	2	4	3	...	2	1	12	...	1	6	16	62	53	115	5.6	5.1	5.3	4.5	4.5
12 Peddunaickenpet	18	12	11	6	11	9	2	4	2	2	5	3	25	32	57	3.6	3.5	3.0	4.0	4.0
13 Trevelyan Basin	10	8	1	4	5	8	5	4	2	2	...	3	3	3	6	1.3	1.9	1.5	1.5	9.5
14 Esplanade	7	1	5	2	2	1	...	2	1	2	...	3	3	3	6	...	...	...	...	...
15 Park Town	13	5	...	1	2	2	10	4	4	2	4	3	23	24	47	4	3.2	2.7	3.2	3.2
16 Perambur	11	17	20	23	15	23	17	21	18	21	9	15	107	98	205	4.6	4.7	4.7	5.4	5.4
17 Choolai	23	11	11	4	9	7	5	10	6	6	3	12	60	50	110	4.2	3.8	4.0	7.9	7.9
18 Purasawalkam	20	9	10	11	11	11	6	22	12	12	8	5	71	64	135	5.1	4.9	5.0	7.2	7.2
19 Vepery	9	5	7	3	8	9	6	5	4	6	6	4	44	28	72	3.6	2.9	3.3	5.0	5.0
20 Egmore	11	12	13	5	12	10	8	14	19	10	7	2	63	60	123	4.1	4.3	4.2	5.3	5.3
21 Kilpauk	14	10	2	6	8	8	6	6	4	6	3	7	41	39	80	3.1	3.5	3.3	4.7	4.7
22 Nungambakam	10	14	9	5	10	4	4	13	12	7	7	5	45	55	100	3.1	4.3	3.7	4.3	4.3
23 Chintadripet	15	11	9	11	7	9	5	9	8	4	3	7	47	51	98	3.4	3.9	3.7	6.0	6.0
24 Tiruvateeswaranpet.	13	11	5	7	13	8	12	14	10	8	11	9	62	60	122	3.8	4.0	3.9	6.0	6.0
25 Chepauk	13	7	7	6	4	2	2	6	4	1	2	8	29	33	62	3.1	4.1	3.6	3.6	3.6
26 Triplicane	16	12	7	5	8	3	4	3	5	7	1	3	35	39	74	3.4	4.2	3.8	3.5	3.5
27 Amir Mahal	5	10	6	5	15	12	5	9	7	7	5	12	49	49	98	4.9	5.2	5.0	5.6	5.6
28 Mirsahibpet	22	19	11	9	12	17	14	21	28	14	10	14	93	93	186	6.7	6.8	6.8	7.1	7.1
29 Royapettah	23	20	12	12	21	15	7	18	13	13	10	8	86	86	172	5.0	5.4	5.2	5.3	5.3
30 Mylapore	12	12	6	13	17	9	6	8	6	8	6	6	63	41	104	5.8	5.9	4.9	5.9	5.9
Total	372	296	215	185	249	235	178	274	200	176	154	212	1,392	1,354	2,746	4.1	4.4	4.2	5.3	5.3

\* Includes deaths in the Government General Hospital of patients admitted from mofussil and destitute.

Annual Form No. XIV.—Deaths registered from "TUBERCLE" including Tubercle of the Lungs by divisions during each month of the year 1931.

Divisions.	1931												Ratio of deaths per 1000 of population.		Mean ratio per 1,000 during five years.				
	2		3			4			5		Total.	Total.							
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.			November.	December.		Males.	Females.		
1 Royapuram	...	1	1	1	1	1	1	1	2	2	1	2	8	7	15	0.7	0.6	0.7	1.5
2 Tondiarpet	...	4	4	1	4	4	4	2	2	2	3	2	17	13	30	1.3	1.0	1.2	1.6
3 Washermanpet	...	10	7	7	5	7	10	10	2	7	6	1	47	35	82	3.6	2.8	3.2	2.5
4 Korukkupet	...	10	6	4	2	7	9	5	2	5	8	6	37	28	65	2.8	2.3	2.5	2.5
5 Harbour	...	...	1	...	1	1	3	1	...	...	...	...	4	3	7	0.7	0.9	0.8	1.8
6 Muthialpet	...	...	1	2	...	...	3	...	1	...	1	...	6	4	10	0.7	0.7	0.7	1.3
7 Katchaleswaranpet	...	...	1	...	...	...	...	...	2	2	1	1	9	7	16	1.3	1.2	1.3	1.7
8 Kothawal Bazaar	...	...	...	...	...	...	...	...	...	1	...	...	2	5	7	0.5	2.0	1.1	1.5
9 Ammen Koil	...	3	1	...	...	1	2	1	...	...	...	...	4	8	12	0.4	0.9	0.6	3.1
10 Seven Wells	...	12	3	3	5	5	5	10	6	8	4	6	33	26	69	3.2	3.7	3.4	4.9
11 Sowcarpet	...	1	2	...	...	...	2	...	...	1	...	1	2	3	5	0.5	1.0	0.7	2.6
12 Peddunaickenpet	...	3	2	...	...	1	2	...	2	1	2	1	10	9	19	0.9	0.9	0.9	2.9
13 Trevelyan Basin	...	...	...	1	...	...	1	...	2	...	...	1	3	4	7	0.3	0.4	0.4	2.3
14 Esplanade	...	2	...	3	5	4	7	5	6	3	7	4	1	2	3	0.4	1.3	0.8	11.6
15 Park Town	...	1	1	3	...	...	1	...	...	...	...	...	2	5	7	0.2	0.7	0.4	1.8
16 Perambur	...	10	4	4	2	3	4	...	1	...	5	1	16	21	40	0.7	1.2	0.9	1.4
17 Choolai	...	5	3	8	5	7	10	6	5	3	3	4	32	29	61	2.2	2.2	2.2	3.1
18 Purasawalkam	...	8	6	9	5	7	5	4	3	4	2	4	33	33	66	2.3	2.6	2.4	2.8
19 Vepery	...	5	1	2	...	4	...	2	2	1	...	7	16	12	28	1.3	1.0	1.3	2.6
20 Egmore	...	4	5	5	1	1	6	2	3	3	3	6	27	18	45	1.8	1.3	1.5	2.3
21 Kilpauk	...	6	4	2	3	3	5	2	3	2	2	3	22	16	38	1.7	1.4	1.6	2.0
22 Nungambakkam	...	7	4	2	6	5	7	3	2	2	4	3	20	26	46	1.4	2.0	1.6	1.6
23 Chintadripet	...	11	7	7	5	6	5	8	2	3	5	2	41	28	69	2.9	2.2	2.6	2.8
24 Tiruvateeswaranpet	...	1	4	2	2	3	7	3	2	5	4	6	19	22	41	1.2	1.5	1.3	2.4
25 Chepauk	...	4	4	3	7	4	3	3	...	...	2	...	18	13	31	1.9	1.7	1.8	2.7
26 Triplicane	...	...	3	4	1	2	5	2	1	2	...	3	7	17	24	0.7	1.2	1.2	2.4
27 Amir Mahal	...	2	1	...	4	3	5	...	2	5	4	2	17	13	30	1.7	1.4	1.5	2.3
28 Mirsahibpet	...	3	2	3	4	5	6	4	2	3	4	2	18	23	40	1.3	1.6	1.5	1.8
29 Royapettah	...	3	1	8	5	9	4	2	4	1	4	5	22	26	46	1.3	1.6	1.4	1.7
30 Mylapore	...	1	3	...	1	2	2	...	...	...	1	...	4	8	12	0.4	0.8	0.6	1.8
Total	122	84	86	77	90	128	65	91	60	68	76	73	536	481	1,020	1.6	1.5	1.6	2.3

\* Includes deaths in the Government General Hospital of Patients admitted from mofussil and destitute.



Annual Form No. XV.—Deaths registered from "RESPIRATORY DISEASES" excluding Tubercle of the Lungs by divisions during each month of the year 1931.

Divisions.	Districts.	3												4			5		Mean ratio per 1,000 during previous five years.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	
1	Royapuram	22	8	11	11	24	20	16	11	14	15	20	91	92	183	8.3	8.4	8.3	6.8
2	Tondiarpet	19	17	19	19	20	26	26	16	10	30	16	114	126	240	8.6	9.9	9.3	7.8
3	Washermanpet	21	25	18	12	22	30	9	25	18	12	20	122	105	227	9.3	8.3	8.8	12.1
4	Korukupet	27	18	17	15	12	18	13	14	12	15	19	108	84	192	8.2	6.8	7.5	9.6
5	Harbour	9	3	11	6	9	11	3	7	4	3	8	41	40	81	7.5	12.4	9.3	10.3
6	Muthialpet	11	3	11	8	10	13	2	8	3	4	6	38	45	83	4.5	7.7	5.8	6.7
7	Katchaleswarpet	16	7	11	4	6	12	5	3	4	6	4	49	40	89	7.1	6.8	7.0	9.6
8	Kothwal Bazaar	2	1	6	1	2	3	1	1	4	3	1	16	13	29	4.0	5.1	4.4	6.9
9	Amnen Koil	15	13	18	16	26	20	13	14	11	10	17	100	94	194	9.9	10.3	10.1	9.5
10	Seven Wells	17	17	12	19	27	25	27	18	13	11	17	123	98	221	11.8	9.9	10.9	10.2
11	Sowcarpet	5	5	6	3	4	6	5	4	...	5	2	34	19	53	8.2	6.3	7.4	7.8
12	Peddunaickenpet	24	13	17	19	23	27	14	15	18	13	17	110	110	220	9.9	10.6	10.2	9.8
13	Trevelyan Basin	24	19	15	16	12	24	13	14	11	10	9	96	87	183	9.9	9.4	9.7	10.2
14	Esplanade	3	6	3	2	7	9	3	8	6	4	3	16	11	27	6.9	6.9	6.9	14.3
15	Park Town	21	16	9	11	14	13	11	13	13	14	9	89	70	159	9.3	9.2	9.3	8.9
16	Perambur	80	51	31	27	19	36	23	23	22	23	28	208	196	404	9.0	9.5	9.2	10.3
17	Choolai	50	26	24	22	24	28	25	30	24	20	35	203	128	331	14.2	9.7	12.0	11.6
18	Purasawalkam	36	27	22	23	25	42	19	27	20	18	15	161	134	295	11.5	10.2	10.9	9.4
19	Vepery	29	26	19	19	34	26	14	20	18	13	22	124	137	261	10.0	14.0	11.8	9.3
20	Egmore	25	26	15	27	28	27	12	17	7	16	11	118	113	231	7.7	8.1	7.9	6.7
21	Kilpauk	25	9	14	11	20	14	15	23	11	12	10	103	80	183	7.9	7.1	7.5	6.6
22	Nungambakam	29	26	18	16	18	28	16	11	16	9	19	113	108	221	7.8	8.5	8.1	5.8
23	Chintadripet	32	27	15	32	25	27	16	26	8	10	24	127	143	270	9.1	11.1	10.1	8.8
24	Tiruvateeswarpet	16	15	20	8	18	32	22	21	26	15	15	129	108	227	8.0	7.1	7.6	7.3
25	Chepauk	17	18	12	10	11	23	9	10	9	8	7	73	75	148	7.8	9.7	8.6	6.7
26	Triplicane	21	16	10	8	12	11	4	9	7	10	12	66	61	127	6.4	6.6	6.5	6.6
27	Amir Mahal	6	13	23	6	17	26	11	13	8	7	10	97	57	154	9.6	6.0	7.9	7.7
28	Mirsabpet	32	24	17	19	27	34	19	22	17	22	28	146	125	273	10.7	9.3	10.0	8.1
29	Royapettah	42	15	17	22	28	24	20	10	19	21	22	124	135	259	7.2	8.5	7.8	5.9
30	Mylapore	14	8	13	10	12	18	7	9	11	10	11	69	66	135	6.4	6.3	6.3	6.0
	Total	690	498	454	422	536	653	393	448	376	381	415	2,035	2,708	5,743	8.9	8.6	8.9	8.5

\* Includes deaths in the Government General Hospital of Patients admitted from mofussil and destitute.

Annual Form No. XVI.—Deaths registered from "INJURIES" by divisions during each month of the year 1931.

Divisions.	3												4			5		6	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males per 1000 of population.	Females per 1000 of population.		Mean Ratio per 1000 during previous five years.
1 Royapuram	1	1	4	2	1	1	2	2	1	1	2	3	7	4	11	0.6	0.4	0.5	0.4
2 Tondiarpet	1	2	2	2	1	1	1	1	1	1	1	3	4	6	10	0.3	0.5	0.4	0.3
3 Washermanpet	...	2	...	...	...	...	...	...	...	...	...	...	6	5	11	0.5	0.4	0.4	0.3
4 Korukkupet	...	2	...	...	...	...	...	...	...	...	...	3	5	6	11	0.4	0.5	0.4	0.4
5 Harbour	...	1	...	...	...	...	...	...	...	...	...	...	4	2	6	0.7	0.6	0.7	0.6
6 Muthialpet	...	1	...	...	...	...	...	...	...	...	...	...	...	3	3	...	0.5	0.2	0.2
7 Katchaleswaranpet	...	1	...	...	...	...	...	...	...	...	...	...	3	2	5	0.4	0.3	0.4	0.4
8 Kothawal Bazaar	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	0.2	0.4	0.3	0.6
9 Ammen Koil	...	2	...	...	...	...	...	...	...	...	...	...	1	2	3	0.1	0.2	0.2	0.1
10 Seven Wells	...	2	...	...	...	...	...	...	...	...	...	...	5	2	7	0.4	0.2	0.3	0.2
11 Sowcarpet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1
12 Peddunatekenpet	...	1	...	...	...	...	...	...	...	...	...	...	5	4	9	0.4	0.4	0.4	0.2
13 Trevelyan Basin	...	1	...	...	...	...	...	...	...	...	...	...	1	4	5	0.1	0.4	0.3	0.3
14 Esplanade	...	1	1	2	4	3	1	1	1	2	1	2	19	4	23	8.2	2.5	5.9	6.9
15 Park Town	...	1	...	...	...	...	...	...	...	...	...	...	6	3	9	0.6	0.4	0.5	0.2
16 Perambur	...	1	...	...	...	...	...	...	...	...	...	...	6	5	11	0.3	0.2	0.3	0.3
17 Choolai	...	1	...	...	...	...	...	...	...	...	...	...	5	2	7	0.4	0.2	0.3	0.3
18 Purasa walkam	...	1	...	...	...	...	...	...	...	...	...	...	6	3	9	0.4	0.2	0.3	0.2
19 Vepery	...	2	2	1	4	2	6	2	...	...	...	...	14	8	22	1.1	0.8	1.0	0.9
20 Egmore	...	2	2	...	...	...	...	...	...	...	...	...	7	1	8	0.5	0.07	0.3	0.2
21 Kilpauk	...	1	2	4	6	3	2	3	1	2	1	...	27	6	33	2.0	1.5	1.4	0.9
22 Nungambakam	...	1	2	2	1	2	1	2	...	...	...	...	8	5	13	0.9	0.4	0.5	0.3
23 Chintadripet	...	1	...	...	...	...	...	...	...	...	...	...	3	3	6	0.2	0.2	0.1	0.1
24 Tiruvateeswaranpet	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.1
25 Chepauk	...	2	3	...	...	...	...	...	...	...	...	...	6	6	12	0.4	0.4	0.4	0.3
26 Triplicane	...	...	1	...	...	...	...	...	...	...	...	...	6	4	10	0.6	0.5	0.6	0.4
27 Amir Mahal	...	2	1	...	...	...	...	...	...	...	...	...	6	3	9	0.6	0.3	0.5	0.3
28 Mirsahibpet	...	...	1	...	...	...	...	...	...	...	...	...	6	3	9	0.6	0.3	0.5	0.4
29 Royapettah	...	...	1	...	...	...	...	...	...	...	...	...	3	2	5	0.2	0.1	0.2	0.2
30 Mylapore	...	...	1	1	2	1	...	...	...	...	...	...	3	4	7	0.2	0.3	0.2	0.3
Total	29	17	22	15	37	31	36	18	5	21	15	29	174	101	275	0.5	0.3	0.4	0.4

Annual Form No. XVII.—Deaths registered from "CHILD BIRTH" by divisions during each month of the year 1931.

Divisions.	3												4		5		Mean ratio per 1000 during previous five years.		
	Districts.												Males.	Females.	Total.	Males.		Females.	Total.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.							
1	3	1	1	2	2	1	1	1	3	1	2	2	2	9	...	0.9	10.3	2.1	
2	1	1	5	2	2	1	1	3	3	2	1	2	2	24	...	1.1	18.5	4.5	
3	2	2	1	2	2	2	1	1	1	1	3	3	11	...	0.9	9.1	2.9		
4	...	...	2	1	3	2	2	...	...	1	2	2	15	...	1.2	16.1	2.5		
5	1	...	...	2	1	1	1	2	2	1	1	...	10	...	3.1	37.1	4.0		
6	1	...	...	...	...	1	1	...	...	...	1	...	5	...	0.9	11.3	2.1		
7	1	...	...	3	...	2	1	...	...	...	...	...	7	...	1.2	15.4	1.4		
8	...	...	...	1	1	1	1	...	...	...	...	...	3	...	1.2	16.7	2.4		
9	1	...	...	1	1	1	...	...	1	...	...	...	4	...	0.4	5.0	3.3		
10	...	...	...	1	1	...	3	...	...	1	...	...	9	...	0.9	13.1	2.8		
11	...	...	...	1	...	...	2	2	1	1	1	1	5	...	1.6	27.0	3.6		
12	...	1	1	1	...	...	1	1	2	1	...	...	8	...	0.8	9.2	2.9		
13	...	1	3	2	...	2	1	2	2	2	...	...	15	...	1.6	21.5	2.4		
14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
15	...	1	1	...	1	...	...	...	1	1	1	...	8	...	1.0	12.4	2.6		
16	...	2	2	2	3	4	2	2	2	1	...	...	22	...	1.0	14.1	2.1		
17	2	...	1	1	1	3	1	1	1	1	...	...	9	...	0.7	7.3	2.4		
18	2	1	...	3	...	...	...	1	1	1	...	...	10	...	0.8	9.4	2.1		
19	...	1	...	...	1	1	...	...	...	...	...	...	2	...	0.2	2.6	1.9		
20	3	1	4	4	4	1	1	3	2	...	3	3	29	...	2.0	19.5	2.8		
21	...	...	1	1	...	1	...	1	1	1	2	...	6	...	0.5	7.1	1.6		
22	1	...	1	1	...	3	3	2	1	1	1	...	15	...	1.2	15.1	1.1		
23	1	1	2	2	2	1	...	1	3	1	...	...	12	...	0.9	10.5	3.0		
24	1	1	2	2	...	4	...	1	1	...	2	...	10	...	0.7	6.4	2.1		
25	...	1	...	3	1	2	...	1	2	...	...	...	12	...	1.6	14.9	4.0		
26	...	2	...	...	...	...	...	1	1	...	...	...	3	...	0.3	4.0	2.0		
27	1	...	1	3	...	...	...	3	...	...	...	...	8	...	0.8	9.9	1.0		
28	...	...	2	...	4	...	...	2	1	...	...	...	12	...	0.9	10.1	1.9		
29	2	1	...	2	...	1	...	...	1	3	1	...	11	...	0.7	8.8	1.4		
30	...	...	...	1	...	...	...	...	1	...	2	...	5	...	0.5	7.0	1.7		
Total.	22	14	30	38	25	32	19	27	31	24	18	19	299	...	0.9	11.5	2.5		

Annual Form No. XVIII.—Deaths registered from other causes by divisions during each month of the year 1931.

Divisions.	Districts.	3												4			5		Mean ratio per 1,000 during previous five years.	
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.		Total.
1	Royapuram	60	58	38	31	36	41	34	39	29	24	33	38	222	219	441	20.3	19.9	20.1	15.9
2	Tondiarpet	64	51	38	47	53	47	35	47	38	27	52	35	287	247	534	21.8	19.4	20.6	16.9
3	Washermanpet	56	48	32	35	25	33	37	37	30	26	42	24	226	199	425	17.2	15.8	16.6	19.3
4	Korukkupet	57	43	33	33	45	35	43	39	35	25	32	31	233	198	431	17.7	16.0	16.9	16.5
5	Harbour	18	19	10	9	13	7	8	19	10	19	7	11	85	56	141	15.5	17.4	16.2	13.9
6	Muthialpet	17	9	7	16	12	20	12	7	13	14	10	16	77	75	152	9.2	12.8	10.7	9.7
7	Katchaleswaranpet	24	13	13	13	16	23	12	22	11	13	17	15*	99	92	191	14.4	15.7	15.0	12.1
8	Kothwal Bazaar	8	11	11	3	6	10	10	2	13	9	14	9	58	48	106	14.5	18.9	16.2	11.3
9	Annen Koil	23	10	18	15	27	22	12	20	19	13	26	29	126	114	240	12.5	12.5	12.5	16.0
10	Seven Wells	46	28	41	23	23	21	23	35	30	24	31	31	194	172	366	18.6	17.4	18.0	20.4
11	Sowcarpet	11	13	8	9	6	7	13	12	11	10	9	11	77	40	117	18.5	13.2	16.3	14.7
12	Peddunaickenpet	19	23	21	25	16	32	23	28	24	24	34	38	153	154	307	13.7	14.8	14.2	16.3
13	Trevelyan Basin	25	30	31	25	31	30	31	32	26	20	23	27	142	189	331	14.7	20.5	17.5	14.6
14	Esplanade	27	18	20	26	19	32	18	17	22	33	18	19	39	27	66	16.8	17.1	16.9	63.0
15	Park Town	36	26	26	18	21	26	27	22	26	15	23	26	161	131	292	16.7	17.3	17.0	15.1
16	Perambur	87	54	47	49	49	45	37	38	42	54	47	42	311	290	601	13.4	14.0	13.7	11.5
17	Choolai	63	29	33	34	35	36	26	37	34	41	25	40	217	216	433	15.2	16.3	15.8	13.1
18	Purasawalkam	50	38	22	25	35	36	41	43	30	26	35	46	201	226	427	14.4	17.3	15.8	11.6
19	Vepery	36	29	25	21	27	25	24	37	27	26	34	33	174	170	344	14.1	17.4	15.5	14.8
20	Egmore	59	42	34	31	44	42	37	28	33	35	39	36	209	247	456	13.6	17.6	15.5	13.5
21	Kilpauk	55	38	26	34	32	30	22	28	26	40	24	44	212	177	389	16.2	15.7	16.0	12.2
22	Nungambakkam	44	26	20	24	24	30	24	22	27	31	30	19	168	153	321	11.6	12.0	11.8	10.7
23	Chintadripet	47	42	35	34	32	42	32	38	34	27	38	38	232	207	439	16.7	16.0	16.4	14.8
24	Tiruvateesvaranpet	78	70	84	41	54	52	53	31	39	43	46	50	330	311	641	20.3	20.5	20.4	15.5
25	Chepauk	28	33	24	19	19	25	13	19	22	26	24	23	128	147	275	13.6	19.1	16.1	13.5
26	Triplicane	26	25	29	25	31	34	22	21	17	30	27	35	170	175	345	16.5	19.0	17.7	14.1
27	Amir Mahal	51	41	24	30	44	41	31	20	29	32	24	34	203	199	402	23.0	21.0	20.5	16.8
28	Mirshahibpet	81	43	63	34	50	50	38	34	39	33	32	44	267	274	541	19.3	20.3	19.8	17.6
29	Royapettah	46	37	38	19	30	30	31	27	33	34	35	44	227	197	424	13.1	12.4	12.8	10.4
30	Mylapore	34	27	26	21	35	36	19	31	24	20	26	28	164	163	327	15.1	15.7	15.4	12.8
	Total	1286	952	896	779	890	950	770	835	783	791	857	916	5,558	5,150	10,708	16.3	16.8	16.5	14.0

\*Includes deaths in the Government General Hospital of patients admitted from mofussil and destitute.

Annual Form No. XIX.—Comparing the deaths from some of the principal diseases during the year with the deaths during the preceding 5 years.

	Cholera.		Small-Pox.		Measles.		Plague.		Malaria.		Enteric Fever.		Other fevers.		Dysentery and Diarrhoea.		Tuberculosis and other Pulmonary.		Respiratory Diseases.		Injuries.		Deaths from child birth.		All other causes.		Total 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.	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.		
1926	98	0.2	60	0.1	21	0.01	...	...	1242	2.6	152	0.3	1191	2.3	3867	7.3	177	0.3	1361	2.6	4932	9.5	243	0.5	3.2	0.7	9980	18.9	23776	45.0
1927	512	1.0	32	0.06	5	0.09	...	...	1367	2.6	164	0.3	1095	2.1	3263	6.2	162	0.4	1619	3.1	5035	9.6	228	0.4	29.3	0.6	8589	16.2	22361	42.3
1924	708	1.3	251	0.5	59	0.1	...	...	1599	3.0	177	0.3	1555	2.9	3931	7.4	163	0.4	1649	3.2	6879	13.0	262	0.5	866	0.7	9116	17.2	26715	50.5
1929	16	0.03	506	1.0	68	0.1	...	...	681	1.3	130	0.2	1731	3.0	3127	5.9	17	0.03	1354	2.6	5324	10.1	242	0.5	3.94	0.6	8915	16.9	22415	42.4
1930	43	0.08	188	0.4	16	0.03	...	...	283	0.5	126	0.2	1961	3.7	3056	6.8	151	0.3	924	1.7	5256	9.9	249	0.5	328	0.6	10258	19.4	2839	43.2
Mean of the last 5 years...	275	0.4	207	0.3	34	0.05	...	...	1054	1.6	150	0.2	1507	2.3	3449	5.3	134	0.2	1381	2.1	5465	8.5	245	0.4	3.99	0.4	9372	14.0	23622	36.5
1931	153	0.2	24	0.04	3	0.006	...	...	277	0.4	166	0.3	1748	2.7	2746	4.2	177	0.3	843	1.3	5743	8.9	276	0.4	1.99	0.5	10708	16.5	3162	35.8

1	100	...	...
2	100	...	...
3	100	...	...
4	100	...	...
5	100	...	...
6	100	...	...
7	100	...	...
8	100	...	...
9	100	...	...
10	100	...	...
11	100	...	...
12	100	...	...
13	100	...	...
14	100	...	...
15	100	...	...
16	100	...	...
17	100	...	...
18	100	...	...
19	100	...	...
20	100	...	...
21	100	...	...
22	100	...	...
23	100	...	...
24	100	...	...
25	100	...	...
26	100	...	...
27	100	...	...
28	100	...	...
29	100	...	...
30	100	...	...
31	100	...	...
32	100	...	...
33	100	...	...
34	100	...	...
35	100	...	...
36	100	...	...
37	100	...	...
38	100	...	...
39	100	...	...
40	100	...	...
41	100	...	...
42	100	...	...
43	100	...	...
44	100	...	...
45	100	...	...
46	100	...	...
47	100	...	...
48	100	...	...
49	100	...	...
50	100	...	...

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Annual Form No. XX—Table of deaths for 1921 arranged in accordance with the international list (Third Revision 1920) 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.
<b>I. INFECTIOUS DISEASES</b>														
1	Enteric Fever	12	22	24	16	12	18	14	21	8	9	6	4	166
5	Malaria	36	30	26	19	33	30	23	17	11	17	16	16	276
6	" Cachexia	3	1	5	4	4	1	...	...	1	1	...	3	24
7	Small-pox	1	...	...	1	...	...	...	...	...	...	1	...	3
9	Measles	12	5	7	2	8	4	5	8	7	6	7	11	82
10	Whooping Cough	2	...	...	...	...	...	1	1	...	4	...	...	5
11	Diphtheria	...	...	...	...	...	6	1	...	...	...	...	1	12
13	Influenza	...	...	...	...	...	1	...	...	...	...	...	...	5
14	Mumps	2	...	...	...	1	1	...	...	...	...	...	...	5
16	Cholera	72	29	16	18	18	4	...	...	1	...	...	...	158
20	Dysentery	225	175	129	79	108	119	89	129	106	107	75	106	1442
21	Leptosy	...	5	3	2	2	7	4	5	5	4	4	4	45
25 (2)	Erysipelas	2	1	1	2	1	...	...	...	1	...	...	...	8
25 (3)	Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	1
28	Kala Azar	1	3	2	1	5	4	1	2	2	1	4	4	30
29	Rabies	...	2	...	...	1	2	4	1	...	3	2	1	16
31	Tetanus	6	4	1	5	7	3	18	4	3	5	5	2	58
33	Tuberculosis of the Respiratory System	99	68	72	64	78	111	51	75	50	58	61	61	843
36	" Intestine and Peritoneum	22	14	14	11	14	10	12	11	6	8	12	11	145
36 (c)	" other organs	1	2	...	2	3	4	2	4	2	2	2	1	25
38	" lymphatic System	...	...	...	...	...	3	...	1	1	2	1	...	7
40 (1)	Syphilis	2	5	5	1	8	1	2	4	...	1	2	2	28
41	Congenital Syphilis	3	3	1	3	...	3	1	...	...	2	1	1	18
	Gonorrhoea	...	...	...	...	...	...	1	...	...	...	...	...	1
	Purulent Infection—	...	...	...	...	...	...	...	...	...	...	...	...	...
	Septicaemia	18	13	5	5	16	13	7	7	18	10	5	8	108
	Sapraemia	...	2	1	...	1	7	3	2	3	1	1	8	24
	Sapraemia	...	...	...	...	1	...	...	1	2	1	2	...	7
<b>II. GENERAL DISEASES, (Not included in I.)</b>														
43	Cancer of the buccal cavity	...	3	2	3	...	2	3	1	...	2	3	4	23
44	" Pharynx, Liver Stomach & Annexia.	...	2	1	...	...	2	2	1	...	...	2	2	12
45	" Intestine & Rectum	...	1	1	...	...	2	...	...	...	...	...	...	4
46	" female genital organs	...	2	...	5	2	3	1	2	4	2	2	...	23
47	" Breast	...	1	...	1	1	2	1	2	1	1	1	...	9
49	" other or unspecified organs	2	6	5	2	4	4	4	2	3	4	4	...	40

Infectious Diseases.

General Diseases.

General Diseases—contd.

50	Tumours not returned as malignant	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
51	Rheumatic Fever	...	1	4	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
52	Gout	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
53	Scurvy	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55	Beri-Beri	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
56	Rickets	...	21	8	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
57	Diabetes	...	6	5	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	"    Carbuncle	...	6	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	"    Coma	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	"    Gangrene	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
58	Pernicious Anaemia	...	20	24	13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
64	Anaemia	...	36	21	25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
66	Enlargement of Spleen	...	1	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
67	Alcoholism	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
67 (2)	Poisoning by mineral substances	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
69	Toxaemia	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

III. DISEASES OF THE NERVOUS SYSTEM & SENSE ORGAN.

70-1	Cerebral abscess	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
71	Meningitis	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
74-a	Cerebral haemorrhage	...	...	6	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
75	Apoplexy	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
75 (a)	Paralysis	...	28	15	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
75 (b)	Hemiplegia	...	20	7	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
77	Paraplegia	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
77	Other forms of insanity	...	2	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
78	Epilepsy	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
80	Infantile convulsion (under 5 years of age)	...	38	50	39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
82 (1)	Hysteria	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
82 (2)	Neuralgia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
82 (2)	Neuritis	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
85	Cataract	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
86 (2)	Otitis	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

DISEASES OF THE EYE.

DISEASES OF THE EAR.

IV. DISEASES OF THE CIRCULATORY SYSTEM.

87	Pericarditis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
88 (2)	Endocarditis	...	4	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
88 (3)	Myocarditis	...	7	8	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
89	Angina Pectoris	...	4	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
90 (4)	Unspecified Valve disease	...	5	10	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
90 (5)	Fatty degeneration of heart	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Diseases of the Circulatory system.

Diseases of the Nervous System.

Diseases of the sense organs.

Diseases of the Circulatory system.



Annual Form No. XX—Table of deaths for 1931 arranged in accordance with the international list (Third Revision 1920) as adopted for use in England and Wales, Scotland and Northern Ireland.—*contd.*

Classification No.	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	<b>IV. DISEASES OF THE CIRCULATORY SYSTEM—<i>contd.</i></b>													
90 (9)	Heart disease undefined ...	22	31	49	66	67	67	50	50	47	58	60	39	606
	Cardiac Dropsy ...	7	8	4	5	5	4	3	2	2	...	7	4	52
91 (a)	Aneurysm ...	...	...	1	...	1	...	1	...	1	...	1	1	6
(b)	Arterio Sclerosis ...	...	...	1	...	...	...	...	2	...	...	...	...	3
93	Diseases of Veins ...	...	...	1	...	...	...	...	...	...	1	...	...	1
	Haemorrhoids ...	1	1	1	1	2	...	...	1	1	...	3	2	13
94	Diseases of the Lymphatic System ...	1	1	1	...	1	1	...	1	1	...	3	1	10
95	Haemorrhage without stated cause ...	...	4	2	3	1	2	3	2	2	...	3	2	24
	<b>V. DISEASES OF THE RESPIRATORY SYSTEM</b>													
99 (a)	Acute Bronchitis ...	23	14	26	18	24	23	21	14	21	10	16	14	224
(b)	Chronic Bronchitis ...	350	38	47	45	49	49	29	30	23	238	28	28	437
100	Broncho-Pneumonia ...	90	232	265	239	313	390	224	282	281	8	267	300	3,371
101 (a)	Lobar Pneumonia ...	119	12	5	5	9	13	6	9	9	77	5	9	109
(b)	Pneumonia not otherwise defined ...	82	173	91	85	110	141	101	87	78	7	79	100	1,304
102	Pleurisy ...	...	1	2	4	3	2	1	2	2	...	1	2	27
(2)	Pneumo Thorax ...	...	1	...	...	...	...	...	1	...	1	...	...	2
103	Oedema of Lung ...	...	...	1	...	1	4	...	1	...	19	1	2	11
105	Asthma ...	25	24	16	23	27	31	10	21	10	...	17	22	245
106	Empyema ...	1	3	1	3	...	...	1	1	2	...	1	...	13
	<b>VI. DISEASES OF THE DIGESTIVE SYSTEM</b>													
108 (1)	Stomatitis ...	4	1	...	1	...	...	1	1	1	1	...	1	11
(3)	Paratuberculosis ...	2	1	...	...	...	...	...	1	...	1	...	...	5
109 (1)	Tonsillitis ...	2	1	...	...	...	...	1	1	1	1	...	...	7
110	Diseases of Oesophagus ...	1	...	...	...	...	...	...	1	...	1	...	...	3
111 (a)	Ulcer of Stomach ...	6	3	1	7	5	4	4	4	2	5	5	4	50
(b)	Ulcer duodenum ...	4	2	1	5	2	5	1	2	3	8	1	2	36
112	Other diseases of Stomach.—													
(1)	Gastritis ...	17	13	4	10	14	14	16	6	10	5	16	9	134
(2)	Dyspepsia ...	5	3	1	1	3	2	3	2	3	4	2	2	31
113-114	Dilatation of Stomach ...	...	1	...	...	...	...	...	1	...	...	...	...	2
(2)	Diarrhoea and Enteritis ...	133	102	71	94	114	87	74	130	76	55	66	91	1,083
(3)	Colitis ...	6	3	...	2	2	2	2	2	2	3	1	2	28
(3)	Colic ...	2	1	...	2	5	3	1	1	2	1	...	2	20
	Infantile Diarrhoea ...	14	19	15	12	32	29	15	25	18	14	13	15	221
	Gastro-Enteritis ...	22	14	3	14	10	4	15	14	10	2	14	5	137

Diseases of the Digestive System—Contd.		Diseases of the Genito-Urinary System.		Puerperal State.	
115	Ankylostomiasis	8	5	3	5
116 (e)	Guinea Worm	1	1	1	2
116 (f)	Undefined Intestinal Parasites	4	1	1	12
117	Appendicitis	6	1	3	26
118 (a)	Hernia	10	3	4	56
118 (b)	Intestinal Obstruction	12	5	6	75
119 (1)	Constipation	2	2	1	11
119 (2)	Fistula in ano	2	2	1	4
	Ischio-Rectal abscess	2	2	1	7
120	Hepatitis	2	2	1	16
121	Hydatid Cyst	2	2	1	1
122 (b)	Cirrhosis of Liver	10	11	14	147
	Biliary Cirrhosis	2	4	2	32
	Ascites	4	3	4	40
124	Enlargement of Liver	4	6	4	47
	Jaundice	4	6	4	47
	Hepatic Abscess	3	6	1	47
126	Peritonitis	2	2	1	12
127	Other Diseases of Digestive System	8	7	5	50
VII. NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM					
128	Acute Nephritis	7	37	5	236
129	Chronic Nephritis	6	12	8	176
	Renal Dropsy	2	6	11	129
	Uræmia	...	3	3	31
132	Calculi of the Urinary Passages	1	2	2	2
133 (1)	Cystitis	1	3	1	11
133 (2)	Retention of Urine	1	3	1	11
	Rupture Bladder	...	...	...	1
134 (a)	Diseases of the Urethra :—	1	1	1	5
	Stricture Urethra	...	...	...	7
136	Extravasation of Urine	1	1	2	4
	Non-Veneral diseases of male genital organs :—	...	...	...	2
	Hydrocele	1	...	1	4
	Orchitis	...	...	...	2
141 (1)	Other diseases of female genital organs :—	...	...	...	3
	Amenorrhœa	...	1	1	2
	Dysmenorrhœa	...	1	1	12
	Endo-metritis	...	2	...	...
VIII. PUERPERAL STATE.					
148	Accidents of Pregnancy :—	...	...	...	...
148 (a)	Abortion	...	3	2	13
	Mis Carriage	...	1	...	5
144	Puerperal Hæmorrhage	...	...	...	2
	Placenta prævia	...	1	2	8

Annual Form No. XX.—Table of deaths for 1931 arranged in accordance with the International list (Third Revision 1920) as adopted for use in England and Wales, Scotland and Northern Ireland.—*Contd.*

Classification	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	
Puerperal State.— <i>Contd.</i>	VIII PUERPERAL STATE— <i>contd.</i>														
	145	Post Partum Haemorrhage	...	8	2	4	1	...	...	2	1	...	5	18	
	146	Other accidents of child-birth.—	...	...	...	1	1	3	1	1	2	1	...	1	12
		Child birth	...	...	...	...	...	...	...	2	...	...	1	...	6
	147 (2)	Prolonged labour	...	...	...	...	...	...	...	1	1	1	1	6	
	148	Rupture uterus	...	...	...	...	...	...	...	1	1	1	...	6	
	Puerperal State.— <i>Contd.</i>	Puerperal sepsis	19	9	24	26	15	23	12	22	19	10	11	11	201
		Sudden death after delivery	...	...	...	1	...	1	...	...	...	1	1	1	5
		Puerperal eclampsia and convulsions	1	1	...	1	1	2	...	...	2	2	1	1	12
		Toxaemia of Pregnancy	...	...	...	1	...	...	2	...	1	2	...	...	6
IX. DISEASES OF SKIN AND CELLULAR TISSUE.															
Diseases of Skin and Cellular Tissue.	151 (2)	Cancrum oris	...	8	2	...	1	3	1	2	...	1	1	16	
	152	Gangrene	1	2	1	2	...	1	3	1	3	...	...	14	
		Carbuncle and Boil	14	13	1	2	3	8	9	1	2	5	2	2	62
	153 (1)	Cellulitis	18	15	7	4	6	2	4	2	5	2	9	71	
	154 (2)	Abscess	22	21	15	10	18	13	3	2	9	5	8	17	143
		Ulcer	16	14	1	3	3	5	5	3	2	4	4	5	65
	155	Eczema	...	...	...	...	...	...	...	...	2	1	...	...	5
		Elephantiasis	1	1	...	1	3	1	1	2	...	...	1	1	12
	156	Scabies	...	...	2	...	...	...	...	...	1	...	...	...	2
		X. DISEASES OF BONES AND ORGANS OF LOCOMOTION.													
Diseases of Bones & Organs of Locomotion.	155	Diseases of Bones	2	1	1	2	2	2	2	...	2	2	2	18	
	156	Diseases of Joints	5	1	1	...	1	...	...	...	...	1	1	9	
		Arthritis	1	1	...	1	...	...	1	1	...	...	...	7	
	159 (3)	Synovitis	2	...	...	...	...	...	...	...	...	...	...	2	
Diseases of Bones & Organs of Locomotion.	XI. CONGENITAL MALFORMATION.														
	159 (3)	Imperforate Anus	2	...	...	1	...	2	1	2	...	1	1	10	
Diseases of early infancy.	Spira bifida	1	...	...	...	1	...	...	...	1	...	...	1	4	
	XII. DISEASES OF EARLY INFANCY.														
Diseases of early infancy.	160 (1)	Congenital debility	...	...	2	2	2	...	...	4	3	1	8	22	
	...	Inanition	37	20	20	22	14	18	9	24	11	13	10	13	211
		Malnutrition	24	14	4	2	12	9	9	9	6	7	6	6	108
	...	Marasmus	48	34	18	12	23	21	20	20	5	12	11	21	245

	144	108	185	191	128	128	182	155	187	129	166	177	1670
161 (1) Premature birth	...	...	...	...	...	...	...	...	...	...	...	...	...
162 (2) Other diseases peculiar to early infancy—	25	17	6	18	19	12	9	5	9	18	14	21	168
Atelectasis	15	19	7	4	2	8	6	5	11	4	5	7	98
Asphyxia Neonatorum	...	...	...	...	...	...	...	...	...	...	...	...	...
XIII. OLD AGE.	...	...	...	...	...	...	...	...	...	...	...	...	...
164 (2) Old age	17	11	116	42	91	105	69	93	92	107	88	108	989
Senile debility	94	73	46	27	28	20	29	37	24	20	20	32	450
165-166 Suicide by solid or liquid poisons	1	...	...	...	...	...	...	...	...	1	...	...	2
168 " by hanging	1	1	...	...	1	1	...	...	...	2	1	...	7
169 " by drowning	1	1	1	2	1	2	1	...	...	3	2	2	16
170 " by fire arms	...	...	...	...	...	...	...	...	...	...	1	...	1
174 " by burns	...	...	...	...	...	1	...	...	...	...	...	...	1
175 Food poisoning	...	...	...	...	...	...	...	...	...	...	...	...	1
176 Poisoning by Venomous animals—	...	...	...	...	...	...	...	...	...	...	...	...	1
Snake bite	...	...	...	2	1	...	...	...	...	...	...	1	4
Scorpion sting	...	...	...	...	2	1	1	1	...	...	...	...	5
Accidental burns	1	1	...	1	...	1	2	...	...	...	2	5	18
Scald	...	1	...	...	...	...	...	...	...	...	...	...	3
" Drowning	1	1	1	1	2	1	6	...	...	1	2	6	22
" Injury	1	2	3	3	4	6	5	4	1	4	1	6	40
" Railway	1	...	1	...	1	1	...	...	...	1	1	...	6
" Motor Car	1	...	2	...	5	2	1	1	1	2	1	2	18
" Tram Car	...	...	...	...	...	...	...	...	...	...	...	...	2
Starvation	...	...	...	1	...	...	...	...	...	2	...	...	5
Excessive heat Sun-stroke...	...	...	...	...	...	...	...	...	...	1	...	1	5
Electricity shock	1	...	...	...	...	1	...	1	...	1	...	...	3
Homicide by piercing instruments	...	...	...	...	...	1	1	...	...	...	...	1	3
" by other means	...	...	1	...	...	1	1	...	...	...	1	...	3
Fracture cause not specified	9	4	18	4	12	12	10	6	2	4	2	2	80
Other unstated forms of accidental violence	5	3	...	2	6	...	6	4	...	2	...	2	30
Concussion	3	1	...	...	2	...	1	1	...	...	...	...	8
Contusion	3	2	...	...	2	1	2	1	...	...	...	...	11
Hanging legal execution	...	...	...	...	...	...	...	...	4	...	...	...	4
XV. ILL-DEFINED DISEASES.	...	...	...	...	...	...	...	...	...	...	...	...	...
204 Sudden death	2	...	3	...	4	...	4	...	...	1	...	...	2
205 Causes of death unstated or ill-defined	3	2	...	...	...	28	21	21	11	30	29	31	24
(1) Heart failure	95	48	64	30	31	...	...	...	...	...	...	...	439
(2) Coma	5	...	...	...	...	...	...	...	...	...	...	...	5
Debility under one year	25	9	14	18	17	12	20	17	12	13	16	20	188
" age 10-50 years	115	40	74	30	31	30	24	23	20	22	33	30	472
Dentition	3	...	...	...	...	...	...	...	...	...	...	...	3
Dropsy	5	2	...	...	...	...	...	...	...	...	...	...	7
Inanition age 10 and over	45	19	16	12	5	2	...	10	11	8	...	11	188
Malnutrition age 10 and over	40	12	15	...	4	3	...	8	...	...	...	10	92
Natural Causes	1	1	2	1	3	1	2	1	7	...	2	2	23
Pyrexia uncertain origin	194	194	168	126	156	182	129	127	110	113	97	105	1701
Collapse	6	2	1	...	1	...	...	...	1	2	1	1	15
Death after operation	1	3	1	1	...	...	1	...	1	...	1	2	11

20-H  
Diseases of early Infancy. Contd.

External Causes.

Ill-defined diseases.

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.		Still Births.	Deaths.
	No. of Registered	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.		
1920	21,396	41.3	21,418	41.3	22	0.04	103	0.2	560	1.1	1780	2.4	1995	3.8	8	0.02	4671	9.0	4428	8.5	5976	279.3	3654	83.3	1172	
1921	19,187	36.4	20,268	38.5	139	0.3	180	1.2	652	1.2	1475	2.8	708	1.3	3	0.006	4149	7.9	4467	8.5	5408	281.9	3273	79.9	1136	
1922	21,650	41.1	22,475	42.7	17	2.1	1121	2.1	763	1.4	1325	2.5	612	1.2	1	0.002	4167	7.9	4911	9.3	6659	308.0	4113	100.4	1274	
1923	22,975	43.6	19,933	37.9	21	0.3	131	0.3	783	1.5	769	1.5	363	0.7	1	0.002	3778	7.2	4610	8.7	5837	254.0	3272	79.9	1312	
1924	23,275	44.2	21,960	41.7	97	0.4	197	0.4	971	1.8	681	1.3	982	1.9	...	...	3700	7.0	5598	1.6	6148	261.1	3810	93.0	1274	
1925	23,070	43.6	25,000	47.3	203	0.4	763	1.4	128	2.5	1039	2.9	682	1.3	...	...	4631	7.6	6416	12.1	6431	278.8	4655	112.9	1335	
1926	22,000	41.6	23,776	45.0	98	6.2	60	0.1	1342	2.6	1243	2.7	565	1.1	...	...	3867	7.3	6470	12.2	6145	279.3	4120*	100.0	1105	
1927	21,760	46.8	22,364	42.3	512	1.0	32	0.06	1367	2.6	1259	2.1	...	...	...	...	3263	6.2	3816	12.9	5888	237.6	3806	92.3	1258	
1928	23,729	44.9	26,715	50.5	708	1.3	251	0.5	1599	3.0	1732	3.2	1052	2.0	...	...	3327	7.4	8691	16.4	6806	283.8	4864	118.0	1721	
1929	23,124	43.7	22,415	42.4	16	0.03	506	1.0	681	1.3	1861	3.5	612	1.2	...	...	3127	5.9	6695	12.7	5933	256.6	3875	94.0	1287	
1930	25,662	48.5	22,639	43.2	43	0.08	188	0.4	283	0.5	2097	3.9	411	0.8	...	...	3056	5.8	6331	12.0	6258	243.9	2633	88.1	1260	
1931	25,738	39.8	23,162	35.8	153	0.2	24	0.04	277	0.4	1748	2.7	1347	2.1	...	...	2746	4.2	5743	8.9	6391	248.3	3767	50.3	1318	

TABLE—B.  
Rainfall.

Years.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.
	January to March.	April to June.	July to September.	October to December.	
	Inches.	Inches.	Inches.	Inches.	Inches.
1926	1.11	0.60	9.05	20.66	31.42
1927	0.55	4.17	7.80	19.88	32.40
1928	3.30	0.33	16.15	31.69	51.47
1929	8.29	2.77	13.72	27.64	52.42
1930	3.69	11.24	8.71	55.05	78.69
1931	0.05	6.76	17.94	33.73	58.53

TABLE—C.

Table of Births, Deaths and Infantile Death-rates for different Communities in the City of Madras for 1930 and 1931.

Race or Caste.	Population according to the census of 1931.	1931.						1930.					
		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	58	13.4	24	6.7	4	73.1	67	18.7	30	8.4	7	104.4
Anglo Indians ...	10,657	381	35.8	266	25.0	38	99.7	368	34.5	256	24.0	50	133.2
Indian Christians ...	39,884	1,364	34.2	1,069	26.8	254	186.2	1,277	32.0	1,062	26.6	229	179.3
Hindus ...	5,20,176	21,024	40.4	19,008	36.5	5,347	254.4	21,021	40.4	18,724	36.0	5,241	249.3
Mohamadans ...	70,031	2,910	41.6	2,792	39.9	748	257.0	2,928	41.8	2,766	39.5	781	249.7
Others ...	2,901	1	0.3	3	1.0	..	...	1	0.3	1	0.3	...	...
Total ...	6,47,280	25,738	39.8	23,162	35.6	6,391	248.3	25,669	39.6	22,839	35.3	6,258	243.9

TABLE-D.

Table of Birth and Death rates of principal Sub-divisions of the Hindu Community for 1930 and 1931.

Name of Community.	Population.	1931				1930			
		Total Births.	Birth Rate.	Total Deaths.	Death Rate.	Total Births.	Birth Rate.	Total Deaths.	Death Rate.
Brahmins	58,751	1,819	31.0	1,201	20.4	1,750	36.3	1,385	28.7
Chetties	37,949	1,446	38.1	1,347	35.5	1,964	54.0	1,665	45.8
Vellalah or Mudaliars	86,716	2,905	33.5	2,822	32.5	2,676	38.4	2,965	42.5
Balijah or Naidus	60,263	2,077	34.5	2,030	33.7	2,092	41.9	2,224	44.5
Vannia or Naickers	69,650	2,965	42.6	2,827	42.0	2,553	50.7	2,565	50.9
Adi-Dravidas	73,701	3,065	41.6	3,182	43.2	3,195	54.4	2,641	45.0
Patnavars	11,309	375	33.2	535	47.3	484	41.5	478	45.7
Yadaval or Idays	17,022	819	48.1	735	43.2	783	51.1	826	54.0
Visvakarma Brahmin or Kammalars	15,570	713	45.5	623	39.8	629	45.5	568	41.0



TABLE-E.

Table of Births, Deaths and Infantile Death-rates by months for 1920 and 1931.

Months.	1931.						1920.					
	Total No. of Births.	Birth rate.	Total No. of Deaths.	Death rate.	Infantile Deaths.	Infantile Death rate on 1000 live births.	Total No. of Births.	Birth rate.	Total No. of Deaths.	Death rate.	Infantile Deaths.	Infantile Death rate on 1000 live births.
January	1,902	35.3	2,841	52.7	735	386.4	2,100	38.9	2,064	38.3	527	251.0
February	1,589	29.1	2,141	37.7	492	313.6	1,690	31.3	1,711	31.7	448	265.1
March	2,100	38.9	1,944	36.0	482	229.5	2,013	37.3	1,940	36.0	471	234.0
April	2,179	40.4	1,697	31.5	440	201.9	2,195	40.7	1,777	32.9	471	214.6
May	2,371	44.0	2,055	38.1	577	243.4	2,216	41.1	1,865	34.6	487	219.8
June	2,252	41.8	2,276	42.2	578	256.7	2,093	38.8	1,741	32.3	521	248.9
July	2,887	44.3	1,629	30.2	490	205.3	2,059	38.2	1,790	33.2	487	236.5
August	2,188	40.6	1,861	34.5	599	273.8	2,178	40.4	1,661	30.8	425	195.1
September	2,071	38.4	1,588	29.4	444	214.4	2,257	41.8	1,599	29.6	440	195.0
October	2,274	42.2	1,609	29.8	435	191.3	2,304	42.7	1,673	31.0	493	214.0
November	2,233	41.4	1,662	30.8	499	223.5	2,266	42.0	2,389	44.3	777	342.4
December	2,212	41.0	1,859	34.5	620	280.3	2,291	42.5	2,629	48.7	711	310.3
Total	25,738	39.8	23,162	35.8	6,391	248.3	25,662	39.6	22,839	35.3	6,258	243.9

TABLE-F.

Ratio of deaths among Children under one year of age per 1000 Live Birth registered in each division for 1930 and 1931.

Divisions.	1931.		1930.	
	Infantile Mortality.	Infantile Death-rates.	Infantile Mortality.	Infantile Death-rates.
1	281	322.6	233	247.9
2	301	232.3	282	227.1
3	273	247.7	267	235.2
4	267	300.3	270	283.3
5	97	366.0	93	317.1
6	106	239.8	109	259.5
7	104	229.1	104	212.7
8	64	357.5	42	241.4
9	168	213.2	192	250.6
10	182	245.3	185	248.3
11	53	286.5	55	288.0
12	214	245.1	226	263.7
13	195	279.4	196	302.0
14	33	287.0	39	357.8
15	167	259.3	159	284.4
16	430	276.0	410	233.2
17	303	244.4	325	274.0
18	281	265.1	272	243.3
19	203	260.3	202	234.6
20	265	178.0	304	211.4
21	183	217.9	162	198.0
22	227	227.9	194	204.9
23	293	257.2	274	228.5
24	325	207.9	355	259.3
25	167	207.5	167	223.6
26	182	241.1	171	249.3
27	225	278.5	231	269.2
28	324	272.3	294	260.9
29	293	233.1	261	208.5
30	185	259.1	184	237.1
Total ...	6,391	248.3	6,258	243.9

TABLE-G.

Table of Infantile Mortality by months in the year 1931.

1931	Small-pox.	Measles.	Malaria.	Other fevers.	Dysentery and Diarrhoea.	Premature Birth.	Debility.	Nervous system.	Respiratory system.	All other causes.	Total of 1931.			Total of 1930.
											Males.	Females.	Total.	
January	2	...	3	60	73	144	25	49	221	158	399	336	735	527
February	...	...	...	21	49	108	9	39	150	116	260	232	492	448
March	...	...	...	17	37	135	14	35	177	67	259	223	482	471
April	...	...	...	23	52	131	13	24	129	68	248	192	440	471
May	1	...	...	37	84	128	17	27	171	112	299	278	577	487
June	...	...	...	48	61	128	12	56	184	89	304	274	478	521
July	...	...	2	45	46	132	20	38	127	80	274	216	490	487
August	...	...	...	32	90	165	17	36	183	86	309	290	599	425
September	...	...	...	28	51	137	12	24	114	78	244	200	444	440
October	...	...	1	24	41	129	13	37	126	64	245	190	435	493
November	...	...	...	23	32	166	16	65	142	65	272	227	499	777
December	...	...	...	23	45	177	20	74	186	95	326	294	620	711
Total	3	...	6	381	661	1,670	188	494	1,910	1,078	3,439	2,952	6,391	6,258

TABLE—H.

Table of percentage of Infantile Deaths from Principal causes in the year 1931.

	Small-pox		Measles		Malaria		Other Fevers		Diarrhoea and Dysentery		Prenatal		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	...	...	...	...	...	...	5	0.35	9	0.63	965	68.05	5	0.36	102	7.19	91	6.12	241	17.00	1418	22.19
7 days and under 1 month...	...	...	...	...	...	...	30	3.41	40	4.55	422	48.01	13	1.48	119	13.54	102	11.60	153	17.41	879	13.75
1 month and under 4 months	1	0.09	...	...	...	...	82	7.55	156	14.36	105	9.67	138	12.71	87	8.01	386	35.54	131	92.06	1086	16.99
4 months and under 7 months	2	0.2	...	...	...	...	111	9.05	173	14.11	127	10.36	18	1.47	99	8.08	486	39.64	210	17.12	1226	19.18
7 months and under 10 months	...	...	...	...	2	0.21	86	9.04	156	16.40	9	0.95	11	1.16	30	3.15	536	56.36	121	12.72	961	14.88
10 months and under 1 year.	...	...	...	...	4	0.48	67	8.06	127	15.28	42	5.05	3	0.36	57	6.86	309	38.39	222	26.71	831	13.00
Total	3	0.05	...	...	6	0.09	381	5.96	661	10.34	1670	26.13	188	2.94	494	7.73	1910	29.89	1077	16.85	6391	...

## VACCINATION STATEMENT No. I.

Statement showing the number of births (Divisional and Hospital) verified during the calendar year 1931 and the number of Vaccination of Infants under one year of age.

Division.	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	592	327	3	12	75	34	517	293	312	170	52.7	52.0
2	752	533	28	86	135	47	617	486	375	118	49.8	22.1
3	772	307	4	5	119	40	653	267	358	56	46.7	18.2
4	790	261	8	15	98	27	602	234	349	85	49.8	32.5
5	230	64	19	7	40	7	190	57	81	22	35.2	34.3
6	366	98	15	5	65	14	301	84	140	33	38.2	33.6
7	355	126	11	18	58	20	297	106	146	24	41.1	19.0
8	131	42	4	3	37	9	94	33	57	16	43.5	38.1
9	565	223	16	11	95	50	470	173	279	76	49.3	24.0
10	531	218	9	13	122	37	409	181	254	86	47.7	39.4
11	135	36	7	2	33	6	102	30	37	12	27.4	33.3
12	680	173	20	12	129	39	551	134	313	57	46.0	33.0
13	510	176	23	11	106	38	404	138	222	59	43.5	33.5
14	82	27	3	4	20	4	62	23	46	13	56.1	48.1
15	495	107	15	11	80	17	415	90	170	33	34.4	20.9
16	1,337	304	28	30	166	33	1,171	271	989	187	74.0	61.5
17	974	242	31	14	184	41	790	261	608	104	62.4	43.0
18	851	285	23	18	160	44	691	241	488	110	57.3	38.6
19	500	355	23	11	84	53	416	302	295	187	59.0	52.7
20	591	925	16	98	111	96	480	829	324	226	54.8	24.4
21	554	301	21	13	97	36	457	265	310	105	58.9	34.8
22	680	317	21	16	110	42	570	275	402	142	59.1	45.0
23	778	433	8	18	155	69	623	364	413	116	53.1	26.8
24	1,091	519	41	24	88	47	1,003	472	845	118	77.5	22.7
25	477	366	2	12	72	61	405	305	276	78	57.8	21.3
26	549	170	13	10	116	33	433	137	267	54	48.6	31.8
27	513	247	8	14	76	39	497	208	440	50	76.8	20.2
28	797	432	31	53	163	91	634	341	369	114	46.3	26.4
29	948	245	18	18	150	55	798	290	600	112	63.3	32.5
30	599	139	12	20	135	44	464	95	309	37	51.6	26.6
Total.	18,195	8,098	474	579	3,079	1,173	15,116	6,925	10,074	2,600	55.4	32.1

VACCINATION STATEMENT No. II.

Statement showing the number of Births verified in 1931 and the number of Infants Vaccinated under one year of age.

Year.	1	2	3	4	5	6	7	8
		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 and 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.
1929	...	16,352	3,408	2,823	10,121	8,617	85.1	692
	{	...	806	1,445	4,148	2040	49.1	177
	Hospital							
1930	{	18,308	2,285	3,052	11,971	9,672	80.8	1062
	{	7,335	1,045	1,496	4,794	2,544	53.1	268
	Hospital							
1931	{	18,195	3,079	3,059	12,057	10,074	83.6	973
	{	8,098	1,173	1,772	5,153	2,600	50.5	265
	Hospital							

## Vaccination Statement III:—Showing particulars

Divisions.	Districts.	Population according to the census of 1931.	Number of Depots.	Number of Vaccinators.	Total No. of persons Vaccinated.			Average No. of persons Vaccinated by each Vaccinator.	Primary		
					Males.	Females.	Total.		Total		
									Males.	Females.	Total.
1	2	3	4	5	6	7	8	9	10	11	12
1	Royapuram ...	21,952			717	701	1,418		538	493	1,031
2	Tondiarpet ...	25,911			928	761	1,689		709	696	1,405
3	Washermanpet ...	25,663			863	613	1,476		748	608	1,356
4	Korukkupet ...	25,538			787	635	1,422		561	567	1,128
5	Harbour ...	8,704			269	120	389		167	110	277
6	Muthialpet ...	14,257			272	221	493		239	215	454
7	Katchaleswaranpet ...	12,707			454	437	891		246	291	537
8	Kothawal Bazaar ...	6,550			136	124	260		121	124	245
9	Ammen Kovil ...	19,202			517	501	1,018		392	474	866
10	Seven Wells ...	20,294			559	505	1,064		345	468	813
11	Sowcarpet ...	7,194			111	140	251		99	136	235
12	Peddunaickenpet ...	21,547			488	563	1,051		338	533	871
13	Trevelyan Basin ...	18,916			580	375	955		366	313	679
14	Esplanade ...	3,906			123	97	220	748	84	97	181
15	Park Town ...	17,183	15	49	435	379	814		301	310	611
16	Perambur ...	43,817			2,082	1,410	3,492		1,260	1,139	2,399
17	Choolai ...	27,488			876	716	1,592		668	577	1,245
18	Purasawalkam ...	27,054			662	667	1,329		578	457	1,035
19	Vepery ...	22,137			1,035	1,061	2,096		553	565	1,118
20	Egmore ...	29,385			842	699	1,541		479	601	1,080
21	Kilpauk ...	24,384			936	683	1,619		425	476	901
22	Nungambakkam ...	27,238			1,051	773	1,824		573	580	1,153
23	Chintadripet ...	26,845			811	610	1,421		621	591	1,212
24	Tiruvateeswaranpet ...	31,371			791	662	1,453		627	600	1,227
25	Chepauk ...	17,092			435	356	791		356	335	691
26	Triplicane ...	19,514			429	437	866		365	362	727
27	Amir Mahal ...	19,615			446	415	861		385	336	721
28	Mirsahibpet ...	27,343			402	603	1,005		374	412	786
29	Royapettah ...	33,203			1,294	1,022	2,316		768	716	1,484
30	Mylapore ...	21,270			414	606	1,020		398	394	792
...	Total ...	6,47,230	15	49	19,745	16,892	36,637	..	13,684	13,576	27,260

of Vaccinations during the Calendar year 1931.

Vaccination.					Re-Vaccination.			Percentage of Successful cases in which the results were known.		Persons Successfully Vaccinated per 1,000 of Population.	Average annual No. of persons successfully Vaccinated during the previous five years.		Average annual No. of deaths from Small-pox during the previous five years.		Average cost of each Successful Vaccination.
Successful.					Total.	Successful.	Unknown.	Primary.	Re-Vaccinations.		Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of population.	
Under one year.	One year and under 6 years.	Six years & above.	Total.	Unknown.						Total.					Successful.
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
671	319	37	1,027	2	387	159	71	99.8	50.3	54.0	1,259	57.4	16	0.7	
955	414	36	1,405	..	284	55	110	100.0	31.6	56.3	1,322	51.0	7	0.3	
1,029	260	65	1,354	..	120	37	14	99.9	34.9	54.2	1,364	50.8	7	0.3	
762	306	58	1,126	..	294	150	29	99.8	56.6	50.0	1,173	45.9	10	0.4	
123	141	7	271	..	112	19	49	99.3	30.2	33.3	371	42.6	3	0.3	
333	119	..	452	..	39	3	16	99.6	13.0	31.9	599	42.0	3	0.2	
445	82	8	535	..	354	69	213	99.6	48.9	47.5	579	45.6	7	0.6	
120	121	1	242	..	15	..	14	99.6	..	36.9	522	79.7	3	0.5	
583	279	3	865	..	152	36	16	99.9	26.5	46.9	881	45.9	8	0.4	
529	278	4	811	..	251	59	11	99.8	24.6	42.9	799	89.4	4	0.2	
130	102	1	233	..	16	3	..	99.1	18.8	32.8	264	36.7	3	0.4	
583	280	6	869	..	180	43	13	99.8	25.7	42.3	917	42.6	7	0.3	
435	214	10	659	..	276	33	203	98.2	45.2	36.6	684	36.2	8	0.4	
118	60	2	180	..	39	2	30	99.4	22.2	46.6	187	47.9	1	0.3	
359	231	3	593	..	203	60	81	98.7	49.2	38.0	599	34.9	7	0.4	
1,650	736	5	2,391	..	1,093	154	44	99.7	14.7	58.1	2,350	53.6	10	0.2	
1,008	237	..	1,245	..	347	118	3	100.0	34.3	49.6	1,325	48.2	10	0.4	
835	199	..	1,034	..	294	95	..	99.9	32.3	41.7	1,264	46.7	10	0.4	
1,022	93	..	1,115	..	978	175	6	99.7	18.0	58.3	1,014	45.8	6	0.3	
822	240	16	1,078	..	461	103	220	99.8	42.7	40.2	1,176	40.0	2	0.07	
800	99	..	899	..	718	111	14	99.8	15.8	41.5	869	35.7	5	0.2	
844	298	..	1,142	..	671	144	66	99.6	23.8	47.2	1,159	42.6	2	0.07	
1,022	178	7	1,207	..	209	45	110	99.6	45.5	46.6	1,266	47.2	5	0.2	
953	247	12	1,212	..	226	1	154	98.9	1.4	38.7	1,235	39.4	16	0.5	
497	173	3	673	..	100	3	97	99.9	100.0	39.6	658	38.5	3	0.2	
415	277	9	701	..	189	1	137	99.7	50.0	36.0	668	34.2	7	0.4	
570	131	8	709	..	140	..	128	98.9	..	36.1	752	38.3	5	0.3	
617	159	..	776	..	219	84	..	98.7	38.4	31.5	979	35.4	17	0.6	
955	484	33	1,472	..	832	175	37	99.7	22.0	49.6	1,140	34.3	8	0.2	
518	239	9	766	..	228	60	15	98.2	28.2	38.8	745	35.0	7	0.3	
19,703	6,996	343	27,042	99	9,377	1,997	1,901	99.6	26.7	44.9	28,060	43.4	207	0.3	

Rs. 1-3-9



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

Municipal Division.	Name of area.	Length of sewers laid during 1930.	Length of sewers laid up to 31-12-1931.	Percentage of sewered portion up to 31-12-1931.	Percentage yet to be sewered.	
1	Royapuram	...	140	40,833	84	16
2	Tondiarpet	...	..	31,486	68	32
3	Washermenpet	...	..	52,541	96	4
4	Korukkupet	...	..	22,401	65	35
5	Harbour	...	..	29,938	92	8
6	Muthialpet	...	..	24,104	94	6
7	Katchaleswaranpet	...	..	34,410	91	9
8	Kothawalchavadi	...	..	22,058	98	2
9	Ammenkoil	...	..	25,244	99	1
10	Seven wells	...	..	28,766	100	...
11	Sowcarpet	...	..	18,045	96	4
12	Peddunaickenpet	...	..	30,597	96	4
13	Trevelyan Basin	...	..	31,909	96	4
14	Esplanade	...	..	8,896	72	28
15	Park Town	...	..	20,489	85	15
16	Perambur	...	5,857	25,900	50	50
17	Choolai	...	2,110	28,871	52	48
18	Purasawakkam	...	1,580	52,595	99	1
19	Vepery	...	..	35,712	75	25
20	Egmore	...	5,582	79,542	88	12
21	Kilpauk	...	..	28,431	52	48
22	Nungambakkam	...	3,486	11,649	17	83
23	Chintadripet	...	..	40,623	95	5
24	Thiruvattiswarenpet	...	..	47,271	85	15
25	Chepauk	...	..	22,926	90	10
26	Triplicane	...	..	25,638	85	15
27	Amir Mahal	...	2,914	28,354	82	18
28	Mirsahibpet	...	4,333	81,811	88	12
29	Royapettah	...	4,597	36,046	47	53
30	Mylapore	...	14,462	58,469	50	50
	Total	...	45,061	10,24,655	79.60	20.40

## List of Licensable trades.

Description.	Number of cases dealt with.	Number sanctioned.	Number refused.	Number pending.
Aerated water factory ...	36	34	2	...
Bakery ...	79	74	5	...
Candles & Soap ...	28	23	5	...
Cart-stands ...	20	20	...	...
Cattle-yards ...	1374	1244	9	121
Cocoon fibre, Flax, Hemp & Jute ...	37	37	...	...
Bones, Hoofs, Hair rags, Wool and Horns ...	38	36	2	...
Dairy ...	134	134	...	...
Flour ...	108	101	7	...
Golding, Electroplating, Condiments, Carpets ...	133	125	8	...
Hack-stable ...	79	79	...	...
Dyeing ...	51	50	1	...
Onions and Garlic ...	46	45	...	1
Oil Mill, & Oil storing ...	491	480	11	...
Lodging house ...	66	66	...	...
Markets ...	41	41	...	...
Meat Stalls & Butchers ...	234	202	32	...
Spirits, Turpentine & Rosin ...	161	161	...	...
Sweetmeat Bazaars, & Coffee hotels ...	368	351	17	...
Washing soiled clothes ...	202	199	3	...
Fish, Fins ...	18	18	...	...
Skins, Hides & Leather ...	122	121	1	...
Paddy boiling ...	1	1	...	...
Sugar, Sugarcandy ...	11	11	...	...
Catgut, Tallow, Offal, Blood, Bones ...	8	8	...	...
Pig-stye ...	6	6	...	...
Snuff ...	89	85	4	...
Cotton ...	23	23	...	...
Brick-kiln ...	3	...	3	...
Lime-kiln ...	32	30	2	...
Eating-house, Tea-shop ...	834	791	43	...
Total ...	4873	4596	155	122

## List of unwholesome articles of food destroyed during 1931.

Aerated water.	66 bottles.
Apples.	339
Appam.	971
Beef.	16½ lbs.
Berries.	520
Beans.	½ measure.
Biscuits.	36 lbs.
Brinjals.	413
Condensed Milk.	144 tins.
Cheese.	1026
Chocolate.	2678 tablets.
Cocoa.	1194 tins.
Cocoanuts.	137
Country Guava.	50
Dried fish	3 baskets.
Edili.	156
Eggs.	1360
Fish.	47 baskets.
Fresh herrings	159 tins.
Findon Hadlocks	12 tins.
Fruitsalad	19 cups.
Grapes.	15 bunches.
Groundnut seeds.	4 baskets.
Glaxo.	398 tins.
Hunters Beef drappings.	6 tins.
Herrings.	35
Jack fruits.	363
Keppered.	57 tins.
Lactogen.	143 tins.
Limes.	100
Mangoes.	4944
Masalavadai.	151
Melons.	195
Nestles M. Food.	142 tins.
Onions.	84½ vis.
Oranges.	5732
Pagoda.	3 vis.

List of unwholesome articles of food destroyed during 1931—*contd.*

Plantains.	4120
Pork	18 tins.
Potatoes.	95 vis
Rotten cabbages.	114
Stale fish.	96½ baskets.
Stale mutton.	26 viss & 1 seer.
Seetha fruits.	893
Sweets.	313
Stale.	70
Sugar.	4 vis.
Sweet cakes.	38
Tomatoes.	4091
Vomapodi.	1 seer 10 palams.

## STATEMENT OF NOTICES ISSUED AND DISPOSED OF TOGETHER WITH

Section or By-law.	Substance of Section or By-Law.	NOTICES.						No. cancelled.
		No. pending on 1st January 1931.	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	Failure to alter, repair and keep in order all house drains and all private latrines and cesspools ...	1	8	9	8	1	...	...
178 (4)	Occupying or allowing occupation of house without proper drainage ...	1	1	2	...	...	...	2
186	Failure to obey requisition to provide latrine or to remove latrine to another site and failure to keep latrines clean and in proper order ...	309	307	616	238	53	6	106
188	Failure to obey requisition to provide latrine for market, cattle stand or cart-stand, or to keep them clean and in proper order ...	...	1	1	...	...	...	...
189	Failure to construct latrines so as to screen persons using them from view ...	6	6	12	8	...	...	...
196 (a)	Failure to obey direction to collect and remove rubbish and filth accumulating on business premises. ...	...	...	...	...	...	...	...
202 (5)	Keeping rubbish or filth for more than twenty-four hours, etc. ...	4	34	38	31	3	...	...
206 (6)	Allowing sewage to flow in streets ...	7	46	53	43	3	...	2
260	Failure to obey requisition to repair, etc. tank or other place dangerous to passers-by or persons living in neighbourhood ...	3	11	14	6	1	...	4
264	Failure to obey requisition to fill up etc. tank or well, or drain off water, etc. ...	96	455	551	380	17	...	32
269	Failure to obey requisition to enclose, clear or cleanse untenanted premises ...	14	82	96	42	2	...	15
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 ...	10	74	84	52	3	...	7
272	Failure to obey requisition to lime-wash or otherwise cleanse building ...	76	550	626	535	3	...	4
273	Failure to obey requisition to execute work or take other action with respect to insanitary buildings ...	1091	3183	4274	2743	197	...	221
280 (a)	Unlawful keeping of pigs ...	...	...	...	...	...	...	...
282	Use of place as stable, cattle stand, etc. without license or contrary tax license ...	...	...	...	...	...	...	...
283	Repairs to or demolishing of stable, cattle-shed, etc. .	...	13	13	7	...	..	...





## THE STATEMENT OF PROSECUTIONS INSTITUTED DURING THE YEAR 1931

No. pending.	PROSECUTION.								No. pending.
	No. of prosecutions pending disposal on 1st January 1931.	No. instituted during the year.	Total.	Number convicted.	Fines imposed.	Number acquitted.	Number withdrawn.	No. in which parties were not found.	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
					Rs. A. P.				
1	...	1	1	...	...	...	1	...	...
...	...	13	13	7	102 0 0	...	3	...	3
...	44	176	220	122	1,713 12 0	2	43	...	53
...	...	1	1	1	25 0 0	...	...	...	...
...	5	26	31	21	76 0 0	...	5	...	5
...	...	1	1	...	...	...	1	...	...
...	2	10	12	4	9 0 0	5	2	...	1
...	...	3	3	...	...	...	3	..	...
...	6	9	15	14	55 0 0	...	1	...	...
...	3	82	85	62	29 14 6	...	1	...	22
...	...	2	2	...	...	...	2	...	...
1	...	8	8	5	9 4 0	...	3	...	...
...	3	5	8	...	...	...	8	...	...
...	51	459	510	348	2,711 0 0	1	52	...	109
...	...	1	1	1	7 8 0	...	...	...	...
...	31	316	347	269	242 0 0	7	23	...	48
...	...	1	1	1	5 0 0	...	...	...	...



Statement showing the number of cases treated in the Corporation Dispensaries during 1930—1931.

Serial No.	Name of the Dispensary.	Year in which the institution was opened	Total No. of cases treated.		Total No. of minor operations performed.	
			1930.	1931.	1930.	1931.
1	Royapuram Dispensary ...	1924	25,670	26,137	291	279
2	Washermanpet "	1913	1,01,023	101,690	830	805
3	Harbour Division "	1929	73,181	1,03,275	202	260
4	Mannady "	1923	86,992	38,579	562	534
5	Mafuskhan Garden "	1923	83,300	1,03,025	1204	451
6	Mint Street "	1923	91,268	96,730	1,278	1,502
7	George Town "	1919	1,00,602	1,07,145	404	495
8	Perambore "	1928	40,053	44,333	459	455
9	Pulianthope "	1922	68,164	75,170	354	1077
10	Vyasarpady "	1929	27,187	33,329	321	511
11	Baliah Naidu "	1899	91,492	95,375	2,361	2,268
12	Kosapet "	1929	32,470	43,831	345	401
13	Kilpauk "	1919	42,497	41,310	293	370
14	Nungambakkam "	1923	73,830	72,698	447	461
15	Chintadripet "	1909	98,558	1,08,660	674	720
16	Triplicane "	1918	1,05,733	1,17,547	491	481
17	Pudupakkam "	1924	1,05,287	1,09,579	1,020	833
18	Teynampet "	1921	32,612	40,279	279	400
19	Mylapore "	1924	1,14,686	91,410	632	597
20	Ayurvedic Dispensary for Women & Children, Thousandlights ...	1930	2,745	30,122	...	245
21	Siddha Dispensary, Chulai ...	1931	...	97,880	...	143
22	Unani Dispensary, Mambalam ...	1930	2,935	32,832	32	450

THE INFECTIOUS DISEASES HOSPITAL, TONDIARPET—(STATEMENTS.)

TABLE No. 1

Admission, discharge and death under various diseases during the year 1931.

	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.	Other Diseases.	Total.
Patients remaining in the Hospital on 31st December, 1930 at 12 Midnight	2	5	...	30	1	...	...	...	...	...	...	...	...	...	...	...	38
Admitted from 1st January to 31st December 1931	46	264	42	172	16	45	84	12	5	1	3	5	...	2	4	80	781
Total No. Treated	48	269	42	202	17	45	84	12	5	1	3	5	...	2	4	80	819
" No. Discharged	36	265	42	163	15	44	84	11	1	1	3	5	...	1	4	55	730
" No. Died	8	...	...	39	2	1	...	...	4	...	...	...	...	1	...	24	79
Mortality rate per cent.	16.7	...	...	19.3	11.7	2.2	...	...	80	...	...	...	...	50	...	39	9.6
Patients remaining in the Hospital on 31st December, 1931 at 12 Midnight	4	4	...	...	...	...	...	1	...	...	...	...	...	...	...	1	10
	Moribund Moribund																
	4 1																
	Moribund																
	5																

TABLE No. II.

No. of cases admitted classified according to various diseases during different months.

	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.	Other diseases.	Contacts.	Total.	Daily average.
January	9	35	8	88	4	5	1	...	3	...	...	...	...	...	...	11	19	183	51.8
February	3	49	4	19	2	2	11	10	...	...	...	...	...	...	1	16	17	134	42
March	6	81	11	13	...	...	14	...	1	...	...	...	...	...	1	7	16	150	58.2
April	4	38	4	8	...	...	17	...	...	...	1	...	...	1	...	7	11	91	34.6
May	4	6	5	32	3	3	31	...	1	1	...	...	...	...	...	7	6	99	29.2
June	1	6	5	1	...	5	3	...	...	...	...	...	...	...	...	4	1	26	15.9
July	3	8	...	3	...	10	1	...	...	...	1	...	...	...	...	4	4	34	7.4
August	...	13	2	8	...	8	1	1	...	...	...	2	...	...	...	3	4	42	10.4
September	4	7	2	...	3	5	1	...	...	...	...	1	...	...	1	5	3	32	12.05
October	6	7	...	...	2	3	4	...	...	...	...	2	...	...	1	6	4	35	10.4
November	...	6	...	...	...	1	...	...	...	...	1	...	...	1	...	7	3	19	9.2
December	6	8	1	...	2	3	...	1	...	...	...	...	...	...	...	3	4	28	11.5
Total. ...	46	264	42	172	16	45	84	12	5	1	3	5	...	2	4	80	92	873	24.4

TABLE III.

Admissions according to nationality, Age and Sex.

	Adults.		Children.		Total.
	Male.	Female.	Male.	Female.	
European and Anglo-Indian ...	6	4	2	9	21
Hindus ...	295	111	71	52	529
Mahamadans ...	30	6	1	...	37
Others ..	99	50	23	22	194
Total ..	480	171	97	83	781

TABLE IV.

Number of Beds available in the Hospital and their Distribution.

Sections.	Number of Wards.	Beds per Ward.	Total Beds.
Indian ...	2	24	48
Do. ...	1	20	20
Do. ..	7	4	28
European ...	4	2	8
Total ...	14	50	104

**TABLE V.**  
Showing the Vaccinal condition of patients admitted for Small-pox.

Age.	Vaccinated.										Un-vaccinated.				
	Vaccinated successfully with marks Visible.					Vaccinated with marks not Visible.					Total.				
	1	2	3	4	5	Total Admitted	Death	Mortality Per-cent.	Total admitted	Death	Mortality Per-cent.	Admission	Death.	Recovered.	Mortality per cent.
0-1	..	..	..	..	..	..	..	..	..	..	..	4	2	2	50
1-2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2-3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3-4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4-5	..	..	..	..	..	..	..	..	1	..	..	1	..	1	..
5-10	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..
10-20	2	2	1	2	..	7	..	..	5	..	..	12	..	2	50
20-40	3	..	4	3	1	11	..	..	4	1	25	15	1	3	25
40-60	..	..	..	..	..	..	..	..	3	1	33.3	3	1	..	..
60 & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	5	2	5	5	1	18	..	..	13	2	15.4	31	2	29	6.5
													6	9	40

TABLE VI.

Statement showing the incidence of Small-pox among the vaccinated and the unvaccinated.

All ages.	Cases.	Deaths.	Fatality rate per cent.
Among vaccinated ...	18	Nil.	Nil.
Among stated to have been vaccinated but with no scars visible ...	13	2	15.4
Among unvaccinated ...	15	6	40.0
Total ...	46	8	17.3

THE NATIONAL BUREAU OF HEALTH INVESTIGATION  
 DIVISION OF BACTERIOLOGY  
 WASHINGTON, D. C.

THE INFECTIOUS DISEASES HOSPITAL, KRISHNAMPET (Statements).  
TABLE No. I.

Admissions, discharges and deaths under various diseases during the year 1931.

	Small-pox.	Chicken-pox.	Measles.	Cholera.	Dysentery.	Diarrhoea.	Mumps.	Whooping Cough.	Pneumonia.	Enteric Fever.	Malaria.	Pyrexia of un- known origin.	Kala-Azar.	Pulmonary Tuber- culosis.	Secondary Syphi- lis.	Influenza.	Influenzal Pneu- monia.	Skin diseases.	Other diseases.	Contacts.	Total.
Patients remaining in the hospital on 31st December 1930 ...	2	2	...	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	8	37
Patients admitted from 1st January 1931 to 31st Decem- ber 1931 ...	34	163	23	183	9	27	...	...	...	...	...	...	...	1	2	...	...	...	40	72	554
Total No. Treated ...	36	165	23	199	9	27	...	...	...	...	...	...	...	1	2	...	...	...	49	80	591
No. Discharged ...	29	159	22	125	8	23	...	...	...	...	...	...	...	1	2	...	...	...	40	75	484
" Died ...	1	...	1	74	1	4	...	...	...	...	...	...	...	...	...	...	...	...	7	...	88
Mortality rate per cent ...	1.85	...	4.34	40.4	11.11	14.81	...	...	...	...	...	...	...	...	...	...	...	...	17.5	...	15.88
Patients remaining in the hospital on 31st December 1931 ...	6	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	5	19

TABLE No. II.

Distribution of admissions throughout the year 1931 in the Krishnampet Isolation Hospital

1931	Disease														Total	Daily Average.							
	Small-pox.	Chicken-pox.	Measles.	Cholera	Dysentery.	Diarrhoea.	Mumps.	Pneumonia	Enteric Fever	Malaria.	Pyrexia of unknown origin.	Kala-Azar.	Pulmonary Tuberculosis.	Secondary Syphilis.			Influenza.	Influenzal Pneumonia.	Skin Diseases	Other Diseases.	Whooping Cough.	Contacts.	Total.
January	1	11	5	83	2	2	..	..	..	..	..	..	..	..	..	..	..	10	..	23	138	28	
February	3	44	8	38	2	6	..	..	..	..	..	..	..	..	..	..	..	3	..	11	115	32	
March	8	36	5	20	..	2	..	..	..	..	..	..	..	..	..	..	..	2	..	12	86	22	
April	8	29	3	16	..	1	..	..	..	..	..	..	..	..	..	..	..	4	..	7	68	28	
May	..	6	..	15	1	2	..	..	..	..	..	..	..	..	..	..	..	6	..	2	32	10	
June	..	..	1	10	1	6	..	..	..	..	..	..	..	..	..	..	..	7	..	6	31	5	
July	..	3	..	..	3	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	8	3	
August	..	20	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	22	10	
September	2	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	8	4
October	2	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	2	10	6	
November	2	2	1	..	..	3	..	..	..	..	..	..	..	..	..	..	..	1	..	3	12	3	
December	8	8	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	..	4	24	8	
Total	34	163	23	183	9	27	..	..	..	..	..	1	2	..	..	..	..	40	..	72	55+	13	



TABLE No. III.  
Admissions according to Nationality, Sex and Age  
(Excluding Contacts for the year 1931).

Nationality.	Adults.		Children.		Total.
	Male.	Female.	Male.	Female.	
Europeans and Anglo-Indians ...	9	2	13	6	30
Hindus ...	154	100	25	14	293
Mahomadans ...	7	8	...	2	17
Others ...	73	40	13	16	142
Total ...	243	150	51	38	482

TABLE No. IV.  
Number of Wards and of Beds available in each Ward.

Name.	Number of beds.	Total.
Special Ward ...	3	3
General Ward ...	14	14
Male Ward ...	16	16
Female Ward ...	16	16
Block No. I ...	4	4
Block No. II ...	4	4
Total ...	57	57

TABLE No. V.  
Vaccinal Condition of Small-pox Patients admitted during 1931.

Total No. Admitted.	Vaccinated.		Unvaccinated.		Said to be vaccinated but no marks visible.	
	Cured.	Died.	Cured.	Died.	Cured.	Died.
34	19	1	6	...	8	...

## CONSERVANCY (Statements).

## Statement of Bullocks 1931.

Depots.	No. on 1-1-31	New additions.	No. Died.	No. on 1-1-32.	
A ...	82+1	New Bullocks—161	15	104	+ Denotes No. of condemned ani- mals at grass Farm.
B ...	132+2		28	150	
C ...	131+4		19	139+3	
D ...	108+2		23	105	
E ...	95+2		17	97+2	
F ...	85		15	88	
Total ...	633+11	161	117	683+5	

## RICE TRANSACTIONS.

Value of Stock on hand on 31-3-31	...	...	281	9	0
Purchased during the year 1931-32	...	...	73,613	0	0
			73,894 9 0		
Expenditure incurred for conveying, rice measuring Establishment, etc.	...	...	1,541	0	0
			75,435 9 0		
Sold during the year 1931-32 to the coolies	...	...	74,526	0	0
Issued to Lethal Chamber	...	...	240	8	0
Issued to Education Dept. for midday meals to pupils	...	...	674	7	8
Damaged in floods	...	...	15	3	7
			75,456 3 3		
			75,435 9 0		
			20 10 3		
		Gain Rs.	...	20	10 3

Statement of Sick Bullocks treated in the official year 1931.

Depots.	Sore neck.	Sprain.	Wounds.	Fits.	Debility & other cases.	Lymph-angitis.	Dis-location.	Intestinal catarrh.	Piroplasmiasis.	Trypanosomiasis.	Eye cases.	Foot and mouth.	T.B.	Nephritis.	Rheumatism.
A	...	13	27	14	2	11	1	...	...	2	...	17	...	...	1
B	...	39	116	...	14	36	...	...	...	..	...	56	...	...	...
C	...	35	9	...	...	109	2	9	...	...	...	55	...	2	...
D	...	96	47	..	36	...	...	3	3	...	...	32	...	...	...
E	...	58	13	2	2	19	...	...	6	...	1	90	1	...	...
F	...	52	21	...	52	16	...	...	2	...	14	7	14	...	...
Total	...	293	233	16	106	191	3	1	12	11	2	201	15	2	1

## Works of a Sanitary Nature.

Serial numbers.	Division.	Budget Heads.	Remarks.
<i>New Works—Latrines.</i>			
1	2	Extending the existing latrine to 15 seats in Rope Godown Paracheri ...	
2	22	Installing a convertible latrine of 12 seats at Chetput village ...	
3	2	Converting the existing sanded latrine into F.O.L. of 20 seats with bathing ghat in Masthan Coil Street ...	
4	3	Extension of F.O.L. of 15 seats in Mottai Garden ...	
5	3	Do. Maniganda Mudali Street ...	
6	28	Converting the existing latrine into F.O.L. of 40 seats with bathing ghat in Ramakrishnapuram ...	
7	20	Installing double seat F.O.L. for the station staff, Pudupet ...	
8	13	Installing F.O.L. of 4 seats at Frazer Bridge Road junction of Erusappa Mudali Street ...	
9	14	Construction of F.O.L. of 4 seats in Nyniappa Naick Street ...	
10	...	Converting the existing latrine into F.O.L. of 30 seats in Chucklipalayam ...	
11	10	Construction of F.O.L. of 6 seats in Shanmugharoya Mudali Street ...	
		Many other latrines are in progress ...	
<i>Bathing Fountains.</i>			
1	27	Constructing B.F. in Shaik Dawood Street ...	
<i>Other works.</i>			
1	21	Construction of shelter for coolies at Otteri Dumping ground ...	
2	...	Extending tipping platform near Krishnampet Incinerator ...	
<i>Drains.</i>			
1	26	Construction of water tables in Madah Streets, Triplicane ...	
2	16	Repairing anti-malarial channel and constructing tipping platform at DeMellow's Road junction of Puliathope Road ...	
3	9	Covering drain in Parish Venkatachala Iyer Street ...	
4	29	Construction of drain in Royapet High Road ...	
5	11	Construction of water table in Govindappa Naick Street.	
6	15	Do. in Ponnappa Chetty Street ...	
7	15	Do. in Edapalayam Street ...	
8	5	Covering drain with R.C. slabs in Ebramji Sahib from Angappa Naick Street ...	
9	29	Construction of masonry drain in Balu Mudali Street.	
10	22	Do. at the back of village Road ...	
11	21	Covering drain on both sides of Rajaratnam Street ...	
12	2	Providing water tables on both sides of Monegar Choultry Road ...	
13	11	Do. do. in 11th division ...	
14	13	Do. do. in 13th division ...	
15	21	Do. in Ponnappa Mudali Street ...	
16	21	Do. in Andiappa Mudali Street ...	

**ANTI-MALARIAL WORK—(STATEMENTS).**

**STATEMENT A.**

Statement showing the action taken re: cleaning of tanks, wells and ponds in the City of Madras during the year 1931.

No. of Notices served.	No. complied with						No. not complied with			No. reclaimed.				Amount collected.		No. of Prosecutions instituted.			Fines collected.		Remarks.					
	(a) By the party.			(b) By the Corporation at the cost of the owner.			Tanks.	Ponds.	Wells.	Tanks.	Ponds.	Wells.	By Corporation.	Private lands by Corporation at owners' cost.	Rs.	A. P.	Tanks.	Ponds.	Wells.	Amount.		Tanks.	Wells.			
286	49	578	149	21	517	128	18	1	9	10	60	8	1	...	1	...	1,746	8	2	23	5	9	...	1	0	Out of 37 Prosecutions instituted 2 were convicted and fined Rs. 0-8-0 each and the remaining 35 cases were withdrawn.

Division.

1 to 30

# NORTH RANGE (MALARIA SECTION H. D.) "B"

Statement showing the private tanks under departmental cleaning for the year 1931 on payment of the cost by the owners.

Serial No.	Register No.	Reference No.	Division No.	Locality.	Name and address of the owner.	Date of the work undertaken departmentally.	Details of the estimated cost.				Date of Payment.	Remarks.						
							Cleaning charges.	Oiling charges.	Supervision charges.	Total.								
							Rs.	A.	P.	Rs.	A.	P.						
1	...	H.D.1080/31	6	Krishnan Pagoda	K. A. Chakravathy Iyengar	25-4-31	11	...	...	2	12	13	12	0	260 dated 8-4-31			
2	...	83/264 (G)	3	160, Gollawar Agraharam Road	Munuswamy Mudaliar	1-5-31	5	8	...	1	6	14	0	10	dated 6-5-31			
3	...	68/264 (I)	3	Manraswami Coll. St. (Brahma-thertham)	Rajagopala Aiyar	18-6-31	11	...	...	2	12	13	12	0	81 dated 16-6-31			
4	...	70/264 (I)	3	do	do	18-6-31	11	...	...	3	12	13	12	0	...	4 coolies for one cleaning.		
5	155	H.D.280/31	4	118, Tiruvottiyur High Road	C. Mohan/dan Chetty	12-6-31	5	8	...	1	6	14	0	...	do			
6	157	...	4	do	do	13-6-31	5	8	...	2	0	8	0	...	...			
7	...	53/264 (I)	14	Chennakesava-perumal Temple	Rao Bahadur M. Saravana Mudaliar	30-6-31	16	0	...	4	0	20	0	91	dated 22-6-31			
8	...	65/264 (I)	6	Melkavayalar Temple	P. Rajasundaram Chettiar	6-7-31	4	8	...	2	0	10	0	82	dated 16-6-31			
9	165	56/264 (I)	4	111, Tiruvottiyur High Road	do	6-7-31	1	5	...	1	6	14	0	79	dated 16-6-31			
10	167	57/264 (I)	4	do	do	6-7-31	1	5	...	1	6	14	0	80	dated 20-6-31			
11	146	62/264 (I)	4	Vakkannatha Mudaly Street	do	6-7-31	1	5	...	1	6	14	0	81	dated 20-6-31			
12	164	41/264 (I)	4	4/140, Tiruvottiyur High Road	Rao Sahib P. Rameshchandra Chettiar.	6-7-31	1	5	...	1	6	14	0	16	dated 17-6-31			
13	166	42/264 (I)	4	141, do	do	6-7-31	1	5	...	1	6	14	0	...	...			
14	168	36/264 (I)	4	292/294 do	Myapoor Hindu Permanent Fund Ltd.	7-7-31	1	5	...	5	0	13	2	0	16	dated 2-7-31		
15	178	51/264 (I)	4	143, do	P. Kuppuswamy Chettiar	7-7-31	2	11	...	5	12	13	12	0	56	dated 30-6-31		
16	137	72/264 (I)	4	Vytilanatha Mudaly St.	Krishnaswamy Gramany	10-7-31	1	2	...	0	8	2	8	0	114	dated 3-7-31		
17	148	63/264 (I)	4	do	do	10-7-31	1	2	...	0	8	2	8	0	...	...		
18	147	64/264 (I)	4	do	G. Rama Rao	10-7-31	1	5	...	1	6	14	0	...	...			
19	148	67/264 (I)	4	do	do	10-7-31	1	5	...	1	6	14	0	...	...			
20	151	45/264 (I)	4	Tiruvottiyur High Road	Suryaprakas Rao Naidu	10-7-31	1	5	...	1	6	14	0	...	8	dated 6-7-31		
21	...	H.D.2056/31	4	196, Tiruvottiyur High Road	Administrator G. Madras, (Es-tate of P. Annachala Mudaliar)	10-7-31	1	5	...	1	6	14	0	...	41	dated 6-7-31		
22	134	17/264 (I)	4	Lalagutta	Iyyadurai Mudaliar	16-7-31	1	5	...	1	6	14	0	36	dated 6-1-31			
23	...	...	4	1/274, Tiruvottiyur High Road	Suryaprakas Rao Naidu	22-7-31	1	5	...	1	6	14	0	65	dated 17-7-31			
24	...	...	12	Krishnapura Naik Tank	Ramaswami Mudaliar	22-7-31	1	5	...	...	...	69	2	8	10	dated 7-5-31		
25	163	39/264 (I)	4	133, Tiruvottiyur High Road	P. Ramaswamy Pillay	25-7-31	1	5	...	1	6	14	0	38	dated 10-12-31			
26	162	1/264 (I)	4	Dharmasaja Coll Street	Myapoor Hindu Permanent Fund Ltd.	4-8-31	1	5	...	1	6	14	0	38	dated 13-7-31			
27	61	6/264 (I)	4	Elia Mudaly Street	do	4-8-31	1	5	...	1	6	14	0	17	dated 1-8-31			
28	173	45/264 (I)	4	Tiruvottiyur High Road	K. Pattabhiramiah Garu	8-8-31	1	5	...	1	6	14	0	102	dated 31-7-31			
29	174	47/264 (I)	4	do	do	8-8-31	1	5	...	1	6	14	0	...	...			
30	175	48/264 (I)	4	do	do	8-8-31	1	5	...	0	8	2	8	0	...	...		
31	176	49/264 (I)	4	do	do	8-8-31	1	5	...	0	8	2	8	0	...	...		
32	177	50/264 (I)	4	do	do	8-8-31	1	5	...	1	6	14	0	103	dated 31-7-31			
33	178	51/264 (I)	4	do	do	8-8-31	1	5	...	1	6	14	0	...	...			
34	163	7/264 (I)	4	Seni Amman Coll Street	Rao Bahadur M. Saravana Mudaliar.	8-8-31	1	5	...	1	6	14	0	44	dated 1-9-31			
35	49	88/264 (I)	4	Elia Mudaly Street	Murugesu Mudaliar.	8-8-31	1	5	...	1	6	14	0	47	dated 29-7-31			
36	...	...	16	Erukkanery Road	Saundara Amud P. D. Chaitanya	10-8-31	1	5	...	1	6	14	0	47	dated 29-7-31			
37	...	67/264 (I)	7	Katchawanan Temple	Secretary, Katchawanan Devasala nam Board.	24-8-31	6	33	0	...	8	4	41	4	0	65	dated 12-8-31, 102 dated 29-9-31, 88 dated 1-12-31, 98 dated 6-1-32, 181 dated 10-2-32	
38	...	H.D.4294/31	7	Sengalancor Pillayar Temple	K. Venkataraghavachary (Trustee)	28-8-31	4	22	0	4	0	32	8	0	82	dated 1-12-31, 178 dated 27-8-31		
39	159	H.D.4293/31	4	291, Tiruvottiyur High Road	M. Rangiah Chetty	3-9-31	1	5	...	1	6	14	0	...	...			
40	100	Do	4	Arni Rangian Street	Suryaswamy Mudaliar	3-9-31	1	5	...	1	6	14	0	...	...			
41	...	75/264 (I)	4	Elia Mudaly Street	do	31-8-31	1	5	...	1	6	14	0	...	...			
42	...	76/264 (I)	4	do	do	31-8-31	1	5	...	1	6	14	0	...	...			
43	...	85/264 (I)	4	Manappa Mudaly Street	do	31-8-31	1	5	...	1	6	14	0	...	...			
44	...	6/264 (I)	4	Seni Amman Coll Street	Krishnaswami Mudaliar	31-8-31	1	5	...	1	6	14	0	116	dated 11-8-31			
45	...	82/264 (I)	4	65, Gollawar Agraharam Road	M. G. Munuswamy Chetty	31-8-31	1	5	...	1	6	14	0	...	...			
46	...	23/264 (I)	3	Solanappan Street	do	1-9-31	1	5	...	1	6	14	0	...	...			
47	...	25/264 (I)	3	Arunachaleswarar Coll Street	do	31-8-31	1	5	...	0	8	2	8	0	...	...		
48	...	20/264 (I)	4	do	do	31-8-31	1	5	...	0	8	2	8	0	...	...		
49	208	21/264 (I)	4	do	do	31-8-31	1	5	...	0	8	2	8	0	...	...		
50	209	22/264 (I)	4	do	do	31-8-31	1	5	...	0	8	2	8	0	...	...		
51	210	23/264 (I)	4	do	do	31-8-31	1	5	...	0	8	2	8	0	...	...		
52	211	24/264 (I)	4	do	do	31-8-31	1	5	...	0	8	2	8	0	...	...		
53	212	25/264 (I)	4	do	do	31-8-31	1	5	...	0	8	2	8	0	...	...		
54	215	H.D.1597/31	2	Suryaswamy Chetty Street	M. K. Sahadri Iyer.	31-8-31	1	5	...	0	8	2	8	0	...	...		
55	...	H.D.1597/31	2	Manappa Mudaly Street	Seethachala Gramam	4-9-31	1	5	...	1	6	14	0	151	dated 1-9-31			
56	...	84/264 (I)	4	Nynappa Naik Street	do	4-9-31	1	5	...	1	6	14	0	102	dated 1-9-31			
57	...	86/264 (I)	4	do	do	4-9-31	1	5	...	0	8	2	8	0	...	...		
58	...	87/264 (I)	4	do	do	4-9-31	1	5	...	0	8	2	8	0	...	...		
59	54	26/264 (I)	4	Elia Mudaly Street	Varadacharya Chetty	14-9-31	1	5	...	1	6	14	0	74	dated 10-9-31			
60	...	54/264 (I)	15	Ekambareswarar Temple	R. K. Subramanya Iyer	14-9-31	8	16	0	...	2	12	13	12	0	7	dated 11-9-31	
61	189	19/264 (I)	4	Tiruvottiyur High Road	Messrs. Abhai Bhandari Anand & Co.	14-9-31	1	5	...	1	6	14	0	10	dated 9-9-31			
62	...	71/...	4	Thandavayya Mudali Street	C. Manava Chetty	24-9-31	1	5	...	1	6	14	0	106	dated 10-9-31			
63	160	...	4	Thandavayya Mudali Street	Sajja Muthuswamy Chetty	24-9-31	1	5	...	1	6	14	0	107	dated 16-9-31			
64	...	45/264 (I)	4	Elia Mudaly Street	Myapoor Hindu Permanent Fund	24-9-31	1	5	...	0	8	2	8	0	112	dated 16-9-31		
65	...	818&2/386 (I)	4	Manasram Pandya Lane	Karuppanna Chetty & Veeravagan Gramany.	24-9-31	2	11	0	...	2	12	13	12	0	95	dated 17-9-31	
66	...	71/264 (I)	2	Suryaswamy Chetty Street	Vasudeva Chetty	2-10-31	1	5	...	1	6	14	0	111	dated 1-7-31			
67	...	72/264 (I)	2	do	do	2-10-31	1	5	...	1	6	14	0	77	dated 1-10-31			
68	...	H.D.2624/31	4	Elia Mudaly Street	Sajja Munuswamy Chetty	3-10-31	1	5	...	0	8	2	8	0	26	dated 9-10-31		
69	214	H.D.4031/31	4	Arunachaleswarar Coll Street	Messrs. T. Namburam Chetty & Sons	12-10-31	1	5	...	1	6	14	0	...	...			
70	55	43/264 (I)	4	Elia Mudaly Street	Rejoth Gramany	14-10-31	1	5	...	1	6	14	0	89	dated 8-10-31			
71	...	44/264 (I)	4	do	do	14-10-31	1	5	...	1	6	14	0	43	dated 27-7-31			
72	126	68/264 (I)	4	Tiruvottiyur High Road	Rao Bahadur M. Saravana Mudaliar.	12-10-31	1	5	...	1	6	14	0	68	dated 7-10-31			
73	...	H.D.5031/31	9	25, Sahab Hazrat Street	M. Rangiah Chetty	16-10-31	1	5	...	0	8	2	8	0	...	...		
74	124	5/264 (I)	4	Seni Amman Coll Street	Rao Bahadur M. Saravana Mudaliar.	26-10-31	1	5	...	1	6	14	0	102	dated 12-10-31			
75	...	H.D.5229/31	4	do	do	30-11-31	1	4	0	...	1	0	0	0	...	...		
76	129	Do	4	do	M. Mahomed Mian Kowther	30-11-31	1	4	0	...	1	0	0	0	...	...		
77	130	Do	4	do	do	31-12-31	1	4	0	...	1	0	0	0	...	...		
78	126	7/264 (I)	9	Rama Naik Garden, Broadway	Ramaswamy Gramany	31-12-31	1	4	0	...</								

ГОДЪ ВЪСТАВЛЕНА СЪСТАВЪ СЪСТАВЪ СЪСТАВЪ

**SOUTH RANGE (MALARIA SECTION H. D.)**

Statement showing the private tanks under departmental cleaning for the year 1931 on payment of the cost by the owner.

Serial No.	Register No.	Reference No.	Division.	Locality.	Name and address of the owner.	Date of work undertaken (date and monthly).	Details of the estimated cost.						Date of Payment.	Remarks.			
							Cleaning charges.		Oiling charges.		Supervision charges.				Total.		
							Rs.	A.	Rs.	A.	Rs.	A.			Rs.	A.	Rs.
1	45/264	22	Harrington Road	Gopal Chetty	...	1	8	1	8	0	6	1	14	0	111 dated 1-4-31		
2	54/264	22	"Cutting" Anderson Road	Thiruvengoda Muthalar	...	2	11	0	...	1	6	5	14	0	11 dated 13-4-31		
3	H.D.C.	29	Blacks Garden, Mount Road	H. D. Cornish	...	2	12	12	0	...	2	12	12	0	67 & 24 dated 6-31		
4	65/264	22	Secretary, Madras Club	Whites Road	...	1	5	8	...	1	6	5	11	0	63 dated 19-6-31		
5	H.D.C.	29	81, Mount Road	Personal Asst to Surgeon General	...	2	11	0	...	2	12	13	12	0	83 dated 13-7-31		
6	H.D.C.	29	Greenways Road	Secretary, Adyar Club	...	...	...	...	...	...	...	...	...	...	...	...	
7	2381/31	...	...	Mashamoni Pillai	...	1	5	8	...	1	6	6	14	0	6 dated 4-7-31		
8	81/264	18	Kandawami Coll Street	G. A. Rajagopal Naidu	...	1	5	8	...	1	6	6	14	0	9 dated 14-7-31		
9	82/264	23	Nainampy Nacker Street	Trustees	...	2	11	0	...	2	12	13	12	0	4 dated 19-7-31		
10	1208/31	24	Thiruvattarpet Temple Tank	Trustees	...	1	1	0	...	1	2	1	4	0	113 dated 6-7-31		
11	13/264	25	Chepauk	Warden, Victoria Hostel	...	1	5	8	...	1	6	5	11	0	85 dated 1-7-31		
12	55 & 56/264	28	Madavaperumal Coll Street	Trustees	...	1	5	8	...	1	6	5	11	0	155 dated 29-7-31		
13	387/31	29	Mount Road	Military Grass Farm	...	2	12	0	...	2	12	14	12	0	159 dated 14-7-31		
14	41/264	22	Kodambakkam High Road	Chokalinga Mudaliar	...	2	12	0	...	2	12	14	12	0	159 dated 14-7-31		
15	65/264	22	Breaches Road	St. James' Home M. V. Seshayya	...	1	6	8	...	1	6	5	11	0	58 dated 14-7-31		
16	13/7/31	19	Breaches High School for Girls	Miss M. Syles	...	1	22	0	...	5	8	27	8	0	55 dated 14-7-31		
17	59 & 60/264	30	Brookes Road	Kahaleswar Temple Tank	...	4	22	0	...	5	8	27	8	0	57 dated 25-7-31		
18	65/264	17	Angalammen Coll Street	Trustees, Angalammen Tank	...	1	5	8	...	1	6	6	14	0	38 dated 31-7-31		
19	11/264	19	41, Sydenhams Road	Cremetial Gardens S. K. P. D.	...	2	11	0	...	2	12	13	12	0	98 dated 25-7-31		
20	46 & 50/264	22	Nungambakkam High Road	Pentland Gale S. G. Sabagopa	...	1	5	8	...	1	6	6	14	0	119 dated 3-8-31		
21	6/264	21	Purasawalkam	Sri Gaugadeswarar Coll	...	8	41	0	...	11	0	35	0	0	151 dated 20-7-31		
22	8/264	26	Virepachchewar Coll Street	Trustees	...	1	cootes.	2	0	0	8	5	0	0	99 dated 4-8-31		
23	2335/31	26	Triplacane	Trustees: Parthasarathy Temple	...	...	...	...	...	...	...	100	0	0	128 dated 6-8-31 & 32 dated 26-11-31	1st & 2nd instalments	
24	62/264	22	10, Whites Road	Raja of Venktagiri "Ositorre House"	...	4	22	0	...	5	8	27	8	0	108 dated 5-8-31		
25	55/264	28	Valluwar Coll Street	Thangavelu Pillai (Trustee)	...	1	5	8	...	1	6	6	14	0	89 dated 8-8-31		
26	4232/31	22	Mc. Nicholas Road	T. Numbernall Chetti	...	4	cootes.	4	0	1	0	5	0	0	113 dated 18-8-31		
27	4463/31	20	Venkatachelia Pillai Street	T. Numbernall Chetti	...	4	cootes.	4	0	1	0	5	0	0	77 dated 20-8-31		
28	55/264	22	General Posters Road	Ledd Govindas	...	2	11	0	...	2	12	13	12	0	110 dated 22-8-31		
29	10/264	19	S. P. Pillai Street	P. Manickavelu Mudaliar	...	3	11	0	...	3	12	13	12	0	41 dated 1-9-31		
30	4463/31	20	"Prince Villa", Monteth Road	M.G.M. Chidambaram Chetti	...	3	11	0	...	3	12	13	12	0	125 dated 29-9-31		
31	4172/31	25	Coonn Loch	Ex. Engr., South Presy. Division	...	2	11	0	...	2	12	20	0	0	165 dated 21-8-31		
32	1684/31	22	Mcunt Road, St. George Cathedral.	Ex. Engineer	...	1	5	8	...	1	6	5	11	0	52 dated 2-9-31		
33	81/264	20	Vaiyulka Raja Lane	Raja Gramani	...	1	5	8	...	1	6	5	11	0	41 dated 8-9-31		
34	81/264	20	College Road "Moonat Gardens"	Mother Superior	...	4	22	0	...	5	8	27	8	0	89 dated 23-9-31		
35	64/264	22	22 A, Peters Road	Mahaaja of Jayapure	...	...	...	...	...	...	...	50	0	0	8 dated 23-9-31		
36	4195/31	29	Kodambakkam High Road	Raja of Srivargana	...	2	11	0	...	3	10	18	2	0	64 dated 2-9-31		
37	181/31	21	Peters Road	"Toc. H. (on India) Alwinder"	...	2	11	0	...	3	8	10	12	0	187 dated 5-10-31		
38	4293/31	29	Mowbrays Road	Linnth Gardens	...	2	11	0	...	2	12	13	12	0	103 dated 24-9-31		
39	13/264	19	Mowbrays Gate Road	Messrs. C. Kesel Dass	...	2	11	0	...	2	12	13	12	0	82 dated 28-9-31		
40	66/264	22	College Road Eccleston House	K. Ethirajammal	...	1	5	8	...	1	6	5	11	0	127 dated 12-10-31		
41	67/264	22	Nungambakkam High Road	Mrs. D. M. Kay	...	1	5	8	...	1	6	5	11	0	111 dated 12-10-31		
42	92/264	22	Ramanujam Chetty Street	Sponing Garden Azha Batcha Sub	...	1	5	8	...	1	6	5	11	0	160 dated 26-10-31		
43	4295/31	20	Kasa Major Road	Pratt Chetty	...	...	...	...	...	...	...	14	26	4	0	50 dated 28-10-31	
44	4296/31	20	S. P. Pillai Street	H. M. Krishnan Sub	...	1	5	8	...	1	6	5	11	0	176 dated 4-11-31		
45	4297/31	20	S. P. Pillai Street	Wesleyan Mission Principal	...	5	ponds.	...	...	5	8	27	8	0	74 dated 27-10-31		
46	66/264	22	116, Nungambakkam	Benney & Co.	...	4	22	0	...	5	8	27	8	0	108 dated 5-11-31		
47	4297/31	20	Indian Carriage Club	Keeth Lodge Mr. Chudhala	...	...	...	...	...	...	...	13	12	0	136 dated 19-11-31		
48	66/264	22	Edmans Road	V. S. Ranganathan Pillai	...	4	22	0	...	5	8	27	8	0	137 dated 19-11-31		
49	46/66/31	29	Edmans Road	Raja of Palapuram	...	4	22	0	...	5	8	27	8	0	56 dated 27-11-31		
50	45/264	25	Venkatacongum Pillai Street	Venkatasubbarai Chetty	...	2	11	0	...	2	12	13	12	0	86 dated 17-11-31		
51	52/264	25	Cathedral Road, "Waterton"	Mr. Robert Lee	...	...	...	...	...	...	...	3	7	0	124 dated 19-11-31		
52	6/31/31	29	Murray's Gate Road	S. K. P. D. Charles	...	1	5	8	...	1	6	5	11	0	23 dated 25-11-31		
53	90/264	22	Cathedral House	Justice Wallace	...	1	5	8	...	1	6	5	11	0	41 dated 25-11-31		
54	...	30	Greenways Road	Trustee	...	...	...	...	...	...	...	16	6	14	0	103 dated 25-11-31	
55	...	32	Harrington Road	Kollathammen Coll	...	1	5	8	...	1	6	5	11	0	137 dated 9-12-31		
56	...	21	5, Police Commissioner's Office	Sriramanulu Naidu	...	1	5	8	...	1	6	5	11	0	107 dated 30-9-31		
57	286/31	26	Triplacane High Road	Hafiz Ahmed Khan Mosque	...	3	0	...	...	3	0	12	0	0	32 dated 9-4-31		
58	...	29	Vacant Land Behind 5 Ponds Road...	Baalyakoralu Naidu	...	1	5	8	...	1	6	5	11	0	32 dated 9-4-31		
59	...	20	12, Police Commissioner's Office	...	...	...	...	...	...	...	...	2	12	0	134 dated 25-4-31		
60	...	22	Pachappas Hostel	Warden	...	2	11	0	...	2	12	13	12	0	...		
61	...	25	Mount Road	Ex. Engineer Govt. House	...	4	22	0	...	5	8	27	8	0	...		
62	...	25	do.	do.	...	4	22	0	...	5	8	27	8	0	...		
63	...	25	do.	do.	...	4	22	0	...	5	8	27	8	0	...		
64	...	22	Whites Road	Ex. Engineer Hobart Training School.	...	1	5	8	...	1	6	5	11	0	32 dated 9-4-31		
65	...	25	Lankerbham, Cherpauk	Ex. Engineer, Engineering College, Compound.	...	1	5	8	...	1	6	5	11	0	32 dated 9-4-31		
66	...	22	St. George Cathedral Road	St. George Cathedral	...	...	...	...	...	...	...	0	12	0	32 dated 9-4-31		
67	...	22	1, Harrington Road	Dhanakoti Mudali	...	...	...	...	...	...	...	2	12	0	134 dated 25-4-31		
68	...	26	Parthasarathy Temple Tank	Trustees	...	...	...	...	...	...	...	5	8	0	...		
											Total	...	1077	15	6		

at Rs. 4-6-0 per pond.



COLLEGE STAGE CHEMISTRY II D.

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Reaction	Observations	Chemical Equation	Reaction Type
1. $Zn + 2HCl \rightarrow ZnCl_2 + H_2$	Bubbles of gas evolved.	$Zn + 2HCl \rightarrow ZnCl_2 + H_2$	Single displacement
2. $Fe + 2HCl \rightarrow FeCl_2 + H_2$	Bubbles of gas evolved.	$Fe + 2HCl \rightarrow FeCl_2 + H_2$	Single displacement
3. $Mg + 2HCl \rightarrow MgCl_2 + H_2$	Bubbles of gas evolved.	$Mg + 2HCl \rightarrow MgCl_2 + H_2$	Single displacement
4. $2FeSO_4 \rightarrow Fe_2O_3 + SO_2 + SO_3$	Reddish-brown solid formed.	$2FeSO_4 \rightarrow Fe_2O_3 + SO_2 + SO_3$	Decomposition
5. $2KClO_3 \rightarrow 2KCl + 3O_2$	Bubbles of gas evolved.	$2KClO_3 \rightarrow 2KCl + 3O_2$	Decomposition
6. $2H_2O_2 \rightarrow 2H_2O + O_2$	Bubbles of gas evolved.	$2H_2O_2 \rightarrow 2H_2O + O_2$	Decomposition
7. $Ca + 2HCl \rightarrow CaCl_2 + H_2$	Bubbles of gas evolved.	$Ca + 2HCl \rightarrow CaCl_2 + H_2$	Single displacement
8. $Ca + 2H_2O \rightarrow Ca(OH)_2 + H_2$	Bubbles of gas evolved.	$Ca + 2H_2O \rightarrow Ca(OH)_2 + H_2$	Single displacement
9. $Ca + 2HNO_3 \rightarrow Ca(NO_3)_2 + H_2$	Bubbles of gas evolved.	$Ca + 2HNO_3 \rightarrow Ca(NO_3)_2 + H_2$	Single displacement
10. $Ca + 2H_2SO_4 \rightarrow CaSO_4 + H_2$	Bubbles of gas evolved.	$Ca + 2H_2SO_4 \rightarrow CaSO_4 + H_2$	Single displacement

Medical Inspection of Corporation Schools.

STATEMENT I.

1931-32

No.	Defects.	Boys.						Girls.						Remarks.			
		Entrants.		Regulars.		Total of Entrants and Regulars.		Entrants.		Regulars.		Total of Entrants and Regulars.					
		No. Defective.	Percentage.		No. Defective.	Percentage.		No. Defective.	Percentage.		No. Defective.	Percentage.					
			1931-32	1930-31		1931-32	1930-31		1931-32	1930-31		1931-32	1930-31				
1	Malnutrition	1534	19.46	20.24	2227	22.41	24.15	3761	21.10	123	2.70	7.46	292	5.20	10.05	415	4.08
2	Dirty head, body and Nails	1191	15.11	18.91	1275	12.83	15.75	2466	13.28	616	13.51	17.00	209	9.06	12.90	1125	11.05
3	Teeth and Mouth	1292	16.39	21.50	1798	18.09	21.66	3096	17.34	859	18.81	24.08	1340	23.84	26.25	2199	21.60
4	Nose and Throat	1852	23.49	24.16	2501	25.17	24.28	4353	24.43	706	15.48	15.26	1043	18.56	19.63	1749	17.18
5	Eye disease	220	2.79	2.63	311	3.13	3.71	521	2.98	128	2.81	3.98	150	2.67	3.43	278	2.73
6	Vision	52	0.66	1.04	178	1.79	1.23	250	1.29	7	0.15	0.21	11	0.24	0.23	21	0.21
7	Ear disease	106	1.34	1.68	166	1.67	1.78	272	1.53	78	1.71	1.69	161	2.86	1.41	239	2.35
8	Hearing	5	0.06	0.09	9	0.09	0.12	14	0.08	5	0.11	0.05	11	0.24	0.09	19	0.19
9	Speech	31	0.39	0.48	64	0.64	0.62	95	0.53	10	0.22	0.16	11	0.20	0.17	21	0.21
10	Circulatory System	91	1.15	1.25	130	1.31	2.05	221	1.24	17	0.37	1.17	44	0.78	1.53	61	0.60
11	Tuberculosis	5	0.06	0.07	20	0.20	0.29	35	0.14	9	0.20	0.38	10	0.18	0.29	19	0.19
12	Respiratory System	379	4.81	2.93	356	3.58	2.68	735	4.12	238	5.22	3.27	254	4.52	3.69	492	4.83
13	Abdominal Organs	166	2.11	2.56	199	2.00	3.53	365	2.05	25	0.55	0.72	48	0.85	0.81	73	0.72
14	Bones and Joints	269	3.41	3.12	372	3.74	3.36	611	3.60	12	0.26	0.36	33	0.59	0.23	45	0.44
15	Nervous and Psychic systems	18	0.23	0.22	31	0.31	0.21	49	0.27	9	0.20	0.10	8	0.14	0.09	17	0.17
16	Infectious and Contagious diseases	1024	12.99	11.32	1321	13.29	11.84	2345	13.16	430	9.43	9.80	524	9.32	9.13	954	9.37
17	Other diseases and Defects	716	9.08	10.67	916	9.22	10.42	1632	9.16	275	6.03	7.06	489	8.70	5.33	764	7.60
18	Vaccination	26	1.21	1.17	...	...	...	95	0.53	83	1.82	1.03	...	...	...	83	0.82
19	Deformities	40	0.51	0.39	54	0.54	0.41	94	0.53	13	0.23	0.21	14	0.24	0.17	27	0.27

## STATEMENT II—1931-32.

## Height and Weight Table.

Age.	Boys.		Girls.		Remarks.
	Average height in inches.	Average weight in pounds.	Average height in inches.	Average weight in pounds.	
4 years ...	35.67	25.67	37.76	32.65	
5 " ...	37.18	31.48	40.50	32.70	
6 " ...	41.19	33.71	41.15	33.16	
7 " ...	43.68	36.05	42.94	37.06	
8 " ...	45.53	38.85	43.90	41.53	
9 " =	46.81	41.98	47.21	43.93	
10 " ...	48.51	45.71	48.68	48.43	
11 " ...	49.81	48.67	50.81	52.00	
12 " ...	51.85	54.24	53.00	59.70	
13 " ...	53.04	57.84	54.72	62.44	
14 " ...	55.16	61.67	56.61	73.80	
15 " ...	55.36	64.39	58.14	79.77	
16 " ...	60.16	73.99	58.70	86.34	
17 " ...	63.06	86.87	63.85	78.50	One girl.
18 " ...	63.10	93.30	63.30	91.40	Three girls.
19 " ...	60.50	99.00	59.00	84.00	One girl.
		one Boy			
20 " ...	...	...	59.00	85.00	Two girls.
21 " ...	...	...	57.00	72.00	One girl.
22 " ...	...	...	61.00	71.00	
23 " ...	...	...	60.25	88.75	One girl.
24 " ...	...	...	60.91	105.50	Do.
26 " ...	...	...	59.00	77.00	Do.
27 " ...	...	...	60.00	88.00	Do.
28 " ...	...	...	59.75	111.00	Do.
30 " ...	...	...	59.00	123.50	Two girls.
38 " ...	.....	...	57.00	178.00	One girl.

## APPENDIX TO STATEMENT I.

1931-32.

Group.	No. on Roll.		Average Daily Attendance.		No. Examined.		No. Defective.		Percentage Defective.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
Entrants ...	19,936	12,438	16,266	9,390	7883	4,560	4,620	2,607	58.61	57.17
Regulars ...					9938	5,620	5,920	3,359	59.57	59.77
Total ...	19,936	12,438	16,266	9,390	17,821	10,180	10,540	5,966	59.14	58.61

## TREATMENT TABLE.

1931-32.

Corporation Schools.	No. sent to Corporation Dispensaries.	No. referred to General Hospital	No. referred to Ophthalmic Hospital.	No. referred to Tuberculosis Institute.	No. referred to Gosha Hospital.	No. referred to Govt. Royapuram Hospital (Leprosy out-patient Department.)	No. of parents met.	No. of re-visits paid to School for following up.	Remarks.
Boys ...	8,956	534	223	25	...	92	4,129	173	
Girls ...	4,088	457	63	14	8	13	388	133	
Total ..	13,044	991	296	39	8	105	4,517	306	

TEETH AND MOUTH TABLE.

1931-32.

No.	Defects.	Entrants.						Regulars.						Total defective of Boys and Girls.	
		Boys.			Girls.			Boys.			Girls.				
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.		
1	Dirty Teeth	...	367	140	1	247	...	66	436	107	4	390	...	107	1440
2	Dental Caries	...	315	222	14	500	...	103	546	437	12	710	...	138	2071
3	Stomatitis	...	714	714	...	172	171	1	925	925	...	244	243	1	2055
4	Tongue Tie	...	2	...	2	...	...	...	8	...	8	3	...	3	13
5	Oral Sepsis	...	13	13	...	4	4	...	18	18	...	11	10	1	46
6	Other Conditions	...	3	1	2	1	...	1	2	...	1	2	1	1	8

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

NOSE AND THROAT TABLE.

1931-32.

No.	Defects.	Entrants.						Regulars.						Total defective of Boys and Girls.
		Boys.			Girls.			Boys.			Girls.			
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	
1	Nasal Catarrh	121	121	...	185	185	...	82	82	...	146	146	...	534
2	Nasal Polypus	...	...	...	...	...	...	5	...	5	4	...	4	9
3	Enlarged Tonsils	1613	1530	83	494	320	174	2122	2035	87	857	538	890	5086
4	Granular Pharynx	20	20	...	2	2	...	24	24	...	10	10	...	56
5	Adenoids	16	...	16	1	...	1	38	...	38	3	...	3	58
6	Enlarged Cervical glands.	400	79	...	18	18	...	608	148	...	25	25	...	1051
7	Bifid & Elongated Uvula	14	5	...	14	11	1	15	3	...	36	33	1	79
8	Other Conditions	...	...	...	...	...	...	5	2	1	...	...	...	5

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

EYE-TABLE.

1931-32.

No.	Defects.	Entrants.						Regulars.						Total defective of Boys and Girls.
		Boys.			Girls.			Boys.			Girls.			
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Ophthalmic Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Ophthalmic Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Ophthalmic Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Ophthalmic Hospital.	
1	Conjunctivitis	60	60	...	51	...	73	73	...	35	35	...	219	
2	Blepharitis	...	...	...	1	...	2	...	...	2	...	...	5	
3	Granular lids	27	26	1	21	18	41	43	1	37	20	17	129	
4	Corneal opacity	26	...	14	9	4	40	...	30	9	...	5	81	
5	Corneal ulcer	...	...	...	...	...	...	...	...	1	...	1	2	
6	Staphylocoma	...	...	...	...	...	...	...	...	1	...	1	2	
7	Dacryocystitis	...	...	...	...	...	...	...	...	3	...	...	3	
8	Cataract	1	...	1	...	...	4	...	4	1	...	1	6	
9	Xerosis	54	45	3	25	1	85	50	14	34	21	3	198	
10	Stye	13	13	...	9	...	16	8	2	12	12	...	50	
11	Squint	33	...	14	7	...	43	...	17	15	...	...	98	
12	Keratitis	...	...	...	1	...	2	...	2	...	...	...	3	
13	Ptosis	4	...	4	...	...	6	...	6	...	...	...	10	
14	Other conditions	6	1	2	5	5	5	...	2	3	...	...	19	
15	Defective Vision	52	...	41	7	7	178	80	98	14	...	14	251	

N. B.—Cases not amenable to or not requiring treatment have been omitted from treatment columns.

OTHER DISEASES TABLE.

1981-82.

No.	Defects.	Entrants.				Regulars.				Total defective of boys and girls.				
		Boys.		Girls.		Boys.		Girls.						
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.		No. referred to General Hospital.			
1	Worm	340	340	...	219	219	...	350	350	...	370	370	...	1,279
2	Wounds, Cuts, Ulcers, etc.	188	188	...	41	41	...	292	292	...	41	41	...	562
3	Undescended Testis	82	...	...	...	...	...	32	...	...	...	...	...	64
4	Phimosis	56	...	56	...	...	...	90	...	90	...	...	...	146
5	Enlarged Groin glands	45	8	...	...	...	...	93	93	...	...	...	...	138
6	Pyrexia	42	42	...	22	22	...	41	41	...	36	36	...	141
7	Boils and abscesses	37	37	...	29	29	...	54	54	...	28	28	...	148
8	Keloids	5	...	...	...	...	...	3	...	...	...	...	...	8
9	Warts	...	...	...	2	...	...	2	1	1	4	...	...	8
10	Leucodermic patches	12	...	...	9	...	...	26	...	...	10	...	...	57
11	Lipoma	1	...	1	...	...	...	1	...	1	...	...	...	2
12	Cyst	2	...	2	...	...	...	...	...	...	...	...	...	2
13	Obesity	...	...	...	...	...	...	4	...	...	...	...	...	2
14	Whitlow	...	...	...	1	...	...	...	...	...	...	...	...	4
15	Salivary Fistula	...	...	...	...	...	...	...	...	...	1	...	...	1
16	Alopecia	2	...	...	...	...	...	4	2	1	...	...	...	6
17	Orchitis	...	...	...	1	...	...	1	1	...	...	...	...	1
18	Burns	...	...	...	...	...	...	...	...	...	...	...	...	1
19	Tumours	...	...	...	1	...	...	...	...	...	3	...	...	3
20	Cellulitis	...	...	...	1	...	...	...	...	...	...	...	...	1
21	Other Conditions	8	4	...	1	...	...	11	6	3	...	...	...	19

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



Statement showing the details of defects found on Medical  
Inspection of Schools 1931-32.

No.	System or Organs.	Details.	No. Defective.				Total defective of Boys and Girls.
			Entrants.		Regulars.		
			Boys.	Girls.	Boys.	Girls.	
1	Ear	1. Otorrhoea ...	96	61	143	95	395
		2. Otitis ...	8	18	21	68	115
		3. Other Ear Diseases ...	2	...	4	...	6
		4. Defective Hearing ...	5	5	9	14	33
2	Heart and circulation.	Heart Disease (a) Organic...	11	4	21	13	49
		(b) Functional	24	...	60	5	89
3	Lungs.	2. Anaemia ...	57	13	53	27	150
		1. Bronchitis (acute and chronic) ...	375	232	338	247	1192
4	Tuberculosis.	2. Other Non-Tuberculous Diseases (Asthma, etc.)	9	6	18	7	40
		1. Pulmonary (a) Definite ...	...	...	1	3	4
		(b) Suspected ...	4	4	12	6	26
		2. Non-Pulmonary (a) Glands ...	1	4	7	1	13
		(b) Spine ...	...	...	...	...	...
		(c) Hip ...	...	...	...	...	...
		(d) Bones & Joints ...	...	...	...	...	...
(e) Skin ...	...	...	...	...	...		
5	Abdominal Organs.	(f) Other Forms ...	...	1	...	...	1
		1. Enlarged Spleen ...	64	5	54	10	133
		2. " Liver ...	...	1	1	4	6
		3. " Spleen and Liver ...	1	...	4	1	6
		4. Hydrocele (a) Vaginal ...	24	...	29	...	53
		(b) Cord ...	...	...	3	...	3
		(c) Infantile ...	5	...	7	...	12
		5. Hernia (a) Inguinal ...	29	...	48	...	77
		(b) Umbilical ...	25	...	15	1	41
		(c) Femoral ...	...	...	...	...	...
		6. Stomach conditions ...	1	5	6	2	14
7. Bowel conditions ...	20	7	33	25	85		
8. Other conditions ...	2	3	...	...	5		
9. Generative disorders in girls ...	...	4	...	5	9		
6	Bones and Joints.	1. Bones (a) Fractures ...	1	...	3	...	4
		(b) Caries ...	...	...	...	...	...
		(c) Deformities ...	2	1	1	2	6
		(d) Diseases ...	3	...	2	1	6
		2. Joints (a) Dislocations & sprains ...	2	2	2	4	10
		(b) Diseases ...	...	1	...	5	6
		(c) Deformities ...	7	...	9	...	16
		3. Rickets (a) General ...	3	...	8	...	11
		(b) Deformed Chest... ..	257	10	365	21	653
		7	Nervous System	1. Organic disease (Palsies etc.) ...	3	4	6
8	Psychic System.	2. Functional disorders ...	5	3	10	2	20
9	Deformities.	1. Mentally defective ...	10	4	15	4	33
		General Deformity ...	...	...	...	...	...
		(a) Spinal Deformity ...	4	1	6	1	13
		(b) Talipes ...	6	3	5	2	16
		(c) Shortened Limbs ...	4	...	15	...	19
		(d) Congenital Dislocation Hip ...	2	...	1	...	3
		(e) Ankylosis, Joints ...	2	1	2	1	6
		(f) Amputated Limbs ...	...	...	1	1	2
		(g) Genu Varum & Valgum ...	4	...	7	...	11
		(h) Supernumerary Fingers ...	3	3	3	...	9
		(i) Flat Foot ...	2	...	3	3	8
(j) Syndactily ...	...	...	3	1	4		
(k) Dwarf ...	1	...	...	...	1		
(l) Other conditions ...	10	4	8	5	27		

OTHER DISEASES TABLE.

1981-32.

No.	Defects.	Entrants.						Regulars.						Total defective of boys and girls.
		Boys.			Girls.			Boys.			Girls.			
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to General Hospital.	
1	Worm	340	340	...	219	219	...	350	350	...	370	370	...	1,279
2	Wounds, Cuts, Ulcers, etc.	188	188	...	41	41	...	292	292	...	41	41	...	562
3	Undescended Testis	82	...	...	...	...	...	32	...	...	...	...	...	64
4	Phimosis	56	...	56	...	...	...	90	90	90	...	...	...	146
5	Enlarged Groin glands	45	8	...	...	...	...	93	93	...	...	...	...	139
6	Pyrexia	42	42	...	22	22	...	41	41	...	36	36	...	141
7	Boils and abscesses	37	37	...	29	29	...	54	54	...	28	28	...	118
8	Keloids	5	...	...	...	...	...	3	3	...	...	...	...	8
9	Warts	...	...	...	2	2	...	2	2	1	4	4	...	8
10	Leucodermic patches	12	...	...	9	9	...	26	26	...	10	10	...	57
11	Lipoma	1	...	1	...	...	...	1	1	1	...	...	...	2
12	Cyst	2	...	2	...	...	...	...	...	...	...	...	...	2
13	Obesity	...	...	...	...	...	...	4	4	...	...	...	...	4
14	Whitlow	...	...	...	1	1	...	...	...	...	...	...	...	1
15	Salivary Fistula	...	...	...	...	...	...	...	...	...	1	1	...	1
16	Alopecia	2	2	...	...	...	...	4	4	1	...	...	...	6
17	Orchitis	...	...	...	1	1	...	1	1	...	...	...	...	1
18	Burns	...	...	...	...	...	...	...	...	...	...	...	...	1
19	Tumours	...	...	...	1	1	...	...	...	...	...	...	...	1
20	Celutitis	...	...	...	1	1	...	...	...	...	3	3	...	3
21	Other Conditions	8	4	...	...	...	...	11	11	3	...	...	...	19

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

Statement showing the details of defects found on Medical  
Inspection of Schools 1931-32.

No.	System or Organs.	Details.	No. Defective.				Total defective of Boys and Girls.
			Entrants.		Regulars.		
			Boys.	Girls.	Boys.	Girls.	
1	Ear	1. Otorrhoea ...	96	61	143	95	395
		2. Otitis ...	8	18	21	68	115
		3. Other Ear Diseases ...	2	...	4	...	6
		4. Defective Hearing ...	5	5	9	14	33
2	Heart and circulation.	Heart Disease (a) Organic...	11	4	21	13	49
		(b) Functional ...	24	...	60	5	89
3	Lungs.	2. Anaemia ...	57	13	53	27	150
		1. Bronchitis (acute and chronic) ...	375	232	338	247	1192
4	Tuberculosis.	2. Other Non-Tuberculous Diseases (Asthma, etc.) ...	9	6	18	7	40
		1. Pulmonary (a) Definite ...	...	...	1	3	4
5	Abdominal Organs.	(b) Suspected ...	4	4	12	6	26
		2. Non-Pulmonary (a) Glands ...	1	4	7	1	13
		(b) Spine ...	...	...	...	...	...
		(c) Hip ...	...	...	...	...	...
		(d) Bones & Joints ...	...	...	...	...	...
		(e) Skin ...	...	...	...	...	...
		(f) Other Forms ...	...	1	...	...	1
		1. Enlarged Spleen ...	64	5	54	10	133
		2. " Liver ...	...	1	1	4	6
		3. " Spleen and Liver ...	1	...	4	1	6
		4. Hydrocele (a) Vaginal ...	24	...	29	...	53
		(b) Cord ...	...	...	3	...	3
(c) Infantile ...	5	...	7	...	12		
5. Hernia (a) Inguinal ...	29	...	48	...	77		
(b) Umbilical ...	25	...	15	1	41		
(c) Femoral ...	...	...	...	...	...		
6. Stomach conditions ...	1	5	6	2	14		
7. Bowel conditions ...	20	7	33	25	85		
8. Other conditions ...	2	3	...	...	5		
9. Generative disorders in girls ...	...	4	...	5	9		
6	Bones and Joints.	1. Bones (a) Fractures ...	1	...	3	...	4
		(b) Caries ...	...	...	...	...	...
		(c) Deformities ...	2	1	1	2	6
		(d) Diseases ...	3	...	2	1	6
		2. Joints (a) Dislocations & sprains ...	2	2	2	4	10
		(b) Diseases ...	...	1	...	5	6
		(c) Deformities ...	7	...	9	...	16
		3. Rickets (a) General ...	3	...	8	...	11
		(b) Deformed Chest ...	257	10	365	21	653
		7	Nervous System	1. Organic diseases (Palsies etc.) ...	3	4	6
8	Psychic System.	2. Functional disorders ...	5	3	10	2	20
9	Deformities.	1. Mentally defective ...	10	4	15	4	33
		General Deformity ...	...	...	...	...	...
		(a) Spinal Deformity ...	4	1	6	1	12
		(b) Talipes ...	6	3	5	2	16
		(c) Shortened Limbs ...	4	...	15	...	19
		(d) Congenital Dislocation Hip ...	2	...	1	...	3
		(e) Ankylosis, Joints ...	2	1	2	1	6
		(f) Amputated Limbs ...	...	...	1	1	2
		(g) Genu Varum & Valgum ...	4	...	7	...	11
		(h) Supernumerary Fingers ...	3	3	3	...	9
		(i) Flat Foot ...	2	...	3	3	8
		(j) Syndactily ...	...	...	3	1	4
		(k) Dwarf ...	1	...	...	...	1
(l) Other conditions ...	10	4	8	5	27		

## Statement of Following up work done showing the results of Medical advice, 1931-1932.

No.	Headings.	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 ...	...	323	605	108	
2	Teeth & Mouth.	Dirty teeth ...	5*	...	88	...	*Cleaned by a dentist.
		Caries teeth ...	10†	72‡	21	20	†Extracted. ‡Filled up or fallen out being replaced by healthy teeth.
		Stomatitis ...	...	501	198	163	
		Gingivitis ...	...	1	...	...	
		Tongue Tie ...	1	...	...	...	
3	Nose & Throat.	Nasal Catarrh and Rhinitis. ...	...	105	2	4	
		Nasal Polypus ...	1	...	...	...	
		Enlarged Tonsils ...	38	567	675	58	
		Granular Pharynx... ..	...	14	...	...	
4	Eye Diseases ...	Conjunctivitis ...	...	104	3	...	
		Xerosis ...	...	25	...	...	
		Granular lids ...	...	14	22	...	
		Stye ...	...	9	...	...	
		Blepharitis ...	...	3	...	...	
		Cataract ...	2	...	...	...	
		Dacryo-cystitis ...	1	...	...	...	
		Defective Vision ...	10(a)	13(b)	13(c)	8(d)	(a) wore glasses 6; could not purchase glasses due to poverty 4; b, c, d took Cod-liver Oil, Milk, etc.
5	Ear Diseases ...	Otitis ...	...	37	...	...	
		Otorrhoea ...	...	119	47	11	
		Mastoid abscess ...	1	...	...	...	
		Polypus Ear ...	1	...	...	...	
						1	
6	Circulatory System.	Anaemia ...	...	30	35	1	
		Functional diseases heart. ...	...	2	1	1	
		Organic diseases of the heart. ...	...	...	...	9	
7	Tuberculosis ...	Pulmonary—					
		(a) Suspicious ...	...	11	7	8	
		(b) Definite ...	...	...	...	...	4 (left the school),
8	Respiratory Diseases.	Bronchitis ...	...	241	9	1	
		Bronchial Asthma. ...	...	...	17	...	
9	Abdominal Organs.	Enlarged Spleen ...	...	55	35	2	
		" Liver ...	...	...	1	...	
		" Spleen and liver. ...	...	5	1	...	
		Inguinal Hernia ...	3	2§	...	...	§Wearing Truss
		Umbilical " ...	1	...	...	...	
		Diarrhoea ...	...	7	...	...	
		Dysentery ...	...	9	...	...	
		Intestinal colic ...	...	9	...	...	
		Retention of Urine. ...	1	...	...	...	
		Dysmenorrhoea ...	...	1	...	...	
		Nephritis ...	...	1	...	...	

Statement of Following up work done showing the results of medical advice 1931-1932.—*contd.*

No.	Headings.	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.
10	Bones & Joints.	Rickety Chest ... Fracture clavicle ...	... 1	26 ...	14 ...	... ...	X'rayed and set up at General Hospital.
11	Infectious and Contagious Diseases.	Scabies ... Eczema ... Leprosy ...	... ... ...	1145 66 3	31 30 28	1 1 37	9 left school. 15 refused. Indifferent 13. Parents improved 3.
		Ringworm ...	...	58	22	...	
		Lichen ...	...	13	...	...	
		Dermatitis ...	...	1	...	...	
		Malaria ...	...	76	20	...	
		Hookworm ...	...	6	33	1	
		Whooping Cough... ..	...	22	...	...	2 left school.
		Mumps ...	...	7	...	...	
		Filariasis ...	...	...	1	...	2 not undergoing treatment.
		Pruritis ...	...	1	...	...	
		Phemphigus ...	...	1	...	...	
		Gonorrhoea ...	...	2	...	...	1 left the school.
		Enteric fever ...	...	1	...	...	
		Influenza ...	...	2	...	...	
12	Other diseases and defects.	Worms ... Wounds, cuts, ulcers etc. Boils and abscesses. Pyrexia ... Leucodermic patches. Phimosi ... Whitlow ... Cellulitis ...	... ... ... ... ... 46 ... ... ...	655 151 61 33 2 ... 1 1	... ... ... ... ... ... ... ...	... ... ... ... ... ... ... ...	
13	Nervous and Psychic systems.	Palsies ... Epilepsy ...	... ...	... ...	1 2	1 4	

## Statement of Following up work done showing the results of Medical advice, 1931-1932.

No.	Headings.	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 ...	...	323	605	108	
2	Teeth & Mouth.	Dirty teeth ...	5*	...	88	...	*Cleaned by a dentist.
		Caries teeth ...	10†	72‡	21	20	†Extracted.
		Stomatitis ...	...	501	198	163	‡Filled up or fallen out being replaced by healthy teeth.
		Gingivitis ...	...	1	...	...	
		Tongue Tie ...	1	...	...	...	
3	Nose & Throat.	Nasal Catarrh and Rhinitis. ...	...	105	2	4	
		Nasal Polypus ...	1	...	...	...	
		Enlarged Tonsils ...	38	567	675	58	
		Granular Pharynx... ..	...	14	...	...	
4	Eye Diseases ...	Conjunctivitis ...	...	104	3	...	
		Xerosis ...	...	25	...	...	
		Granular lids ...	...	14	22	...	
		Stye ...	...	9	...	...	
		Blepharitis ...	...	3	...	...	
		Cataract ...	2	...	...	...	
		Dacryo-cystitis ...	1	...	...	...	
		Defective Vision ...	10(a)	13(b)	13(c)	8(d)	(a) wore glasses 6; could not purchase glasses due to poverty 4; b, c, d took Cod-liver Oil, Milk, etc.
5	Ear Diseases ...	Otitis ...	..	37	...	...	
		Otorrhoea ...	...	119	47	11	
		Mastoid abscess ...	1	...	...	...	
		Polypus Ear ...	1	...	...	...	
6	Circulatory System.	Anaemia ...	...	30	35	1	
		Functional diseases heart. ...	...	2	1	1	
		Organic diseases of the heart. ...	...	...	...	9	
7	Tuberculosis ...	Pulmonary—					
		(a) Suspicious ...	...	11	7	8	
		(b) Definite ...	...	...	...	...	4 (left the school).
8	Respiratory Diseases.	Bronchitis ...	...	241	9	1	
		Bronchial Asthma. ...	...	...	17	...	
9	Abdominal Organs.	Enlarged Spleen ...	...	55	35	2	
		" Liver ...	...	...	1	...	
		" Spleen and liver. ...	...	5	1	...	
		Inguinal Hernia ...	3	2§	...	...	§Wearing Truss
		Umbilical " ...	1	...	...	...	
		Diarrhoea ...	...	7	...	...	
		Dysentery ...	...	9	...	...	
		Intestinal colic ...	...	9	...	...	
		Retention of Urine. ...	1	...	...	...	
		Dysmenorrhoea ...	...	1	...	...	
		Nephritis ...	...	1	...	...	



## WATER ANALYSIS (STATEMENTS.)

Table I.—Showing the work done at the Laboratory during 1931.

Chemical Examination	...	4266
Bacteriological Examination	...	2328
Total	...	6594

Table II.—Showing the Monthly average Lake Level and Rainfall at Red Hills Lake in 1931.

Months.	Lake level expressed in feet.	Rainfall expressed in inches.	Remarks.
January	65.87	0.20	
February	65.39	Nil	Total Rainfall in 1930 75.29
March	64.04	Nil	" " 1931 56.12
April	62.85	1.72	
May	62.60	0.70	
June	61.80	2.85	
July	61.38	4.99	
August	62.97	2.73	
September	63.16	4.96	
October	64.26	8.60	
November	64.49	16.78	
December	64.47	12.59	
Average	63.61	4.68	



Table III—Showing the Bacteriological Results for 1931.

1931 Months.	Red Hills Lake.		Kilpauk end of R. W. conduit.		Chlorinated Raw water.		Filtrates from Beds.		Filtered water from Central con- duit & Test Tap.			Distribution system.		Remarks.
	L. F. in 5c.c. and upwards. per c.c.	Total colonies per c.c.	L. F. in 5cc and upwards. per c.c.	Total colonies per c.c.	L. F. in 60 c.c. & upwards. per c.c.	Total colonies per c.c.	L. F. in 60 c.c. & upwards. per c.c.	Total colonies per c.c.	L. F. in 60 c.c. & upwards. per c.c.	Total colonies per c.c.	L. F. in 60 c.c. & upwards. per c.c.	Total colonies per c.c.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
January ...	100%	900	100%	940	100%	220	48.1%	420	0%	650	14.3%	520		
February ...	* ...	...	100%	840	90.9%	270	47.4%	430	18.2%	570	33.3%	620		
March ...	0%	1,000	66.6%	950	100%	270	33.3%	530	4.8%	620	0%	760		
April ...	100%	800	92.9%	870	91.7%	240	34.6%	480	42.9%	470	25%	480		
May ...	100%	820	88.9%	870	100%	210	46.0%	480	16.7%	520	0%	590		
June ...	100%	840	88.9%	850	100%	190	47.0%	420	16.7%	530	16.7%	490		
July ...	100%	1,160	77.8%	990	100%	290	32.7%	550	41.2%	530	40.0%	400		
August ...	100%	1,200	60.0%	1,070	100%	220	18.4%	610	20.0%	610	40.0%	590		
September.	100%	1,090	100%	880	100%	220	15.0%	590	41.2%	550	33.3%	440		
October ...	66.6%	1,030	100%	900	100%	250	35.8%	510	16.7%	620	33.3%	650		
November.	* ...	...	57.1%	1,030	100%	220	15.4%	560	40.0%	510	0%	710		
December.	100%	1,000	42.9%	1,070	100%	250	22.2%	560	14.3%	660	7.5%	470		
Average ...	86.7%	984	81.3%	938	98.6%	238	33.0%	512	22.7%	570	25.9%	560		

\* Samples were not collected.

Table IV.—Showing the Chemical Results for 1931 (expressed in parts per 100,000).

1931	Red Hills Lake.			Kilpauk end of R. W. Conduit.			Chlorinated Raw-water.			Filtrates from Beds.			Filtered water from Central conduit & Test Tap.			Distribution system.		
	Ammoniacal Nitrogen.	Albuminoid Nitrogen.	Oxygen absorbed.	Ammoniacal Nitrogen.	Albuminoid Nitrogen.	Oxygen absorbed.	Ammoniacal Nitrogen.	Albuminoid Nitrogen.	Oxygen absorbed.	Ammoniacal Nitrogen.	Albuminoid Nitrogen.	Oxygen absorbed.	Ammoniacal Nitrogen.	Albuminoid Nitrogen.	Oxygen absorbed.	Ammoniacal Nitrogen.	Albuminoid Nitrogen.	Oxygen absorbed.
Months.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
January ...	0-002	0-031	0-123	Trace	0-040	0-141	...*	...	...	0-010	0-027	0-085	0-012	0-021	0-108	0-003	0-023	0-072
February...	...*	...	...	Trace	0-035	0-139	0-001	0-029	0-110	0-008	0-028	0-090	0-007	0-022	0-096	0-007	0-020	0-082
March ...	0-002	0-022	0-122	0-002	0-032	0-128	0-001	0-031	0-093	0-006	0-022	0-093	0-007	0-023	0-094	0-003	0-021	0-072
April ...	Trace	0-034	0-082	0-002	0-044	0-145	0-003	0-040	0-123	0-016	0-030	0-139	0-012	0-024	0-114	0-002	0-026	0-083
May ...	0-002	0-050	0-138	0-001	0-052	0-159	0-002	0-052	0-145	0-026	0-032	0-136	0-033	0-037	0-109	0-004	0-036	0-101
June ...	0-002	0-037	0-180	0-001	0-056	0-152	0-004	0-045	0-114	0-027	0-032	0-154	0-025	0-032	0-111	0-012	0-034	0-080
July ...	Trace	0-048	0-133	0-006	0-055	0-140	0-004	0-050	0-130	0-025	0-036	0-142	0-025	0-038	0-118	0-007	0-040	0-080
August ...	0-002	0-033	0-133	0-006	0-031	0-153	0-002	0-035	0-128	0-019	0-024	0-173	0-017	0-024	0-119	0-015	0-020	0-076
September.	0-001	0-032	0-173	0-010	0-031	0-154	0-002	0-028	0-143	0-020	0-024	0-180	0-021	0-028	0-147	0-014	0-021	0-096
October ...	Trace	0-026	0-165	0-002	0-028	0-141	0-003	0-027	0-125	0-020	0-022	0-176	0-018	0-023	0-130	0-010	0-018	0-133
November.	...*	...	...	0-003	0-025	0-121	0-002	0-025	0-107	0-014	0-018	0-130	0-013	0-019	0-102	0-004	0-020	0-120
December.	Trace	0-021	0-143	0-007	0-021	0-110	0-001	0-022	0-105	0-009	0-016	0-088	0-011	0-013	0-081	0-003	0-012	0-073
Average ...	0-001	0-033	0-139	0-003	0-038	0-140	0-002	0-035	0-120	0-017	0-026	0-132	0-017	0-025	0-111	0-007	0-024	0-089

\* Samples were not Collected

*Table V.*—Showing the determined dose (according to Sims-wood-head Field Test) and the applied dose of chlorine for raw water.

1931 Months.	Parts per million.		Remarks.
	Determined dose.	Applied dose.	
January ...	1.0	1.5	Till 13-8-1931.
February ...	1.1	1.5	
March ...	1.1	1.5	
April ...	1.1	1.5	
May ...	1.0	1.5	
June ...	1.2	1.5	
July ...	1.0	1.5	
August ...	1.0	1.5	
September ...	0.9	1.0	
October ...	0.9	1.0	
November ...	0.9	1.0	
December ...	0.9	1.0	

*Table VI.*—Showing the Length of Runs of Filters at work, during 1931:

Bed No.	Total No. of Runs during the year.	Total No. of days.	Average No. of days per Run.	Remarks.
1	5	243	49	
2	5	244	49	
3	7	249	36	
4	5	174	35	
5	5	259	52	
6	5	250	50	
7	6	229	38	
8	5	240	48	
9	5	255	51	
10	4	248	62	
11	7	210	30	
12	6	241	40	
13	6	239	40	
14	6	263	44	
15	4	271	68	
16	3	221	74	
17	4	222	56	
	Average life of a filter.		46 days per Run.	

*N.B.*—Average worked out to the nearest integer.

Table VII.—Showing the quantity of water filtered during the year 1931.

Bed No.	Quantity of water expressed in million gallons filtered at		Total quantity of water filtered in million gallons.	Remarks.
	4" vertical and below per hour.	6" to 8" vertical and below per hour.		
1	8.00	407.50	415.50	
2	5.00	410.00	415.00	
3	10.00	416.00	426.00	
4	14.00	269.00	283.00	
5	1.00	454.50	455.50	
6	9.50	432.00	441.50	
7	4.00	389.00	393.00	
8	9.00	404.50	413.50	
9	3.00	398.00	401.00	
10	4.00	442.00	446.00	
11	18.00	336.00	354.00	
12	18.00	379.00	397.00	
13	0.75	348.25	349.00	
14	5.00	449.00	454.00	
15	0.00	478.20	478.20	
16	60.00	411.32	471.32	
17	0.00	510.00	510.00	
	Total quantity ...		7103.52	

**REPORT ON THE WORKING OF THE CHILD WELFARE SCHEME  
CORPORATION OF MADRAS FOR THE YEAR ENDING  
31st DECEMBER 1931.**

There has been a remarkable increase in the work turned out by the staff of the Child Welfare Scheme in the various branches of its activities, during the year under review. To take an instance, in Ante-Natal work which forms an important part of the activities of the Scheme, the out-door activities of Health Visitors have met with a success and response which is unprecedented. Out of a total of 13,315 pre-maternity cases registered, 9,442 expectant mothers sought medical advice and treatment in the Child Welfare Centres.

The 82 midwives of the C. W. S. have attended on 13,514 labour cases during the year under review *i. e.*, each midwife had attended on an average 165 labour cases. The work of a midwife does not cease with the management of labour and the birth of the child. She has to visit the mother and the child daily for the next ten days and see that both emerge as healthy individuals from the puerperal period. Only 50 out of the 82 midwives actually conduct labour, the rest being employed in attending to post-natal work for ten days. While the numbers are constant, the individuals change and work by turns. The average, therefore, should be worked out for 50 midwives on 13,514 labour cases including those taken over from barber midwives and those sent to Hospitals and this works out to 270 per midwife per year. If, however, the total number of labour cases actually conducted by the midwives alone, which is 10,449, is taken into consideration, the average works out to 208 per midwife, per year.

On financial consideration substitutes were not appointed in short vacancies of a month and less caused by midwives and Health Visitors going on leave. Work was carried on without extra cost; the consequence being that very often Centres had to work under great disadvantages.

One difficulty experienced in ante-natal work is the registering of pre-maternity cases. At present this is done by the Health Visitors as and when they meet with such cases in their divisional rounds. There is an element of chance in this method of registration. A half yearly census of the expectant mothers in the city ought to be undertaken and each Health Visitor provided with a list of the expectant mothers residing in the divisions in which each works. Unless this is done by a separate staff, the work of the Health Visitors is not likely to be comprehensive.

Incidentally, such a census will prevent the rich middle classes availing themselves against rules of the free medical and maternity aid offered by the Corporation only to those expectant mothers whose husbands earn Rs. 100 and less per mensem. At present, there is no means to check the entries made under this head by the relatives of the expectant mothers in the Registers at the Centres. It is suspected that a large percentage of those whose income exceeds Rs. 100 get free maternity aid.

The Government in their Order No. 1160 L. & M. dated 1st April 1932 have stated that the Director of Public Health has pointed out that free milk and hot baths do not constitute child welfare, that personal instruction to each mother as she brings her child is inadequate and that the work of the child welfare section should be reformed and placed on a more modern and educative basis. The various points raised have been borne in mind in working out the scheme.

**PERSONAL.**

Mrs. D. Devanesen, Lady Superintendent, was on leave from 6-1-1931 to 10-5-1931 and Mrs. H. V. Kamalammal, Lady Doctor, Triplicane, Centre acted in the vacancy. Miss. M. P. Smith acted in the Triplicane Centre.

### WORK OF THE STAFF.

The total number of visits paid by the 13 Lady Doctors rose to 15,766 as against 14,975 in 1930 (*Vide* statement VII). The Lady Doctors treated 4,124 morbid cases (puerperal) as against 3,884 of the previous year. The number of women and children treated at the out-patients clinics was 2,37,285 as against 2,02,441 of the previous year. The average daily attendance of women and children at the out-patients clinics in all the Centres was 684 as against 600 in 1930. The total number of visits paid by the Health Visitors was 1,48,160 as against 1,27,320 in the previous year and the total number of pre-maternity cases registered by them was 13,315 as against 11,292 in 1930. Of these 9,442 expectant mothers actually attended the centres for medical advice and treatment as against 8,540 in the previous year. The increase in the number of expectant mothers who sought advice is a measure of the greater appreciation of the ante-natal work done by the C. W. S. The outlook of these women is doubtless changing due to the persistent efforts of the Health Visitors.

During the year under review, 13,514 cases of labour which is 52 per cent. of the total number of births in the city came under the care of the Scheme as against 49 per cent. in the previous year. Of these 10,449 cases were actually conducted by the midwives, 1,821 cases were taken over after the barber midwife had conducted the labour and 1,244 cases were sent to the various maternity hospitals in the city. The latter cases were mostly complicated ones which could be dealt with only in Hospitals. The rest which were normal cases had to be sent to hospitals on humane grounds and at the request of the patients themselves as in some instances, there was no accommodation while, in others, there was no-body to attend on the destitute mother. In the absence of a Maternity Home, the only course left open was to get these normal cases admitted into hospitals. Of the 10,449 labour cases, 2,077 were Mohamedans (*Vide* Statement VII). There are, at present, 31 Health Visitors and 82 Midwives in the Scheme.

### ANTE-NATAL WORK.

The total number of pre-maternity cases registered, as has been already stated, was 13,315 as against 11,292 in 1930. The response of the expectant mothers to this line of activity in the Scheme has been remarkable. No less than 9,442 expectant mothers which is roughly 70 per cent. of the registered cases sought medical advice and treatment. The Lady Doctors examine the expectant mothers and treat them after the examination according to the nature of each case. The expectant mothers are requested to attend the Centres once a month during the first six months of pregnancy, once a fortnight during the seventh and eighth months and once a week during the last month.

Very often expectant mothers with acute toxæmia of pregnancy come under the observation of the Scheme. These patients require ante-natal and post-natal treatment in hospitals rather than at a Child Welfare Centre 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 before confinement. The C. W. S. cannot be a substitute for hospitals where alone a strict dietetic treatment and watchful nursing necessary for such diseases of pregnancy can be enforced and obtained. However, there have been cases of toxæmia expectant mothers unwilling to seek treatment in a hospital. Such persons will have to be forcibly removed to hospitals. But the Corporation is not vested with power by any Act of Legislation to adopt any such co-ercive measure. It therefore so happens that certain patients are admitted into the hospitals at the eleventh hour in a moribund condition, in spite of the vigilant antenatal work of the Child Welfare Scheme. In a few instances, at the request of the relatives, the patients are handed over to private medical practitioners.

This aspect of ante-natal work requires detailed investigation and careful consideration. The Council has appointed recently an Ad Hoc Committee to report on the working of the Child Welfare Scheme. The working

of the scheme in respect of the pre-natal work will also receive consideration by the Committee.

#### CASES OF ABORTION.

The total number of abortions treated during the year under review was 274 as against 257 in the previous year. Of these 109 were conducted by the Staff, 19 were taken over after the barber midwives had taken part and 146 difficult cases were sent to Hospitals (*Vide* Statement VI).

#### MATERNAL MORTALITY.

Out of a total of 13,514 labour cases which came under the observation of the scheme, 82 were cases of maternal mortality of which 62 occurred among complicated cases sent to hospitals, 9 among cases which first came under observation but subsequently were handed over to private medical practitioners at the request of the relatives and 3 came to the notice of the Scheme first but later were taken over by "Vydiars" at the request of the relatives. This leaves only 8 deaths which actually took place while under the care of the Scheme (*vide* Statement IV)

#### INFANTILE MORTALITY.

There is a decline in the infantile mortality rate which is 139.5 per mille as against 157.2 of the previous year. This is the lowest on record. Of the 12,600 labour cases which came under observation, 23 were twin births; and the actual number of births were 12,623. Of these 418 were still births; of the live births 1,703 died during their first year of life (*vide* Statement VIII) and 463 died within the first ten days owing to their low vitality. The deaths were largely due to intestinal disorders (365), fevers (314), respiratory disease (216), nervous disorders (130), small-pox (35) etc. (*vide* Statement IX).

#### AMBULANCE SERVICE.

The total number of calls answered by the Ambulance was 581 as against 459 of the previous year.

#### FREE MILK SUPPLY.

805 babies received free milk as against 717 of the previous year. The average daily attendance was 471.4 as against 427.1 of the last year.

Babies who are given free milk are selected with great care as to their circumstances. Under no circumstance is it given to babies whose parents are not poor, nor is poverty the only condition imposed. From among the poor babies, those who come under any of the following are selected;

- (1) Motherless babies ;
- (2) Twins and triplets; the poor and ill-nourished mothers.
- (3) Babies whose mothers suffer from breast abscess and from grave constitutional diseases like anaemia, tuberculosis, heart disease etc., where breast feeding is contraindicated or impossible;
- (4) Babies of destitute mothers who do not have sufficient milk owing to want of nourishment.

Free milk is given to deserving babies. No child welfare work of any description can omit in a city such an important item of work as the distribution of free milk to the very poor and absolutely needy infants. Milk is the staple food for a growing baby during its first year of life and while an infant therefore is solely dependent on the mother's milk and where breast feeding is not satisfying or is impossible, it is only humane that child welfare workers should offer that infant cow's milk in addition or instead. The duty of the child welfare worker lies undoubtedly in preventing the child dying of starvation.

### BATHING OF CHILDREN.

During the year under review, 1,37,394 warm baths were given as against 1,18,824 in the previous year and on an average 376 children were bathed in all the Centres as against 309 of the previous year (*Vide* Statement XI) it is mostly milk-babies, one year and below, who are bathed and if children above a year and below five who attend the centres are badly in need of baths, they are also bathed. Baths to the latter group are optional but are made compulsory to milk-babies. The mothers are taught how to bathe their babies under the supervision of the nurse. The preventive value of baths to babies is undeniable, particularly in skin diseases.

Without bathing of infants, child welfare work will be incomplete. In the City of Madras there are numerous slums where water supply is inadequate and sanitary conditions are far from satisfactory and to the children living in such slums, a warm bath with soap is a luxury. Under such circumstances, mere talk on personal cleanliness of babies will be ineffective. Baths in the centres are object-lessons to the illiterate and ignorant mothers and at the same time they serve to promote the health of the babies who are reared under most trying unhygienic conditions.

### HEALTH PROPAGANDA WORK.

542 lectures were delivered at the various Child Welfare Centres as against 454 of the previous year. Of these 195 lectures were delivered with the aid of Magic Lantern as against 185 of the previous year. There were 11 lectures with cinema films as against 6 of last year. There were 336 out-door lectures. The average attendance was 52.

Three Divisional Health Exhibitions in which C. W. S. participated were held in the 24th, 26th and 29th divisions during the year under review. The public appreciated these exhibitions by attending in large numbers. The day set apart for ladies was particularly popular.

The present staff of Lady Doctors have been on the whole doing very appreciable work in the field and educating the indigent and illiterate mothers has been from the beginning a part of their work. They go into the hearts of slums and give talks on hygiene and on various subjects relating to maternity and child welfare in addition to the Cinema and Magic lantern lectures given by them in the Centres which procure good attendance of women and children listening with rapt attention. In the out-patients clinics, relevant advice to each mother as she brings her child is given as a routine practice; but, owing to the large number of patients, such talks are brief and limited. But this deficiency, is more than compensated by the talks given by the Health Visitors in their homes, the Cinema and Magic lantern lectures and the out-door lectures in the interior of slums given by the Lady Doctors.

### THE CITY HEALTH AND BABY WEEK.

The City Health and Baby Week was celebrated for a week commencing from 13th January 1931 at the S. I. A. A. grounds under the joint auspices of the Corporation of Madras and the National Health Association of Southern India.

The Maternity and Child Welfare section consisted of the following :

1. Out-patient clinics.
2. Ante-Natal clinics.
3. Milk depot.
4. Baby stall.
5. Clean Mid-wifery Room

The most interesting item in the programme of the exhibition was the Baby Show which was held on the 16th January 1931. The Baby competition was opened to all both rich and poor. Nearly 500 babies competed. The judging of babies was held in a separate enclosure and lasted from 8 to 11 A. M. Dr. (Mrs.) Monahan, Dr. (Miss) P. Samuel, Mrs. Hensman, Mrs.



Hannen Angelo, Dr. P. Sadasivan and Dr. Lakshminarayana took considerable pains in judging the babies. Each baby was given a yard of cloth. The mothers were fed free by the proprietor of the Arya Bhavan restaurant.

In the evening at 5-15 P. M. Mrs. Conran Smith was kind enough to distribute the prizes to the babies and mothers. 64 babies and 4 mothers received prizes of which 45 belonged to the Child Welfare Scheme.

Special prizes were given for the following :—

1. Best baby of the whole show.
2. Best Muslim baby.
3. Best Adi Dravida baby.
4. Best Anglo-Indian baby
5. Best Indian Christian baby
6. Best European baby
7. Best Brahmin baby.
8. Best Non-Brahmin baby.
9. Best baby of the Child Welfare Scheme.
10. Best Twins and Triplets
11. Best Indian baby
12. Best Nursing Mother.

#### GOSHA DAY.

The sixth day was specially set apart for ladies as Goshā Day at which several prominent ladies graced the occasion with their presence. All the stalls in the Exhibition were in the hands of the ladies on that day. There was a very large gathering of women from 8 A.M. to 6 P.M.

Srimathi Alemalu Mangathayarammal, M.L.C., lectured to the ladies on Hygiene and Infant welfare.

#### THE LAST DAY.

Her Excellency visited the show and distributed the prizes to various departments. Three medals were awarded to the Child Welfare Scheme.

- |                    |                       |
|--------------------|-----------------------|
| 1. Gold medal ...  | for Baby Stall.       |
| 2. Silver medal... | for Milk Depot.       |
| 3. Silver medal... | for Ante-Natal Stall. |

Corporation of Madras. }  
Ripon Building. }  
Madras. 18-8-'32. }

D DEVANESEN,  
*Lady Superintendent.*  
Child Welfare Scheme.

## CHILD WELFARE STATEMENTS.

## STATEMENT I.

Showing the cases of labour which came under the observation of the staff of the Child Welfare Scheme from January to December 1931 with comparative statements for the years 1918 to 1930.

Period.	Centres.	How Conducted.			Total Cases.	Caste.		Remarks.
		By Nurses of the C. W. S.	Taken over after Barber Women conducted labour.	Taken to Hospitals.		Maho-madan.	Non-Maho-madan.	
From 1st January to 31st December 1931 ...	Triplicane	1,543	118	33	1,694	718	976	
	Washermanpet	927	226	139	1,293	199	1,093	
	Purasawalkam	805	88	91	984	41	943	
	George Town	1,488	188	206	1,882	72	1,810	
	Nungambakam	412	208	40	660	60	600	
	Mirsalpet	923	198	123	1,244	225	1,019	
	Muthialpet	840	131	119	1,090	212	848	
	Royapuram	881	146	226	1,253	117	1,135	
	Perambur	751	107	64	922	216	706	
	Egmore	624	90	66	780	77	703	
	Royapettah	476	168	34	678	64	614	
	Choolai	779	153	103	1,035	46	989	
	Total for 1931	10,449	1,821	1,244	13,514	2,077	11,437	
	1920	9,733	1,738	1,129	12,600	2,027	10,573	
	1929	8,585	1,796	1,027	11,415	1,862	9,546	
	1928	8,216	1,541	1,136	10,893	1,967	8,926	
	1927	7,422	1,491	1,248	10,161	1,827	8,334	
	1926	6,303	1,005	945	8,253	1,484	6,769	
	1925	6,118	1,243	933	8,294	6,807	1,487	
	1924	5,163	1,216	644	7,023	5,598	1,425	
	1923	4,357	1,097	366	5,820	4,638	1,074	
	1922	3,968	1,213	368	5,549	4,475	1,047	
	1921	3,060	796	255	4,112	3,281	831	
	1920	2,953	672	203	3,828	...	...	
	1919	976	108	87	1,173	612	561	
	1918	55	77	54	681	...	...	

## Prematernity cases registered and diseases and

Serial No.	Centres.	Constipation.	Anaemia.	Malaria	Albuminaria.	Worms.	Bronchitis.	Dysentery.	Influenza.	Diarrhoea	Retention of Urine.	Torpid Liver.	Oedema & swelling.	Fever.	Skin affections.	Syphilis.	T. P.	V. D. H.
1	Triplicane ...	371	129	53	84	23	45	35	27	22	8	...	17	21	17	...	...	1
2	Washermanpet ...	189	16	17	8	35	...	11	7	2	16	...	6	22	9	2	2	15
3	Purasawalkam	308	110	29	27	44	91	85	70	63	13	...	60	78	6	3	10	4
4	George Town ...	624	385	163	125	48	85	89	28	44	...	...	0	88	19	1	3	9
5	Nungambakam ...	161	66	22	37	29	56	16	2	3	...	...	3	19	15	...	...	...
6	Mirsaibpet ...	384	112	5	22	8	30	19	8	18	...	...	...	10	1	...	...	4
7	Muthialpet ...	151	10	35	47	294	47	16	19	19	18	14	8	29	5	...	9	7
8	Royapuram ...	531	32	18	99	2	54	21	11	9	10	...	...	...	6	...	1	...
9	Perambur ...	347	36	12	106	7	50	16	8	6	4	...	6	7	6	2	...	...
10	Egmore ...	98	29	13	23	2	20	19	8	21	12	...	9	16	30	1	...	...
11	Royapet ...	92	24	10	17	...	46	8	...	6	3	...	4	9	5	...	...	2
12	Choolai ...	485	9	2	26	...	32	19	3	...	...	...	3	25	1	...	...	1
	Total ...	3,741	953	379	621	192	556	354	191	213	84	14	126	324	120	9	25	43

Total for 1931--  
 1930--  
 1929--  
 1928--  
 1927--  
 1926--  
 1925--  
 1924--  
 1923--

MENT II.

ailments of Pregnancy treated at the Centres in 1981.

Rheumatism.	Otorrhoea.	Jaundice.	A. P. H.	Pneumonia.	General Anasarca.	Asthma.	Breast Abscess.	Gastritis.	Conjunctivitis.	Flatulence.	Hysteria.	Enteritis.	Strangury.	Morning Sickness.	Gonorrhoea.	Stomatitis.	Ear and Eye diseases.	Threatened Abortion.	Bleeding etc.	Tonsils.	Eclampsia.	P. P. H.	Dyspepsia.	Scanty Urine.	Enlargement of spleen.	Cough.	Piles	Total.	Total of Prematernity cases registered.
1	3	...	1	1	2	3	3	8	3	4	...	9	...	19	2	37	...	...	...	...	...	...	...	...	...	...	...	949	1,666
19	...	2	2	2	3	4	4	18	...	16	...	3	...	12	6	15	8	...	4	...	...	...	...	...	...	...	...	475	475
6	7	2	2	9	24	5	9	2	3	4	1	5	...	31	2	22	...	...	...	3	1	...	...	...	...	...	1,139	1,286	
2	2	2	...	...	...	3	9	24	...	...	...	...	...	26	14	73	...	...	...	...	...	...	...	...	...	...	1,876	1,971	
9	4	...	...	...	...	6	4	2	...	...	...	...	...	...	...	7	...	...	...	...	...	...	4	...	...	...	465	478	
1	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	12	...	6	...	...	...	11	10	...	...	...	664	1,121	
5	1	...	...	12	...	1	...	37	...	...	...	4	...	...	138	3	...	11	1	...	5	...	4	9	1	960	1,446		
2	...	1	3	...	...	3	5	5	...	...	...	...	...	2	3	3	...	1	25	...	...	...	...	...	...	...	847	1,681	
6	4	...	...	2	5	3	2	3	3	...	...	...	...	2	7	15	...	...	...	...	...	...	...	...	...	...	665	612	
2	16	...	16	6	3	3	10	12	...	...	...	...	...	4	...	20	14	...	6	...	...	...	...	...	...	...	413	695	
3	1	...	...	3	1	1	...	2	...	...	1	...	...	...	13	4	...	...	...	...	...	...	...	...	...	...	256	335	
3	...	...	...	1	2	...	...	...	...	...	...	2	...	...	1	5	16	...	...	...	97	...	...	...	...	...	733	1,549	
59	40	7	8	28	49	37	44	72	21	67	1	18	5	96	34	356	34	23	25	21	4	1	117	10	4	9	1	9,442	13,315

- 13,315.
- 11,292.
- 10,535.
- 10,915.
- 9,232.
- 6,269.
- 6,062.
- 4,071.
- 3,501.

Serial No.	Centres.																						
		Anaemia.	Albuminaria.	Malaria.	V. D. H.	Bronchitis.	Dysentery.	Influenza.	Typhoid.	Retained Membrane.	Adherent Placenta.	Retained Placenta.	Eclampsia.	Pneumonia.	T. P.	Ulcerated Vagina.	Retention of Urine.	Syphilis.	Asthma.	Diarrhoea.	Jaundice.	Indigestion.	Gastritis.
1	Triplicane	258	83	25	1	33	27	29			7	4		1	20	1	2	29	2				
2	Washermanpet	117	10	13	18	16	10	11		6	5	3	2	1	3	115	3				1		
3	Purasawalkam	53	23	27	7	41	31	39	2	10	3	6	5	6	9	12	5	11	3	31		23	1
4	George Town	235	29	39	8	10	11	15			2		6		3			4	1	12			
5	Nungambakam	76	15	10	1	26	9	5						1			2		1	3		2	1
6	Mirsaibpet	205	2	4	4	19	3	3		5		2	1		2				2	4			
7	Muthialpet	23	56	18		6	3	4				1	1	2	13				1	2	2		
8	Royapuram	115	53	9		24	10	10			1		9		1				2	8		4	2
9	Perambur	11	16	6	1	4	3	5	1	1		1		4	2	2	2	2	1	2	2	2	3
10	Egmore	20		3		10	8	4							5				1	2			
11	Royapet	35		18		20	6	2		1	1	1	1	1	6				1	3		6	
12	Choolzi	65		44	5	5	11	2							1	3			1		1	1	
	Total.	1213	287	216	45	224	132	150	3	23	12	22	30	14	34	27	44	24	15	97	7	38	8

MENT III.

(Puerperal) 1931.

	Constipation.	Worms.	Mastitis & Breast Abscess.	Nephritis.	Sapraemia.	A. P. H.	P. P. H.	Mumps.	Skin disease.	Stomatitis.	Sepsis.	Neuritis and Sciatica.	Septicaemia.	Ulcerated Vulva.	Fever and Hyperpyrexia.	Piles.	Rheumatism.	Chicken Pox.	G. Conjunctivitis.	After pains.	Other diseases.	L. P.	Ovarian Tumour.	Puerperal Sepsis.	Elephantitis.	Gen. Anasarca.	Leucorrhoea.	Hysteria.	Debility.	Cough.	Neuritis.	Pleurisy.	Total.		
131	4	21	.....	1	3	..	24	22	3	.....	29	27	1	.....	50	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	850	
21	2	4	.....	2	6	..	7	9	.....	.....	.....	18	3	1	16	..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	324	
64	12	18	..	4	3	11	..	4	15	6	1	1	45	4	7	47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	590	
111	...	5	.....	3	.....	8	21	2	.....	.....	.....	6	2	1	17	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	566	
1	...	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	214	
1	...	9	..	1	2	..	7	2	.....	.....	.....	3	24	1	.....	39	11	1	8	3	4	12	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	387	
1	3	28	..	1	.....	.....	59	.....	.....	.....	.....	3	.....	.....	29	12	.....	.....	.....	.....	.....	.....	.....	1	1	60	3	3	.....	.....	.....	.....	336		
7	1	6	..	4	4	2	110	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	285	
3	...	4	.....	2	1	2	1	4	.....	.....	.....	3	4	2	.....	2	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	113	
...	...	6	.....	.....	.....	2	12	.....	.....	.....	8	.....	.....	.....	3	.....	.....	.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	91
8	...	...	4	.....	.....	3	9	.....	.....	.....	.....	12	4	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	154	
12	...	1	.....	.....	.....	1	2	.....	.....	.....	.....	.....	.....	13	.....	.....	.....	.....	.....	.....	17	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	214	
370	22	104	4	9	11	32	268	152	15	...	95	143	9	8	...	10	236	114	11	1	8	2	5	12	3	60	3	3	1	.....	.....	.....	4124		

## STATEMENT IV.

## A

Maternal mortality (Puerperal) among cases treated by Child Welfare Scheme for 1931.

Centres.	V. H. D.	Typhoid.	Eclampsia.	Adherent placenta.	Anaemia.	Dysentery.	Tuber. Enteritis.	Sepsis.	Total.
Triplicane	...	...	...	...	...	...	...	...	...
Washermanpet	...	2	...	1	...	...	...	...	4
Purasawalkam	...	...	...	...	...	...	...	...	...
George Town	...	2	...	...	...	...	...	...	2
Nungambakkam	...	...	...	...	...	...	...	...	...
Mirsaibpet	...	...	...	...	...	...	...	...	...
Muthialpet	...	...	1	...	...	...	...	...	1
Royapuram	...	...	...	...	...	...	...	...	...
Perambur	...	...	...	...	1	...	...	...	1
Egmore	...	...	...	...	...	...	...	...	...
Royapet	...	...	...	...	...	...	...	...	...
Choolai	...	...	...	...	...	...	...	...	...
Total ...	4	...	2	1	1	...	...	...	8

## B

Deaths among cases brought to the notice of the Child Welfare Scheme in 1931 but not under our treatment.

	Triplicane.	Washermanpet.	Purasawalkam.	George Town.	Nungambakkam.	Mirsaibpet.	Muthialpet.	Royapuram.	Perambur.	Egmore.	Royapet.	Chulai	Total.
1. In Hospital ...	5	7	5	8	6	6	2	6	6	6	3	2	62
2. Under private Doctors ...	1	1	1	3	1	...	2	...	...	...	...	...	9
3. Under Vydians' treatment ...	1	1	...	1	...	...	...	...	...	...	...	...	3
4. Under Barber Women ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	7	9	6	12	7	6	4	6	6	6	3	2	74

STATEMENT IV—*contd.*

## C

Showing the causes of death among cases brought to the notice of Child Welfare Scheme but not under our treatment in 1931.

Centres.	Eclampsia.	Adherent Placenta.	P. P. H.	V. D. H.	Anaemia.	Tub. Enteritis.	Septicaemia.	Pneumonia.	General Anasarca.	Dysentery.	Tetanus.	Fever.	Causes unknown.	Drugged with native medicine.	Typhoid.	Retained placenta.	A P. H.	Total.
Triplicane	1			2			4											7
Washermanpet	1	2		3									1	1	1			9
Purasawalkam	1	1					1		1		1					1		6
George Town	1	1	2	2			2	1							3			12
Nungambakam	1	1		1			1		1		1						1	7
Mirsaibpet		1		1		1					1		1			1		6
Muthialpet	2							1				1						4
Royapuram	2			2	1					1								6
Perambur	3			1			1										1	6
Egmore	4	1								1								6
Royapettah							1		2									3
Choolai			1		1													2
Total	16	6	2	12	4	1	8	4	1	5	1	3	2	1	4	2	2	74

A total of 82 deaths occurred among the 13,514 labour cases which came under the observation of the Child Welfare Scheme. Maternal Mortality rate for all deaths among cases brought to the notice of the Scheme is .61 per cent.

## Maternal Mortality rates for the C. W. S. for

1922—	.5 per cent.	1927—	.4 per cent.
1923—	.56 per cent.	1928—	.52 per cent.
1924—	.56 per cent.	1929—	.49 per cent.
1925—	.59 per cent.	1930—	.49 per cent.
1926—	.72 per cent.	1931—	.61 per cent.



**STATEMENT V.**  
Table showing the total attendance of Children and Mothers at the Child Welfare Centres during 1931.

From 1st January to 31st December 1931.	Age.				Nature of disease.										Total attendance for the year.	Pregnant women treated at the Centre.	Average Daily Attendance.	Remarks.
	Total New Attendance.				Respiratory.	Alimentary.	Skin affection.	Influenza.	Ear and Eye disease.	Malaria.	Syphilis.	Anæmia.	Other causes.					
	Under 1 year.	1 to 5 years.	5 to 12 years.	Women.														
Triplicane	3,222	1,500	1,170	3,712	9,604	2,269	2,110	729	1,087	544	203	15	1,484	1,163	26,123	959	85.9	
Washermanpet	1,831	1,210	999	3,345	7,385	759	1,652	640	533	377	404	16	118	2,885	9,111	418	45.2	
Purasawalkam	1,622	1,819	1,542	3,917	8,909	1,623	1,649	685	902	509	712	139	876	1,805	21,109	957	57.8	
George Town	4,277	3,193	2,468	8,021	17,959	1,685	1,746	1,357	283	1,287	2,072	...	1,577	7,952	36,576	1,971	100.2	
Nungambakkam	1,876	1,539	1,873	1,974	7,262	1,496	1,256	809	498	370	472	2	382	1,977	18,002	465	49.3	
Mirsaibpet	1,826	1,139	725	3,016	6,706	898	1,566	526	216	254	236	4	639	2,367	15,842	664	43.0	
Muthialpet	2,730	1,383	1,066	4,526	9,705	434	2,344	775	655	339	622	...	78	4,448	25,638	996	70.3	
Royapuram	1,933	1,462	792	3,316	7,503	1,635	2,088	709	362	283	769	5	191	1,461	13,550	847	37.0	
Perambur	2,442	1,719	1,800	3,422	9,383	801	3,749	581	364	498	405	101	292	2,592	20,771	665	56.9	
Egmore	1,931	1,652	1,569	2,682	7,874	1,251	1,618	849	184	569	105	2	289	2,947	15,389	410	42.2	
Royapet	1,852	1,112	601	2,239	5,802	952	933	762	202	792	253	6	166	1,737	14,560	256	40.0	
Choolai	1,831	782	667	3,226	6,506	1,535	1,246	592	77	184	63	2	544	2,263	20,614	733	56.5	
<b>Total for</b>	1931 27,373	18,510	15,271	43,396	104,550	15,338	21,958	9,014	5,373	6,006	6,316	292	6,626	33,617	2,37,285	9,251	684.3	£50.1
"	1930 23,681	15,000	11,711	38,644	88,436	13,752	19,524	7,672	5,191	5,406	5,441	395	4,653	26,354	2,02,441	8,463	599.53	
"	1929 19,514	13,254	11,062	37,720	81,550	1,838	18,570	6,196	3,634	3,980	6,026	247	4,253	26,801	1,88,329	7,104	520.19	
"	1928 15,195	10,167	9,265	33,745	62,918	9,864	15,632	4,200	1,808	2,813	4,845	195	3,513	18,273	1,61,801	6,637	442.1	
"	1927 12,394	7,694	5,383	26,096	51,567	5,789	12,736	3,578	1,499	2,662	3,055	191	2,886	18,401	1,20,019	5,169	328.8	
"	1926 11,478	9,343	7,703	20,232	48,856	6,749	13,371	3,829	1,258	1,941	3,195	95	2,810	15,246	1,14,814	4,192	316.0	
"	1925 14,704	8,871	5,713	20,708	49,996	6,469	21,504	2,783	967	2,856	3,900	64	2,647	12,806	1,05,363	4,054	299.3	
"	1924 10,731	7,444	4,256	14,006	36,137	6,040	12,721	2,231	840	1,741	2,074	13	1,783	8,789	71,244	3,134	194.79	
"	1923 6,549	3,678	2,349	7,463	19,126	3,359	5,832	2,090	243	617	995	30	...	6,060	33,535	3,773	93.0	
"	1922 4,995	3,387	1,457	4,533	14,372	2,359	4,846	1,997	189	429	285	24	...	4,245	28,138	1,778	78.0	
"	1921 5,474	2,533	1,203	5,564	14,774	2,719	3,133	1,087	494	423	...	24	...	6,875	25,919	1,490	35.0	
"	1920 4,079	1,762	1,855	3,934	10,636	1,912	1,160	874	583	308	...	29	...	5,715	18,816	1,040	73.0	
"	1919 1,617	858	316	1,074	3,365	295	139	250	31	37	...	12	...	253	8,442	322	24.1	
"	1918 222	207	52	235	716	77	27	55	4	1	...	4	...	35	1,558	116	18.0	

## STATEMENT VI.

Showing the number of abortion cases which came under the observation of the C. W. Scheme staff during the year 1931.

Period.	Centres	How Conducted.			Total.
		By Nurses of C.W.S.	Taken over after B.W. conducted labour.	Taken to Hospital.	
From 1st January to 31st December 1931.	Triplicane ...	5	4	8	17
	Washermanpet ...	8	3	11	22
	Purasawalkam ...	11	1	16	28
	George Town ...	19	2	21	42
	Nungambakam ...	3	2	14	19
	Mirsaibpet ...	3	3	14	20
	Muthialpet ...	23	2	20	45
	Royapuram ...	16	...	19	35
	Perambur ...	6	1	12	19
	Egmore ...	6	1	2	9
	Royapet ...	2	...	3	5
	Choolai ...	7	...	6	13
	Total ...	109	19	146	274

## STATEMENT VII.

Number of visits paid by the staff of the C. W. Scheme during the year 1931.

Centres.	Visits paid by			Total.	
	Midwives.	Health Visitors.	Lady Doctors.		
Triplicane ...	17,819	18,031	1,457	37,307	
Washermanpet ...	13,668	11,504	1,301	26,473	
Purasawalkam ...	12,191	13,510	1,134	26,835	
George Town ...	31,597	12,984	1,597	46,178	
Nungambakam ...	10,217	10,515	1,457	22,189	
Mirsaibpet ...	13,051	12,318	1,075	26,444	
Muthialpet ...	14,938	16,230	1,624	32,792	
Royapuram ...	12,471	15,281	1,313	29,065	
Perambur ...	20,420	9,118	1,317	30,855	
Egmore ...	9,704	7,567	1,099	18,370	
Royapet ...	10,496	8,913	1,203	20,612	
Choolai ...	11,972	12,189	1,189	25,350	
	Total ...	1,78,544	1,48,160	15,766	3,42,470

STATEMENT VIII.

Ages at death of infants born during 1930 and kept under observation during the 1st year of life.

From 1st January to 31st December 1930.	Total No. of cases visited.	Still born.	Died within				Total deaths excluding Still births.	Left City or otherwise not traceable.	No. of living children traceable when one year old.
			10 Days.						
			1 to 3 Months.	3 to 6 Months.	6 to 12 Months.				
Tripligan	1,683	40	38	35	32	81	186	319	1,138
Washermaipet	1,216	49	50	32	34	50	166	106	895
Purasawalkam	808	25	33	22	35	30	120	117	516
George Town	1,657	55	79	44	44	46	213	205	1,184
Nungambakam	623	13	29	28	25	41	123	16	471
Mirsabpet	1,226	56	27	20	23	12	82	51	1,087
Muthialpet	1,042	59	40	30	29	62	161	104	748
Royapuram	1,195	45	43	26	29	74	172	98	880
Perambur	954	25	35	13	27	51	136	56	737
Egmore	787	27	26	23	14	43	105	162	493
Royapet	632	18	22	19	15	30	86	120	408
Choolai	797	33	41	29	30	53	153	94	517
Total	12,623	448	462	321	337	582	1,703	1,448	9,054

City rate.

For infants in care of C. W. Scheme.

Infantile Mortality rate for	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918
do.	139.5	157.2	171.6	159.1	160.0	181.4	169.5	203.7	201.9	232.7	175.7	231.9	276.8
do.	per mille.												
do.	243.9	256.6	286.8	237.6	279.3	278.8	264.1	254.0	308.0	281.9	279.0	329.0	355.2

## STATEMENT IX.

Causes of Death among infants born in 1930 and kept under observations, during the 1st year of life.

Centres.	Total No. of cases visited.	Still born.	Died within 19 days.	Pneumonia.	Influenza.	Abscess.	Enteritis.	Small-pox.	Bronchitis.	Malnutrition.	Malaria.	Convulsion.	Whooping cough.	Skin disease.	Syphilis.	Chicken-pox.	Fever.	Drugged with native medicines.	Diarrhoea.	Dysentery.	Constipation.	Rickets.	Gastritis.	Causes unknown.	Dropsy.	Infant Paralysis.	By vaccination.	Rat bite.	Measles.	Total deaths.	Left the City and not traceable.	No. of living children the 1st year of life.
Triplicane	1,683	40	38	13	2	5	11	2	16	1	1	14	5	4	4	...	41	...	15	5	4	...	...	...	7	...	...	...	...	186	319	1,138
Washermanpet	1,216	49	50	4	...	3	18	2	8	3	...	14	6	...	1	...	17	...	12	6	...	1	...	21	...	...	...	...	...	166	106	895
Purasawalkam	808	25	33	2	2	3	8	12	6	3	...	5	4	...	...	...	10	...	20	4	2	5	...	5	...	...	...	...	...	120	117	546
George Town	1,657	55	79	4	...	...	19	6	14	1	...	21	11	...	...	...	15	7	...	...	7	...	...	20	...	...	...	4	213	205	1,184	
Nungambakkam	623	13	29	1	1	...	26	5	20	...	...	7	...	...	...	...	30	...	...	3	...	...	...	1	...	...	...	...	123	16	471	
Mirsaiipet	1,226	56	27	4	...	...	6	...	3	2	...	5	1	...	...	...	18	1	3	1	2	...	9	...	...	...	...	...	82	51	1,037	
Muthialpet	1,042	29	40	3	...	...	28	2	2	1	...	10	...	...	...	...	53	...	1	5	...	1	5	...	5	...	...	...	...	161	104	748
Royapuram	1,198	48	43	5	3	8	25	...	23	...	2	2	3	3	...	...	27	...	9	9	...	...	13	...	...	...	2	...	172	98	880	
Perambur	954	25	35	2	1	1	13	2	20	...	2	8	3	2	4	...	9	3	8	12	...	2	...	9	...	...	...	...	136	56	737	
Egnore	787	27	26	1	...	3	...	1	1	2	...	3	5	2	...	...	15	4	20	4	1	...	17	...	...	...	...	105	162	493		
Royapettah	632	18	*	4	1	...	4	3	9	...	...	26	2	...	...	...	16	...	12	6	...	...	3	3	...	...	...	...	86	120	408	
Choolai	797	33	41	...	...	...	2	...	7	...	...	15	2	...	...	...	47	...	26	3	1	...	8	...	...	...	...	...	153	94	517	
Total	12,623	418	441	45	11	18	155	35	129	13	5	130	42	11	4	6	298	15	135	65	8	11	1	118	...	...	...	2	4	1,702	1,448	9,054

\* 22 cases are shown under diseases.

## STATEMENT X.

Showing the number of cases taken on for Milk Supply during the year 1931.

Centres.	No. taken on for Milk Supply.	Yearly attendance.	Average daily attendance
Triplicane ...	62	11,527	31.5
Washermanpet ...	48	9,787	27.0
Purasawalkam ...	62	13,575	37.2
George Town ...	89	17,922	49.1
Nungambakkam ...	69	14,168	38.8
Mirsaibpet ...	86	15,517	43.2
Muthialpet ...	77	18,917	51.8
Royapuram ...	51	10,712	29.5
Egmore ...	56	13,719	37.3
Perambur ...	97	20,204	55.3
Royapet ...	61	14,473	39.6
Choolai ...	47	11,355	31.1
Total ...	805	1,71,876	471.4

## STATEMENT XI.

Showing the number of children who were given free baths during the year 1931.

Centres.	New admissions.	No. of baths given to babies.	Average daily attendance.
Triplicane ...	415	11,962	32.7
Washermanpet ...	135	13,390	36.6
Purasawalkam ...	489	12,160	33.3
George Town ...	259	11,073	30.3
Nungambakkam ...	849	16,449	45.1
Mirsaibpet ...	495	8,195	22.4
Muthialpet ...	180	15,977	43.8
Royapuram ...	1,095	10,766	29.5
Perambur ...	306	8,323	22.8
Egmore ...	67	7,671	21.01
Royapet ...	342	13,147	36.01
Choolai ...	319	8,281	22.7
Total ...	4,951	1,37,394	376.22



STATEMENT XIII.  
Showing the Births, Infantile Mortality and Infantile Mortality rate during 1931 and Infantile Mortality rate from 1921 to 1930.

Divisions.	No. of Births registered excluding Still-births.		Infantile Mortality rate for										Remarks.	
	1931		1930	1929	1928	1927	1926	1925	1924	1923	1922	1921		
	Still-births.	Infantile Mortality.	Infantile Mortality rate.											
1	871	41	281	322.6	247.9	296.9	352.2	253.6	330.3	293.1	291.8	319.9	286.2	308.9
2	1296	120	301	232.3	227.1	252.1	278.8	225.7	271.6	277.7	297.6	277.9	283.6	255.5
3	1102	36	273	247.7	231.2	329.7	316.5	253.0	353.2	288.1	265.8	273.2	333.1	286.1
4	889	27	267	30.3	28.3	269.7	343.4	251.9	323.3	256.6	286.2	238.3	304.0	331.2
5	265	19	97	368.0	317.1	373.0	502.1	332.0	379.9	370.7	351.4	405.0	342.3	456.9
6	442	31	106	239.8	253.5	231.2	238.0	227.4	295.3	361.6	390.0	237.0	385.7	348.8
7	454	25	104	229.1	212.7	259.3	265.3	259.4	295.3	318.5	396.4	303.4	322.4	390.1
8	179	9	64	357.5	241.4	310.3	328.8	289.8	258.6	438.0	437.0	359.6	312.5	476.2
9	788	38	168	213.2	250.6	250.0	323.8	266.1	281.8	303.7	312.2	289.7	301.7	337.2
10	742	41	182	245.3	248.3	235.5	341.5	293.1	833.3	831.8	282.9	271.0	373.6	335.0
11	185	2	53	286.5	288.0	315.4	407.6	369.4	304.3	359.8	401.3	329.7	133.7	522.6
12	873	49	214	245.1	263.7	293.6	367.8	255.8	323.4	303.5	318.5	325.8	399.1	319.6
13	698	41	195	279.4	302.0	289.8	337.8	308.7	339.4	301.8	355.9	293.0	428.1	376.2
14	115	8	33	287.0	357.8	474.1	165.9	319.3	388.2	284.1	432.8	195.7	500.4	339.8
15	644	30	167	259.3	284.4	292.0	301.2	255.7	376.7	377.9	318.4	309.0	360.9	293.9
16	1518	51	430	276.0	233.2	283.7	296.9	231.1	271.8	195.8	232.5	203.2	261.7	220.3
17	1240	53	303	244.4	274.0	288.8	281.2	273.1	284.9	344.9	253.8	241.0	329.9	289.9
18	1060	36	281	265.1	243.3	218.7	261.0	212.7	248.5	251.0	262.5	205.0	306.7	203.8
19	780	44	203	260.3	234.6	266.1	275.6	232.9	267.6	258.6	269.5	235.2	332.1	269.5
20	1489	138	265	178.0	211.4	191.1	222.1	192.1	238.9	231.8	197.3	232.0	256.6	229.3
21	840	44	183	217.9	198.0	223.2	232.1	309.3	235.6	274.6	236.5	250.0	310.7	233.6
22	996	38	227	227.9	201.9	201.7	239.1	211.9	214.6	250.3	216.8	215.4	281.7	256.4
23	1139	38	293	257.2	228.5	258.4	271.7	233.3	306.8	258.2	246.9	219.6	323.6	267.0
24	1564	66	325	207.9	259.3	259.2	252.6	248.6	211.7	236.1	236.4	214.5	255.4	249.0
25	805	50	167	207.5	223.6	166.2	230.9	177.6	204.2	162.5	206.6	221.3	218.4	206.6
26	755	36	182	241.1	243.3	225.4	279.3	221.5	255.7	247.9	216.6	216.5	275.5	230.8
27	808	41	225	278.5	269.2	303.9	330.8	227.1	288.3	272.3	299.7	219.7	302.4	266.6
28	1190	83	324	272.3	260.9	235.4	220.7	190.3	254.3	282.6	238.5	260.5	312.6	299.3
29	1257	51	293	233.1	208.5	195.9	251.3	203.0	241.3	267.1	239.0	287.2	246.0	251.3
30	714	32	185	259.1	237.1	324.9	248.0	268.3	254.5	313.0	261.5	252.2	218.9	254.4
Total	25738	1318	6391	248.3	243.9	256.6	286.8	237.6	279.3	278.8	264.1	251.0	308.0	281.9
General Death rate ...			75.8	43.2	42.4	60.5	42.3	45.0	47.3	41.7	37.8	42.7	38.5	

STATE

Table showing the results of the various experiments conducted during the year 1900

No.	Year	Area	Yield	Remarks
1	1900	100	100	Normal
2	1900	100	100	Normal
3	1900	100	100	Normal
4	1900	100	100	Normal
5	1900	100	100	Normal
6	1900	100	100	Normal
7	1900	100	100	Normal
8	1900	100	100	Normal
9	1900	100	100	Normal
10	1900	100	100	Normal
11	1900	100	100	Normal
12	1900	100	100	Normal
13	1900	100	100	Normal
14	1900	100	100	Normal
15	1900	100	100	Normal
16	1900	100	100	Normal
17	1900	100	100	Normal
18	1900	100	100	Normal
19	1900	100	100	Normal
20	1900	100	100	Normal
21	1900	100	100	Normal
22	1900	100	100	Normal
23	1900	100	100	Normal
24	1900	100	100	Normal
25	1900	100	100	Normal
26	1900	100	100	Normal
27	1900	100	100	Normal
28	1900	100	100	Normal
29	1900	100	100	Normal
30	1900	100	100	Normal
31	1900	100	100	Normal
32	1900	100	100	Normal
33	1900	100	100	Normal
34	1900	100	100	Normal
35	1900	100	100	Normal
36	1900	100	100	Normal
37	1900	100	100	Normal
38	1900	100	100	Normal
39	1900	100	100	Normal
40	1900	100	100	Normal
41	1900	100	100	Normal
42	1900	100	100	Normal
43	1900	100	100	Normal
44	1900	100	100	Normal
45	1900	100	100	Normal
46	1900	100	100	Normal
47	1900	100	100	Normal
48	1900	100	100	Normal
49	1900	100	100	Normal
50	1900	100	100	Normal

Notes: The above table shows the results of the various experiments conducted during the year 1900. The yield is given in bushels per acre. The area is given in acres. The year is given in the first column.

1900



Table showing details of all Births in the Municipal Divisions in which

Centre.	Municipal Divisions.	Total No. of Births from 1-1-1931 to 31-12-1931.	No. of cases conducted by the Corporation Mid-wives.	Percentage			
				1931	1930	1929	1928
Royapuram ...	1	871	380	43.6	58.8	41.50	39.5
	2	1,296	501	38.6	50.7	38.08	33.7
Washermanpet ...	3	1,102	531	53.6	47.04	48.50	41.9
	4	839	336	37.7	36.09	37.90	33.3
Muthialpet ...	5	265	148	55.8	54.9	32.37	32.5
	6	442	123	27.8	33.5	26.80	22.5
	7	454	264	58.1	74.4	57.60	50.6
	9	788	305	38.7	49.03	32.36	30.8
	8	179	54	30.1	29.3	22.06	16.2
George Town ...	10	742	428	57.6	50.8	50.41	31.4
	11	185	10	5.4	8.3	3.81	6.7
	12	873	457	52.3	44.5	40.04	38.1
	13	698	318	45.5	45.2	42.21	35.1
	14	115	37	32.2	31.1	41.02	31.5
Perambur ...	15	644	184	28.5	29.1	22.51	20.8
Choolai ...	16	1,558	751	48.2	45.5	47.10	28.0
Purasawalkam ...	17	1,240	564	45.4	12.5	40.76	40.4
	19	780	215	27.6	5.9	37.56	39.3
Egmore ...	18	1,060	521	49.1	39.5	21.46	19.6
	21	840	284	33.8	28.4	29.67	22.3
Nungambakam ...	20	1,489	287	19.2	16.5	21.59	8.8
	23	1,139	337	29.5	32.1	37.85	16.6
Triplicane ...	22	996	412	41.4	39.3	64.20	28.9
	24	1,564	847	54.2	65.5	55.48	47.9
Mirsaibpet ...	25	805	305	37.9	46.5	37.24	35.3
	27	808	391	48.4	51.5	42.32	41.7
Royapet ...	26	755	184	24.3	34.4	26.22	22.6
	28	1,190	532	44.7	58.3	38.13	41.6
	30	714	207	28.9	42.9	27.09	27.1
	29	1,257	476	37.8	50.3	10.87	28.5
Total ...		25,738	10,449	40.6	41.39	37.74	30.5

NOTE.—1. The cases conducted in hospitals are as follows.—

1. Government Maternity Hospital	2,872
2. Do. Indian Medicine School	188
3. Do. Victoria Goshia and Caste Hospital	1,657
4. Rajah Sir Ramasawmy's Lying in Hospital	1,812
5. Kalyani Hospital	515
6. Christiana Rainy Hospital	610
7. Lady Amphthil Nurse's Institute	32
8. Dr. Rungachari's Nursing Home	20
9. General Hospital	1
Total ...	7,707

## MENT XIV.

the Scheme was working for one year ending with 31st December 1931.

to Total Births.								Remarks.
1927	1926	1925	1924	1923	1922	1921	1920	
41.9	39.3	20.1	13.0	7.1	...	...	8.9	
33.8	53.1	31.1	19.9	19.2	12.4	15.7	20.9	
43.4	39.6	39.4	28.3	25.5	29.7	35.8	20.5	
30.1	28.5	31.7	38.4	24.2	21.2	22.1	...	
21.3	15.6	12.5	6.7	5.5	1.9	...	...	
23.9	15.0	16.4	1.6	12.6	7.4	...	...	
46.3	56.7	41.3	27.6	18.0	6.4	...	...	
30.75	23.8	23.5	18.8	15.0	7.9	...	...	
18.8	11.0	3.1	13.4	19.6	1.3	...	...	
36.3	31.8	31.5	28.3	24.0	11.4	...	...	
3.8	1.1	3.9	2.5	7.6	5.0	...	...	
37.75	29.8	31.1	24.4	27.4	15.8	...	...	
31.1	28.0	23.7	19.3	20.0	10.0	...	...	
38.8	67.0	21.3	6.2	2.8	...	...	...	
9.4	7.4	8.5	6.4	9.3	6.5	...	...	
25.2	22.7	21.5	20.8	25.3	22.4	18.6	15.9	
37.2	31.0	30.7	22.1	26.4	27.9	26.7	18.4	
35.6	35.8	26.7	28.7	28.3	25.1	24.7	25.2	
16.1	12.9	12.95	12.0	12.9	12.6	8.6	10.3	
18.3	16.6	14.0	25.6	14.6	13.3	9.3	13.3	
5.1	5.2	5.6	3.7	4.4	4.1	1.8	3.5	
21.0	17.4	16.5	42.0	11.3	10.1	8.2	6.6	
26.0	28.5	28.1	14.5	3.8	3.8	...	...	
49.2	41.1	38.9	29.4	38.2	40.4	41.5	42.0	
32.2	32.5	25.8	11.8	36.5	33.1	30.7	28.5	
39.85	38.1	35.3	45.9	35.6	31.2	28.1	37.9	
22.15	75.9	19.3	25.1	16.8	19.0	20.7	16.3	
40.8	36.0	34.2	4.9	19.4	19.1	16.2	14.9	
26.2	22.0	14.2	21.0	4.7	4.2	...	...	
21.7	21.8	20.35	14.9	3.0	9.9	9.4	11.0	
30.0	27.3	25.1	21.0	19.0	19.5	21.7	21.3	

Note 2.—Percentage of hospital births to total births.

1931	1930	1929	1928	1927	1926	1925	1924	1923	1918
29.94	30.09	34.01	32.5	32.6	29.8	30.0	28.5	28.8	16.9

Note 3.—Percentage of cases in care of C.W.S. to total births.

1931	1930	1929	1928	1927	1926	1925	1924	1923	1922
40.6	41.39	37.74	39.5	30.0	27.3	25.1	21.0	19.0	19.6
	1921	1920	1919	1918					
	21.7	21.3	10.4	11.0					

STATE OF NEW YORK

Annual

Year	...	...	...	...	...
1870	...	...	...	...	...
1871	...	...	...	...	...
1872	...	...	...	...	...
1873	...	...	...	...	...
1874	...	...	...	...	...
1875	...	...	...	...	...
1876	...	...	...	...	...
1877	...	...	...	...	...
1878	...	...	...	...	...
1879	...	...	...	...	...
1880	...	...	...	...	...
1881	...	...	...	...	...
1882	...	...	...	...	...
1883	...	...	...	...	...
1884	...	...	...	...	...
1885	...	...	...	...	...
1886	...	...	...	...	...
1887	...	...	...	...	...
1888	...	...	...	...	...
1889	...	...	...	...	...
1890	...	...	...	...	...
1891	...	...	...	...	...
1892	...	...	...	...	...
1893	...	...	...	...	...
1894	...	...	...	...	...
1895	...	...	...	...	...
1896	...	...	...	...	...
1897	...	...	...	...	...
1898	...	...	...	...	...
1899	...	...	...	...	...
1900	...	...	...	...	...

1871 1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900

C  
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