

1

RECEIVED
JUN 1 1926

THE SIXTY-THIRD ANNUAL REPORT OF THE
DIRECTOR OF PUBLIC HEALTH

AND

THE THIRTY-SEVENTH ANNUAL REPORT OF
THE SANITARY ENGINEER

M A D R A S

1926

74123

2

THE SIXTY-THIRD ANNUAL REPORT OF THE
DIRECTOR OF PUBLIC HEALTH

AND

THE THIRTY-SEVENTH ANNUAL REPORT OF
THE SANITARY ENGINEER

MADRAS

1926

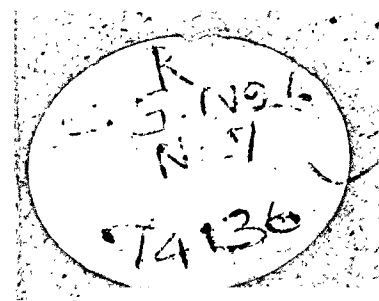
கி.ஜி.சி.ரன்.
செப்பனருவர் பெயர்
செப்பனருவதற்காக எடுத்த
கொள்ளப்பட்ட நாள். 1993
செப்பனரு முடித்த நாள்
செப்பனருக்கும் உதவிபுள்ள
மு.ப.அ.உ. கையொப்பம்.

MADRAS
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS

1927

THE SIXTY THIRD ANNUAL REPORT
OF THE DIRECTOR OF PUBLIC HEALTH
IN
THE ~~THIRTY~~-SEVENTH ANNUAL
REPORT OF THE SANITARY ENGINEER
MADRAS

1926



INDEX.

RAINFALL	PARAS.	1—5
PRICES OF FOOD-GRAINS		6
GENERAL POPULATION		7—9
VITAL STATISTICS—		
Compilation		10—13
Registration		14—17
Births, districts		18—24
Births, rural towns		25—26
Births, municipalities		27—28
Deaths, districts		29—34
Infantile deaths		35—37
Deaths, rural towns		38—39
Deaths, municipalities		40—41
GENERAL HISTORY OF CHIEF DISEASES—		
General remarks		42—44
Cholera		45—51
Dysentery and Diarrhoea		52—56
Smallpox		57—67
Plague		68—74
Fevers		75—79
Malaria		80—85
Relapsing Fever		86—87
Respiratory diseases		88—92
Ankylostomiasis Bureau		93—100
Rabies and Hydrophobia		101
Injuries		102
All other causes		103—107
MATERNAL DEATHS AND CHILD WELFARE AND MATERNITY RELIEF		108—112
PROPAGANDA		113—119
HEALTH WEEK		120—122
FAIRS AND FESTIVALS		123—124
MEDICAL INSPECTION OF SCHOOLS AND COLLEGES		126—127
INDUSTRIAL HYGIENE		128
CAUVERY-METTUR PROJECT		129—130
MINES		140
SANITARY WORKS—CIVIL—		
Municipalities		141—144
District Boards		148—150
GENERAL REMARKS AND PERSONAL PROCEEDINGS		153—158

THE SIXTY-THIRD ANNUAL REPORT

OF THE DIRECTOR OF PUBLIC HEALTH, MADRAS 1926.

RAINFALL.

The average district rainfall of the Presidency during 1926 amounted to 38.75 inches against 52.02 in 1925 and 48.51 in 1924. The distribution was as follows:—

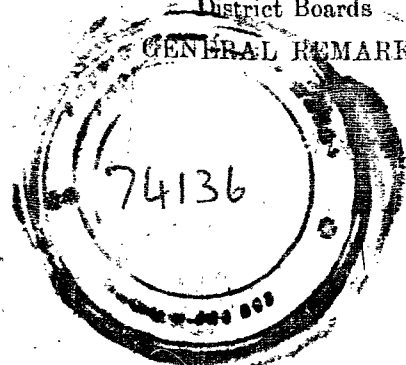
	INCHES.
Inter-monsoon period, January to May	6.62
South-west monsoon, June to September	23.50
North-east monsoon, October to December	8.63
Total	38.75

2. As compared with 1925 every district, except Salem, showed a decrease. The decrease was marked in South Kanara (— 41.85), Madras (— 35.44), Chingleput (— 29.41) and Nellore (— 26.24). Malabar registered the highest increase (+ 4.88), and Madras the highest decrease (— 18.17), as compared with the average.

3. The average district rainfall recorded in the inter-monsoon period was 6.62 inches against 7.58 inches in 1925 and an average of 5.32. Twelve districts recorded an increased rainfall over that of 1925 and in 20 the average was exceeded. The largest increase as compared with 1925 was returned by Ganjam (+ 2.25). Marked decreases occurred in South Kanara (— 10.76), Madras (— 6.97) and Malabar (— 6.69).

4. The south-west monsoon was generally weak, the average district rainfall being 0.77 inch less than that of the previous year and 0.71 inch below the average. Thirteen districts recorded an increased rainfall over that of 1925 and 6 over the average, the largest increase being returned by Malabar.

5. The north-east monsoon was on the whole a failure, the average rainfall during the period being 8.63 inches against 20.17 inches in 1925 and an average of 14.84. In every district the figures compared unfavourably with the average. In Nellore, Chingleput, Madras, Tinnevely, Guntur and Kistna marked decreases of (— 11.10), (— 10.09), (— 9.47), (— 8.85), (— 8.42), (— 8.28) inches respectively were recorded as compared with the average, and defects of (— 27.87), (— 22.42), (— 26.53), (— 24.22), (— 11.78), (— 9.02), respectively, as compared with 1925.



R
L 35, 1926
N 27

2 PRICES OF FOOD-GRAINS, GENERAL POPULATION AND COMPILATION OF VITAL STATISTICS.

PRICES OF FOOD-GRAINS.

6. Prices of the staple food-grains were more favourable than those of 1925. The subjoined statement gives details:—

Grain.	Seers available per rupee in			Percentage rise in price above average in		
	1926.	1925.	Average.*	1926.	1925.	1924.
Rice	5.6	5.2	6.6	18.0	32.7	34.0
Ragi	10.0	9.3	11.5	15.0	28.0	34.1
Cholam	9.7	8.6	10.8	11.3	30.2	33.9
Cumbu	9.0	8.5	10.7	18.9	29.4	37.8

* For fifteen years ending 1925.

Economic conditions in the Presidency, judged by the cost of the staple food-grains, may therefore be considered fairly satisfactory as compared with the two previous years, but are still unsatisfactory in comparison with the average figures for the last 15 years. Signs are not wanting that conditions may become more acute, consequent on the general failure of the north-east monsoon.

GENERAL POPULATION.

7. The population of the Presidency according to the census of 1921 was 42,759,827, exclusive of Europeans and Anglo-Indians who numbered 34,328. Returns of vital statistics were received for a population of only 41,002,696, owing to the exclusion of the hill tribes in the Agency Tracts, the inhabitants of the Laccadives and the population of Banganapalle and Pudukkottai States.

8. The total population for 1926, estimated according to previous inter-censal increases, amounts to 43,307,590, whilst estimated according to natural increase the figure is 45,102,311. The difference of close on two millions is to be ascribed partly to the absence of registration of vital statistics in the major portion of the Agency Tracts and partly to continued defects in registration in other parts of the Presidency.

9. The figures for emigration to Ceylon and the Straits Settlements for the last four years are as follows:—

1923	126,117
1924	148,438
1925	154,584
1926	215,783

The numbers show a steady increase, but although every district was represented, the greater proportion was contributed by North Arcot (40,326), Trichinopoly (39,541), Salem (32,050), Tanjore (17,632), Chingleput (14,394), Madura (13,343), South Arcot (13,032), and Malabar (10,900). Only 175 of the total were skilled labourers.

Immigrants returning from Ceylon totalled 60,007. Those from the Straits Settlements numbered 911, but this figure does not include those returning through the Port of Madras, who paid their own fares.

COMPILATION OF VITAL STATISTICS.

10. Although the subject of accurate compilation of vital statistics has been dealt with at length in every report for the last six years, it is necessary to take the risk of being accused of vain repetition by drawing attention once more to the deficiencies and errors which still exist.

Accurate compilation and correct interpretation of vital statistics constitute the very foundation of all sanitary effort. From accurate compilation it is possible to obtain information of facts relating to the health of the people and the diseases from which they suffer; and their correct interpretation indicates the lines along which preventive measures should be planned and by which deleterious influences can be counteracted.

Judged from these two standpoints it is not possible to place too great faith either in the census figures, or in those relating to births and deaths. In the first place, the Births and Deaths Registration Act of 1898 is compulsory only in parts of the Presidency. In the second place, municipal and local authorities and other officials entrusted with this work are, for the most part, content to register such information as is placed before them or as they obtain by chance; and consider that their obligations in this respect, and to the Public Health Department, are entirely fulfilled by these dubious methods. Monthly returns prepared from such data are, therefore, bound to be inaccurate and defective, and, until registration is made generally compulsory and the machinery for registration is improved in accordance with the recommendations repeatedly made by the Public Health Department, the Presidency statistics will fail to provide the information which it is so necessary to have before any great advance in sanitary matters can be expected.

11. In respect of reports of outbreaks of infectious and dangerous diseases, some improvement has been noticed in a number of districts, owing to the personal interest taken by the revenue authorities, but much still remains to be done in this direction. In spite of a fairly well-organized staff of health officials, only too often is an outbreak of infectious disease allowed to run its course or to assume such proportions as to render efforts at suppression and control extremely difficult, because of failure to report its occurrence without delay. Under existing circumstances, this is perhaps bound to happen, and will only be prevented when it is recognized that the average taluk is much too wide an area to be supervised effectively by a single Health Inspector.

12. As regards the more accurate preparation of district returns, a special report on the working of the compromise agreed to in 1925 was submitted to Government at the end of June 1926. Another report on the same subject is due in June 1927, but it may be stated here that the check now being made by each District Health Officer is satisfactory only in those districts where the scrutiny of the returns is carried out with the help of his own office staff. Where District Health Officers depend on the Collectorate staffs, delays and inaccuracies continue, as the clerks concerned only take up this work when the other duties imposed upon them permit. Without bringing into question the assistance given by District Collectors to this Department in making the returns as accurate as possible—and in recent years considerable help has been given—the desired degree of improvement cannot be obtained, because it is the system which is at fault. To transfer the work of compilation to the offices of the District Health Officers will not interfere in any way with the control of the revenue authorities over their village officers. What is asked for is merely the transfer of the clerks, originally sanctioned to collectorates for this work, to the offices of District Health Officers; and, until this is done, present defects will continue to exist and will be the subject of adverse comment.

In order to strengthen the arguments in favour of this readjustment of staff, it has been reported that in certain districts, only one of the two clerks in the collectorates is permitted to attend to the vital statistics compilation, owing, presumably, to pressure of other work. The Public Health Department has no concern with that; but what is its concern is that the clerks appointed for vital statistics duties should be given these duties and none other, if the returns are to be prepared in time and in accurate fashion. This can only be attained if and when these statistical clerks are placed under the District Health Officers.

13. At the same time, it must be stated that the monthly scrutiny of the returns by District Health Officers has effected improvement in most cases, and

if copies of individual village returns suspected to be incorrect could be sent by District Health Officers to the Health Inspectors concerned—and this could only be done if the work were transferred to District Health Officers' offices—much greater accuracy could be reached than is at all possible under the present organization.

REGISTRATION OF VITAL STATISTICS.

14. Apart from the points already discussed, departmental activities have, during recent years, ensured much greater accuracy in the registration of births and deaths. During the last six years, the steady improvement which has been made is sufficient testimony to the efforts of the District Health staffs, who have done a great deal in the detection of omissions and the setting right of irregularities in village registers. During the vaccination off-season, special attention is demanded in these directions, but all District Health Officers, Health Inspectors and Vaccinators are expected to conduct enquiries throughout the year and to check registers and advise village officers as to improvement in registration work. In municipal towns and unions, however, the standard of accuracy is unfortunately still far below that in rural villages—except where municipal Health Officers have been appointed because the work is entrusted to subordinates who do not realize its importance. This is all the more regrettable, as in all municipal areas registration of births and deaths is compulsory; but until municipal and union authorities take steps to enforce the Act and to educate the citizens as to their obligations in this respect by prosecuting selected defaulters, it is unlikely that improvement will be effected.

15. As in previous years, District Health Officers have submitted figures showing the numbers of unregistered births detected by their Health staffs and the figures given below indicate the degree of error which still exists. Although these figures are arranged in order, it cannot be assumed that the lower figures indicate a lesser efficiency, as in certain districts the birth-rates are much higher than in others and the populations of different districts also vary enormously.

Districts.	Number of unregistered births discovered.
1. South Arcot	8,354
2. Coimbatore	7,901
3. Madura	7,876
4. North Arcot	6,766
5. Tinnevely	6,262
6. Ramnad	6,107
7. Nellore	5,285
8. Salem	5,113
9. Ganjam	4,923
10. Trichinopoly	4,312
11. Vizagapatam	4,063
12. Godavari, East	3,954
13. Bellary	3,592
14. Kistna	} 3,495
15. Godavari, West	
16. Tanjore	3,376
17. Anantapur	3,261
18. Guntur	2,801
19. Cuddapah	2,683
20. Malabar	2,677
21. Kurnool	1,900
22. Chingleput	1,877
23. Chittoor	1,691
24. South Kanara	731
25. Nilgiris, The	446
Total	99,446

During the last five years, the District Health staffs have detected 329,770 unregistered births, the annual totals being :—

1922	...	...	...	...	...	...	...	...	31,895
1923	...	...	...	...	...	...	...	...	62,214
1924	...	...	...	...	...	...	...	...	63,783
1925	...	...	...	...	...	...	...	...	72,432
1926	...	...	...	...	...	...	...	...	99,446

Total ... 329,770

The effect of this work on the registered birth-rates has been very marked in nearly every district in the Presidency, and has been invaluable in connexion with improvement of the vaccinal state of the child population.

16. There is no doubt that many of the defects in registration of births and deaths could be prevented if only the officials entrusted with the work would give it a little more care and thought. Nearly every District Health Officer complains that local authorities are generally opposed to the prosecution of defaulters. This explains why registration is normally worse in compulsory than in non-compulsory areas. Even where a few prosecutions have been sanctioned, as, for example, in the towns of Berhampur, Trichinopoly and Chingleput, the defaulters have been either dismissed with a warning or have been awarded such petty fines that the cases have failed to be either a warning or a deterrent.

17. Curious discrepancies continue to be reported from time to time. In Anantapur District, for instance, the number of small-pox deaths given in the returns prepared in the Collector's office was 270, ten times the actual number reported to the District Health Officer. In South Kanara District, births of European children have been shown in certain village returns, where no Europeans were in residence.

Although Trichinopoly has registered a considerably higher birth-rate (+6·7) compared with that for 1925, it still lags far behind other districts. The reason seems to be obvious. The District Health Officer reports that as many as 2,036 supplementary village returns have not been received during the year. In August, the attention of the Collector was drawn to the omission of statistics for nearly 20—30 per cent of the villages in the monthly returns, and although strict orders were issued by him to the subordinates concerned, the returns for the district have not appreciably improved.

Guntur records a lower birth-rate than last year and, as the District Health Officer points out, this is obviously due to the omission of statistical returns for a population of over 700,000, or a little over one-third of the total population.

Such instances are, however, becoming less frequent and this is in great measure due to the increased attention paid by revenue authorities to the subject, partly as a result of the continued reminders on the subject issued by the Public Health Department and partly to repeated instructions sent out by Collectors.

BIRTHS IN DISTRICTS.

18. The total number of births registered during the year was 1,480,293 against 1,382,477 in 1925, an increase of 97,816; and 121,545 more than the numbers for 1923. Calculated on the census population of 1921, these figures yield birth-rates of 36·1 per mille for 1926 and 33·7 for 1925, as compared with 28·8 for the quinquennium 1919—23. Although the registered birth-rate has not yet reached the estimated Presidency average of 42·5 per mille, the increase of 7·3 clearly indicates the degree of error which existed prior to the reorganization of the Public Health Department and the extent to which that error has now been corrected.

19. Seventeen districts recorded increased rates over the previous year. The largest increases were registered in—

	Birth-rate.	Increase.
Malabar	41.9	+ 9.2
Anantapur	40.8	+ 7.0
Trichinopoly	25.9	+ 6.7
South Arcot	33.5	+ 6.6
Salem	38.2	+ 6.1

The following table gives the birth-rates for each district for the six years 1921—26. The last column compares the 1921 figures with those of the current year. Once more, Trichinopoly District has the unenviable distinction of being the only area in the Presidency where efforts to effect improvement have failed.

Districts.	1921.	1922.	1923.	1924.	1925.	1926.	Increase or decrease over 1921.
Ramnad	18.4	23.1	24.2	28.5	27.8	25.4	+ 7.0
Trichinopoly	25.4	27.4	27.4	23.7	19.2	25.9	+ 0.5
Tanjore	23.7	28.1	29.7	30.0	31.4	30.0	+ 6.3
Madura	26.1	27.6	32.0	34.1	33.5	32.3	+ 6.2
Coimbatore	26.7	24.2	30.1	33.8	32.3	32.8	+ 6.1
South Arcot	25.5	25.2	28.1	28.5	29.9	33.5	+ 8.0
Godavari, East	27.1	30.2	35.6	38.0	38.4	35.1	+ 8.0
Nilgiris, The	25.0	28.0	31.9	32.0	31.5	35.1	+ 10.1
Tinnevely	30.6	32.1	34.7	36.3	35.9	35.2	+ 4.6
Neelore	24.6	28.9	21.1	31.9	30.1	35.2	+ 10.6
Ganjam	26.7	29.7	33.2	36.7	35.5	35.8	+ 9.1
Agencies	26.1	20.2	29.6	32.6	40.0	35.9	+ 9.8
Cuddapah	27.1	29.2	32.6	35.1	34.5	36.1	+ 9.0
Vizagapatam	28.8	31.2	36.5	37.0	35.2	36.9	+ 8.1
Chittoor	22.8	32.1	30.9	33.9	33.1	37.4	+ 14.6
South Kanara	37.4	36.8	38.7	40.3	32.9	37.4	NH.
Salem	22.7	28.0	34.2	32.1	32.1	33.2	+ 15.5
Guntur	29.1	33.0	37.6	40.2	40.2	38.8	+ 9.7
Chingleput	31.2	33.7	37.4	38.8	37.1	39.2	+ 8.0
Godavari, West	...	...	...	...	39.7	39.4	...
Kistna	20.1	31.6	39.4	41.8	40.8	39.8	+ 9.7
Anantapur	29.9	32.0	34.7	33.8	33.8	40.8	+ 10.9
North Arcot	27.9	31.5	31.5	34.9	36.8	41.4	+ 13.5
Madras	36.4	41.2	43.7	44.3	43.9	41.8	+ 5.4
Malabar	32.4	36.1	37.4	37.6	32.7	41.9	+ 9.5
Bellary	30.5	30.0	36.5	40.8	40.0	42.6	+ 12.1
Kurnool	26.7	27.6	38.3	40.4	43.1	46.6	+ 19.9

Kurnool (46.6), Bellary (42.6), Malabar (41.9) record the highest registered birth-rates. The birth-rate exceeded the death-rate in all districts except Madras City.

20. The accompanying statement gives the registered birth-rates for the different provinces in India for the years 1922—26.

Provinces.	Birth-rates in				
	1922.	1923.	1924.	1925.	1926.
Punjab	39.31	43.16	40.05	40.10	41.65
Central Provinces	35.80	45.63	44.18	43.90	46.03
United Provinces	32.17	38.04	34.72	32.73	34.20
Bihar and Orissa	35.03	37.02	35.70	35.63	37.28
Burma	29.69	29.51	27.40	25.38	27.59
Bombay	32.39	35.57	35.60	34.67	37.05
Assam	28.40	28.82	31.04	29.08	30.82
Bengal	27.40	29.90	29.45	29.60	27.48
Madras	30.00	33.10	34.90	33.71	36.1

21. The ratios of female to male births in the Presidency for the same five years are given below :—

Years.	Ratio of female to male births.	
	Female.	Male.
1921	100	104.7
1922	100	104.4
1923	100	104.1
1924	100	104.2
1925	100	104.2
1926	100	103.6

22. The registered birth-rates of the different communities are as follows :—

Communities.	Birth-rates per mille.					
	1921.	1922.	1923.	1924.	1925.	1926.
Hindus	27.2	29.9	33.0	34.7	33.6	35.8
Mahammadans	28.7	32.5	35.6	37.6	35.2	40.2
Indian Christians	24.1	27.0	30.2	34.1	32.6	33.9

The Muhammadan community as usual returned the highest rate.

23. The subjoined statement shows the approximate number of births registered in the four quarters of the year :—

	Number of births.
First quarter	308,500
Second quarter	374,000
Third quarter	415,400
Fourth quarter	382,400

24. The ratios of still-births to live-births for the six years 1921—26 are as follows :—

Years.	The ratio of still-births per 1,000 live-births.
1921	9
1922	11
1923	18
1924	13
1925	14
1926	14

The largest ratios are returned by Madras (51), Malabar (30), and Tanjore (26), the lowest by Coimbatore (5), Ganjam (5) and Ramnad (5). Defective registration is the chief cause for these wide variations.

Out of a total of 21,032 recorded still-births, 11,447 were male and 9,585 female children, giving a proportion of 119 males to 100 females. More than 50 per cent of the total still-births were registered in the following seven districts :—

Districts.	Percentage of still-births in	
	1925.	1926.
Malabar	18.0	13.0
Tanjore	9.0	9.1
Madras	5.0	6.6
North Arcot	5.0	6.2
South Arcot	5.0	2.6
South Kanara	5.0	6.9
Trichinopoly	5.0	3.3

In many rural districts, as well as municipal areas, it was found that still-births were either not registered at all or were being included in both the births

and deaths columns of the monthly returns. The Revenue Board's standing orders specifically forbid such a practice, and a departmental circular was issued in November drawing attention to the correct procedure and impressing on the minds of the registrars the necessity for recording separately all still-births.

The importance of having recorded information on this subject lies in its close relation to maternity relief and infant-welfare work. In the first place, the large numbers of still-born children mean a deplorable and preventible recurring loss to the child-population. Secondly, there is the associated waste of strength and energy fruitlessly expended by the mothers. Thirdly, the loss of children is accompanied by a high maternal mortality or results in permanent damage to the mothers' health and efficiency.

Investigations into the causes of still-births have shifted the angle of vision to a great extent from the known post-natal influences to the somewhat mysterious pre-natal factors which affect both mother and infant. The imperative need for "ante-natal care" has thus been brought to the forefront, and perhaps no part of preventive medicine demands more urgent attention in this country.

BIRTHS IN RURAL TOWNS.

25. The 214 rural towns of the Presidency with populations over 5,000 recorded 75,309 births (38,453 males and 36,856 females), against 74,720 (38,111 males and 36,609 females) in 1925. Further re-adjustments in the areas of certain towns have resulted in a diminution of the total population from 2,136,376 to 2,129,433. Calculated on these populations the annual birth-rates are 35.4 in 1926 and 35.0 in the previous year. The registered average birth-rates for the population of these rural towns for the past five years are given below:—

Years.	Birth-rate.	Increase over 1921.
1921	22.6	...
1922	27.3	+ 4.7
1923	32.3	+ 9.7
1924	34.0	+11.4
1925	35.0	+12.4
1926	35.4	+12.8

As compared with the previous year, increases were registered in 114, and decreases in 100 towns. The increase was marked in Kavali (+ 38.2), Chodavaram (+32.6), Nayudupet (+21.2), Chebrolu (+16.5) and Madugole (+16.4). Among those which showed a decrease, Tiruvottiyur (− 26.2) headed the list, followed by Karkala and Udangudi (− 20.6) each and Vadakkuvalliyur (− 18.4). These wide annual variations are sufficient proof that registration in those areas is still very defective.

26. A list of the towns, with the current birth-rates compared with those of the previous year, is given in Appendix A, and the following statement gives a comparison of the rates with those of 1921:—

Registered birth-rates.		Number of towns in		
		1926.	1925.	1921.
Below 10	per mille	...	2	10
Between 10—20	do.	7	7	57
Do. 20—30	do.	54	49	96
Do. 30—40	do.	94	114	32
Do. 40—50	do.	46	36	8
Do. 50—60	do.	12	4	1
Above 60	do.	1	2	2

In last year's report the recommendation was made that the provisions of the Madras Registration of Births and Deaths Act should be extended to all rural areas in the Presidency. The Government has asked for the opinions of Collectors on the proposal and it is hoped that favourable orders will be issued shortly. Registration in rural areas is certain to improve if the proposal is accepted.

BIRTHS IN MUNICIPALITIES.

27. The total population according to the census of 1921 is 3,018,785, an increase of 1,876 owing to the inclusion of the Mambalam area into Madras City. The average birth-rate for the year under report was 38.0 against 37.1 in the previous year and 35.6, the quinquennial average. The rates for the past five years are shown in the table below:—

Years.	Birth rate per mille.	Increase over 1921.
1921	31.2	...
1922	35.2	+ 4.0
1923	37.1	+ 5.9
1924	37.5	+ 6.3
1925	37.1	+ 5.9
1926	38.0	+ 6.8

A statement showing the birth-rates for individual municipalities during 1925 and 1926 is appended to the report as Annexure B. Increased rates have been recorded in 47 towns and decreases in 34.

Salem recorded the enormous birth-rate of 63.1. The 1921 census population of this town was returned as 59,153, but at that time the town was in the throes of a severe outbreak of plague and many of the inhabitants had fled to places outside. The Municipal Council has decided to take a fresh census of the population, but meantime the 1921 figure must stand.

Other towns which have recorded high birth-rates were Periyakulam (54.0), Kodaikanal (50.2), Bodinayakanur (50.2), Tiruvannamalai (49.1), Chingleput (47.1), Guntur (46.7), Tiruppattur (45.8), Hindupur (45.6), Saidapet (44.6), Bezwada (44.1), Kurnool (43.9), Rajahmundry (43.8), Pollachi (42.9) and Palghat (42.7). Tiruvalur again returned the lowest birth-rate (18.7), only 1.5 above last year's figure, and only three other towns have recorded rates below 25 per mille, Srirangam (24.5), Tadpatri (24.4) and Erode (23.4). These four towns also registered very low rates in 1925, and the inference is that registration of vital statistics in those places continues to be almost entirely neglected.

28. The progress of registration during the past six years may be estimated from the following table:—

		Number of municipalities.					
		1921.	1922.	1923.	1924.	1925.	1926.
Below 20	per mille	9	4	1	2	2	1
Between 20—25	do.	14	7	5	6	2	3
Do. 25—30	do.	18	20	12	10	9	12
Do. 30—35	do.	21	21	24	20	23	20
Do. 35—40	do.	13	15	22	23	27	17
Do. 40—45	do.	5	10	12	14	10	19
Do. 45—50	do.	1	3	3	3	6	6
Above 50	do.	...	1	2	3	2	4

Although only 26 out of 81 municipalities have Health Officers, steady but slow progress has been made. In spite of strenuous effort, however, it seems almost impossible to obtain any improvement in certain municipal areas.

DEATHS IN DISTRICTS.

29. Deaths registered during the year number 1,048,529 against 1,000,558 in 1925, these figures representing death-rates of 25.6 and 24.4, as compared with the quinquennial average of 22.5 per mille. Only one district registered a death-rate below 20 per mille. In nine districts the rate ranged between 20 and 25; and in 12 it was between 25 and 30 per mille. The highest figures were recorded in Madras (45.3), Kurnool (33.6), Vizagapatam (31.7) and the Nilgiris (31.6).

The statement below gives the death-rates for each district for the six years 1921—26 and the last column shows the increase or decrease of the 1926 figures as compared with those of 1921. The increased rates are partly due to improvement in registration and partly to the fact that these are only crude death-rates calculated on the 1921 census population. The census population of 1921 for which vital statistics returns are received is 41,002,696, but estimated according to natural increase the actual population in 1926 is 45,102,311; calculated on the latter figure, the death-rate for 1926 is 23.2, and, though based on a somewhat hypothetical figure, it gives a more correct idea of the actual mortality in the Presidency.

District.	1921.	1922.	1923.	1924.	1925.	1926.	Increase or decrease over 1921.
Ramnad	13.5	16.3	16.5	20.4	24.2	17.9	+ 4.4
Coimbatore	17.8	17.2	20.3	24.2	23.1	20.8	+ 3.0
Madura	19.2	19.9	22.1	23.3	25.8	20.9	+ 1.7
Trichinopoly	20.0	20.0	21.1	19.4	15.9	20.9	+ 0.9
Salem	18.4	19.4	20.5	24.6	23.2	21.5	+ 3.1
Nellore	16.8	18.7	15.6	20.8	19.9	22.9	+ 6.1
Godavari, East	25.6	20.6	22.4	23.5	25.4	23.7	+ 1.9
North Arcot	16.8	17.4	17.5	22.7	22.3	24.0	+ 7.4
South Arcot	16.1	17.2	22.2	24.6	23.4	24.2	+ 8.1
Chittoor	16.6	20.2	20.8	22.8	22.6	24.4	+ 7.8
Agencies	26.2	18.8	13.4	22.7	26.5	24.8	+ 1.4
Guntur	25.8	23.0	28.3	25.5	25.2	25.0	+ 0.8
Cuddapah	19.6	20.3	21.4	25.2	24.9	25.8	+ 6.2
Tinnevely	18.8	20.6	21.9	27.1	27.6	26.1	+ 7.3
Ganjam	23.0	21.3	20.8	22.6	23.9	23.6	+ 3.6
Anantapur	17.8	19.4	22.9	26.5	23.4	26.9	+ 9.1
Kistna	25.6	23.7	27.0	28.4	26.4	27.3	+ 1.7
Malabar	20.4	23.4	22.2	25.1	22.0	27.7	+ 7.3
Tanjore	25.8	25.5	25.2	23.0	25.5	28.3	+ 2.5
Chingleput	19.7	21.5	23.8	23.9	25.3	28.5	+ 8.8
Bellary	19.6	25.0	26.8	34.2	25.5	28.7	+ 9.1
South Kanara	19.0	21.2	21.5	21.6	26.7	29.0	+ 10.0
Godavari, West	...	...	...	...	27.8	29.2	...
Nilgiris, The	24.5	25.2	29.9	45.5	32.6	31.6	+ 7.1
Vizagapatam	23.5	21.1	21.4	24.2	27.1	31.7	+ 8.2
Kurnool	19.6	23.0	23.7	27.1	25.9	33.6	+ 14.0
Madras	38.6	43.1	45.1	41.9	47.9	45.3	+ 6.7

Seventeen districts showed an increase when compared with the rates for the previous year, the increase being most marked in Kurnool (+7.7), Malabar (+5.7) and Trichinopoly (+5.0). The largest decreases were recorded in Ramnad (—6.3), Madura (—4.9) and Madras (—2.6).

30. The following table summarizes the registration of deaths during the six years 1921—26:—

Death-rates.	Number of districts.					
	1921.	1922.	1923.	1924.	1925.	1926.
Below 20 per mille	15	9	4	1	2	1
Between 20—25 do.	5	13	16	15	10	10
Between 25—30 do.	5	3	5	7	13	12
Above 30 do.	1	1	1	3	2	4

VITAL STATISTICS

31. The following statement shows the death-rates registered in the different provinces in India during the past five years:—

Provinces.	Death-rates per mille in				
	1922.	1923.	1924.	1925.	1926.
Punjab	22.07	30.94	43.48	30.0	36.52
Central Provinces	29.3	30.58	32.59	27.27	34.33
Bombay	23.61	25.89	27.63	23.67	23.53
Bengal	25.2	25.50	25.86	24.90	24.74
Bihar and Orissa	24.13	25.04	29.10	23.69	25.71
Assam	26.9	23.54	27.30	22.52	23.02
United Provinces	27.01	23.87	28.29	24.78	25.10
Madras	21.0	22.20	24.54	24.40	25.6
Burma	22.23	20.87	21.50	18.75	20.92

32. The mortality of the different quarters for the years 1921—26 is shown below:—

	Total deaths in					
	1921.	1922.	1923.	1924.	1925.	1926.
First quarter	208,912	194,964	240,011	236,886	244,430	261,019
Second do.	193,948	191,130	203,161	231,657	224,973	242,419
Third do.	214,129	214,697	220,919	263,985	241,027	270,324
Fourth do.	205,890	258,445	244,734	273,415	290,126	265,767

The large increase in the third quarter of 1926 was due to the increased prevalence of "fevers" and "dysentery and diarrhoea."

33. As regards the different communities the rates are as follows:—

	Death-rates in					
	1921.	1922.	1923.	1924.	1925.	1926.
Hindus	20.4	21.0	22.2	24.7	24.5	25.6
Muhammadians	19.3	21.4	21.8	24.4	23.8	25.9
Christians	16.7	17.9	20.4	21.5	21.2	23.4

34. The proportion of female to male deaths was 100 : 102.3.

Year.	Proportion of deaths.	
	Females.	Males.
1921	100	102.6
1922	100	103.4
1923	100	101.9
1924	100	103.2
1925	100	103.1
1926	100	102.3

INFANTILE DEATHS.

35. The number of registered infantile deaths during 1926 was 280,552 as compared with 250,153 in 1925, the infant mortality rates being 189.5 and 180.9 per 1,000 births, respectively.

The infant death-rates for the past six years are shown in the accompanying table :—

Year.	Infant mortality.	Year.	Infant mortality.
1921	160.9	1924	179.2
1922	166.4	1925	180.9
1923	173.7	1926	189.5

Infant mortality rates for individual districts are given in Annexure C.

The highest rates were recorded in Madras (281.6), Kistna (263.9), Godavari, West (256.9), Guntur (224.9) and Ganjam (222.1) and the lowest in Ramnad (146.9) and Malabar (159.7). When compared with 1925, the registered infantile mortality rose in 21 districts and fell in 5 districts. The largest increase is recorded in Vizagapatam (+39.3), while the greatest decrease in South Arcot (—18.3).

Compared with the quinquennial average, the infant mortality rates for 1926 show an increase in 21 districts in the Presidency. It is to be noted that since 1921 the registered rate has increased year by year but there is good reason to believe that the figures still under-estimate actual conditions.

36. The following table gives the percentage of infant deaths in four different age groups for the six years 1921—26 :—

Age at death.	Percentage of infant deaths.					
	1921.	1922.	1923.	1924.	1925.	1926.
Under 1 week	26.7	31.7	34.3	31.8	35.5	34.1
1 week to 1 month	16.3	16.8	16.5	16.7	16.9	16.7
1 month to 6 months	21.9	22.3	21.9	24.2	23.9	26.5
6 months to 12 months	35.1	29.2	27.3	24.3	23.7	22.7

These percentages remain remarkably constant, and the remarks made regarding them in previous years still hold good. The fact remains that throughout the Presidency a large sacrifice of child-life continues from what are definitely preventable causes. By far the largest mortality occurs during the first month of infant life, the annual figures for this period being at least 50 per cent of the total. In this age period, death results from one or other of the group of causes included in the term "developmental" or "ante-natal." Immaturity, prematurity, congenital defect, debility and atrophy all play an important part under every environmental condition. They are all, indeed, dependent on the physical health of the mother, and if the lesson from these figures is to be learned, measures must be instituted by which mothers can be cared for and supervised during the "ante-natal" period. The teaching of mothercraft must also be undertaken if the child is to have a fair chance of survival during the dangerous first month of life.

37. As has been observed in former years, large variations in the death-rates occur in individual districts. These are illustrated by the following selections :—

Name of district.	Percentage of infantile deaths in first week of life.
Coimbatore	50.7
Salem	41.9
Ganjam	21.0
Nilgiris	20.4

DEATHS IN RURAL TOWNS.

38. The total number of deaths registered in the 214 rural towns of the Presidency was 52,379, compared with 53,014 in 1925, these figures representing annual ratios of 24.6 and 24.8 per mille, respectively. A statement of the

death-rates during 1925 and 1926 for each town is appended as Annexure D. The following abstract shows the variations met with :—

Death-rates.	Number of rural towns in					
	1921.	1922.	1923.	1924.	1925.	1926.
Below 10 per mille	36	19	9	2	5	2
Between 10—20 do.	97	97	78	62	50	56
Do. 20—30 do.	60	79	102	111	128	110
Do. 30—40 do.	17	17	21	33	24	39
Above 40 do.	6	3	5	6	7	7

The seven towns included in the last group for 1926 are Tiruvattur (40.8), Eral (41.1), Sattankulam (42.2), Kilakarai (44.2), Ettaiyapuram (46.5), Kottur (46.8) and Muttupet (47.2). The high mortality in Tiruvattur, Eral and Sattankulam and Muttupet was due to cholera; in Kilakarai and Ettaiyapuram dysentery and diarrhoea was the chief cause of death, whilst Kottur was badly infected with plague.

The towns of Nayudupet and Siruguppa have recorded nearly 98 per cent and 94 per cent of deaths, respectively, under "fevers," which, apart from anything else, indicates gross carelessness in registration work.

39. The total deaths registered in rural towns during each of the past six years are shown in the accompanying table :—

Years.	Total deaths in rural towns.	Death-rates per mille.
1921	38,147	17.6
1922	41,193	19.1
1923	46,713	21.7
1924	51,809	24.1
1925	53,014	24.8
1926	52,379	24.6

DEATHS IN MUNICIPALITIES.

40. The total deaths registered in the 81 municipalities during the year numbered 93,469, as compared with 97,602 in 1925, these figures giving annual ratios of 32.6 and 32.3, respectively, as compared with the quinquennial average of 31.0 per mille. A comparative statement of the death-rates in 1925 and 1926 in each municipality is appended to the report as Annexure E.

The following table summarizes the registration work from 1921 onwards :—

Death-rates.	Number of municipalities in					
	1921.	1922.	1923.	1924.	1925.	1926.
Below 15 per mille	3	3	1	1	1	1
Between 15—20 do.	9	14	15	9	11	11
Do. 20—25 do.	27	19	17	18	21	21
Do. 25—30 do.	20	22	24	22	16	13
Do. 30—35 do.	10	13	12	17	19	22
Do. 35—40 do.	7	4	10	6	7	11
Do. 40—45 do.	3	1	...	4	4	2
Do. 45—50 do.	1	3	2	2	1	1
Above 50 do.	1	2	...	2	1	...

The highest death-rates were recorded in Madras (45.3), Salem (44.1) and Chingleput (40.2). The high mortality in Madras is as usual due, for the most part, to intestinal and respiratory diseases. Salem apparently suffered from an epidemic of "fevers," and in Chingleput the great majority of the deaths is said to have been caused by dysentery and diarrhoea; but these peculiarities are more likely due to idiosyncrasies of the municipal registrars rather than to unusual incidence of these diseases.

41. A comparison of the death-rates of municipalities in 1926 with those of 1925 shows that increases have occurred in 39 municipalities, and decreases in 41

Marked increases were recorded in Tellicherry (+ 10.0), Saidapet (+ 7.4), Tiruppur (+ 6.6), and Vizianagram (+ 6.5). The greatest decreases were recorded in Bodinayakkanur (-19.9), Salem (-16.4) and Calicut (-8.6).

During the year under report the infantile deaths in the municipalities were 24,227 against 23,280 in 1925, the registered death-rates being 211.3 and 207.9, respectively, and 4.7 less than the quinquennial average.

Annexure F gives the infant mortality rates for 1926 compared with those of the previous year.

The highest rate was recorded in Masulipatam (315.0), followed by Tadpatri (312.7). Guntur, Bezwada, Madras and Vizagapatam returned rates varying from 250 to 300 per mille.

In 22 towns the rates were below 150 per mille. Prominent decreases in infant mortality were recorded in Tiruvannamalai (-85.1), Hospet (-57.8), Cuddapah (-41.6) and Palakole (-40.1); but it is almost certain that these are fortuitous in nature and are not indicative of any improvement of health conditions in these localities.

GENERAL HISTORY OF CHIEF DISEASES.

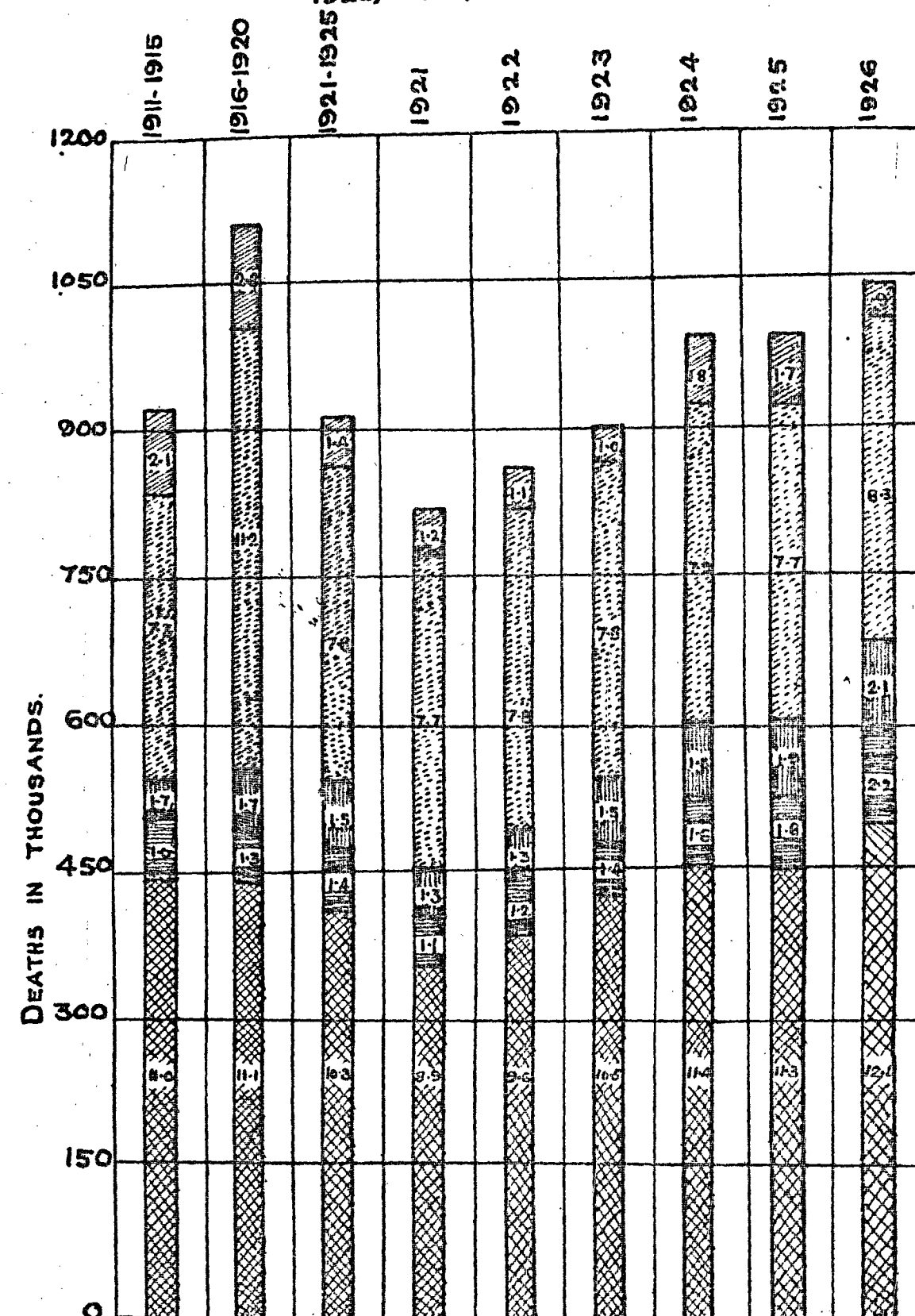
42. The experience of the past year has only served to confirm what was said in last year's report regarding the importance of carrying out detailed epidemiological studies in connexion with the prevalent epidemic diseases. From the investigations already made as regards the incidence and periodicity of cholera, it was possible to forecast that the epidemic of 1924 and 1925 would continue during 1926 with considerable severity in the southern parts of the Presidency, but that the northern areas would remain practically free, and actual events have coincided more or less with that forecast. During the year under report three more statistical papers on the "Epidemiology of Cholera" have been published, and the final article of the series is now nearly ready for the press. Recent papers by Sir Leonard Rogers, F.R.S., on the epidemiological features of smallpox in India have made it all the more necessary to carry out the investigations on this disease which have been planned; but, even with generous financial assistance from the Indian Research Fund Association, it has not been possible, because of pressure of other work, to devote as much time as it was hoped to these studies. The Government has, however, now agreed to the request for a Statistical Assistant, and, provided a suitably qualified and energetic man can be obtained, it is proposed to carry out further researches in this fascinating field of work. The harvest to be reaped is so rich, and the labourers are so few! Fortunately one or two of the younger members of the Health Officers' cadre have shown considerable aptitude for this scientific detective work in the realms of disease, and so long as it is possible to obtain recruits of that kind, there will be little danger of the Public Health Department relapsing into somnolent complaisance, content only to do the ordinary routine, without imagination, without enthusiasm, and without foresight.

43. The following table classifies the total deaths registered during the six-year period 1921 to 1926:—

Diseases.	Deaths in						Increase or decrease in 1926 over 1925.
	1921.	1922.	1923.	1924.	1925.	1926.	
Cholera	27,064	16,502	5,169	51,571	44,815	24,407	- 20,408
Smallpox	9,792	22,801	24,434	18,810	20,478	10,957	- 9,521
Plague	11,875	9,193	12,110	8,822	2,014	2,143	+ 129
Fever	316,019	319,688	318,172	322,356	316,406	337,945	+ 21,539
Dysentery and diarrhoea ...	53,621	51,805	60,323	74,941	78,935	91,758	+ 12,823
Respiratory diseases ...	45,180	48,166	55,951	64,782	74,591	85,602	+ 11,011
Other causes	363,348	391,081	432,666	469,261	463,319	495,717	+ 32,398
Total ..	826,897	859,236	908,825	1,006,043	1,000,558	1,048,529	+ 47,971

GRAPH I

TOTAL DEATHS AND DEATHS BY CAUSES FOR THE QUINQUENNIAL PERIODS
1911-1915, 1916-1920 & 1921-1925 AND FOR THE SIX YEARS 1921, 1922,
1923, 1924, 1925 & 1926.



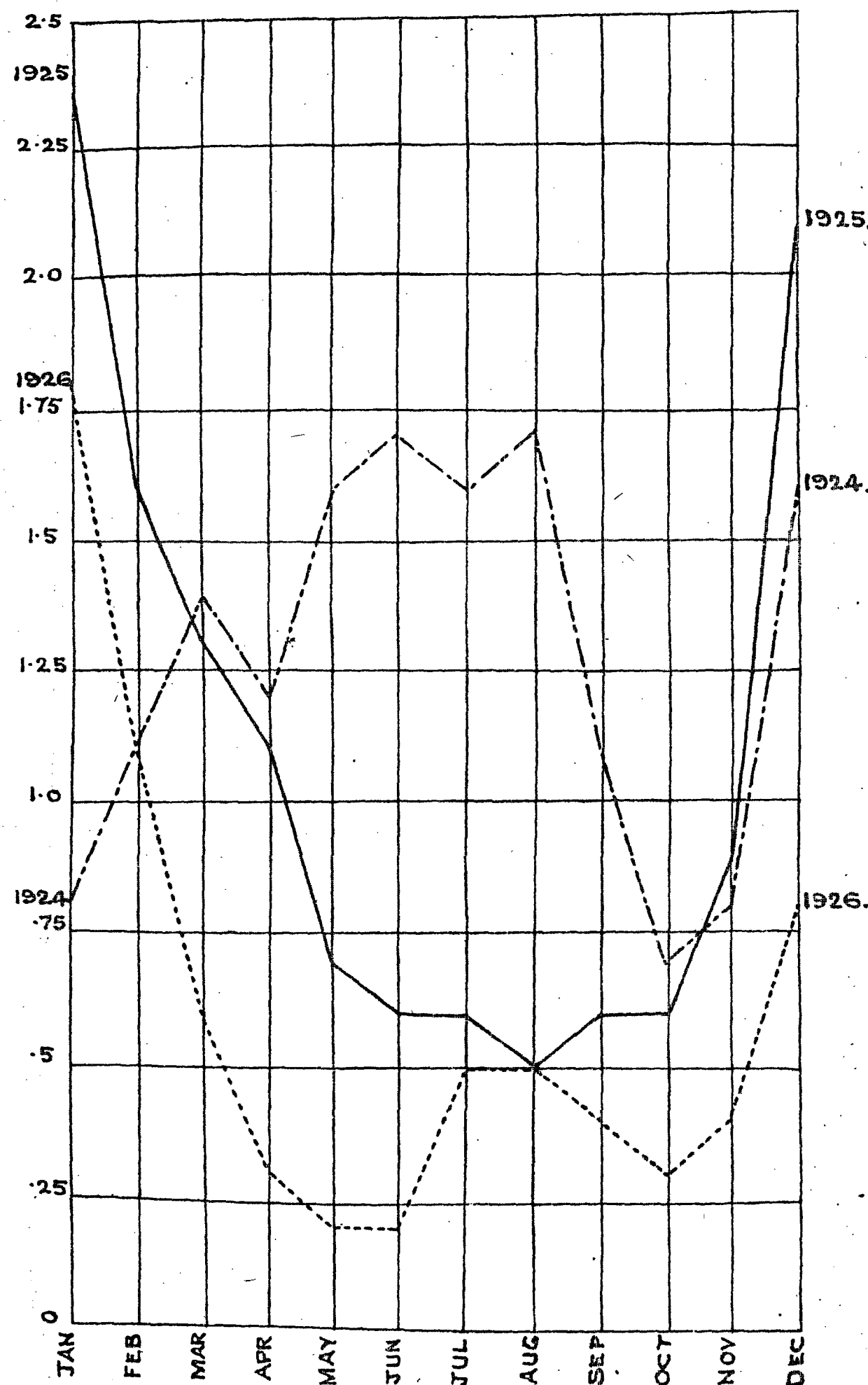
REFERENCE.

- PLAGUE, CHOLERA & SMALLPOX.
- FEVERS.
- RESPIRATORY DISEASES
- DYSENTERY & DIARRHOEA
- OTHER CAUSES & INJURIES.

N.B.:-

THE FIGURES IN THE COLUMNS REPRESENT DEATH RATES
PER 1000 OF THE POPULATION

SHOWING THE DEATH RATES FROM CHOLERA IN THE
MADRAS PRESIDENCY DURING THE YEARS 1924
1925 & 1926.



Although the cholera deaths are more than 20,000 less than those of 1925, the figures for "dysentery and diarrhoea" continue to increase in disconcerting fashion, being nearly 13,000 more than the corresponding deaths in 1925. Taking into consideration the simultaneous large increases under "fevers," "respiratory diseases" and "all other causes," 1926 must, therefore, be recorded as a generally unhealthy year. The only encouraging features of this statistical summary are the very large reduction in the incidence of smallpox and the continued comparative freedom from plague. In the former case, the Public Health Department can claim some credit; in the latter, it cannot be said that preventive measures have been to any degree responsible for the satisfactory reduction of this scourge.

44. In graph I the mortality figures for the three quinquennial periods 1911—15, 1916—20 and 1921—25 and for the individual years from 1921—1926 are shown. No corrections have been made for the natural increase in population, the census figures for 1921 having been used throughout. In order, however, to give a more accurate idea of the actual death-rates, the following statement has been prepared:—

Year.	Death-rates based on 1921 population.	Death-rates based on estimated population.
1921	20.2	20.2
1922	21.0	19.8
1923	22.2	20.7
1924	24.5	22.7
1925	24.4	22.4
1926	25.6	23.2

CHOLERA.

45. The number of deaths from cholera registered during 1926 was 24,407 against 44,815 deaths in 1925, these figures representing death-rates of 0.6 and 1.1 per mille, respectively, as compared with 0.7, the quinquennial average. The following six districts returned more than 80 per cent of the total for the year:—

District.	Deaths from cholera in 1926.
Tanjore	8,793
Tinnevely	2,797
South Arcot	2,541
Trichinopoly	2,191
Coimbatore	2,124
Salem	1,816
Total	20,262

The districts of Madura (1,076), North Arcot (605), Ramnad (491), Chingleput (471) and Malabar (423) also experienced comparatively severe outbreaks. In the remaining 14 districts in the Presidency only 1,079 deaths were recorded, but of these only one, Anantapur, enjoyed complete immunity. As in 1925, therefore, cholera was almost wholly confined to the southern parts of the Presidency. Compared with 1925, eleven districts returned slightly increased death-rates, the largest difference being in Tanjore (+0.7). The largest decreases were recorded in Ramnad (—3.7) and Madura (—3.6). When compared with the quinquennial average, five districts recorded higher and 15 lower rates. Comparative statements of cholera mortality during 1925 and 1926 for individual districts and municipalities will be found in Annexure G.

Graph II shows the monthly incidence of cholera mortality for 1924, 1925 and 1926. The seasonal incidence curve for 1926 closely follows that of 1925, infection having been largely confined to the same areas in both years. The proportion of deaths among males and females was as 100:87. This comparative rate seems to remain fairly constant, but whether the higher rate in males was due to greater exposure to infection or to a higher fatality rate amongst infected males, it is not easy to say.

46. The incidence of mortality from cholera in the four quarters of the year is given in the following statement for the period 1921-26 :—

	Deaths from cholera in					
	1921.	1922.	1923.	1924.	1925.	1926.
First quarter	7,889	3,725	1,720	11,288	18,478	11,593
Second do.	5,828	5,740	478	15,173	8,348	2,558
Third do.	11,628	5,640	595	14,835	5,685	4,853
Fourth do.	1,719	1,391	2,376	10,675	12,304	5,403
	27,064	16,502	5,169	51,971	44,815	24,407

47. Thirty municipal towns remained entirely free from cholera during the year, and 20 others had less than ten cases each. The 51 municipalities which were infected with cholera registered a total of 2,222 deaths representing a rate of 0.7 per mille against figures of 3.681 and 1.2 per mille in 1925, and 0.9 per mille for the quinquennium 1921-25. Death-rates of 1.0 per mille and over were recorded in 20 municipalities, all situated in the southern districts. The highest rates were registered in Tuticorin (5.7), Salem (4.7), Srirangam (4.3), Mayavaram (4.0), Dharapuram (4.0) and Mannargudi (3.9).

The rules governing cholera preventive measures in municipalities were revised and re-written during the year under report. It would be preferable to issue these rules, under section 303 (1) of the District Municipalities Act, in order to give them statutory force.

48. Ninety-five rural towns registered 2,014 deaths from cholera against 110 towns with 4,204 deaths in 1925, representing annual ratios of 0.9 and 2.0, respectively. The death-rate was high in Shiyali (13.3), Adirampatnam (12.7) and Muttupet (10.7).

49. The following paragraphs summarize the results of observations made in the infected districts :—

(1) *Ganjam District*.—One hundred and ninety-six attacks and 152 deaths were recorded. About 70 villages in all were infected, but the disease was most severe in the village of Brahmanatarla in the Tekkali range. The outbreak in this district had no connexion with the epidemic in the southern districts, infection being introduced as usual from Puri.

(2) *Vizagapatam District*.—The 43 deaths recorded occurred in Palkonda and Chipurupalle adjoining Ganjam District.

(3) *Guntur District*.—The disease first appeared in Guntur town, whence it spread to the Vinukonda, Palnad, Tenali, Repalle, Bapatla and Ongole taluks. The worst affected taluk was Vinukonda, where 121 deaths were recorded and the infection was most active during the months of August and September.

Guntur District is liable to two waves of cholera, one in August corresponding to the south-west monsoon, and the other in November following the north-east monsoon. During the former period, the parts of the district north of Bapatla are commonly infected, whilst the southern parts are more liable to outbreaks during the latter period. The disease is usually introduced from the adjoining Nizam's State and spreads along the Kistna and its irrigation channels.

(4) *Kurnool District*.—Fifty-eight deaths were recorded, most of the cases occurring in Markapur Taluk. The outbreak seems to have commenced amongst a party of Adi-Andhra, hide merchants, who spread infection in a number of villages on their way home.

(5) *Nellore District*.—Cases occurred in every taluk, but the total mortality was only 1.5. Parts of this district also were apparently infected by cases imported from Kurnool District.

(6) *Chingleput District*.—The epidemic which began in December 1925, continued until March 1926, but sporadic cases cropped up until August. All taluks were infected, Saidapet as usual being the worst affected. The town of Saidapet

had 30 deaths, and the 97 deaths in Madras City were probably also due to the prevalence of the disease in the surrounding districts.

(7) *Chittoor District*.—One hundred and seventy deaths in all were recorded, but the epidemic prevailed only in the first quarter of the year.

(8) *North Arcot District*.—The epidemic of 1925 continued in the taluks of Gudiyattam, Polur, Wallajah and Cheyyar during the early months of 1926, but only 123 villages and towns, as compared with 246 in 1925, were infected and the total mortality was only 605. As in previous years, the outbreaks in this district seem to have no relation to those of neighbouring districts, and they present an interesting epidemiological problem which is worth further investigation.

(9) *South Arcot District*.—Although cholera was less severe than in 1925, 2,541 deaths were recorded, the towns of Cuddalore, Gingee and Villupuram suffering severely. Most of the cases occurred in Chidambaram Taluk, which forms a part of the Cauvery delta, and which in regard to cholera closely resembles the northern deltaic taluks of Tanjore District. It is indeed a part of the endemic focus situated in this region.

(10) *Salem District*.—The disease existed in severe form during the autumn months, infection having been introduced by the coolies flying from the Mettur Project area when cholera broke out there. The four taluks of Tiruchengodu, Omalur, Salem and Dharmapuri were all infected from this source and 1,816 deaths in all were recorded.

(11) *Coimbatore District*.—Every taluk in this district was infected at one time or another throughout the year, 2,124 deaths, as compared with 2,743 in 1925, were registered, but nearly 64 per cent of these occurred in the four taluks of Bhavani, Gobichettipalayam, Palladam and Udumalpet. The first two areas suffered severely as the result of importation of the disease from Mettur. In Gobichettipalayam 1,070 persons were inoculated with anti-cholera vaccine, and although three of these were attacked, none of them died. No outbreak followed any of the fairs and festivals held in the district.

(12) *The Nilgiris*.—As a result of the importation of infection from Coimbatore district, 20 attacks and 15 deaths occurred.

(13) *Malabar District*.—Although cholera cases were reported from one or other part of this district throughout the year, the disease at no time existed in serious form and the deaths numbered only 423 as compared with 1,336 in 1925. The taluks of Walluvanad and Palghat were worst affected, having 228 and 131 deaths, respectively. The disease appears to have been introduced by pilgrims returning from Madura and Coimbatore. In Malabar, cholera is more often spread by contact than by contaminated water, as each house is self-contained and has its own water-supply.

(14) *South Kanara District*.—The number of registered deaths totalled 235 against 36 in 1925. Udipi and Coondapoor taluks suffered most, and the disease is reported to have been imported by pilgrims returning from Tirupati and by other persons coming in over the Mysore border. Owing to its geographical position, this district is ordinarily protected from invasion by cholera, but once the infection is introduced it spreads in the usual way.

(15) *Ramnad District*.—The severe epidemic of 1925 carried over into the year under report but with ever-decreasing virulence, and the district was practically free by the end of March 1926. The total number of deaths was only 491 as compared with 6,828 in 1925. A fresh outbreak occurred in June in certain villages of Tirupattur Taluk, infection being imported by persons coming from the Emigration Depot in Negapatam, but by the middle of August the disease had once more died out.

(16) *Tinnevely District*.—In this district also, the cholera epidemic of 1925 continued through the first three months of 1926 in severe form, but from April onwards it gradually died out, and only 6 cholera deaths were recorded during the second half of the year. The total deaths numbered 2,797 as compared with 5,621 in 1925. There is reason to believe that the area included in the basin of the Tambaraparani River and its branches and canals is almost an endemic focus for this disease, from which infection spreads regularly to other parts of the district.

(17) *Madura District*.—The severe infection in the last quarter of 1925 gradually subsided during the early months of 1926, and the district reported no further cases until November when Nilakkottai and Dindigul taluks became infected. The total number of deaths was 1,076 as compared with 8,275 in the previous year. The harvest epidemic which usually appears in February and March did not take place and this explains the greatly decreased incidence. Only in two years since 1871, however, has Madura District been entirely free from cholera, and this is largely due to the regular propagation of the disease among pilgrims attending the festivals held at the temples of Madura, Palni and Rameswaram.

(18) *Trichinopoly District*.—The severe winter-epidemic of 1925 which continued into the first quarter of 1926 practically subsided by the end of March. The usual summer-epidemic in May and June caused 235 deaths in Udayarpalaiyam and Perambalur taluks, and the next winter-epidemic again appeared in November. 2,191 deaths were registered during the year as compared with 1,933 in 1925.

(19) *Tanjore District*.—As regards the epidemiology of cholera in this district little remains to be added to the remarks made in last year's report. The winter epidemic of 1925 continued during the first three months of 1926, the deltaic tracts being as usual the areas chiefly affected. The disease gradually subsided from April onwards, but owing to the spread of infection from the Emigration Camp in Negapatam, a sudden rise in incidence was recorded in June. The dispersal of 700 coolies spread the disease southwards to Tirutturaippundi and northwards into Nannilam, and for the rest of the year it prevailed in severe form. Tanjore had 7,201 deaths in 1925; in 1926, no less than 9,861 attacks and 8,793 deaths were recorded.

This district has the unenviable reputation of being the worst cholera district in the Presidency. Investigation of records over the past 45 years has shown that it has rarely been entirely free from the infection, and that when once an epidemic breaks out, it takes years for it to subside. The deltaic taluks in the north of the district, along with Chidambaram Taluk in South Arcot District, constitute what is almost certainly an endemic focus for the disease. It is in this area that most of the experimental field-work for the testing of Besredka's bilivaccine has been done, and during the coming year the Indian Research Fund Association has agreed to continue to finance this work. It is proposed to treat the whole population of a number of villages, known to have been infected every year for the past ten years, with a view to test still further the value of anti-cholera vaccines. In the deltaic tracts, drinking water-supplies are almost wholly derived from the network of irrigation channels, and, in view of the impracticability of removing infection from these channels, the only feasible method of prevention seems to be by mass treatment with vaccines.

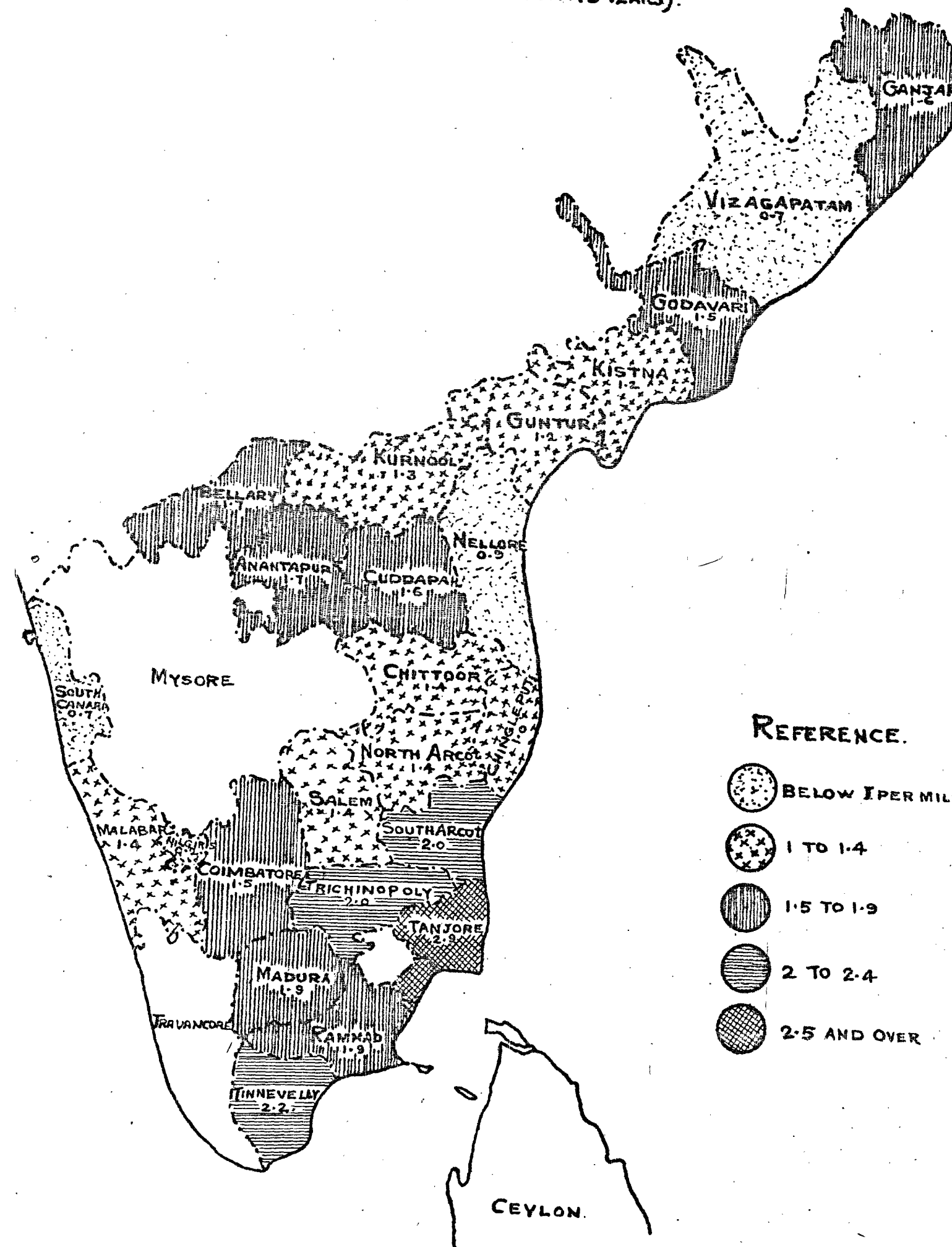
50. In several of the worst-affected districts the district health staffs have worked under great pressure, and in most cases they have carried out their responsible duties with great enthusiasm and without any consideration of self. Those who have never experienced a cholera epidemic have no conception of the constant strain involved in managing a preventive campaign, and the District Health Officer of Tanjore District deserves special mention in this connexion for the excellent work he has done during the last two years.

51. Mention has been made in previous reports of the recurring outbreaks of severe and fatal diarrhoea associated with the ground nut harvest. In October, one of the investigation units attached to the King Institute was sent at my request, immediately cases were reported from Pollachi Taluk. The investigation made it clear that these outbreaks were true cholera, and all district officers have been instructed to deal accordingly with future outbreaks of the kind.

DYSENTERY AND DIARRHOEA.

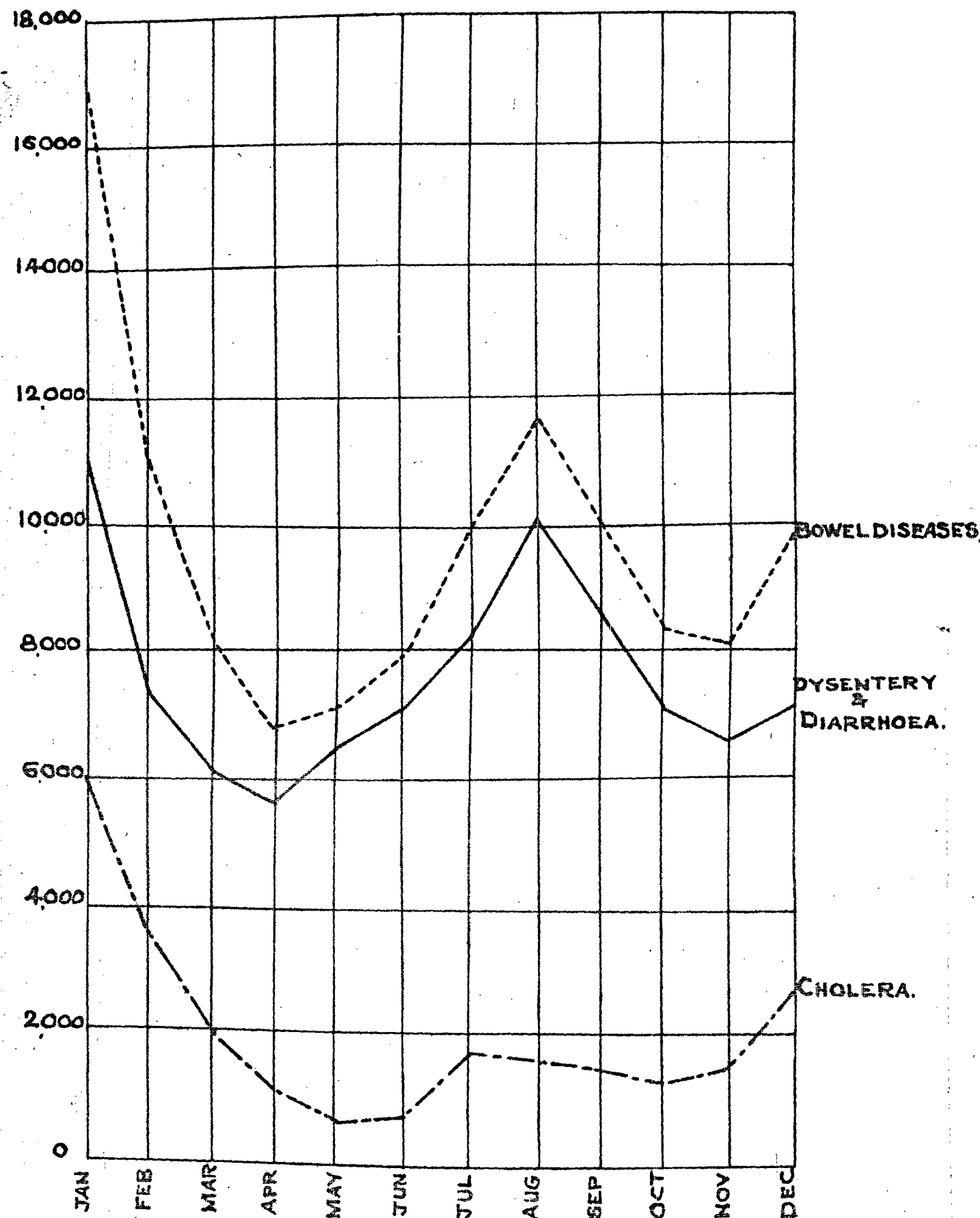
52. The number of deaths registered under this head was 91,758 against 78,935 in 1925, these figures representing death-rates of 2.2 and 1.9 per mille, respectively, as compared with 1.6 the quinquennial average. The close relationship between the incidence of this disease and cholera, to which attention has

MAP SHOWING MORTALITY FROM CHOLERA
IN THE MADRAS PRESIDENCY FROM 1881 TO
1925 (AVERAGE FOR 45 YEARS).



GRAPH III

SHOWING BOWEL DISEASES OR THE TOTAL NUMBER OF DEATHS FROM CHOLERA, DYSENTERY AND DIARRHOEA IN THE MADRAS PRESIDENCY DURING 1926.



CHIEF DISEASES

19

already been drawn, still continues to exist. Graph III shows the monthly variations in the incidence of these two members of the "bowel diseases" group. The largest number of deaths, viz., 11,091, was registered in the month of January when cholera was at its worst.

53. The table below shows the number of deaths for the past six years:—

Years.	Deaths from dysentery and diarrhoea.	Ratio per mille.
1921	53,621	1.3
1922	51,805	1.3
1923	60,323	1.5
1924	74,941	1.8
1925	78,935	1.9
1926	91,758	2.2

Madras City records the very high rate of 7.4 per mille. High rates are also returned from the Nilgiris (6.0), Malabar (4.0), South Kanara (3.7), Chingleput (3.3), North Arcot (3.0) and Coimbatore (3.0). The lowest rates were registered in the Agencies (0.7) and Nellore (0.8). Registration continues to be very defective in these two areas.

54. Municipal towns returned 13,462 deaths under this head, giving a rate of 4.5 per mille, the corresponding figures for 1925 being 12,308 and 4.1, respectively. The highest death-rates were returned by Chicacole (8.1), Madras (7.4), Anakapalle, (6.9), Vizagapatam (6.9), Bimlipatam (6.8), Dindigul (6.8) and Periyakulam (6.6). The lowest rate (0.9) was recorded in Nandyal, but registration in Nandyal receives little or no attention.

55. 4,674 deaths were registered in rural towns against 4,517 in 1925. These figures represent rates of 2.2 and 2.1, respectively. The highest figures were recorded in Kilakkarai (18.7) and Ettaiyapuram (13.3).

56. 12,310 villages and towns registered deaths under dysentery and diarrhoea in 1926 against 12,929 in 1925.

SMALLPOX.

57. 10,957 deaths from smallpox were registered during the year under report as compared with 20,478 deaths in 1925. Calculated per mille of population, these figures represent rates of 0.3 and 0.5, the quinquennial average being 0.4 per mille. The death-rate was highest in the districts of Bellary (0.7) and West Godavari (0.7). In Madura and South Arcot the rate was 0.5 and in Trichinopoly 0.4 per mille. In other districts the rate was below 0.4 per mille.

58. More than 50 per cent of the total mortality from smallpox in 1926 was registered in seven districts, viz., South Arcot (1,186), Madura (989), Tanjore (781), West Godavari (708), Trichinopoly (697), Bellary (642) and North Arcot (614).

In Annexure H the death-rates during the year for districts and municipalities are compared with the quinquennial average.

59. Forty-six of the 81 municipalities registered deaths from smallpox, the aggregate mortality being 1,100 against 2,442 in the previous year. These figures yield death-rates of 0.4 and 0.8, respectively, the quinquennial average being 0.9. No less than 627 deaths, or 57 per cent of the total, were reported from Madura alone, the smallpox death-rate there being 4.5.

60. The following table gives the total deaths, and ratios per mille, for the past five years in municipal areas:—

Year.	Total deaths from smallpox.	Death-rate.
1922	5,412	1.8
1923	3,304	1.1
1924	1,456	0.5
1925	2,442	0.8
1926	1,100	0.4

61. Seventy-six rural towns registered 255 deaths from smallpox against 744 deaths in 1925, representing annual ratios of 0.1 and 0.3, respectively. The highest rates were recorded in Tiruvattur (1.1), Tiruvadamardur, Ramnad, Sattenapalle and Pamidi (0.9) each.

62. The total number of towns and villages where deaths from smallpox were registered was 2,626 against 4,263 in 1925.

63. The following statement shows the number and percentage of registered deaths from smallpox in children and adults:—

Age.	Number of deaths from smallpox.	Percentage.
Under 1 year	4,889	44.6
Between 1 and 10 years	3,662	33.4
Above 10 years	2,406	22.0
	10,957	100.0

As 78 per cent of the deaths occurred among children under ten years of age, it is clear that although much has been done, much still remains to be done before the child population in the Presidency can be said to be adequately protected.

64. The only serious epidemic during the year under report occurred in Madura City, where 1,476 cases with 627 deaths were registered within a period of four months. This was the natural sequel to persistently bad vaccination work done by an indifferently qualified and undisciplined staff of vaccinators. Fortunately the infection did not spread to the neighbouring districts to any extent, although the District Health Officer, Ramnad, reports that the increased incidence of the disease in the taluks of Aruppukkottai, Paramagudi and Tirupattur was due to the importation of infection from this source.

South Arcot District suffered considerably, 1,186 deaths being registered during the year. Vaccination is still very backward in this district, and this is no doubt mainly due to the inadequacy of the vaccination staff employed by the District Board and taluk boards.

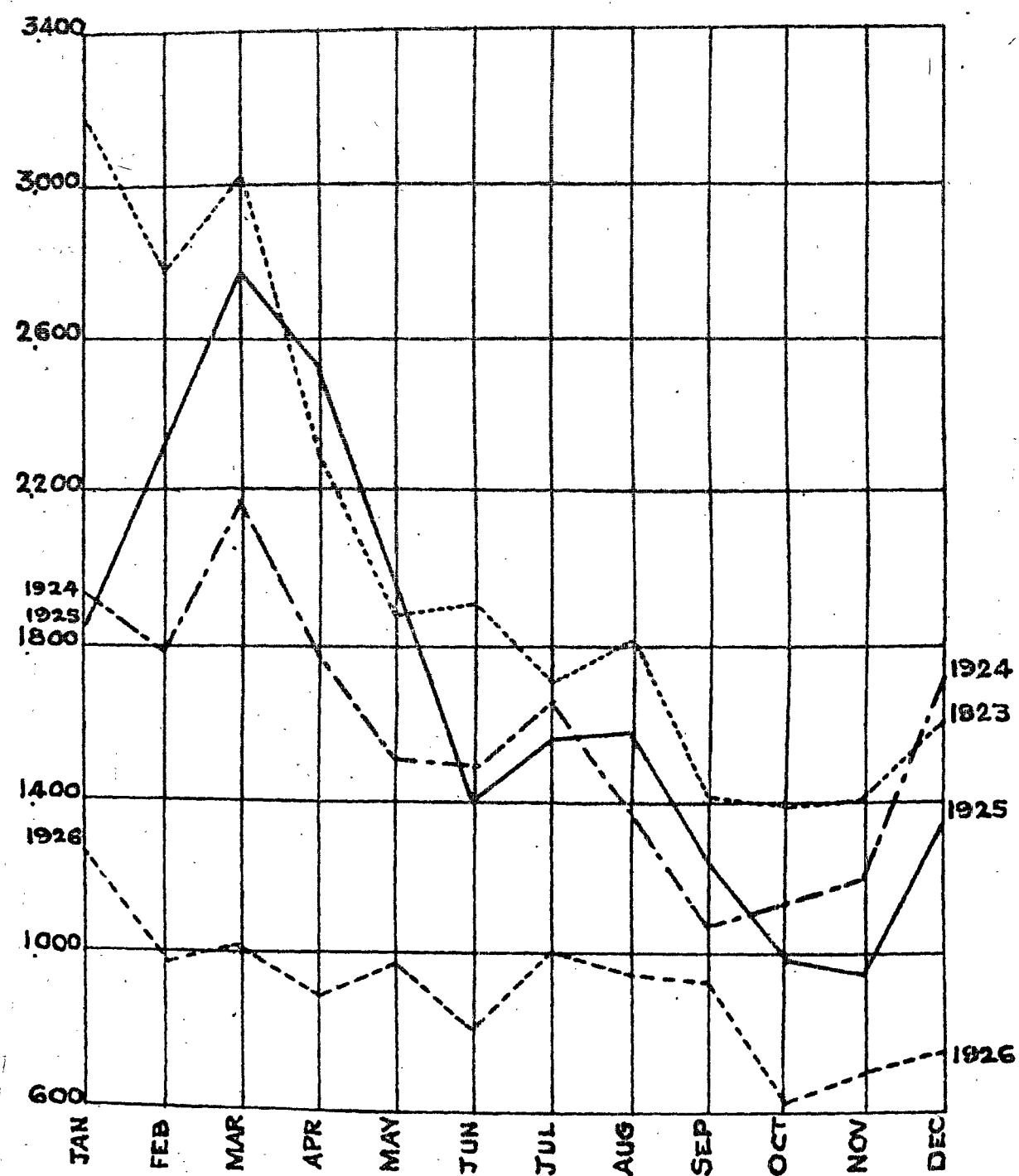
Vaccination has been declared compulsory throughout the districts of Ganjam and the Nilgiris, but progress in this connexion is much too slow; and definite control of smallpox will not be possible of attainment until other districts follow these examples. In Tinnevely District, for instance, over 93 per cent of all registered deaths from smallpox were amongst children under ten years of age. No further argument in favour of the introduction of compulsory vaccination in such cases seems necessary.

In Bellary District, the disease was by no means epidemic, but the district returns show a huge discrepancy when compared with the reports received by the District Health Officer. The annual returns from the Collector's office give the total deaths as 642, whereas the District Health Officer has received official reports of only six deaths. Whichever figure is correct, the village officers must shoulder the responsibility. In the one case, the figures must be due to the imagination of the compilers; in the other, the village officials must have suppressed information regarding outbreaks of the disease. The vaccination staff in Bellary District is, in any case, very inefficient, and the attention of Government is particularly invited to the complete indifference shown by the President of Hospet Taluk Board to this branch of public health work.

In Anantapur District although 277 deaths from smallpox were recorded, the District Health Officer has, by personal investigation, satisfied himself that many of these were really cases of measles.

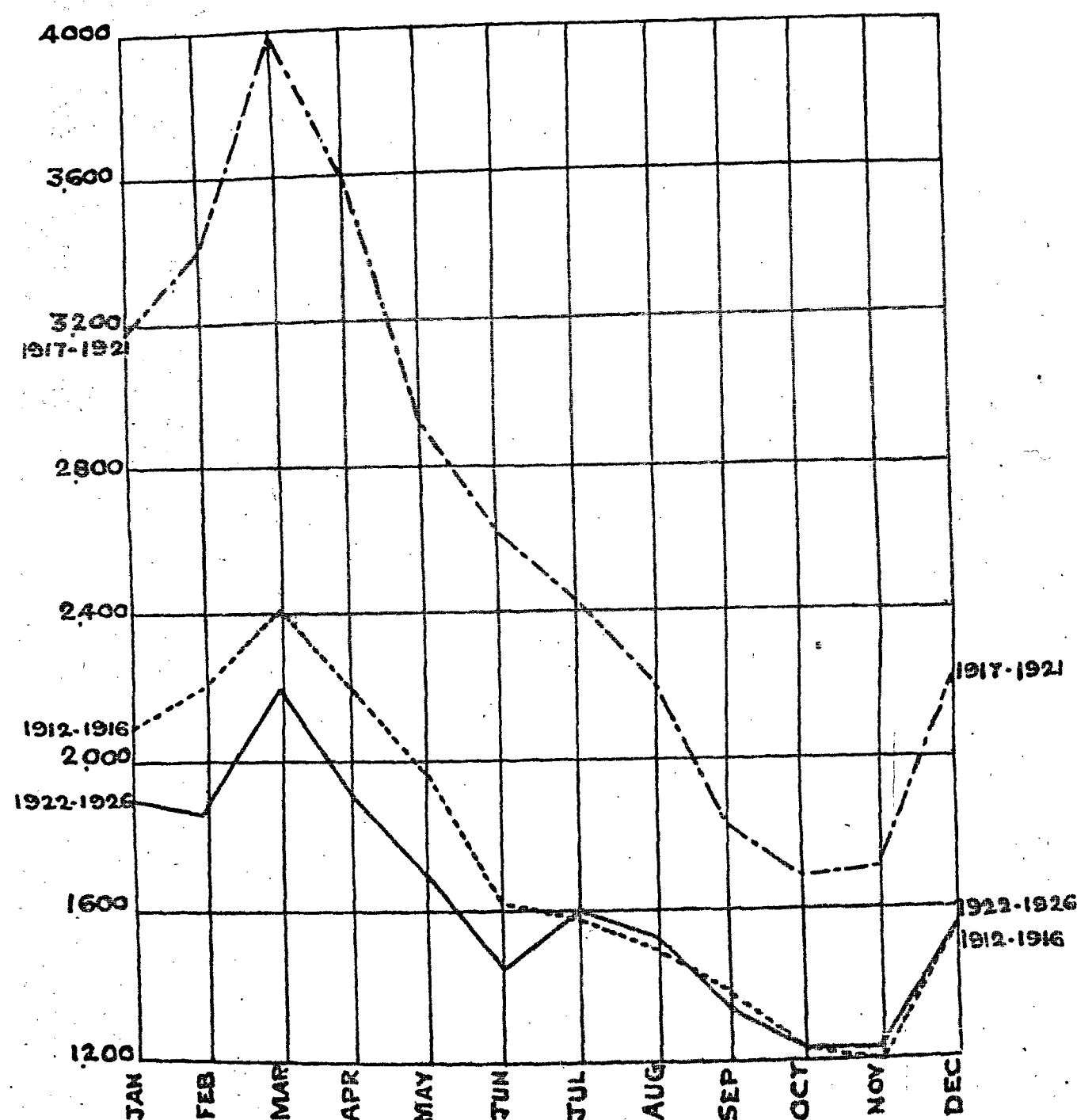
65. In view of these facts and figures, it is unfortunate that local bodies are still disinclined to make vaccination compulsory throughout the areas for which they are responsible. Moreover, this Department has had considerable difficulty in its efforts to improve the quality of the vaccination work, because many taluk boards have refused to replace inefficient men with qualified vaccinators. In other instances, the salary offered is so small that suitably qualified men will not take up the appointments.

GRAPH IV
SHOWING THE MONTHLY INCIDENCE OF SMALL-POX
DURING 1923, 1924, 1925 & 1926.



GRAPH V

SHOWING THE MONTHLY INCIDENCE OF SMALL-POX
DURING THE QUINQUENNIAL PERIODS 1912-1916
1917-1921 & 1922-1926.



Reg. No. 836
5

Copies 30+1570

NOTE.—Reproduced from the original received from the
Director of Public Health, Madras.

Vandyke., Survey Office, Madras.
1927.

66. At the same time, it is gratifying to be able to report that the mortality from smallpox has steadily decreased during the last five years, the figures for the year under report being only about 45 per cent of the total for 1922. The continued high potency of the glycerine lymph in use and the increased numbers of successful vaccination operations performed encourage the belief that this disease is being gradually brought under effective control.

67. Graphs IV and V give pictorial representation of the total and seasonal incidence of smallpox for the years 1923 to 1925 and for the quinquennial periods 1912-16, 1917-21 and 1922-26. Further details will be given separately in the Annual Vaccination Report.

PLAGUE.

68. The total number of deaths from plague reported during the year was 2,143, only 129 more than that for 1925. This represents a death-rate of 0.1 as compared with 0.1 in 1925 and 0.2 the quinquennial average. Ganjam, East Godavari and Nellore have been free from plague during the whole quinquennium. More than 75 per cent of the total mortality was recorded in the three districts of Bellary (697), Coimbatore (483), and Salem (475).

Detailed figures both for districts and municipalities are given in Annexure I.

69. As usual, plague was most prevalent during the first and last quarters of the year. The following table shows the quarterly incidence for the years 1921-26:—

Period.	1921.	1922.	1923.	1924.	1925.	1926.
First quarter	7,229	3,718	5,360	2,275	1,380	893
Second quarter	420	189	920	101	70	182
Third quarter	1,141	1,799	3,268	310	126	388
Fourth quarter	3,085	3,487	2,562	1,236	449	690

70. Only 12 municipal towns were infected, the number of deaths being 162 against 1,018 deaths in 14 towns in 1925. These figures give death-rates of 0.1 and 0.3 per mille, respectively. The towns of Salem, Madura, Periyakulam, Dharapuram, which were heavily infected in 1925, were free from the disease during the year under review. Whilst Ponachi, which had a death-rate of 11.9 in 1925, registered only one death from this cause in the current year, Hospet became once more badly infected, and was responsible for nearly 70 per cent of the total deaths registered in municipal areas, the death-rate being (6.1). The appointment of a Reserve Health Officer as Special Plague Officer to assist the District Health Officer in combating the epidemic at Hospet was necessary. No other town had a death-rate from plague of more than 0.5 per 1,000.

71. Twelve rural towns recorded 643 deaths from plague against 8 towns with 125 deaths in 1925. These figures represent 0.3 and 0.1 per mille, respectively. The highest death-rates from this cause were registered in Kotturu (25.6), Kotturu (13.7), Chinnamanur (12.4) and Ramnad (7.1).

72. Deaths from plague were reported from 189 towns and villages against 135 in 1925.

73. The epidemic which broke out in Ramnad town towards the close of 1925 continued till the end of March 1926. The infection was unfortunately carried to other parts of the district, the worst affected areas being the taluks of Ramnad and Paramagudi with 127 and 60 deaths, respectively, whilst in other taluks only stray cases were reported. The total deaths during the year numbered 198 as compared with 262 in 1925, but the whole district was free from the month of May. A propaganda campaign in favour of plague inoculation was

initiated and 18,138 persons were protected. Rat-catching operations were also carried on in Ramnad town by the municipal authorities.

The Cumbum valley in Madura District is a well-known endemic centre for plague, and in order to ascertain the actual extent of the disease a Sub-assistant Surgeon was appointed to investigate the presence of infection in the rat population of the villages situated in this area. That investigation is still in progress and promises to give information of considerable value. The villages of Chinnamanur, Karungattangulam and Uttamapalaiyam in Periyakulam Taluk were badly affected almost throughout the year. The total number of attacks and deaths were 526 and 212, respectively, as compared with 255 and 207 during 1925. Observation and grain-disinfection posts were established at Theni, Cumbum and Chinnamanur, and nearly 25,000 persons in the infected areas were protected with anti-plague vaccine. The value of this measure is illustrated by the following comparative figures:—

		Number of attacks.	Ratio per 100.	Number of deaths.	Ratio per 100.	Case mortality.
Inoculated	19,328	62	0.32	13	0.07	21.0
Non-inoculated	2,132	26	1.2	21	0.99	80.8

In Salem District, plague was less severe than in 1925, 475 deaths being recorded, most of these in Hosur and Dharmapuri taluks. 21,457 persons were inoculated and the disease has now practically disappeared for another season.

In Coimbatore District, 483 deaths from plague were registered—most of these having occurred in the taluks of Pollachi and Kollegal. In Kollegal 4,797 persons were inoculated, and amongst these there were only 26 attacks and no deaths.

In the Nilgiris, the disease appeared in certain villages of Ootacamund and Coonoor taluks, being most virulent in Kodanad Village, whilst Gudalur Taluk unexpectedly remained free from infection. Guntur District reported 8 cases, all imported from the Nizam's Dominions, where a severe outbreak had occurred.

Infection with plague is now almost an annual occurrence in the western taluks of Bellary District. The areas included in Hospet, Hadagalli, Harpanahalli and Kudligi taluks are unfortunately situated in relation to the endemic centres for plague in Hyderabad State, Mysore State and Bombay Presidency. During the year under review the total deaths in this district numbered 697 as compared with 205 in 1925, Hadagalli and Hospet towns being worst affected. In villages where anti-plague measures were promptly carried out, the disease was quickly brought under control. For instance, in Mangalam Village of Hadagalli Taluk, 2,012 persons were inoculated out of a total population of 2,100 and the infection at once disappeared. By contrast, in the town of Hospet where the disease appeared in October, the municipal authorities and the inhabitants generally resisted both evacuation and inoculation, and the infection still goes on, no less than 111 deaths from plague having occurred up to 31st December.

74. These district reports indicate that the disease has again been more or less confined to the districts shown in the map attached to last year's report. In order to remove plague, therefore, from among the epidemic scourges of this Presidency, all that seems necessary is to confine preventive measures to these restricted areas and to carry them out in a more intensive fashion. The rat is the elusive and ubiquitous enemy; and poisoning, baiting, and the construction of rat-proof grain-godowns are amongst the important methods to be applied to his destruction. Wholesale eradication of the rat population will not be attained by slipshod and half-hearted attacks. In Great Britain, a Rat Ordinance gives powers to penalize those who harbour rats or fail to take measures to eradicate them from their houses and shops; and for educative purposes, if for no other, some such legal enactment seems to be necessary in this Presidency, so that the people may come to realize the losses they sustain year by year, not only from plague infection, but from the destruction of food grains and other articles by the depredations of the rat population.

FEVERS.

75. Deaths registered under this head number 337,945 against 316,406 in 1925, the rates per mille of population being 8.3 and 7.7, respectively. This figure amounts to over 32 per cent of the total mortality for the year, and, as a very large proportion is certainly due to malaria, it gives a very clear indication of the crying need for anti-malarial work and the permanent employment of a large anti-malarial staff. The highest rate was recorded in Vizagapatam (20.9). Other districts returning a rate over 10 per mille are Ganjam (19.8), Agencies (19.5), Kurnool (17.1), Cuddapah (16.2), Nilgiris (11.8), West Godavari (11.2), Nellore (11.1), East Godavari and South Kanara (10.6 each). Seventeen districts, including the Agency Tracts, recorded rates above the quinquennial average.

76. The total number of deaths registered under this cause in municipalities was 12,833 against 12,974 in 1925, the death-rate being 4.3 per mille in both years. The highest rate (18.0) was returned from Tadpatri, and Nandyal followed with a death-rate of 12.6. All other towns had "fevers" death-rates below 10 per mille. In Madras City the figures again showed a large increase, and confirmed the warnings given in previous reports as to the danger of continued inaction. Annexure J gives detailed figures for both districts and municipalities.

77. Thirteen thousand one hundred and fifty deaths were recorded in rural towns during the year against 12,328 deaths in 1925. These figures yield death-rates of (6.2) and (5.8), respectively. High rates were registered in Saluru (31.2), Badvel (30.5), Chodavaram (22.6), Parvatipuram (22.0) and Rajampeta (20.3).

78. Villages and towns which registered deaths from fevers during 1926 numbered 33,455 compared with 25,645 in 1925.

79. The number of deaths registered as being due to fevers during the past six years is shown in the following table:—

Years.	Deaths from fevers.	Rate per mille.
1921	316,019	7.7
1922	319,688	7.8
1923	318,172	7.8
1924	322,356	7.9
1925	316,406	7.7
1926	337,945	8.3

MALARIA.

80. The problems associated with "malaria" are to be met with in practically every district of the Presidency. Very large areas in Bellary, Cuddapah, Kurnool, Anantapur, Ganjam, Vizagapatam, Godavari, Kistna, Nellore and Coimbatore are known to be endemic seats of the disease, and the "fevers" statistics of these districts almost certainly include large numbers of deaths due to malaria or its after-effects. Evidence continues to accumulate regarding the high mortality or morbidity caused by this protozoal infection. For example, the village of Ganjam, once a flourishing seaport, is now but an insignificant village; Bimlipatam, another large trading centre in past generations, is rapidly succumbing to the decay so frequently associated with invasion by the malarial parasite, and these are two instances only out of many given in District Health Officers' reports.

81. During the year under report, the disease seems to have been more than usually prevalent. In Bellary District, the increased number of "fevers" deaths is definitely attributed to malarial epidemics. The same remark applies to the Nilgiris and South Kanara districts.

82. Malaria is one of the few diseases, the etiology, mode of spread, and methods of prophylaxis of which are well established. Notwithstanding this knowledge, however, few local bodies have ever given even a passing thought to

the damage caused by the disease, much less inaugurated any preventive measures worth the name. During the year under report, the investigation units of the King Institute have, at the instance of this Department, conducted malarial surveys in a number of badly infected areas. These included Bimlipatam in Vizagapatam District, the Mopad Canal area and Udayagiri and the neighbouring villages in Nellore District. The report on Bimlipatam indicates the effect of decay, industrial and economic, in producing conditions favourable to an increased incidence of the disease, whilst that on the Mopad area shows clearly the danger of constructing irrigation works without at the same time providing suitable drainage channels and preventing stagnation of water.

The proposed investigation at Hospet did not materialize during 1926 owing to the prevalence of plague in that town, but is now in hand.

83. In connexion with the Mettur Project, the required preventive staff and the necessary laboratory and equipment have been sanctioned, and anti-malarial work is now being carried out under the direct supervision of a Health Officer specially trained in this branch of preventive medicine. During the year under report very few cases of malaria have been reported from the Project area and it is hoped that the staff now working there will be able to keep the mosquito population under control and will prevent the occurrence of anything in the nature of an epidemic outburst of the disease.

84. Now that the appointment of a Malariologist has been sanctioned temporarily, it will be possible to carry through a definite programme of malarial surveys, the primary object in view being to demonstrate the practicability or otherwise of combating malaria in selected areas at a cost within the means of the Government and the local bodies concerned. It is proposed to commence with surveys of certain municipal areas, and to include, in future budget proposals, the cost of executing the anti-malarial works suggested by these surveys. By this method, the Malariologist's reports will avoid relegation to a dusty pigeon-hole and the Government will be able to estimate the possibility of financing, or assisting in the finance of, a definite anti-malarial campaign throughout the Presidency.

85. In a few areas, the distribution of quinine has been attempted, but generally this has been in totally inadequate quantities. In Kadiri Taluk of Anantapur District, where the Local Board accepted the recommendations of the District Health Officer in this respect, the drug was not received until after the close of the year under review. In other areas only ludicrously small amounts were sanctioned.

The proposals for free distribution of quinine in specially malarious tracts are still under the consideration of Government. The question bristles with difficulties, and although a number of applications from voluntary workers were received, these have not yet been accepted, in the absence of a detailed scheme showing the areas where quinine is most urgently required, and what the free distribution in these areas would cost. It is doubtful if in India sufficient quinine is available to meet the every-day needs of the people to any adequate degree, and this fact makes all the more difficult any scheme for free distribution.

RELAPSING FEVER.

86. During 1926, outbreaks of relapsing fever were reported from the districts of Coimbatore, Trichinopoly, Madura, The Nilgiris, Nellore and Kurnool, but in no case was there anything in the way of a serious epidemic. The insidious manner, however, in which this infection continues to crop up in different parts of the Presidency indicates the necessity for continuous watchfulness.

The outbreak in Trichinopoly District was confined to a number of villages in Karur Taluk bordering on Dharapuram Taluk of Coimbatore District where the disease had been allowed to drift along without any very active preventive measures being instituted. Altogether 84 attacks with 34 deaths occurred, all among the Chakkiliyar community; but once the disease was discovered by the

Health staff—for the village officers failed to report its appearance—no difficulty was experienced in stamping it out.

Palni Taluk of Madura District was also infected from Coimbatore District and 29 attacks with 7 deaths were recorded. Delousing of infected persons and their contacts prevented further spread.

In Coimbatore District relapsing fever cases continued to occur for months in the taluks of Udumalpet and Dharapuram, the chief centre of infection being the municipality of Udumalpet. In spite of repeated advice and instruction, the municipal authorities failed to carry out preventive measures with any vigour, and, as a result, not only did the disease continue to take its toll of victims in Coimbatore, but the infection spread to two neighbouring districts. These outbreaks need never have taken place if Udumalpet, which is a growing and wealthy town, had had a Health Officer and a properly qualified Health staff, or if delay in taking action had been avoided.

In contrast to the last two years, the Nilgiris District reported infection with relapsing fever in only five villages, but here also, owing to the danger of fresh importation of the disease, a constant watch has to be kept. The villagers in the Nilgiris are now well acquainted with the disease, its treatment and its prevention.

In Nellore District only 22 attacks and 7 deaths were recorded, but in Kurnool District 295 attacks and 56 deaths occurred, these being confined to certain villages of Markapur Taluk which had been infected in previous years.

87. The disease generally continues to confine itself to the poorer classes of the community, and as a consequence outbreaks are not reported until the infection is well established. The type of the disease has moreover become more and more mild in nature, and, for this reason, does not now attract the same attention as it did when 85 per cent of those attacked died.

RESPIRATORY DISEASES.

88. The total number of deaths registered under respiratory diseases was 85,602 (2.1 per mille) as compared with 74,591 (1.8 per mille) in 1925. The highest rates were recorded in Madras (12.5), the Nilgiris (4.6), West Godavari (4.4), Kistna (4.1) and Kurnool (3.7); and the lowest in Ganjam (0.8) and Tanjore (0.9). The monthly incidence was highest in the month of January. This heading is used to include a variety of diseases, not necessarily having anything to do with the respiratory system.

89. In municipalities, 15,238 deaths from this cause were recorded during the year against 13,772 deaths in 1925, representing annual ratios of 5.0 and 4.6, respectively. Parlakimedi (10.6), Ootacamund (8.4) and Conjeevaram (8.2) all registered high rates.

90. A total of 3,826 deaths from respiratory diseases was registered in 192 towns during the year against 3,644 deaths in 193 towns in 1925. These figures yield annual ratios of (1.8) and (1.7) per mille, respectively. The death-rate was highest in Nuzvid (15.3), Sivaganga (9.5), Ettaiyapuram (9.2) and Madanapalle (7.4). The fact that 22 towns apparently had no deaths from this group of diseases throws considerable light on the indifferent registration work done in those areas.

91. The number of towns and villages where deaths from respiratory diseases were registered in the year was 11,115 against 11,840 in 1925.

92. The table given below shows the total number of registered deaths from respiratory diseases during the past six years—

Year.	Deaths from respiratory diseases.	Ratio per mille.
1921	45,180	1.1
1922	48,166	1.2
1923	55,951	1.4
1924	64,782	1.6
1925	74,591	1.8
1926	85,602	2.1

It is not easy to explain the steady increase in the numbers of deaths registered under this heading.

ANKYLOSTOMIASIS BUREAU.

93. No review of the Public Health administration in this Presidency would be complete without a reference to the activities of the Ankylostomiasis Bureau. During 1926, Dr. Kendrick's staff was largely centred in the Tamil, Malayalam and Kanarese areas of the Presidency. The work which had been in progress in North Arcot District during the early part of the year was abandoned in favour of Madura for two reasons. In the former area, two years of incessant work had failed to persuade either individuals or local bodies of the necessity for the establishment of suitable and sufficient latrines if mass treatment were to be effective. In the latter district, the President, District Board, agreed to finance an experimental scheme for rural sanitation, and the transfer of activities to this field was made as soon as District Board funds were made available.

94. General hookworm surveys were made in Tanjore, at Mandapam Camp, in Malabar and South Kanara. Surveys were also conducted in Chittoor and Cuddapah districts in selected villages "representative of the general area surrounding them."

95. The number of examinations made during the year amounted to 31,493, of which 26,464 or 84 per cent were found to harbour hookworms. Taken with the figures obtained during previous years, the infection-rate works out at 74 per cent for the Presidency—a very high figure. Of the districts surveyed, Malabar shows the highest intensity of infestation; Cuddapah, the lowest. "The intensity of infestation in Malabar was 2 to 3 times that of any other district, even exceeding by several hundred eggs per gramme the average of the counts at Mandapam Camp. The present survey in Malabar confirms previous clinical observation that hookworm is more prevalent there than anywhere else in the Presidency." The examinations made at the Mandapam Camp have also brought out the interesting fact that "the egg counts of those who had previously been to Ceylon are consistently higher for both sexes and for all age groups than are those who had never been out of India." This shows that, climatic conditions being favourable, the emigrant coolies become heavily infested in a very short time after they reach the estates. "This is only to be expected, since those examined in the districts represent all social groups and persons of various occupations, while those examined at the Camp are all of the lower castes—field labourers, extremely poor, ignorant and insanitary."

96. The surveys carried out by the Ankylostomiasis Bureau have established that rainfall associated with warmth and excremental pollution of soil are the most potent factors for the propagation and spread of hookworm infection. Thus, (1) infection is largest where the rainfall is highest, (2) in the plains, east of the Western Ghats, where the comparatively deficient rainfall is offset by extensive irrigation, the infection is correspondingly increased, and (3) in dry districts, like Anantapur and Cuddapah, where rainfall is scanty and the soil is dry and hot, the rate of infestation is very low.

97. The total number of treatments given during the year was 16,132, both carbon tetra-chloride and oil of chenopodium being used. No figures for the number of treatments given for hookworm in public hospitals and dispensaries are yet available; but, judged from the large quantities of these drugs and of thymol that were purchased, it is estimated that several thousands of persons were given treatments in these institutions.

98. The members of the anti-hookworm staff continue to give valuable assistance in health propaganda work. A total of 978 lectures were given to audiences approximating 112,700 and, in addition, 24 other lectures were given with the aid of a cinema film entitled "Unhooking the Hookworm."

99. The Government in G.O. No. 1112, Public Health, dated 2nd July 1926, sanctioned the loan of the services of a first-class Health Officer for employment

for a period of two years as Assistant Director of the Ankylostomiasis Campaign. It was felt that it would be of advantage to all concerned to have one of the Health Officers from the regular cadre appointed for this work, and the results have already justified the proposal.

In order to organize and assist in the carrying out of anti-hookworm measures in the rubber and tea estates in the Presidency, it has been proposed to post an additional first-class Health Officer under the Director of the Ankylostomiasis Campaign for this work. This proposal, if and when sanctioned, should also justify itself by results.

100. Now that it has been possible to initiate a practical scheme of rural sanitation—although so far this has been done only in one small part of one district—it is eminently desirable that Government should assist local bodies with grants for a rapid extension of the scheme. The International Health Board is always ready to help those who help themselves and there need be no fear of losing the Board's continued co-operation if progress in this and other directions can be reported. During the last seven years this Presidency has benefited largely by the work done by the Ankylostomiasis Campaign, and it is to be hoped that the Government will show its appreciation of the generous assistance given by the International Health Board, by placing the necessary funds at the disposal of local bodies and the Public Health department in order that practical use may be made of the facts placed at its disposal through that work. To Dr. Kendrick and to the International Health Board, the Public Health Department tenders its grateful thanks for continued co-operation and assistance.

RABIES AND HYDROPHOBIA.

101. Four hundred and eighty-eight deaths were registered as being due to hydrophobia—388 from rural areas and 100 from municipal and rural towns. The six districts of Salem (51), Kistna (50), North Arcot (38), Chingleput (32), Coimbatore and South Kanara (28 each) returned nearly 50 per cent of the total.

INJURIES.

102. The number of deaths registered under this head was 11,770 against 11,387 in 1925. More than 15 per cent of these were due to suicides and 54 per cent to wounds and accidents.

ALL OTHER CAUSES.

103. The deaths registered under this head aggregated 476,805 as compared with 447,644 in 1925. These figures represent death-rates of 11.6 and 10.9 per mille, respectively, or nearly a half of the total mortality in the Presidency.

The percentage given in column (5) of the following table shows that the proportion of this mass of figures to the total mortality is more or less constant:—

Year.	Deaths due to other causes.	Ratio per mille.	Registered death-rate for all causes.	Percentage of (3) to (4).
(1)	(2)	(3)	(4)	(5)
1921	355,428	8.7	20.2	43.0
1922	380,286	9.3	21.0	44.3
1923	420,018	10.2	22.2	46.2
1924	456,161	11.1	24.5	45.3
1925	447,644	10.9	24.4	44.7
1926	476,805	11.6	25.6	45.5

104. As they exist, these figures are of little assistance to the Public Health Department in its efforts to investigate the causation and prevention of disease. Tuberculosis, leprosy, and venereal diseases are all said to be on the increase, but the evidence on which that opinion is based is inexact and scanty. Influenza and post-influenzal affections, measles and chickenpox, dengue, kala-azar, malaria, beri-beri, the enteric fevers, nervous and cardiac diseases, and many other ills to

which man is heir in this country, and to which preventive measures might be usefully applied, all are buried in this vast, common grave, and the investigator has little hope of obtaining more detailed and more reliable information, so that identification, classification, and prevention are all alike impossible.

105. During the year under report District Health Officers were instructed to make as accurate an estimate as possible of the leper population in their districts. The number of leprosy persons in the Presidency given in the 1921 census report is obviously an under-estimate, and it was thought desirable to try to obtain a more reasonably correct figure. Apparently the District Health staffs have found this a difficult task, for little information of value is to be found in the District Sanitary Reports. Dr. Muir, of the Calcutta School of Tropical Medicine, has planned for the whole of India an investigation with the same end in view, and the expectation is that this new effort will be more successful. Owing to the work of the Leprosy Relief Association, considerable interest has been aroused as to the methods of spread and prevention of this disease, and with financial assistance from the Leprosy Relief Committee, it is hoped to be able to issue a certain amount of propaganda literature on the subject during the present year.

106. In last year's report mention was made of an outbreak of epidemic dropsy in certain villages in Ganjam District. The disease appears to break out in epidemic form at the same time each year, and the outbreak of 1926 gave an opportunity for its detailed investigation. The District Health Officer reports that the disease regularly makes its appearance in the hot months of April and May and subsides with the commencement of the rains, whilst any cases which may occur in the latter part of the hot weather are milder in character. The disease appears to him to be caused by an infective agent, probably conveyed by food. 102 cases in all were discovered, and, in 88 of these, the infection was traced to two endemic foci in the union village. The death-rate was only 6 per cent, but little or no immunity is developed, as the same individuals are liable to attack in subsequent outbreaks. The popular belief in the villages is that gingelly oil, adulterated with the oil of the "Odisimari" seed, is the cause of the disease, and samples of this seed have been sent to Col. McCarrison, I.M.S., for analysis and experiment. The disease is gradually assuming larger proportions and further investigation is called for.

107. The only practicable method of throwing light on the obscurity covering the vast mortality included under "all other causes" is to encourage officers of the Public Health Department to carry out investigations of this kind. Burdened as these officers are with other work, this may not be too easy, but no more desirable method of relieving the monotony of routine duties can be imagined than the careful investigation of puzzling outbreaks of strange diseases. No Health Officer with any ambition can afford to neglect the unrivalled opportunities in this direction which lie at his hand.

MATERNAL DEATHS AND CHILD WELFARE AND MATERNITY RELIEF.

108. During 1926, 7,142 deaths were registered from causes associated with "childbirth." The figures for the six years 1921-1926 are given below for purposes of comparison—

Year.	Deaths due to childbirth.	Rate per 1,000 births.
1921	1,864	1.7
1922	2,613	2.1
1923	2,892	2.1
1924	2,601	1.8
1925	3,788	2.7
1926	7,142	4.8

109. There can be no doubt that the steady increase is largely a question of better registration, and that the extent of mortality from this cause is still very much under-estimated.

This is borne out by the more detailed monthly statistical returns submitted for those municipal towns where Health Officers are employed. During 1926, for a municipal population of 1,276,457, the total births numbered 51,883, including 1,777 still-births. This gives a crude birth-rate of 40.6 per mille which is only slightly less than the estimated Presidency birth-rate and which therefore may be taken as reasonably correct. For the same population, the 809 maternal deaths which were recorded give a maternal death-rate of 15.6 per 1,000 births. Applying this rate to the whole Presidency, and this cannot be considered at all unjustifiable as municipal populations are generally better provided with medical and midwifery service than the rural population, it is certain that no less than 24,000 women in the prime of life were sacrificed during the year under report, because of lack of medical supervision during pregnancy and skilled assistance at the time of childbirth. When it is also stated that in this Presidency only 55 mothers per 1,000 births received skilled attention during labour, and that, if the figures for Madras City are excluded, this proportion fades into insignificance, the enormous scope for development of this branch of preventive medicine requires no additional proof. If further illustration is demanded, reference may be made to Annexure N appended to this report, which gives for each district and municipality the number of qualified midwives, the number of labour cases conducted, and the percentage of births attended by these midwives.

110. During the year 406 trained midwives attended 36,564 births in municipal areas, whilst in the districts only 542 midwives were available for a total population of over 36 millions. These midwives attended 45,300 births, only 3.3 per cent of the total.

111. Maternity relief and child-welfare centres which numbered 23 in 1923, 45 in 1924 and 58 in 1925, decreased to 53 in 1926. The decrease is most disappointing in view of the great necessity for a wide expansion of the activities carried on by these centres. It is a matter for great regret that little has been done by local authorities in organizing measures for the relief of mothers and infants. That the health and welfare of the mother and her child is the foundation of the future well-being of the people is now accepted on all hands. Properly organized schemes for welfare work cost only a fraction of the average expenditure on other public utility services. With a managing committee, containing voluntary workers, these welfare centres can do an enormous amount of good and useful work and quickly attract the mothers, who are only too willing to accept advice as to the proper management of their infants.

The ultimate objects of all effort to promote the health and welfare of mothers and young children are these—

- (1) to make maternity safe, and less burdensome; less disabling for the mother,
- (2) to give the mother a sound and practical knowledge of the elementary laws of hygiene governing the upbringing of her family,
- (3) to help her to carry out these rules in her own home, and
- (4) to make good unavoidable shortcomings, due to lack of means or social disability.

No one can deny that in this Presidency there is a wide field for philanthropic effort and voluntary work in these directions. The few centres now in being have shown what can be done, but hundreds more are required before assistance can be brought to all who require it.

112. One of the greatest handicaps to progress in the past has been the lack of suitably trained Health Visitors, partly because of the reluctance of Indian women to take up this work and partly because there was no proper training school. The time has come when a suitably equipped and properly staffed training school for Health Visitors is essential, and, in order that the necessary supervision of the teaching may be made available, separate proposals are being made for the

institution of a Government training school, and the issue of a Government diploma to candidates passing the requisite examinations. Once this school is opened it is hoped that an adequate number of qualified women will be made available for work both in municipal and rural areas. It is suggested that local bodies desirous of opening child-welfare centres should nominate local candidates for training at the Government school on the condition that after qualification they should serve the local bodies nominating them for a minimum period.

PROPAGANDA.

113. One of the greatest problems to be reckoned with in this country is the general ignorance in regard to health matters. From the moment of birth the individual struggles under the heavy handicaps of an unhealthy environment, unhealthy methods of living and unhealthy conditions associated with food and water-supplies. These handicaps continue to exert their malign influence, because of ignorant and superstitious beliefs; but the culpability lies not with those who do not know better but rather with those who refuse to provide the means and the opportunities for dispelling the clouds of ignorance and superstition. Reference has already been made to the activities in this direction carried on among women and children by the Child Welfare and Maternity Relief centres, but the development of health propaganda work must be greatly enhanced before it will be possible to record any great advance in the spread of knowledge of health.

114. Since the inauguration of the District Health Scheme in 1923, health propaganda work has received continuous and increasing attention, and from the quarterly reports received from local boards, it is evident that District Health Officers and their Health Inspectors have carried out this part of their duties with sustained enthusiasm.

During the year 70,300 lectures were delivered in 44,200 centres to audiences numbering approximately 38,00,000. Of the lectures, 6,400 were illustrated by means of lantern slides. This number, though twice as high as that for 1925, is still unsatisfactory, and until every taluk board realizes the necessity for providing its Health Inspector with a magic lantern, lectures on health subjects will not attract as large audiences as they otherwise would. The Public Health Department has issued repeated appeals to local bodies pointing out the desirability of providing this equipment to Health Inspectors, but the response to those appeals has been on the whole disappointing and progress has been correspondingly slow. Posters, pictures and illustrated leaflets prepared by the Madras Health Council have been widely distributed both during and after the health lectures, and during the coming year it is hoped to be able to produce these in much larger numbers and in more attractive form.

115. In municipalities, with the exception of a few outstanding examples, health propaganda work has been carried out in a most disappointing and desultory fashion. A considerable proportion of the municipal towns in the Presidency have indeed regularly reported that no work of the kind has been attempted. As it is exactly in those compact areas where this work could be most easily organized and where unsatisfactory health conditions most urgently demand attention, this neglect on the part of municipal councils calls for severe comment. As a rule, no attempt has been made to educate the citizens in health matters except where Health Officers have been appointed, and, from this point of view alone, it is to be hoped that further additions will be made shortly to the numbers of Municipal Health Officers employed in the Presidency.

116. The importance of carrying on an educative campaign on health topics in elementary and secondary schools has been also kept in view, and, during the year under review, no less than 6,100 schools were visited by members of the Health staff as compared with 3,500 in 1925. The teachers have continued to give every assistance in their power towards the development of this work, but

managing bodies should make a better response to the suggestions made by the Public Health Department regarding improvement of sanitary defects, because it is difficult to convince children of the advantages of sanitary surroundings and sanitary habits when they find that conditions in the school premises themselves do not conform to the health maxims laid before them during the health lectures and lessons.

117. Advantage was taken of the large gatherings at fairs and festivals to disseminate health knowledge by means of miniature exhibitions and illustrated lectures and talks. One or other of these methods was employed at about 700 centres during the year.

118. The Madras Health Council continued to play an active part throughout the year in connexion with health propaganda work. 40,149 posters referring to nine different subjects, and 528,297 leaflets dealing with 24 subjects, were distributed. 2,880 new lantern slides were prepared and issued on loan and 4,293 slides were prepared to meet indents made by local bodies. The 14 lanterns owned by the Health Council were in constant circulation on loan and 19 lanterns were purchased on behalf of local bodies. The Madras Health Council has, therefore, once more justified its existence and has been of great assistance to the Public Health Department.

119. This section of the report would be incomplete were no reference made to the robust activity of the Trichinopoly District Health Association which has just issued its eighth annual report. The following quotation illustrates the keen spirit possessed by this body of voluntary workers: "It is a good augury for the future of this institution that the people of the district are beginning to realize more and more the efficacy of centres like ours and the advantages gained from a knowledge of elementary rules of health." The members of the Association, under the active presidency of Sir T. Desikachari, are anxious to extend their activities, and hope that it will shortly be possible to acquire a "well appointed and equipped habitation" of its own. The balance sheet appended to the report makes it certain that this hope should be fulfilled in the near future. The work done during the last eight years indicates that, with energy and determination, voluntary associations of this kind can do much to bring comfort and relief to the poor and needy, and it is greatly to be hoped that the success attained in Trichinopoly will serve as an inducement to other districts in the Presidency to initiate voluntary health associations of their own.

HEALTH WEEK.

120. During January the 3rd Annual Health and Baby Week was held throughout the Presidency. Arrangements generally were on the lines laid down for previous celebrations, although it was left to local committees to vary their programmes to suit local conditions. In practically every town of any size the week was carried through with considerable success. Unfortunately, owing to severe infection with cholera, in seven different districts the event had to be cancelled altogether, but in the remaining districts the movement received enthusiastic support from a large proportion of the people, and the great interest shown in the different lectures, exhibitions and demonstrations, made it evident that they met a demand which is without doubt increasing.

121. A detailed report on the 1926 Health and Baby Week was submitted to Government in D. No. 50-V.S., dated 29th September 1926, and was reviewed in G.O. No. 2040, P.H., dated 13th November 1926. In August preliminary circulars were issued in connexion with the 1927 Week, and all District Health Officers and Municipal Health Officers were reminded of the necessity to form local committees and to raise funds well ahead of the date fixed for the celebrations. Although this forms a subject for next year's report it may be stated here that the 1927 Week was celebrated more widely and more successfully than in previous years, the Health staffs now being thoroughly acquainted with the organization required.

122. It is pleasing to be able to report that in a considerable number of centres the Health and Baby Week committees have decided to remain in being throughout the year, so that health problems might be examined and their work of spreading knowledge of health might be continuous. This is a most desirable development and deserves every encouragement. The enthusiasm roused during Health and Baby Week must be kept alive throughout the year, if lasting results are to be obtained.

FAIRS AND FESTIVALS.

123. Since the inauguration of the District Health Scheme in 1923, the sanitary arrangements made by local bodies to safeguard the health and comfort of pilgrims have steadily progressed, with the result that outbreaks of epidemic diseases, and particularly of cholera, which used to be a constant scourge, are now few and far between.

In few aspects of public health work has greater success been attained than in the sanitary management of fairs and festivals. In the past the requirements of the pilgrims at festivals was no man's concern. Water-supply, conservancy, lighting, accommodation, food control and all the other factors which go to make for the comfort and safety of the pilgrims were completely ignored, and disastrous outbreaks of disease were the natural consequence. For the most part conditions are now completely reversed. Every possible arrangement is made to provide safe water-supplies and to ensure the cleanliness of the festival areas. Sufficient and suitable sanitary accommodation is provided as far as possible; and even travelling conveniences have been remarkably improved.

124. For every fair and festival the Health Officer concerned submits a preliminary report in Form I sufficiently in advance giving details of the arrangements proposed in connexion with water-supply, accommodation of pilgrims, food supply, medical aid, etc. These reports are scrutinized, and modified whenever necessary, and the local bodies concerned are then requested to carry out the proposals. Immediately a festival is over, the Health Officer is required to submit a report (in Form II) giving information as to the manner in which the sanitary arrangements were carried out and the occurrence of epidemic disease, if any, with the measures taken. This report enables the Public Health Department to take any further steps necessary to guard against similar occurrences in the future.

The larger fairs and festivals are supervised by the Health Officers themselves, the smaller ones by the subordinate Health staff.

125. During the year under report, no untoward outbreak of disease occurred at these fairs and festivals. In Srirangam cholera was prevalent before the festival commenced, and a few cases occurred during the festival period. The Municipal Council was advised to appoint a special staff for cholera duty, and fortunately the disease never assumed epidemic proportions, although stray cases continued to occur until the end of February 1927. The Palni and Srisaillam festivals, which formerly were responsible for repeated epidemics of cholera, presented clean bills of health during 1926. The sanitary arrangements recommended by the Health Department were generally carried out, although a few notable exceptions still exist. For some of the festivals in Tanjore, South Kanara, Kurnool, Anantapur and Kistna the arrangements made were by no means complete, the usual excuse of lack of funds being made. Many local bodies still fail to exploit sufficiently the many sources of income available at these centres. Were the advice given by the Public Health Department in this direction followed, no shortage of funds need be feared.

MEDICAL INSPECTION OF SCHOOLS AND COLLEGES.

126. The medical inspection of school children is a subject which has been under discussion for several years past. Government have now ordered the compulsory medical inspection of all pupils attending secondary schools, and the medical inspectors' reports, which must be prepared in accordance with approved schedules and forms, are forwarded to the Surgeon-General, for evaluation by him and the Director of Public Health, before they are submitted to the Director of Public Instruction for payment of grants. The reports sent in during 1926 prove that a large number of minor disabilities exist in the school populations, and it would be of the greatest advantage to the health of the whole Presidency, were medical inspection made compulsory in all primary schools as well. Information is lacking as to the health conditions of the younger generations, and, until this is forthcoming, the prevention of disability cannot be usefully planned. Moreover, the inspections can be made the opportunity for providing lessons to the school children in connexion with the maintenance of health, and propaganda work of this kind is more than desirable. The Director of the Ankylostomiasis Campaign has suggested that all medical inspectors should be provided with the necessary drugs for giving hookworm treatment to every child coming up for examination, and this proposal is now under consideration.

127. Proposals have also been made by the authorities of the University of Madras to introduce compulsory inspection of all college students, at least twice during their collegiate careers. This is a move in the right direction, and deserves hearty support.

INDUSTRIAL HYGIENE.

128. District and Municipal Health Officers, in virtue of their appointment under the Factories Act as additional Inspectors of Factories, are expected to supervise the sanitary conditions of all factories and mills within their jurisdiction. Any recommendations they may wish to make are forwarded to the Commissioner for Labour and the Chief Inspector of Factories. The Public Health Department has noticed that many local bodies grant permission for the construction and establishment of factories and workshops without giving any consideration to the interests of persons living in the neighbourhood, or to the amenities of the locality. Such action very often results in prolonged litigation, because powerful vested interests are allowed to supervene. In several recent cases, District Collectors have been compelled to suspend the resolutions of local bodies and Government have ordered their permanent suspension. In order to check this tendency to ignore health conditions, it is proposed to ask Government to issue instructions to all local bodies requiring them in every such case to consult local Health Officers before permission to erect or establish factories is granted. Where building by-laws are in force, the proposed site, the site-plan and the specifications of every building should be seen and approved by the Health Officer, and this rule should be applied with especial force in the case of all new factories and workshops.

CAUVERY-METTUR PROJECT.

129. This irrigation scheme has been the subject of so much discussion that a brief summary of the health work being done in the project area will no doubt be of general interest.

130. A gazetted Health Officer, specially trained in anti-malarial work, was posted to the project area on 1st June 1926. Detailed malaria surveys had indicated the potentialities of the works-site as regards malarial epidemics, and six Sanitary Inspectors, with gangs of ten coolies each, were sanctioned for the carrying out of anti-malarial measures. Four Sanitary Inspectors were employed during the year.

131. The population in June numbered about 1,000, but, as the work developed, additional labourers were recruited, and, by the middle of November, the total population was 2,909, and it has risen to a total of 11,362 by April 1927. Situated, as the site is, 37 miles from a railway, it was no easy matter to provide food supplies, water, and conservancy arrangements for such rapidly increasing numbers. Moreover, contractors were unwilling to spend anything on housing accommodation or for temporary latrines; and as the cooly lines were only under construction when the Health Officer took over his appointment, sanitary conditions were by no means satisfactory.

132. Cholera broke out early in July, infection being imported from the neighbouring village of Sampatti, the weekly shandy in that village being used as a source of supplies by the coolies in the absence of a sufficient number of bazaar shops in the project site itself. Thirty attacks and 16 deaths occurred in all, of which only 17 attacks and 10 deaths were registered in the head works area. The Engineers in charge rendered every possible assistance to the Health Officer, and the outbreak was quickly brought under control. Many of the coolies, however, fled home, and as a result, a serious epidemic, which lasted for nearly three months, broke out in three taluks of Salem District, whilst sporadic cases in different parts of Coimbatore District were also traced to the same source.

Shortly after this outbreak additional bazaar shops were opened in the head-works area, under licences issued by the Engineer in charge, and satisfactory food supplies are now available in sufficient quantities.

133. In addition to the Sanitary Inspectors, two vaccinators were added to the Health staff, and, although smallpox has been reported from a few of the surrounding villages, no case has occurred among the labourers on the works. Vaccination of all children living in the cooly camps, and revaccination of adults is carried on systematically, so that, with ordinary luck, there seems to be little fear of any outbreak.

134. The dangers of malaria having been shown to be so great, anti-malarial work has constituted the most important part of the duties of the Health staff. Marshy areas in Kullaveerampatti, west of the Cauvery bridge site and in Mettur, east of Smith's Knoll, were drained, and other parts of the site covered with jungle growth were cleared. A long drain running from south to north was cut near the bridge site and improved conditions generally; pits and hollows were filled up and the whole ground properly levelled.

The rocky bed of the Cauvery River with its innumerable pools was, however, the most dangerous breeding ground for mosquitoes. The surveys had shown that every one of these pools actively bred *Anopheles culicifacies*, a well-known malaria carrier, all through the dry season. At first a gang of coolies under a Sanitary Inspector was employed in oiling these pools, but this method was soon abandoned, as it was found that the wind blowing up and down the river swept the oil off the surface of the water. Large numbers of the smaller pools and puddles were finally disposed of by filling them up with sand, 40 to 60 coolies under a couple of maistries being employed for this purpose. Later on, it was found that new breeding grounds were being created by the excavation, from the river bed, of sand required for building purposes, but this difficulty was also overcome with the assistance of the engineering staff.

135. Simultaneously with these preventive measures, larvae were collected, bred out and identified in the Health Officer's laboratory in order to check any possible variations in the mosquito population. So far, 98 per cent of all anopheles caught and bred out belong to the species *A. culicifacies*. Occasionally a few *A. Rossi* have been found.

In addition blood smears of all fever cases reporting at the dispensary have been examined, and those showing malaria parasites are traced and given a vigorous course of treatment. The cooly lines are visited every morning and evening and quinine is distributed to all malaria cases. No general quinization of the labouring population has so far been required, however, as, although a few cases of malaria occurred in Kullaveerampatti in December, there was no indication for mass treatment. The fever rate is being closely watched and supplies of quinine are available, should the necessity for its use arise.

136. Accurate records are being kept of all births and deaths. The registration of births and deaths is carried out by the vaccinators who go round every part of the headworks camps twice a week. The monthly statistical returns are meantime being sent to the Tahsildar at Bhavani for incorporation in the Coimbatore District returns.

137. The present water-supply is taken from a well which is open to a certain amount of contamination. A preliminary water-supply scheme, which is now nearing completion, provides for the pumping of river water to an elevated tank, and, after filtration and chlorination, the water will be distributed by means of pipes over the entire headworks area.

138. In the absence of a water carriage system, which it is eventually proposed to lay down, trenching grounds were selected and all night-soil is trenched. It is proposed to erect three small incinerators for the destruction of rubbish. Meantime, this is collected in heaps and burned on the spot. A staff of 18 scavengers and sweepers look after the conservancy of the camps, and 35 temporary latrines have been constructed.

139. Levels have been taken for the whole headworks area, and, on completion of the drains for the various camps and quarters, it is proposed to provide a modern disposal-plant which will deal with the sewage of the whole population.

MINES.

140. The following paragraph is added with reference to G.O. No. 886, P.H., dated 27th July 1921:—

Mining operations were carried on in the districts of Vizagapatam, Nellore, Anantapur, Kurnool, Salem and the Nilgiris. The District Health Officer, Bellary, reports that no mines were worked during the year in his district.

(a) *Inspection of mines by District Health Officers.*—During the year, District Health Officers concerned inspected in Nellore 10 (mica) mines, in Vizagapatam 5, in Kurnool 2, and in Salem and Anantapur 1 each.

(b) *General health.*—The health of the mining population is reported to have been satisfactory with the exception of Nellore where, the District Health Officer reports, most of the coolies were anaemic as a result of infection with hookworm or malaria, or both. No epidemic disease was reported.

(c) *Water-supply.*—The arrangements for the supply of drinking water seem to be generally satisfactory. The District Health Officer, Nellore, however, has recommended provision of draw wells in certain instances.

(d) *Conservancy.*—Latrine accommodation is provided only in the mines at Salem and Anantapur. In the other districts adjoining open spaces are resorted to by the coolies, but this merely intensifies soil pollution, and should be prevented as far as possible. It is very desirable that mining populations should have sanitary latrines, and District Health Officers should continue to recommend their construction in all mining areas.

(e) *House-accommodation.*—In Anantapur District 61 temporary huts were provided for coolies, and special housing accommodation also exists in the Nilgiri District. As regards the mines in Nellore, Kurnool and Salem little separate accommodation seems necessary as the coolies are recruited from neighbouring villages.

(f) *Medical relief.*—The recommendations made by the District Health Officer, Salem, regarding the improvement of the dispensary attached to the Suramangalam mines have not yet been carried out. The dispensary is at present in charge of a Sub-assistant Surgeon who attends twice a week. The syndicate has informed the Collector that it is unable meantime to employ a whole-time medical officer.

DISTRICT BOARDS.

148. The statement below, furnished by the Sanitary Engineer, shows the progress of water-supply and drainage schemes in the rural area in 1926 :—

Rural areas.

Water-supply.				Drainage.			
Opened.	Under execution.	Sanctioned.	Investigated, under investigation, investigation ordered, etc.	Opened.	Under execution.	Sanctioned.	Investigated, under investigation, investigation ordered, etc.
Ramesvaram.	Guntakal ...	Yemmiganur, Chodavaram.	Arcoot. Aruppukottai. Alagarkoil. Devakottai. Gobichettipalayam. Gudur. Hampi. Kalahasti. Madakasira. Mettupalayam. Pallavaram (Civil Settlement). Panrutti. Penukonda. Polur. Ongole. Arkonam. Sholinghur. Ranipet. Tiruchanur. Tirakkalikkunram. Uravakonda. Sembem. Tiruttani. Karaikudi.	Nil.	New Engineering College, Guindi.	Nil.	Chepauk Buildings, Mental Hospital, Drainage, New Council Chamber (Madras). Drainage for Reserve police lines. Ouddalore. Ramnad. Sembicm.

149. Conservancy arrangements existed only in 836 villages of which 482 were unions. The improvement of conservancy in rural areas is receiving greater attention at the hands of the District Health staff but, owing to the financial position of the local boards, progress is very slow.

150. For the efficient administration of Public Health in the local board areas, presidents of local boards were advised to delegate their powers to the District Health Officers under sections 122, 124 (2), 129, 131 to 134, 136 to 139 and 197 of the Local Boards Act, relating to sanitation and Public Health, so that matters of an urgent nature could be promptly attended to by the District Health Officers without individual reference to the presidents of taluk boards. With a few exceptions, local bodies are generally reluctant to delegate their powers to District Health Officers. In dealing with dangerous diseases especially, prompt action on the part of the health staffs is called for; and until local bodies realize the advantage of empowering District Health Officers to deal directly with sanitary matters of an urgent nature, rapid improvement in the administration of Public Health cannot be expected.

In municipalities having Health Officers, it is equally desirable that the chairmen of municipal councils should delegate their powers to their Health Officers under the sections of the District Municipalities Act relating to Public Health. The chairmen of municipal councils concerned have been circularized accordingly. Only 8 out of the 26 municipalities having Health Officers have so far delegated powers to their Health Officers.

151. The desirability of extending to Health Inspectors the powers of police officers so far as they relate to sections 3 and 4 of the Town Nuisances Act, has been commended to presidents of local boards. To give effect to this proposal, section 357 of the District Municipalities Act should be extended to the rural areas under section 206 of the Local Boards Act with the consent of the local boards and of the district boards concerned. Only 6 taluk boards have so far communicated to Government their willingness to sanction this proposal.

152. Instances of failure on the part of the union boards to maintain village sanitary inspection books were not so numerous as in previous years. Defaults in this respect have been brought to the notice of the presidents concerned.

GENERAL REMARKS AND PERSONAL PROCEEDINGS.

153. In January 1926 I attended the Indian Science Congress at Bombay and in December the Medical Research Workers' Conference at Calcutta.

154. A delegation from the British Social Hygiene Council visited Madras from 10th to 24th December 1926, and during these two weeks carried through a very full programme which had been prepared prior to their arrival. Lectures and demonstrations on venereal diseases were given by Dr. Lees to large and interested medical audiences and the value of social hygiene was also laid before the staffs and pupils of colleges and secondary schools. In addition, the sociological aspects of the problem were discussed by Mrs. Neville Rolfe at special meetings arranged for social and voluntary lay workers. These meetings were largely attended, and the subsequent discussions were always well maintained. It is hoped that, as a result of the delegation's visit, greater attention will be paid to personal hygiene and clean living, but it must be remembered that many urgent problems relating to other and more dangerous diseases still await solution and continue to demand financial aid both from Government and local bodies.

155. The visit of the Royal Commission on Agriculture during the year provided a valuable opportunity of drawing attention to the importance of public health in any schemes suggested for improvement of the conditions of the rural population of this Presidency. A detailed memorandum on the subject was submitted to the Commission and I was also asked to give oral evidence. Special emphasis was laid on the importance of continued investigations in connexion with "Nutrition" and "Deficiency Diseases," and the desirability of providing a Nutritional Institute for the Presidency where such investigations could be systematically carried out.

156. Detailed proposals for the framing of a Public Health Act for the Presidency have been submitted to Government. The chapters dealing with Public Health in the present Municipal and Local Boards Acts are not only defective but are in many respects incomplete, and it is for decision whether it would not be more convenient to include all provisions relating to Sanitary Law, with the necessary amendments, in one new enactment, rather than have Public Health provisions scattered through a dozen and more different Acts.

157. In accordance with a resolution passed at the All-India Conference of Medical Research Workers held at Calcutta, the Government of India has invited the Far Eastern Association of Tropical Medicine to hold its Seventh Congress in Calcutta in December 1927. The Congress will no doubt give wide publicity to the many activities of medical and sanitary organizations and of research workers in India, and it is anticipated that several hundreds of delegates from the Far East will attend the Congress. Local Committees have already been formed in each Province as, at the end of the Conference, excursions will be arranged so that the visitors may see some of the most important cities and places of interest in India and be shown the various phases of Medical and Public Health activity. Local Committees will be responsible for arranging hospitality, transport, etc., for the foreign visitors, and it is to be hoped that this Presidency will not fail to reciprocate the generous welcome which several of its delegates have already received at previous conferences held in Java, Singapore and Japan. It has also been suggested that, under the auspices of the League of Nations, a collective study tour of Public Health officers should be organized in India, shortly after the meeting of the Far Eastern Association of Tropical Medicine. The Madras Government has agreed to the proposal. Similar interchanges and study tours have already been carried through in a number of European countries and have proved of great value to the Health Officers participating in them. There can be little

SANITARY WORKS—CIVIL.

MUNICIPALITIES.

141. No addition was made to the number of municipalities in the Presidency during 1926.

142. The statement furnished by the Sanitary Engineer showing the progress of major sanitary works in connexion with water-supply and drainage is appended below :—

Statement showing the position of water-supply and drainage schemes in the year 1926.

Water-supply.				Drainage.			
Opened.	Under execution.	Sanctioned.	Investigated, under investigation ordered, etc.	Opened.	Under execution.	Sanctioned.	Investigated, under investigation ordered, etc.
Adoni. Anantapur. Berhampur. Bezawada. Chidambaram. Chingleput. Cocanada. Conjeeveram. Coonoor. Cuddapah. Dindigul. Elore. Erode. Gudiyattam. Guntur. Kodaikanal. Kurnool. Madura. Masulipatam. Negapatam. Nellore. Ootacamund. Periyakulam. Salem. Tanjore. Tirupati. Trichinopoly. Vizagapatam. Vellore. Kumbakonam.	Adoni (water works improvements). Bellary. Coimbatore. Coonoor (water works improvements). Cuddapah. Dindigul. Elore (water works improvements). Gudiyattam. Guntur (water works improvements). Madura. Masulipatam. Negapatam (services reservoir). Nellore (water works improvements). Salem (water works improvements). Tanjore (water works improvements). Tirupati. Trichinopoly. Vizagapatam (water works improvements). Vellore (water works improvements). Vizagapatam (water works improvements).	Bellary (water supply to Cowl Bazaar and new extensions).	Bodinayakanur. Calicut. Chicacole. Cochin. Chittoor. Coimbatore (Forest College). Cuddalore. Dharapuram. Hidupur. Hospet. Kumbakonam (deep artesian boring). Mangalore. Madura (redistribution). Mannargudi. Mandya. Narasaraopet. Patacole. Periyakulam. Pollachi. Palghat. Palmi. Parlakimedi. Proddatur. Rajahmundry. Salem (Jail). Satur. Srirangam. Srivilliputtur. Tiravallur. Tiruppur. Tiruvannamalai. Trichinopoly (water works improvements). Vaniyambadi. Walajahpet. Virudupatti. Vizagapatam (Mahendri Gedda scheme.)	Ootacamund. Kumbakonam (Part I Conservancy lanes). Madura. Vellore.	Nil.	Adoni. Anakapalle. Bimlipatam. Bellary. Berhampur. Bezawada. Calicut. Chidambaram. Chingleput. Chittoor. Cocanada. Cochin. Cuddapah. Elore. Erode. Guntur. Kumbakonam. Kurnool. Mangalore. Mannargudi. Mandya. Narasaraopet. Patacole. Periyakulam. Ootacamund (improvements to septic tank). Ootacamund (improvements to main sewer). Periyakulam. Rajahmundry. Salem. Srirangam. Tanjore. Tellicherry. Tirupattur. Tenali. Tinnevely. Tirupati. Trichinopoly. Vaniyambadi. Vizianagram. Vizagapatam.	

A priority list of water-supply and drainage schemes was drawn up in accordance with Government Memorandum No. 13934-1/D-2, P.H., dated 7th June 1926, and submitted to Government. During the year under report, the Chingleput water-supply scheme has been completed, and the extension of water-supply to Cowl Bazaar, Bellary, and Yemmiganur, and the Chodavaram water-supply scheme have been sanctioned.

At a recent meeting of the Public Health Board, it was resolved that a revised priority list of all water-supply and drainage schemes should be drawn up in consultation with the Sanitary Engineer. This is under preparation.

143. The total number of sanitary inspectors employed during the year in the 80 municipalities of the Presidency, excluding Madras City, was 204 as against the required number of 250 calculated at the rate of one sanitary inspector for every thousand of the population. As regards maistries and peons, of the 846 required according to the scale laid down, only 801 were actually employed. This number, however, is an increase of 37 over that of last year.

144. One of the causes retarding progress in the sanitation of municipal areas is the employment of unqualified men as Sanitary Inspectors. In spite of the large numbers of qualified Sanitary Inspectors passing out every year, municipal councils, from one cause or another, are very reluctant to replace their present staffs with qualified men. The Government, at my instance, issued a circular to all local bodies pointing out that the payment of salaries to unqualified persons employed as Sanitary Inspectors is illegal and is liable to be surcharged. This has roused a number of municipal councils to the desirability of making improvements in their sanitary staffs.

Another reason for the unsatisfactory sanitary condition in certain municipalities is that the Sanitary Inspectors are employed on all kinds of miscellaneous work, such as the collection of taxes and licence fees, to the detriment of their legitimate duties, in spite of the specific orders of Government to the contrary. The attention of municipal councils has been repeatedly drawn to the false economy of this procedure, but with little or no effect.

Certain local boards in the districts of Ramnad and Malabar also assumed that Health Inspectors could be utilized for collection of licence fees. The Government has recently ordered that the employment of Health Inspectors on such work cannot be permitted, as it would interfere with the efficient working of the Health Scheme. The collection of such revenue should be carried out by special staffs appointed for the purpose.

145. The conservancy plant used in most of the municipalities is still defective. A few municipalities have purchased motor lorries for the quicker transport of rubbish. As regards dust bins, permanent masonry structures are used in a large number of towns.

146. The number of public latrines of all descriptions was only 1,920 as against 1,923 in the previous year. Of these, 800 are of type design, 444 are pucca built latrines with seats and the remainder are brick or mud walled enclosures without seats. In many towns the public latrine accommodation is still very inadequate, great deficiencies in this respect existing in Rajahmundry, Bezawada, Masulipatam, Chirala, Saidapet, Villupuram, Tiruvalur, Bodinayakanur, Kodaikanal, Palamecottah, Vellore, Mangalore, Palghat and Tellicherry.

The total number of private latrines was 171,949 as against 172,689 of last year, the greatest increase of 398 having occurred in Trichinopoly municipality. Of the total, 140,672 latrines of 81.8 per cent was conserved by municipal agencies as against 84.5 per cent in the previous year. Reductions in this respect are reported from Trichinopoly, Bimlipatam, Narasaraopet, Conjeeveram, Periyakulam, Erode, Cuddapah, Anantapur, Palghat, Tellicherry. The percentage of private latrines under municipal management was below 50 per cent in the municipalities of Peddapuram, Saidapet, Coimbatore, Udumalpet and Kurnool. In 12 municipalities, all private latrines were attended to by municipal agencies. In reviewing municipal administration reports Government have constantly drawn attention to the need for carrying out vigorous enforcement of the sections of the Municipal Act, but municipal councils are slow to take action.

147. According to the information furnished by municipalities the total income of all municipalities amounted to Rs. 1,12,61,800 and the expenditure to Rs. 37,14,734 against Rs. 99,21,874 and Rs. 32,14,392 respectively in the previous year. The provision for sanitation amounted to 32.98 per cent of the income and the expenditure for nine months of the year was 24.8 per cent of the allotment. Of the total allotment the expenditure under conservancy was Rs. 3,43,756 and improvement of water-supply Rs. 5,57,696.

doubt that the proposed study tour will be beneficial not only to the visitors but to all officers of the Public Health Departments in India.

158. Under the same system, arrangements were made by the League of Nations Health Section for the visit of Dr. Alkovic of Jugo-Slavia to study anti-malarial measures in India. He visited Madras in March and was given every opportunity of seeing conditions as they exist in this Presidency. One of the first points attracting the attention of foreign visitors is the immensity of all health problems in this vast country.

159. Major J. A. Sinton, V.C., O.B.E., I.M.S., Officer-in-charge of the Malaria Bureau at Kasauli, who was deputed by the Government of India to compile an authoritative and complete bibliography of malaria work done in India, visited Madras in January 1926. He was given every facility for examining the numerous reports and Government Orders dealing with malaria and expressed surprise at the large amount of information available.

160. A Conference of Health Officers was held in Madras towards the end of the year. Suggestions relating to the better working of the District Health Scheme were discussed and a number of practical difficulties were cleared up. It is proposed to hold similar conferences bi-annually, in order that all officers of the department may have the opportunity of hearing at first hand of proposals for expansion of Public Health activities, of the research work in progress, and of other matters concerning which it is not easy for a district officer to gather detailed information on paper.

161. The epidemiological studies on cholera mentioned in last year's report were continued throughout 1926, the Indian Research Fund Association again sanctioning the grant for the employment of a statistical assistant. So far, four statistical papers on "The Epidemiology of Cholera" have been published in the Indian Journal of Medical Research and the fifth and last of this series is approaching completion. Two other papers have also been prepared. The first, dealing with a purely statistical subject, has been already published, and the second, which is now in the Press, describes a method by which it is possible to forecast cholera epidemics two to three months before their actual occurrence. The method of forecasting has been tested not only for different provinces of India, but also for different epidemics in Madras Presidency, and has in no instance failed to give the expected indication. When properly handled, therefore, this process should be valuable, in that it indicates when preventive measures are urgently necessary and when energy and money may be conserved.

162. The geographical survey of the Presidency with reference to cholera, mentioned in last year's report, would have been carried through earlier, but, unfortunately, for several months in the middle of the year, no suitable officer was available. In August, the services of Dr. R. M. Mathew, B.S.Sc., District Health Officer, were lent to the Indian Research Fund Association and he has now completed the necessary investigations. It is hoped that a full report on the subject will shortly be ready for publication. Meantime, Dr. Mathew has commenced the geographical survey for plague, which was also sanctioned, and, when that is complete, he will take up a similar investigation in connexion with relapsing fever.

163. The field work in connexion with the control of cholera by preventive inoculation and by treatment of early cases has also been continued by means of a further grant from the Indian Research Fund Association. During the year under report, some parts of the Presidency have unfortunately continued to be heavily infected with cholera, and this has made it possible to carry out immunization experiments not only with anti-cholera vaccine, but with Besredka's cholera bili-vaccine which is given by the mouth. In order to test the value of these different vaccines, different groups of individuals in infected villages, particularly the contacts of cholera cases, have been treated, that part of the population refusing protection by either vaccine being used as the necessary controls. A synopsis of the work done up to September 1926 was submitted to the Research Workers' Conference in December when some 20,000 cases were

analysed. The results indicated that inoculation with anti-cholera vaccine conferred a very considerable degree of protection the case rate and mortality rate being 3.3 and 1.1 per cent as compared with 13.6 and 6.2 per cent in unprotected groups. Although the cases treated with Besredka's bili-vaccine were not sufficient in number to permit of definite conclusions being drawn, the figures seem to indicate that this vaccine also confers a high degree of immunity. During the recent winter epidemic in Tanjore and South Arcot districts, a staff of five Sub-Assistant Surgeons has continued the treatment of contacts with the two vaccines, and it is hoped that the numbers now available will make it possible to give a definite opinion as to the value of the bili-vaccine. This work has been carried out by the Indian Research Fund Association at the suggestion of the Health Section of the League of Nations, and the results obtained will be communicated in due course to that body. Curiously, the field workers have all reported that the villagers are much more willing to submit to inoculation than to swallow the bili-vaccine tabloids.

In any case, under present circumstances, where rural water supplies are all of doubtful purity, the widest use of a protective vaccine would seem to be indicated. The proposal to make free supplies of anti-cholera vaccine to all local bodies has already been made to Government and it is hoped that favourable orders will be shortly received. The anti-cholera vaccine is prepared by the King Institute, and, as Government already distribute vaccine-lymph free, there seems to be no reason why free supplies of anti-cholera vaccine should not also be made available.

164. The grant of Rs. 10,000 received from the Indian Research Fund Association to be used for a malarial survey was returned to the Accountant-General, Delhi, in September 1926 as the Government was unable to sanction the appointment of a Malarialogist in 1926. At the Research Workers' Conference held in Calcutta in December, the request for a similar grant during 1927 was again made and it is hoped that this will be sanctioned, now that the Government have included the new appointment in the Public Health budget for 1927-28. An All-India Malaria Organization is now in being, the services of two research workers having been recently obtained, and it is of the greatest importance that this Presidency should have a Malarialogist, so that the anti-malaria campaign here may develop *pari passu* with that in the other provinces of India. Not only so, but if the Government allot funds for the free distribution of quinine in specially malarious tracts, this expenditure should be controlled with the help of observations made by a scientific worker possessing special knowledge of malarial conditions.

165. In the report for 1925, I have already expressed my gratitude to the Indian Research Fund Association for its generous attitude towards the proposals for research work to be carried out in this Presidency. No Public Health Department can hope to develop as it should, unless its members take an active part in research work, and it is a matter for congratulation that, among the younger members of the Health Officers' cadre, a number are sufficiently energetic and keen to take up investigations in addition to their routine duties. So long as it is possible to obtain young workers of this kind, so long will the Public Health Department continue to give value for the money spent on it. When enthusiasm for research disappears, the Department will stagnate and deteriorate. In this respect, if in no other, the Indian Research Fund Association continues to play an important part in the development of Public Health in this Presidency, and it is to be hoped that, for many years to come, these grants will be made available. That, however, will wholly depend on the mental outlook of the officers in the Department.

166. In pursuance of the policy outlined in the Memorandum on the Future Developments of the Public Health Service in Madras, experiments in connexion with rural sanitation have been carried on in Usilampatti Union in Madura District, through the enthusiasm of the President and by means of the generosity of the Madura District Board. In Usilampatti, a series of pit latrines were constructed in different parts of the union, and their development has been observed.

by the Assistant Director of the Ankylostomiasis Campaign who has camped in the village for several months. Dr. Kendrick, the Sanitary Engineer, and myself have visited the area at regular short intervals, and, initial difficulties having been overcome, it may now be said that these latrines have demonstrated the practicability of their use in modified form in rural villages. Recently, experiments have also been made in Usilampatti with the "Java" type of pit latrine and as this type is very inexpensive and requires practically no supervision or menial staff, it seems likely that this Department will be able to recommend its general adoption in rural areas. The "Java" pit latrine has proved very useful in Java and Ceylon, where large numbers have been in use for some time, and there seems to be no reason why it should not be equally successful in selected areas of this Presidency. The Sanitary Engineer has now under preparation type plans for various modifications of this latrine and these will be distributed for the information of all Municipal and local bodies as soon as possible. The chief advantages of this type of latrine are that it is almost odourless, that surface soil pollution is entirely avoided and that no handling of nightsoil is necessary. It is hoped that the wide adoption of this cheap type of latrine will be possible, not only for the general population but for schools and colleges. In Ceylon, no less than 90,000 have been constructed during the last four years, and similar developments should not be impossible in Madras. Dr. Heiser of the International Health Board visited this Presidency in February and expressed his great interest in the experiments being conducted in Madura District. In any case, it is only by the development of such practical measures for the improvement of sanitation, that the International Health Board will be induced to continue their work in Madras, and it is greatly to be hoped that these promising results will be brought to fruition.

167. During 1926, health propaganda work continued to be carried out with the assistance of the Madras Health Council. In view of the restricted means at the disposal of the Council, however, definite proposals have been submitted to Government for the creation of a Propaganda Section in the office of the Director of Public Health. The Madras Health Council has agreed, in the event of this proposal being accepted by Government, to hand over all their stock of lanterns, literature, etc., to this Section. It has been also suggested that the balance of funds with the Health Council should be held by an Auxiliary Committee of non-officials, which would keep in touch with and advise the Public Health Department's Propaganda Section. It is hoped that this new Section will be sanctioned for 1927-28. All over the world, health propaganda work is now recognized to be a legitimate function of Public Health Departments, and there can be no doubt that a great development of this work is urgently necessary in India. The greatest difficulty will be in obtaining the services of an officer with the necessary qualifications for the work. He must not only be thoroughly acquainted with scientific facts, but he must be able to present these accurately and in simple form and must also possess most of the qualities of a successful journalist. This combination is not commonly met with, but is essential for successful development of the work.

168. The general death-rate in the City of Madras has for some years past shown a tendency to rise to abnormal heights, during several weeks in 1926 being as high as 53 per 1,000. This is a matter of grave concern not only to Government but to the citizens of Madras, and, although certain enquiries into the subject had already been made, in July the Government appointed a small committee, with the Director of Public Health as Chairman, to report on the causes leading to this high mortality and to recommend what steps should be taken to improve the health conditions of the City. The necessary preliminary statistical examinations were complicated and the committee had not concluded its investigations at the end of the year.

169. The Public Analyst, appointed by Government in 1924, submitted his first report during the year. He found that the Madras Prevention of Adulteration Act, 1918, was defective in certain respects, and recommended that it required amendment before it could be applied properly. An amending bill has been prepared, and will be presented to the Legislative Council early in 1927.

170. I remained in charge of the office of the Director of Public Health throughout the year. Dr. K. T. Matthew held charge of the office of Assistant Director of Public Health (Fairs and Festivals and Epidemiology) until he proceeded on six months' sick leave on 27th April 1926. Dr. Tirumalayya acted in this vacancy from 15th May to 20th August 1926 when, owing to the exigencies of service, he was reverted to his permanent post as Municipal Health Officer, Madura. From 21st August to 27th October 1926 Captain Ubhaya held additional charge of the office of Assistant Director of Public Health (Fairs and Festivals and Epidemiology).

Captain Ubhaya was in charge of Vaccination throughout the year except for a period of one month from 16th May 1926 spent on leave. Dr. Adiseshan held additional charge during this period.

Captain Hesterlow, I.M.S., was in charge of Vital Statistics and Propaganda until 16th April 1926 when he went on a month's leave. On return he was posted as Professor of Hygiene, Medical College, consequent on the reorganization of teaching of Hygiene and the inclusion of the appointment of Professor of Hygiene in the cadre of Assistant Directors of Public Health.

Dr. Adiseshan held charge of Vital Statistics and Propaganda from 16th April to 29th July 1926 when he left for America to study Epidemiology and Vital Statistics, and methods of Public Health administration with special reference to health propaganda and maternity relief and child welfare. On the recommendation of Government, he was awarded one of the four International Health Board Scholarships given to Indians in 1926. Dr. K. Raghavendra Rao, B.A., M.B. & C.M., D.P.H. (Camb.) was appointed to act in his place from 15th August 1926.

171. The following statement shows the inspections and visits made by the Assistant Directors and myself during year :—

Date.	Place.	Remarks.
Lieut.-Col. A. J. H. RUSSELL, C.B.E., I.M.S., Director of Public Health, Madras.		
4th to 7th January 1926 ...	Bombay ...	Attended the Indian Science Congress.
30th January 1926 ...	Salem ...	Inspection of the proposed drainage scheme and discussion with the President, District Board, on health matters.
6th February 1926 ...	Conjeeveram ...	Inspection of Health Week arrangements.
16th to 20th February 1926.	Calicut, Wynad, Salem ...	Inspection of village with the Director of the Hookworm Campaign.
4th March 1926 ...	Tanjore, Tiruvadi ...	} Cholera inspections.
5th March 1926 ...	Kumbakonam ...	
18th March 1926 ...	Andipatti, Palappatti, Batlagundu, Pasu-malai.	} Cholera inspections and inspection of sites for the experimental scheme of rural sanitation.
14th March 1926 ...	Usilampatti ...	
15th March 1926 ...	Manamadurai ...	
16th March 1926 ...	Panagudi, Pettai, Tinnevely,	Cholera inspections.
18th to 20th March 1926 ...	Kodaikanal ...	Routine sanitary inspection.
21st March 1926 ...	Trichinopoly ...	Attended Health Week celebrations.
1st May to 30th June 1926.	Ootacamund ...	With Government.
20th May 1926 ...	Coonoor, Wellington ...	Inspection of burial and burning grounds.
18th June 1926 ...	Madras ...	Arrangement of the staff for the Infectious Diseases Hospital in Madras.
2nd June 1926 ...	Mettur ...	Inspection of anti-malarial measures.
6th July 1926 ...	Bezwada ...	Inspection of sanitation and discussion with the District Health Officer regarding the redistribution of ranges in the district.

Date.	Place.	Remarks.
LIEUT.-COL. A. J. H. RUSSELL, C.B.E., I.M.S.—cont.		
Director of Public Health, Madras.		
7th July 1926	Guntur	Inspection of the town and the District Health Officer's office.
9th July 1926	Berhampur	
10th July 1926	Waltair	
11th July 1926	Simbachalam	
13th and 14th July 1926	Cocanada	Routine sanitary inspection and inspection of the office of the District Health Officer.
16th July 1926	Rajahmundry	Inspection of sanitation in the town.
3rd and 4th August 1926	Anantapur	Inspection of sanitation in the town and of the office of the District Health Officer.
5th and 6th August 1926	Bellary	Routine sanitary inspection of the town.
7th August 1926	Hospet	Inspection of sanitation in the town.
8th August 1926	Bellary	Inspection of District Health Officer's office.
9th August 1926	Karnool	Inspection of District Health Officer's office and the town.
10th August 1926	Nandyal	Inspection of the town.
11th and 12th August 1926	Cuddapah	Inspection of the town and the District Health Officer's office.
25th August 1926	Madura	Inspection of vaccination in the town.
26th August 1926	Usilampatti	Inspection of latrines constructed under the rural sanitation scheme.
1st September 1926	Vellore	Inspection of the District Health Officer's office, and the Medical School.
2nd September 1926	Salem	Inspection of the District Health Officers' and Municipal Health Officers' office.
3rd and 4th September 1926	Coimbatore	
10th September 1926	Do.	Attended health drama.
29th September to 6th October 1926	On casual leave	
6th October 1926	Madanapalle	Inspection of Tuberculosis Sanatorium.
8th and 9th October 1926	Chittoor	Inspection of the District Health Officer's office.
25th October 1926	Cuddalore	
29th and 30th October 1926	Tanjore	Inspection of the District Health Officer's office and cholera measures.
1st November 1926	Madura	Conference with the Collector regarding plague measures.
2nd November 1926	Usilampatti	Inspection of latrines constructed under the rural sanitation scheme.
3rd November 1926	Srirangam	Inspection of small-pox.
.....	Trichinopoly	Inspection of the District Health Officer's office.
21st November 1926	Sholinghur	Inspection of the union and the work of Health Inspector, Ranipet.
2nd and 3rd December 1926	Mettur	Inspection of anti-malarial measures and other sanitary works.
18th to 16th December 1926	Calcutta	Attended Medical Research Workers' Conference.
DR. K. T. MATTHEW, D.M.S., D.P.H. (CANTAB).		
4th and 5th January 1926	Coonoor	To address Municipal Council in the matter of celebration of N.H.B.W. and inspection of burial grounds in Coonoor.
7th January 1926	Tiruppur and Dharapuram	Investigation of cholera in Dharapuram Municipality and Dharapuram Taluk.
26th and 27th January 1926	Ranibennur	Inspection of Mylar and Kuruvathi festival centres on the Bombay border in Bellary District in company with A.D.P.H. Belgaum-Bombay, to settle a programme of arrangements applicable to both.
26th and 30th January 1926	Anantapur	Inspection of N.H.B.W. at Anantapur.
31st January 1926	Ponukonda	Do. Ponukonda.

Date.	Place.	Remarks.
DR. K. T. MATTHEW, D.M.S., D.P.H. (CANTAB)—cont.		
1st February 1926	Arkonam and Melvisharam.	Inspection of N. H. B. W. at Melvisharam and Pallikonda.
2nd February 1926	Ambur and Vanniyambadi.	Do. Ambur and Vanniyambadi.
3rd February 1926	Dharmapuri, Kavripattanam and Krishnagiri.	Do. Dharmapuri, etc., places.
11th to 15th March 1926	Salem	Routine sanitary inspection of Salem Municipality and cholera investigation.
26th and 27th March 1926	Sriperumbudur	Inspection of festival arrangements in Sriperumbudur and the investigation of cholera in the adjoining villages in company with District Health Officer, Chingleput.
11th and 12th November 1926	Vizianagram	Inspection of vaccinators' work awaiting exemption in Vizianagram Municipality and inspection of vaccination in Nellimarla.
13th to 16th November 1926	Waltair	Sanitary inspection of Vizagapatam Municipality and inspection of vaccination in certain villages.
17th to 19th November 1926	Cocanada	Inspection of D.H.O.'s office, Godavari East, and enquiry regarding D.H.O.'s suspension and examining vaccinator's work in Peddapur. Inspection of villages, etc., in Cocanada.
15th to 17th December 1926	Chirala	Routine sanitary inspection of Chirala Municipality and inspection of villages in Bapatla Taluk.
18th and 19th December 1926	Rajahmundry	Inspection of head waterworks sites for Rajahmundry Municipality in company with Deputy Sanitary Engineer, Northern Circle.
24th December 1926	Dharmapuri	Formal opening of the maternity and child-welfare-centre at Dharmapuri and the presentation for N.H.B.W.
CAPT. N. R. UBHAYA, D.P.H., Assistant Director of Public Health.		
1st February 1926	Guntur	Inspection of the arrangements in connexion with the National Health and Baby Week, 1926.
2nd February 1926	Bezwada	
3rd February 1926	Ellore	
4th February 1926	Rajahmundry	
..... 1926	Vizagapatam	
6th February 1926	Nellore	
9th to 11th April 1926	Mayavaram M.T.	Routine sanitary inspection.
12th April 1926	Kumbakonam M.T.	Inspection of vaccinators' work.
13th April 1926	Tanjore M.T.	
14th April 1926	Mayavaram M.T.	
15th April 1926	Tiruvalur	Discussion about the village public health associations and their working in Nannilam South Range.
16th to 18th April 1926	Nannilam and Negapatam taluks.	Inspection of small-pox measures.
8th and 9th May 1926	Ramnad	Enquiry into the conduct of Head Clerk of the office of the District Health Officer, Ramnad, and inspection of District Health Officer's office.
27th and 28th June 1926	Negapatam Taluk	Inspection of cholera measures in Negapatam Taluk.
15th July 1926	Berhampur M.T.	Inspection of vaccinator's work.
17th to 22nd July 1926	Ganjam District	Inspection of vaccination in parts of the district.
23rd and 24th July 1926	Chicacole M.T.	Inspection of vaccinators' work in Chicacole M.T. and range.
25th to 28th July 1926	Ganjam District	Inspection of vaccination in parts of the district.
1st September 1926	Tirupati	Attended Fairs and Festivals Conference.
12th September 1926	Guntur M.T.	Inspection of cholera measures.
14th September 1926	Vinukonda Taluk	Inspection of vaccination.
15th and 16th September 1926	Narasaraopet Taluk	Inspection of vaccination in Narasaraopet Taluk and cholera measures in Vinukonda Taluk.

Date.	Place.	Remarks.
CAPT. N. R. UBHAYA, D.P.H.—cont. Assistant Director of Public Health.		
17th and 18th September 1926.	Guntur M.T. ...	Routine sanitary inspection.
25th September 1926	Tirukalikkunram ...	Inspection of a slaughter-house.
28th October 1926	Chingleput M.T. ...	Inspection of vaccination and vital statistics.
27th and 28th October 1926.	Chingleput Taluk ...	Inspection of vaccination in rural parts.
30th and 31st October 1926.	Conjeeveram M.T. ...	Routine sanitary inspection.
3rd December 1926	Chittoor District ...	Examination of unqualified vaccinators to decide their exemption.
4th December 1926	Chittoor Taluk ...	Inspection of vaccination.
5th December 1926	Palmaner Taluk ...	Do. do.
7th and 8th December 1926.	Anantapur M.T. ...	Routine sanitary inspection.
9th December 1926	Tadpatri M.T. ...	Examination of unqualified Assistant Sanitary Inspector to decide his exemption.
RAO BHADUR DR. K. RAGHAVENDRA RAO, D.P.H., Assistant Director of Public Health.		
4th September 1926 ...	Kumbakonam ...	Routine sanitary inspection.
8th September 1926	Tinnevely ...	Inspection of the Vaccinators' work and of burrow pits.
9th to 13th September 1926.	Tinnevely District ...	Inspection of the work of several vaccinators in the district and investigation into the cause of high infantile mortality in Mathalampuram.
20th and 21st September 1926.	Usilampatti ...	Inspection of pit latrines in Usilampatti.
9th October 1926 ...	Vaniyambadi ...	Inspection of tanneries outside municipal limits.
16th to 22nd October 1926 ...	Hospet ...	Inspection of plague preventive measures.
23rd October 1926 ...	Adoni ...	Routine sanitary inspection.
16th to 18th November 1926.	Cuddapah ...	Do. do.
19th to 23rd November 1926.	Cuddapah District ...	Inspection of vaccination and vital statistics in the district.
24th and 25th November 1926.	Proddatur ...	Routine sanitary inspection.
5th and 6th December 1926.	Srirangam ...	Inspection of festival arrangements.
8th December 1926 ...	Karur ...	Routine sanitary inspection.
7th to 19th December 1926.	Trichinopoly District ...	Inspection of vaccination and vital statistics in parts of the district.
20th December 1926	Chidambaram ...	Inspection of festival arrangements.
CAPT. A. M. V. HESTERLOW, I.M.S., Assistant Director of Public Health.		
11th January 1926 ...	Tiruppurur ...	Inspection of site for building a vault for Mouna-swamigal.
9th February 1926 ...	Chidambaram ...	Cholera inspections.
	Ammappet ...	
	Vakkaramalai ...	
	Nanjalur ...	
10th February 1926	Vayalur ...	Do.
12th February 1926	Tirukkoyilur ...	
	Tiruvannaimallur ...	
	Sithangur ...	
	Periyasevalai ...	Routine sanitary inspection.
13th February 1926	Villupuram ...	

Date.		Place.		Remarks.
DR. R. ADISESHAN, B.S.SC., DIP. HYG. (CANTAB.),				
Assistant Director of Public Health.				
3rd to 11th June 1926	...	Ootacamund	...	Preparation of Vaccination Annual Report.
12th June 1926	...	Melkavatty	...	} Inspections.
13th June 1926	...	Naduvattam	...	
14th June 1926	...	Kotagiri	...	
	...	Yedupalli	...	
	...	Coonoor	...	
6th to 8th July 1926	...	Madura	...	Investigation into the measures adopted for the prevention of small-pox epidemic.
DR. A. TIRUMALAYYA, D.P.H.,				
Assistant Director of Public Health.				
21st July 1926	...	Tindivanam	...	} Inspection of vaccination.
22nd July 1926	...	Gingee	...	
	...	Alampundi	...	
23rd July 1926	...	Chidambaram	...	
	...	Dharmanallur	...	
24th July 1926	...	Thillainayakkanpuram	...	
	...	Lalpuram	...	
	...	Kizhappalur	...	
25th July 1926	...	Dharmanallur	...	
	...	Mayavaram	...	
	...	Mannampandal	...	
27th July 1926	...	Trichinopoly	...	} Routine Sanitary Inspection.
	...	Palakarai	...	
27th and 28th July 1926	...	Karur	...	
29th and 30th July 1926	...	Salem	...	
31st July 1926	...	Echagodu	...	
1st August 1926	...	Thalacholy	...	} Do.
3rd August 1926	...	Gudiyattam	...	
5th August 1926	...	Wallajapet	...	

172. Routine inspections were carried out in the municipalities of Kodakanal, Cocanada and Bellary by myself, and 14 other municipalities were inspected by one or other of the Assistant Directors. The inspection of municipalities which do not employ Health Officers has been transferred from the District Medical Officer to the District Health Officer of the District (G.O. No. 1393, P.H., dated 11th August 1926).

Whilst at headquarters I made periodical inspections of the Penitentiary and the Mental Diseases Hospital and attended meetings of the Water and Sewage Purification Committee, the Madras Town-Planning Trust and the Madras Health Council.

173. The District Health Scheme was extended to the Nilgiris District during the year and a District Health Officer was appointed from 1st April 1926. Health Officers were appointed in the three additional municipalities of Tinnevely, Bezwada and Hindupur, so that 26 municipalities out of the total of 51 now employ Health Officers.

174. During the year 12 medical graduates took the B.S.Sc. course and 8 L.M.Ps. attended the Health Officers' course of training. The first batch of three District Health Officers was deputed to the six months' post-graduate course in the Calcutta School of Tropical Medicine on 15th October 1926. The second-class Health Officers have asked that they also might be given the opportunity of taking a post-graduate course in the Calcutta school, and there seems no reason why they should be excluded.

175. Rules relating to the duties of Municipal Health Officers have been issued with G.Os. Nos. 1960, P.H., dated 21st September 1925 and 194, P.H., dated 2nd February 1927. Those relating to District Health Officers were revised and re-issued in G.O. No. 1393, P.H., dated 11th August 1926.

176. Thirty-two additional Health Inspectors were sanctioned, bringing the total number of Health Inspectors in the Presidency, including the agencies, to 261. This addition made it possible to reduce the size of the ranges in a number of cases, and also permitted of the replacement of those Local Fund Sanitary Inspectors who had been carrying out the duties of Health Inspectors since the re-organization was effected in 1922-23.

177. Forty-one candidates qualified as Sanitary and Assistant Sanitary Inspectors during the year. Sixty candidates attended the first-class Vaccinators' class held at the King Institute during February, and 29 Health Inspectors and 16 Municipal Sanitary Inspectors underwent the quinquennial training in the Medical College.

178. The services of six probationary Health Inspectors were terminated during the year. Twenty-one Health Inspectors were punished for inefficiency, bad work or misconduct. One Health Inspector resigned, three died and seven retired from service during the year.

179. The service registers of the office establishment, Health Inspectors and second-class Health Officers were duly maintained.

180. The work of this office continues to increase rapidly and it has been necessary to ask Government for additional clerical assistance.

The accommodation available in the present office building is also insufficient, and if the new Propaganda Section and the appointment of a Malariologist are sanctioned, additional space will be required at once. Separate proposals will be made in this connexion in conjunction with the Surgeon-General.

181. Mr. K. Narasimha Achariyar, M.A., has carried out his responsible managerial duties to my entire satisfaction, and to him and to Mr. A. Guruswami Achari, Head Clerk, my best thanks are due for their efficient assistance. The continued development of Public Health activities throughout the Presidency requires some re-organization of the office staff, and it is proposed to carry this out, in part at least, during the current year.

182. District and Municipal Health Officers have with two exceptions worked satisfactorily.

In the case of one District Health Officer an investigation into his work and conduct was found necessary and he was later suspended for a period of three months and transferred. One of the probationary Municipal Health Officers has also proved unsatisfactory. After a short period of suspension, he was transferred to a lighter station.

183. The frequent changes in the personnel of the cadre of Assistant Directors which have taken place during the year under review, although almost entirely unavoidable, have interfered to some extent with the work of the various sections in charge of these officers. It is to be hoped that for some considerable time to come, it will be possible to ensure greater continuity of tenure.

A. J. H. RUSSELL, LIEUT.-COL., I.M.S.,

M.A., M.D., D.P.H., C.B.E.,

Director of Public Health.

MADRAS,
2nd May 1927.

ANNEXURE A.

Birth-rates in rural towns for 1926.

Name of rural town.	Birth-rate per mille for 1926.	Increase or decrease (+ or -) compared with 1925.	Name of rural town.	Birth-rate per mille for 1926.	Increase or decrease (+ or -) compared with 1925.
<i>Below 20 per mille (7).</i>					
1. Pallavaram	11.7	- 2.0	5. Bukkapatnam	17.6	-14.6
2. Kandamur	12.9	- 6.5	6. Vempalli	17.7	-12.0
3. Tiruvottiyur	14.3	-25.2	7. Kamalapuram	18.4	- 8.4
4. Pandalgudi	16.9	- 1.2			
<i>Between 20 and 25 per mille (20).</i>					
1. Wellington	20.8	- 1.7	11. Kollegal	23.5	+ 1.6
2. Sivaganga	20.9	- 6.5	12. Kamudi	23.5	+ 3.4
3. Alluru	21.5	+ 7.7	13. Madugula	23.6	+16.4
4. Paramagudi	22.2	-13.7	14. Alluru-Kottapatnam	23.7	- 2.7
5. Tondi	22.3	- 0.2	15. Kadiri	23.8	- 7.6
6. Tirukkattupalli	22.6	- 7.2	16. Tiruvadi	23.8	- 5.5
7. Pallapatti	22.6	- 6.7	17. Marachanallur	23.8	- 4.9
8. Tiruparankunram	22.8	- 6.7	18. Hosur	24.3	-11.6
9. Kampli	23.0	- 6.0	19. Gooty	24.5	- 6.2
10. Muttupet	23.3	- 5.1	20. Guntakal	24.9	-13.0
<i>Between 25 and 30 per mille (34).</i>					
1. Karalkudi	25.0	- 0.5	18. Vedaranniyam	28.0	- 6.7
2. Vaidisvarankoyil	25.0	- 2.7	19. Sembiam	28.2	+ 3.1
3. Kulittalai	25.1	- 7.5	20. Rāmnād	28.3	- 8.5
4. Mettupalaiyam	25.2	+ 1.8	21. Karkala	28.5	-20.6
5. Udagudi	25.4	-20.6	22. Kayalpatnam	28.8	- 1.0
6. bikkavolo	25.7	- 0.7	23. St. Thomas' Mount	28.9	+ 7.1
7. Achanta	26.7	- 2.9	24. Palladam	28.9	- 3.1
8. Tirupattur	26.7	- 4.5	25. Razampeta	28.9	+ 0.9
9. Toraiyur	26.9	- 5.1	26. Viraghattam	28.9	- 8.5
10. Ayyampettai	26.9	- 9.0	27. Jagajayapeta	29.1	+ 4.1
11. Ponnur	26.9	+ 6.6	28. Vetapalem	29.2	- 3.1
12. Ilaiyugudi	27.2	- 1.1	29. Kuruchi	29.4	+ 7.3
13. Porto Novo	27.4	- 0.7	30. Puliyampatti	29.6	- 3.5
14. Kotturu	27.6	- 5.2	31. Dowlaishweram	29.7	- 3.5
15. Amalapuram	27.6	- 4.9	32. Devakottai	29.7	+13.9
16. Venkatagiri	27.6	+ 5.0	33. Tranquebar	29.9	- 2.2
17. Manamadura	28.0	+ 0.7	34. Chinnamerangi	29.9	+ 6.4
<i>Between 30 and 35 per mille (46).</i>					
1. Bhuvanagiri	30.2	+ 2.8	24. Ichchapuram	32.5	+ 2.3
2. Shiyali	30.3	- 4.5	25. Tiruttani	32.8	- 1.1
3. Nidadavole	30.7	+ 9.4	26. Rameswaram	32.8	- 5.6
4. Kulasekharapatnam	30.7	+ 5.6	27. Thuvadamandur	32.8	+ 0.3
5. Pattakkottai	30.8	- 2.0	28. Srungavarappukkottai	32.9	- 5.3
6. Nuzvid	30.9	- 0.8	29. Samalkot	33.3	- 2.4
7. Vallam	31.3	- 8.8	30. Mandapeta	33.4	- 4.2
8. Kolluru	31.4	+ 1.0	31. Tuni	33.4	- 1.0
9. Tirutturaippundi	31.4	- 6.2	32. Kaveripakkam	33.6	- 0.6
10. Nangureri	31.4	- 5.8	33. Kallakurichi	33.7	+ 4.8
11. Badagara	31.4	+ 0.6	34. Cheyur	33.8	+ 1.1
12. Parvatipuram	31.5	+ 2.0	35. Chebrolu	33.8	+16.5
13. Lalgudi	31.5	-13.9	36. Kottur	33.9	+ 1.5
14. Panroti	31.6	+ 8.7	37. Udipi	34.2	- 1.8
15. Chetpet	31.7	-14.9	38. Vadakkuvalliyur	34.3	-18.4
16. Bapatla	31.8	+ 2.9	39. Tirukkoyilur	34.3	+ 6.5
17. Vriddhachalam	31.8	+ 5.6	40. Alvar Tirunagari	34.4	+10.0
18. Yadiki	32.0	- 8.6	41. Narasannapeta	34.5	- 2.8
19. Surandai	32.1	+ 2.6	42. Narasannapatnam	34.6	- 1.6
20. Narasapur	32.1	+ 5.9	43. Alisabad	34.8	- 9.6
21. Badvel	32.2	- 6.5	44. Sattrur	34.8	- 3.3
22. Adirampatnam	32.3	- 1.7	45. Nayudupet	34.9	+21.2
23. Rayachoti	32.5	+ 1.4	46. Sendamangalam	34.9	+ 3.8
<i>Between 35 and 40 per mille (48).</i>					
1. Madanapalle	35.1	- 2.0	6. Srivaikuntam	35.9	+ 8.8
2. Addanki	35.1	+ 4.3	7. Udayarpalaiyam	35.9	- 2.5
3. Ambasamudram	35.1	+ 3.2	8. Uttamapalaiyam	35.9	- 8.6
4. Arupukottai	35.5	- 4.9	9. Tirdivanam	36.1	+ 0.5
5. Vasudavanallur	35.7	- 2.2	10. Watrap	36.3	+ 0.2

ANNEXURE A—cont.

Birth-rates in rural towns for 1926—cont.

Name of rural town.	Birth-rate per mille for 1926.	Increase or decrease (+ or -) compared with 1925.	Name of rural town.	Birth-rate per mille for 1926.	Increase or decrease (+ or -) compared with 1925.
---------------------	--------------------------------------	---	---------------------	--------------------------------------	---

Between 35 and 40 per mille (48)—cont.

11. Coondespoor	363	- 1.1	31. Pedna	383	- 7.0
12. Vinokenda	364	+ 0.2	32. Ranipet	384	+ 8.2
13. Dharmavaram	366	+ 5.1	33. Kalahasti	387	- 0.9
14. Bobbili	367	+ 3.2	34. Siruguppa	388	+ 3.1
15. Ariyalur	369	+ 6.9	35. Tirupavanam	388	+ 5.0
16. Russellkonda	370	+ 0.2	36. Kallidaikurichi	388	+ 8.0
17. Namakkal	372	- 6.3	37. Ramachandrapuram	389	+ 1.0
18. Bhavani	374	- 3.1	38. Guzala	390	+ 3.5
19. Wandiwash	374	- 0.7	39. Kadaiyam	390	+ 13.8
20. Pattamadai	376	+ 1.3	40. Tiruvattur	391	- 8.3
21. Palkonda	376	- 2.2	41. Arkonam	391	+ 3.8
22. Tekkali	377	- 4.8	42. Yellamauchili	392	+ 21
23. Mangalagiri	377	+ 2.8	43. Mulki	395	+ 5.0
24. Sompeta	378	- 1.8	44. Sholingher	396	- 2.2
25. Rasipuram	378	+ 6.8	45. Krishnagiri	397	- 2.1
26. Saluru	378	- 7.1	46. Gudur	398	+ 1.1
27. Kandukur	380	+ 6.5	47. Polur	398	- 5.4
28. Nellikuppam	380	+ 2.8	48. Rajahpalaivayam	399	- 1.1
29. Tiruvallur	381	+ 2			
30. Gobichettipalaivayam	381	+ 6.9			

Between 40 and 45 per mille (33).

1. Penukonda	40'0	+ 55	18. Nattam	42'1	+ 98
2. Valuru	40'0	+ 31	19. Repalle	42'3	+ 56
3. Dharmapuri	40'2	+ 47	20. Kasaragod	42'5	+ 34
4. Cumbam	40'4	+ 32	21. Tiruchendur	42'7	+ 77
5. Puliyangudi	40'4	+ 60	22. Attili	42'7	+ 28
6. Sankaranayinarkeyil	40'5	+ 26	23. Jammalamadugu	42'9	- 49
7. Valavanur	40'8	+ 11'8	24. Chinnamanur	42'9	+ 34
8. Penukonda	40'9	+ 80	25. Sholvandan	42'9	- 12
9. Tirumangalam	40'9	- 2'9	26. Kovilpatti	42'9	+ 31
10. Sriperambudur	41'0	- 3'4	27. Pamidi	43'0	+ 107
11. Tenkasi	41'0	+ 47	28. Kavali	43'2	+ 38'2
12. Sermadevi	41'0	+ 13	29. Tiruchengoda	43'4	+ 52
13. Pithapuram	41'4	+ 32	30. Uravakonda	43'7	+ 66
14. Abiramam	41'4	+ 46	31. Uttiramerur	43'7	+ 85
15. Viravanallur	41'5	+ 02	32. Koggi	43'8	+ 113
16. Tanuku	41'9	+ 13'4	33. Arni	44'2	- 3'8
17. Sivagiri	42'0	+ 2'9			

Between 45 and 50 per mille (13).

1. Ettaiyapuram	45.1	- 26	8. Visharam	46.9	+ 6.1
2. Kollipura	45.8	+ 6.0	9. Sattempalle	47.5	+ 6.7
3. Settur	45.8	- 0.1	10. Poonamallee	47.9	+ 8.2
4. Madurantakam	46.1	+ 4.6	11. Punganur	48.3	+ 10.1
5. Gndivada	46.4	- 3.9	12. Yemmiganuru	48.5	+ 9.0
6. Chilakalarpet	46.6	+ 1.5	13. Attur	49.3	+ 3.7
7. Pallikonda	46.6	+ 7.4			

Between 50 and 55 per mille (9).

1. Pernampatti	...	...	50.0	+ 13.0	6. Chodavaram ..	...	...	531	+ 32.6
2. Anubur	...	...	50.5	+ 3.6	7. Tirukkalkikkuuram	...	...	537	+ 15.5
3. Nizampatnam	...	...	51.6	+ 13.7	8. Ponnani	...	...	538	+ 12.9
4. Arcot	...	...	51.9	+ 10.0	9. Bayadurg	...	...	642	+ 13.8
5. Harpanahalli	...	...	52.2	+ 7.3					

Between 55 and 60 per mille (3).

1. Kadayannallur	...	...	55.6	+ 10.3	3. Kilakkarai	...	...	59.2	- 15.
2. Eral	...	...	55.7	+ 3.6					

Above 60 per mille.

1. Sattankulam	...	...	60.2	-11.7		
----------------	-----	-----	------	-------	--	--

ANNEXURE B.

Birth-rates in municipalities for 1926.

Name of municipality.	Birth-rate per mille for 1926.	Increase or decrease (+ or -) compared with 1925.	Name of municipality.	Birth-rate per mille for 1926.	Increase or decrease (+ or -) compared with 1925.
-----------------------	--------------------------------------	---	-----------------------	--------------------------------------	---

Below 20 per mille.

1. Tiruvalur	...	...	...	187	+	15
--------------	-----	-----	-----	-----	---	----

Between 20 and 25 per mille (3).

1. Erode...	...	...	23.4	- 0.3	3. Srirangam * ...	...	24.6
2. Tadnatri	...	...	24.4	+ 1.6			

Between 25 and 30 per mille (12).

1. Palakollu	28.4	+ 0.8	7. Chicacole	28.4	+ 0.2
2. Anakapalle	27.0	- 4.4	8. Villupuram	28.6	- 2.2
3. Nandyal	27.0	+ 9.2	9. Narasaraopet	29.4	- 3.2
4. Ellore	27.6	+ 1.0	10. Kumbakonam	29.4	- 3.4
5. Karur	27.8	+ 0.4	11. Chidambaram	29.8	- 0.6
6. Proddatur	28.0	- 0.9	12. Mayavaram	29.8	- 1.6

Between 30 and 35 per mille (20).

1. Vāṇiyambadi...	...	...	202	- 09	11. Cuddapah ...	...	...	329	+ 59
2. Negapatam ...	...	...	305	- 32	12. Tirupati ...	...	...	329	+ 07
3. Vizianagaram ...	...	...	307	+ 14	13. Tellicherry ...	...	...	330	+ 04
4. Coonoor ...	...	...	314	- 18	14. Cochinapatam ...	...	...	333	+ 07
5. Chitral ...	...	...	319	- 43	15. Anantapur ...	...	...	338	+ 34
6. Dharsapuram ...	...	...	324	+ 19	16. Tanjore ...	...	...	341	- 11
7. Mannargudi ...	...	...	324	- 03	17. Tinnevely ...	...	...	341	+ 2
8. Padampur ...	...	...	325	+ 17	18. Trichinopoly ...	...	...	346	- 14
9. Palni ...	...	...	325	- 39	19. Palamcottah ...	...	...	347	- 05
10. Tenali ...	...	...	328	- 08	20. Vellore ...	...	...	348	- 27

Between 35 and 40 per mille (17).

1. Mangalore	35.1	+ 1.9	10. Chittoor	38.0	- 3.1
2. Eimilipatam	35.2	- 1.0	11. Calicut	38.0	+ 7.7
3. Jdamalpet	35.5	- 3.2	12. Cannanore	38.3	+ 3.8
4. Cuddalore	36.4	- 1.8	13. Vizagapatam	38.6	+ 3.1
5. Borhampur	36.7	+ 3.9	14. Adoni	39.2	+ 1.1
6. Parlakimedi	36.8	+ 1.6	15. Bellary	39.4	+ 2.3
7. Masulipatam	36.9	- 1.4	16. Srivilliputtur	39.4	- 0.2
8. Tiruppur	37.3	+ 2.1	17. Ongole	39.9	+ 1.7
9. Virudunagar	37.3	- 5.4			

Between 40 and 45 per mille (19).

1. Sivakasi	...	...	40-1	+ 4-1	11. Walajapet	...	...	41-3	- 5-9
2. Nellore	...	...	40-2	+ 3-8	12. Coimunda	...	...	41-4	+ 0-1
3. Celloosevaram	...	...	40-3	+ 3-8	13. Madras	...	...	41-8	- 2-1
4. Tuticorin	...	...	40-3	+ 0-5	14. Palghat	...	...	42-7	...
5. Cochinamund	...	...	40-4	- 0-3	15. Pollachi	...	...	42-9	+ 2-4
6. Dindigul	...	...	40-6	- 0-1	16. Rajahmundry	...	...	43-8	+ 5-0
7. Coimbatore	...	...	41-1	+ 4-0	17. Kurnool	...	...	43-9	+ 3-8
8. Madras	...	...	41-2	+ 0-5	18. Bezvada	...	...	44-1	+ 5-5
9. Hoaspet	...	...	41-3	+ 6-2	19. Saidapet	...	...	44-6	+ 10-2
10. Cochin	...	...	41-3	+ 6-3					

Between 45 and 50 per mille (5).

1. Hindupur	45.6	+ 13.2	4. Chingleput	47.1	- 1.9
2. Tiruppattur	45.8	+ 0.2	5. Tiruvannamalai	49.1	+ 5.5
3. Guntur	46.7	+ 0.5			

Between 50 and 55 per mille (3).

1. Bodinayakkanur	50'2	+ 1'0	3. Periyakulam	54'0	+ 2'4
2. Kodaikanal	50'2	+ 3'7			

Between 55 and 60 per mille.

Nil

Above 60 per mille.

1. Salem	...	...	...	68.1	+11.0
----------	-----	-----	-----	------	-------

R
L. 51226
N27

ANNEXURE C.

Infantile death-rates in districts for 1926.

Name of district.	Infantile death-rates per mille of births in 1926.	Increase or decrease (+ or -) compared with 1925.	Name of district.	Infantile death-rates per mille of births in 1926.	Increase or decrease (+ or -) compared with 1925.
<i>Between 100 and 150 per mille</i>					
1. Rāmānāḍ ...	146.9	- 5.2			
<i>Between 25 and 30 per mille (12).</i>					
1. Palakollu ...	26.4	+ 0.8	7. Chioacole ...	28.4	+ 0.2
2. Anakapalle ...	27.0	- 4.4	8. Villupuram ...	28.0	- 2.2
3. Nandyal ...	27.0	+ 9.2	9. Narasaraopet ...	29.4	- 2.2
4. Ellore ...	27.6	+ 1.0	10. Kumbakonam ...	29.4	- 3.4
5. Karur ...	27.8	+ 0.4	11. Chidambaram ...	29.8	- 0.8
6. Proddatur ...	28.0	- 0.9	12. Mayavaram ...	29.8	- 5.6
<i>Between 30 and 35 per mille (20).</i>					
<i>Between 200 and 250 per mile.</i>					
20. Vizagapatam ...	208.3	+ 30.3	23. Ganjām ...	222.1	+ 35.9
21. Kurnool ...	209.3	+ 34.5	24. Guntūr ...	224.9	+ 15.9
22. Chingleput ...	212.0	+ 14.8			
<i>Between 350 and 300 per mile.</i>					
25. Godāvari, West ...	256.9	+ 28.0	27. Madras ...	281.6	+ 0.2
26. Kistna ...	263.9	+ 31.6			

ANNEXURE D.

Death-rates in rural towns for 1926.

Name of rural town.	Death-rates for 1926.	Increase or decrease (+ or -) compared with 1925.	Name of rural town.	Death-rates for 1926.	Increase or decrease (+ or -) compared with 1925.
<i>Below 20 per mille (58).</i>					
1. Pallavaram ...	8.9	+ 2.0	30. Kadiri ...	17.2	- 7.0
2. Kamudi ...	9.5	- 1.1	31. Addanki ...	17.2	- 4.6
3. Menamadura ...	10.1	- 11.5	32. Sivagiri ...	17.3	+ 0.2
4. Udipi ...	10.9	- 15.2	33. Paramagudi ...	17.3	- 3.8
5. Vempalle ...	11.1	- 9.8	34. Yadiki ...	17.5	- 2.5
6. Bukkapattanam ...	11.3	- 5.7	35. Kandamur ...	17.5	- 4.7
7. Rayachoti ...	11.8	- 3.8	36. Coondapoor ...	17.6	- 2.2
8. Kamalapuram ...	12.2	- 5.2	37. Uttamapalayam ...	17.6	- 19.8
9. Dikkavole ...	12.4	- 5.1	38. Watrap ...	17.7	- 4.9
10. Pandalgudi ...	12.4	- 3.2	39. Karkala ...	17.8	- 9.4
11. Guntakal ...	13.2	- 4.2	40. Wandiwash ...	17.9	- 5.0
12. Tiruvottiyur ...	14.3	- 15.8	41. Nidadavole ...	18.3	+ 5.9
13. Ichchapuram ...	14.4	- 1.0	42. Gopichettipalayam ...	18.4	- 3.7
14. Alluru Kottapattanam ...	14.4	Nil.	43. Vadakku Valliyar ...	18.4	- 10.3
15. Pallapatti ...	14.4	- 8.3	44. Chetput ...	18.6	- 9.2
16. Kolluru ...	14.6	- 1.0	45. Tiruppannam ...	18.7	- 28.2
17. Gooty ...	14.6	- 0.5	46. Tondi ...	18.8	- 17.4
18. Kollegal ...	15.0	- 2.6	47. Dharmavaram ...	18.8	+ 3.9
19. Sankaranarayankoyil ...	15.1	Nil.	48. Cumbum ...	18.9	- 10.1
20. Turaiyur ...	15.1	- 6.6	49. Samalkot ...	18.9	- 2.0
21. Surandai ...	15.6	- 7.0	50. Kulittalai ...	19.0	- 10.2
22. Tirukkattupalli ...	15.7	- 8.7	51. Siruguppa ...	19.1	- 4.4
23. Krichi ...	15.8	+ 0.4	52. Tirupparankunram ...	19.4	- 0.8
24. Alluru ...	15.9	+ 8.4	53. Madugala ...	19.4	+ 12.6
25. Devakottai ...	16.7	- 7.0	54. Alizabad ...	19.4	- 3.8
26. Penakonda ...	16.8	+ 1.9	55. Sivaganga ...	19.4	- 16.1
27. Haliyangudi ...	16.9	- 17.2	56. Tirukkoyilar ...	19.5	+ 4.2
28. Tirupattur ...	16.9	- 10.8	57. Nayadupet ...	19.6	+ 13.5
29. Ponuru ...	17.1	+ 4.5	58. Wellington ...	19.9	- 2.1
<i>Between 20 and 25 per mille (60).</i>					
1. Arappukkottai ...	20.0	- 10.6	31. Dharmapuri ...	22.3	- 1.4
2. Panruti ...	20.2	- 8.7	32. Bapatla ...	22.4	+ 2.9
3. Nolvaiswaram ...	20.2	- 2.0	33. Vallam ...	22.4	- 0.6
4. Kallakurichi ...	20.2	+ 2.2	34. Polur ...	22.5	- 1.4
5. Karali ...	20.3	+ 15.9	35. Narasapattanam ...	22.5	+ 2.7
6. Cravakonda ...	20.4	+ 1.1	36. Vetapalem ...	22.6	- 3.1
7. Madanapalle ...	20.4	+ 3.9	37. Mettupalayam ...	22.6	+ 3.4
8. Kampil ...	20.5	+ 2.0	38. Vaithiavarankoyil ...	22.8	+ 3.9
9. Narasannapeta ...	20.6	- 2.1	39. St. Thomas' Mount ...	22.9	+ 6.8
10. Venkatagiri ...	20.6	+ 5.9	40. Kozigi ...	23.0	- 3.5
11. Kaveripattanam ...	20.6	- 2.1	41. Kollipara ...	23.0	+ 1.2
12. Rasipuram ...	20.7	+ 0.8	42. Yemmiganur ...	23.1	- 0.9
13. Vasudevavanallur ...	20.8	+ 3.9	43. Palladam ...	23.1	- 1.3
14. Viraghattam ...	21.1	+ 6.1	44. Chebrolu ...	23.1	+ 9.1
15. Russellkonda ...	21.3	+ 0.9	45. Kandukur ...	23.3	+ 3.7
16. Namakkal ...	21.3	- 9.8	46. Tekkali ...	23.4	- 2.7
17. Pernampattu ...	21.4	+ 6.7	47. Manachanallur ...	23.4	- 0.7
18. Pedana ...	21.4	- 3.2	48. Krishnagiri ...	23.6	+ 2.3
19. Kadayam ...	21.6	+ 8.5	49. Ramachandrapuram ...	23.6	- 4.0
20. Tuni ...	21.6	+ 1.6	50. Vullavanur ...	23.8	- 4.2
21. Cheyur ...	21.7	- 2.5	51. Udangudi ...	23.9	+ 1.5
22. Gudur ...	21.8	- 2.7	52. Nanguneri ...	24.2	- 4.9
23. Puliyampatti ...	21.9	- 9.2	53. Abiramam ...	24.3	- 2.4
24. Achanta ...	22.0	- 3.1	54. Valuru ...	24.5	+ 3.0
25. Nattam ...	22.0	- 1.0	55. Nizampattanam ...	24.6	- 3.1
26. Amalapuram ...	22.1	+ 3.2	56. Vedānniyam ...	24.7	+ 4.4
27. Rayadrug ...	22.2	+ 11.4	57. Punganur ...	24.8	+ 3.3
28. Sompeta ...	22.2	- 4.1	58. Narasapur ...	24.8	+ 3.1
29. Bodagara ...	22.3	+ 2.9	59. Visharam ...	24.8	+ 3.0
30. Rajapalayam ...	22.3	- 0.3	60. Udaiyarpalayam ...	24.9	- 1.4
<i>Between 25 and 30 per mille (50).</i>					
1. Sembiam ...	25.0	+ 3.2	10. Ambur ...	25.7	+ 1.2
2. Razampeta ...	25.2	+ 0.2	11. Karaikudi ...	25.7	- 8.0
3. Mandapeta ...	25.2	- 5.8	12. Tiruchengodu ...	26.0	+ 2.5
4. Kasaragod ...	25.3	- 3.8	13. Pattukkottai ...	26.0	+ 3.9
5. Ariyalur ...	25.3	+ 6.4	14. Jaggayyapeta ...	26.5	+ 3.0
6. Sattur ...	25.4	- 14.6	15. Sottur ...	26.6	- 1.1
7. Tirumangalam ...	25.5	- 4.9	16. Tiruvadi ...	26.6	- 1.0
8. Kallidaikurichi ...	25.5	- 2.7	17. Ranipet ...	26.7	+ 8.9
9. Kolasekharapattanam ...	25.6	+ 8.6	18. Jammalamadugu ...	26.9	+ 1.9

ANNEXURE D—cont.

Death-rates in rural towns for 1926—cont.

Name of rural town.	Death-rates per mille for 1926.	Increase or decrease (+ or -) compared with 1925.	Name of rural town.	Death-rates per mille for 1926.	Increase or decrease (+ or -) compared with 1925.
<i>Between 25 and 30 per mille (50)—cont.</i>					
19. Chinnamerangi ...	27.1	+ 15.0	35. Arungavarappukotta ...	28.4	+ 4.4
20. Nellikeppam ...	27.3	- 10.3	36. Tiruttani ...	28.5	+ 5.1
21. Tenkasi ...	27.4	+ 2.5	37. Viravanallur ...	28.6	- 9.3
22. Bhavani ...	27.6	+ 7.0	38. Chikakalurpet ...	28.7	+ 4.7
23. Arkonam ...	27.6	+ 3.5	39. Yellamanchili ...	29.1	+ 1.8
24. Sendamangalam ...	27.7	+ 2.8	40. Atur ...	29.1	+ 9.2
25. Porto Novo ...	27.7	- 0.1	41. Madurantakam ...	29.3	+ 6.5
26. Pattamadai ...	27.9	- 10.7	42. Repalle ...	29.3	+ 4.0
27. Tiruchendur ...	28.0	+ 2.8	43. Tindivanam ...	29.3	+ 3.1
28. Kadayannallur ...	28.1	+ 0.4	44. Ayyampettai ...	29.3	+ 3.8
29. Hosur ...	28.1	+ 8.7	45. Gurizala ...	29.4	+ 7.2
30. Puliyangudi ...	28.2	+ 9.1	46. Sholinghur ...	29.4	- 0.1
31. Mangalagiri ...	28.2	+ 4.4	47. Arni ...	29.5	+ 1.3
32. Vriddiachalam ...	28.3	+ 5.1	48. Kovilpatti ...	29.6	- 0.2
33. Harpanahalli ...	28.4	+ 4.0	49. Penugonda ...	29.8	+ 2.6
34. Pithapuram ...	28.4	+ 0.8	50. Kayalpatnam ...	29.9	+ 5.0
<i>Between 30 and 35 per mille (30).</i>					
1. Pamidi ...	30.0	+ 5.5	16. Tirukalikkundram ...	32.2	+ 6.4
2. Poonamallee ...	30.0	- 2.1	17. Nuzvid ...	32.3	+ 5.9
3. Sernadevi ...	30.2	- 8.2	18. Tanaka ...	32.5	+ 9.5
4. Badvel ...	30.5	+ 1.9	19. Tranquebar ...	32.8	+ 8.1
5. Sattenapalle ...	30.5	+ 3.6	20. Alvar Tirunagari ...	33.0	- 4.4
6. Chodavaram ...	30.8	+ 19.2	21. Vinukonda ...	33.0	+ 10.1
7. Srivaikuntam ...	31.0	+ 2.7	22. Tiruvallur ...	33.1	+ 7.5
8. Palkonda ...	31.1	+ 7.6	23. Parvatipuram ...	33.3	+ 7.5
9. Arcot ...	31.2	+ 9.3	24. Sriperumbudur ...	33.8	+ 4.6
10. Bobbili ...	31.4	+ 15.4	25. Chinnasani ...	33.9	+ 2.8
11. Sholavandan ...	31.6	- 4.8	26. Attili ...	34.1	+ 4.6
12. Kalahasti ...	31.7	+ 7.8	27. Ramnad ...	34.2	- 4.6
13. Pallikonda ...	31.8	+ 10.0	28. Uttiramerur ...	34.4	+ 4.1
14. Lalgudi ...	32.0	- 4.9	29. Kottur ...	34.8	+ 5.6
15. Tiruvadamardur ...	32.2	+ 9.2	30. Ponnani ...	34.9	+ 12.7
<i>Between 35 and 40 per mille (9).</i>					
1. Ambasamudram ...	35.1	+ 5.1	6. Godivada ...	37.2	+ 7.6
2. Saluru ...	35.4	+ 10.5	7. Tirutturaiyandi ...	37.6	+ 2.9
3. Bhuvanagiri ...	36.3	- 4.5	8. Adirampattanam ...	38.6	+ 18.4
4. Rameswaram ...	36.4	- 7.4	9. Mulki ...	39.9	+ 20.7
5. Shiyali ...	37.1	+ 14.3			
<i>Between 40 and 45 per mille (4).</i>					
1. Tiruvottiyur ...	40.8	+ 9.1	3. Sattankulam ...	42.2	- 2.8
2. Eral ...	41.1	+ 11.1	4. Kilakarai ...	44.2	- 14.0
<i>Between 45 and 50 per mille (3).</i>					
1. Ettiyapuram ...	46.5	+ 4.4	3. Muttipet ...	47.2	+ 19.8
2. Kottur ...	46.8	+ 23.4			

ANNEXURE E.

Death-rates in municipalities for 1926.

Name of municipality.	Death-rate for 1926.	Increase or decrease (+ or -) compared with 1925.	Name of municipality.	Death-rate for 1926.	Increase or decrease (+ or -) compared with 1925.
<i>Below 15 per mille.</i>					
Nil.					
<i>Between 15 and 20 per mille (11).</i>					
1. Adoni ...	15.4	+ 0.7	7. Proddatur ...	18.3	-
2. Sivakasi ...	16.2	- 0.6	8. Vellore ...	18.3	-
3. Erode ...	16.6	- 3.6	9. Piddapuram ...	19.1	1
4. Hindupur ...	16.9	- 2.8	10. Tirupattur ...	19.2	-
5. Vaniyambadi ...	16.9	- 4.8	11. Tadpatri ...	19.5	-
6. Ellore ...	18.2	- 0.6			
<i>Between 20 and 25 per mille (21).</i>					
1. Berhampur ...	20.4	- 1.3	12. Anantapur ...	23.5	- 0.5
2. Tiruvallur ...	21.1	- 1.6	13. Chittoor ...	23.9	+ 4.0
3. Bodinayakanur ...	21.2	- 13.9	14. Udumalpet ...	24.0	- 4.4
4. Gudiyattam ...	21.3	- 2.3	15. Chittoor ...	24.1	+ 1.0
5. Karur ...	21.3	- 3.3	16. Nandyal ...	24.1	+ 6.1
6. Coonoor ...	21.7	- 0.3	17. Chittoor ...	24.1	+ 5.4
7. Tenali ...	21.9	+ 2.4	18. Tirupar ...	24.5	+ 6.6
8. Cuddapah ...	22.3	+ 0.3	19. Palai ...	24.7	- 7.3
9. Palakollu ...	22.5	- 8.2	20. Villupuram ...	24.7	- 3.7
10. Narasarnpet ...	23.1	+ 1.0	21. Tennevely ...	24.8	- 3.9
11. Mangalore ...	23.2	+ 2.2			
<i>Between 25 and 30 per mille (13).</i>					
1. Cochin ...	25.0	+ 0.5	8. Vizianagaram ...	28.3	+ 6.5
2. Dharmaparam ...	25.2	- 8.1	9. Coimbatore ...	28.6	-
3. Srivilliputtur ...	25.3	- 5.7	10. Palghat ...	29.2	+ 5.0
4. Kodaikanal ...	25.4	+ 6.0	11. Chikambaram ...	29.3	- 1.5
5. Parakkimedi ...	26.0	+ 5.5	12. Dindigul ...	29.7	- 0.4
6. Ottacamund ...	27.0	- 1.9	13. Virudhunagar ...	29.7	+ 6.9
7. Avakapalle ...	27.4	- 2.9			
<i>Between 30 and 35 per mille (22).</i>					
1. Saidapet ...	30.1	+ 7.4	12. Bimlipatam ...	32.0	- 5.8
2. Walajapet ...	30.1	- 2.0	13. Pollachi ...	32.3	- 12.2
3. Kumbakonam ...	30.1	- 0.2	14. Palamcottah ...	32.3	+ 0.5
4. Kurnool ...	30.2	- 0.6	15. Conjeevaram ...	32.6	+ 6.3
5. Cannanore ...	30.2	+ 3.5	16. Tirupati ...	33.1	+ 4.5
6. Bellary ...	30.9	+ 3.6	17. Tanjore ...	33.1	+ 2.1
7. Onzole ...	31.0	+ 3.3	18. Mannarudi ...	33.2	+ 0.9
8. Tiruvannamalai ...	31.0	+ 1.8	19. Negapatam ...	33.5	+ 4.1
9. Cuddalore ...	31.2	- 3.0	20. Periyakulam ...	34.0	- 6.2
10. Coimbatore ...	31.3	+ 2.3	21. Rajahmundry ...	34.5	- 2.0
11. Masulipatam ...	31.5	+ 3.4	22. Tellicherry ...	34.9	+ 10.0
<i>Between 35 and 40 per mille (11).</i>					
1. Trichinopoly ...	35.2	+ 6.0	7. Vizagapatam ...	37.5	+ 1.5
2. Mayavaram ...	35.3	+ 5.9	8. Tuticorin ...	37.9	+ 0.9
3. Hospet ...	35.4	+ 3.9	9. Bezwada ...	38.6	+ 4.8
4. Calicut ...	35.5	- 8.6	10. Guntur ...	39.5	+ 5.2
5. Srirangam ...	35.9	+ 2.7	11. Madurai ...	39.9	+ 3.4
6. Nellore ...	36.2	+ 0.8			
<i>Between 40 and 45 per mille (2).</i>					
1. Chingleput ...	40.2	+ 2.8	2. Salem ...	44.1	- 16.4
<i>Between 45 and 50 per mille.</i>					
1. Madras ...	45.3	- 2.6			

ANNEXURE F.

Infantile death-rates in municipalities for 1926.

Name of municipality.	Infantile death-rates per mille of births in 1926.	Increase or decrease (+ or -) compared with 1925.	Name of municipality.	Infantile death-rates per mille of births in 1926.	Increase or decrease (+ or -) compared with 1925.
<i>Below 100 per mille.</i>					
1. Sivakasi ...	95.6	-21.2			
<i>Between 100 and 150 per mille (21).</i>					
1. Tiruvannamalai ...	102.3	-85.1	12. Hospet ...	131.9	-57.8
2. Vellore ...	111.6	-11.5	13. Bodinayakanur ...	135.2	-34.6
3. Tirupattur ...	119.5	-23.4	14. Erode ...	135.9	-15.4
4. Hindupur ...	119.7	-21.4	15. Karur ...	138.1	-25.9
5. Adoni ...	119.7	+ 8.1	16. Calicut ...	138.8	+14.8
6. Proddatur ...	121.3	- 2.9	17. Peddapuram ...	138.9	+ 8.1
7. Cooroor ...	122.4	- 1.0	18. Chittoor ...	139.3	+ 9.2
8. Anantapur ...	125.6	-23.4	19. Cuddapah ...	141.0	-41.6
9. Cannanore ...	127.1	+27.9	20. Vaniyambadi ...	145.2	+ 4.1
10. Mangalore ...	127.2	+12.1	21. Cochin ...	147.7	-17.1
11. Nandyal ...	130.9	+28.7			
<i>Between 150 and 200 per mille (26).</i>					
1. Tellicherry ...	151.2	+39.7	14. Villupuram ...	174.7	+34.8
2. Gudiattam ...	152.7	-22.4	15. Mannargudi ...	181.4	+25.8
3. Tiruppur ...	153.1	+55.9	16. Udumalpet ...	181.8	+20.2
4. Ellore ...	155.5	-27.1	17. Salem ...	182.0	- 9.3
5. Srivilliputtur ...	163.2	+ 1.6	18. Saidapet ...	184.1	+ 3.3
6. Tiruvallur ...	164.1	-24.3	19. Ongole ...	185.0	- 0.3
7. Virudhunagar ...	167.3	- 3.5	20. Anakapalle ...	189.4	-20.0
8. Coimbatore ...	168.1	-14.5	21. Cocanada ...	190.4	+12.1
9. Pollachi ...	168.6	-28.5	22. Srirangam ...	192.6	+26.2
10. Kurnool ...	168.8	- 8.3	23. Berhampur ...	193.8	+ 7.4
11. Chirala ...	169.7	+32.5	24. Cuddalore ...	196.1	-21.1
12. Dharapuram ...	172.1	+29.5	25. Nellore ...	199.3	- 9.8
13. Vizianagaram ...	174.1	+18.0	26. Kumbakonam ...	199.5	-23.5
<i>Between 200 and 250 per mille (27).</i>					
1. Trichinopoly ...	200.5	+25.0	15. Chidambaram ...	220.6	+36.7
2. Palghat ...	200.6	+ 3.4	16. Mayavaram ...	222.7	+28.4
3. Chingleput ...	202.2	+ 7.8	17. Tirupati ...	230.0	+18.4
4. Walajapet ...	202.9	-11.4	18. Negapatam ...	230.3	+16.1
5. Tanjore ...	205.9	+ 9.6	19. Tinnevely ...	230.5	+25.4
6. Ootacamund ...	206.1	-11.1	20. Periyakulam ...	232.6	+13.8
7. Conjeevaram ...	206.6	+19.6	21. Kodalkanal ...	232.6	+11.6
8. Bimlipatam ...	208.3	-16.8	22. Palamcottah ...	235.8	-15.1
9. Paimi ...	209.1	-21.7	23. Parlakimedi ...	237.7	+40.7
10. Tuticorin ...	210.4	-14.9	24. Rajahmundry ...	240.5	-21.6
11. Dindigul ...	211.3	+17.3	25. Palakollu ...	244.8	-40.1
12. Tenali ...	215.2	+28.0	26. Narasaraopet ...	246.2	+44.5
13. Bellary ...	216.8	+29.0	27. Madras ...	247.5	+24.8
14. Chicacole ...	218.1	+38.5			
<i>Between 250 and 300 per mille (4).</i>					
1. Vizagapatam ...	251.3	- 0.3	3. Madras ...	281.6	+ 0.2
2. Bezwada ...	263.7	- 1.1	4. Guntur ...	282.6	+25.6
<i>Between 300 and 350 per mille (2).</i>					
1. Tadpatri ...	312.7	+176.5	2. Masulipatam ...	315.0	+54.4

ANNEXURE G.

1. Districts—Incidence of mortality from cholera.

Districts.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.	Districts.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.
1. Godavari, East ...	2	0.001	0.7	14. Nilgiris ...	15	0.1	0.3
2. Bellary ...	3	0.003	1.7	15. Madras ...	97	0.2	0.2
3. Godavari, West ...	12	0.01	...	16. South Kanara ...	235	0.2	0.04
4. Kistna ...	14	0.01	0.3	17. Chingleput ...	471	0.3	0.3
5. Cuddapah ...	18	0.02	0.7	18. North Arcot ...	605	0.3	0.6
6. Vizagapatam ...	43	0.02	0.9	19. Ramnad ...	491	0.3	1.2
7. Agencies ...	4	0.02	0.02	20. Madras ...	1,076	0.5	1.4
8. Chittoor ...	170	0.1	0.2	21. Coimbatore ...	2,124	0.9	1.1
9. Ganjam ...	152	0.1	0.8	22. Salem ...	1,816	0.9	0.7
10. Guntur ...	121	0.1	0.1	23. South Arcot ...	2,541	1.1	1.1
11. Kurnool ...	58	0.1	0.9	24. Trichinopoly ...	2,191	1.1	0.8
12. Malabar ...	423	0.1	0.3	25. Tinnevely ...	2,797	1.5	1.2
13. Nellore ...	135	0.1	0.1	26. Tanjore ...	8,793	3.8	1.5

2. Municipalities—Incidence of mortality from cholera.

Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.	Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.
1. Hindupur ...	...	...	0.1	42. Ongole ...	1	0.1	0.1
2. Anantapur ...	...	...	1.0	43. Dindigul ...	4	0.1	0.7
3. Tadpatri ...	...	...	1.8	44. Periyakulam ...	2	0.1	0.5
4. Bellary ...	...	...	0.9	45. Calicut ...	10	0.1	0.5
5. Adoni ...	...	...	0.9	46. Srivilliputtur ...	3	0.1	0.7
6. Hospet ...	...	...	1.9	47. Conjeevaram ...	14	0.2	0.2
7. Proddatur ...	...	...	0.2	48. Madras ...	97	0.2	0.2
8. Berhampur ...	...	...	0.6	49. Chingleput ...	4	0.3	2.0
9. Chicacole ...	...	...	0.6	50. Gudiattam ...	8	0.3	0.7
10. Rajahmundry ...	...	...	0.8	51. Erode ...	11	0.5	0.5
11. Peddapuram ...	...	...	0.7	52. Palni ...	9	0.5	5.1
12. Palakollu ...	...	...	0.04	53. Palghat ...	22	0.5	1.6
13. Narasaraopet ...	...	...	0.1	54. Walajapet ...	5	0.5	0.3
14. Masulipatam ...	...	...	0.04	55. Chidambaram ...	11	0.5	0.7
15. Nandyal ...	...	...	1.4	56. Trichinopoly ...	64	0.5	2.7
16. Kurnool ...	...	...	0.6	57. Vellore ...	38	0.7	0.7
17. Kodalkanal ...	...	...	...	58. Karur ...	13	0.7	1.5
18. Tellicherry ...	...	...	0.2	59. Guntur ...	37	0.8	0.3
19. Cochin ...	...	...	0.1	60. Madras ...	108	0.8	1.4
20. Cannanore ...	...	...	0.01	61. Tiruvannamalai ...	20	0.9	0.7
21. Nellore ...	...	...	0.3	62. Tanjore ...	58	1.0	0.7
22. Ootacamund ...	...	...	0.3	63. Cuddalore ...	51	1.0	0.9
23. Coonoor ...	...	...	0.8	64. Saidapet ...	30	1.1	1.1
24. Vaniyambadi ...	...	...	2.8	65. Udumalpet ...	11	1.1	1.1
25. Tirupattur ...	...	...	0.2	66. Coimbatore ...	102	1.5	1.1
26. Sivakasi ...	...	...	1.2	67. Kumbakonam ...	83	1.5	1.3
27. Mangalore ...	...	...	0.04	68. Bodinayakanur ...	37	1.8	4.2
28. Vizianagaram ...	...	...	0.04	69. Negapatam ...	99	1.8	0.8
29. Anakapalle ...	...	...	0.1	70. Tinnevely ...	105	2.0	2.7
30. Bimlipatam ...	...	...	0.2	71. Tiruvallur ...	57	2.3	1.5
31. Tenali ...	1	0.04	0.6	72. Palamcottah ...	110	2.4	2.0
32. Virudhunagar ...	1	0.04	1.0	73. Villupuram ...	47	2.7	1.1
33. Cocanada ...	1	0.02	0.5	74. Pollachi ...	35	2.9	3.0
34. Ellore ...	1	0.02	0.1	75. Tiruppur ...	32	2.9	0.5
35. Bezwada ...	1	0.02	0.3	76. Mannargudi ...	84	3.9	2.5
36. Vizagapatam ...	1	0.02	0.1	77. Dharapuram ...	65	4.0	4.6
37. Chittoor ...	1	0.1	0.7	78. Mayavaram ...	114	4.0	1.1
38. Tirupati ...	2	0.1	0.2	79. Srirangam ...	99	4.3	1.0
39. Cuddapah ...	2	0.1	0.4	80. Salem ...	247	4.7	1.0
40. Parlakimedi ...	1	0.1	1.3	81. Tuticorin ...	253	5.7	2.2
41. Chirala ...	2	0.1	0.1				

ANNEXURE H.

1. Districts—Incidence of mortality from smallpox.

Districts.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.	Districts.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.
Coimbatore ...	335	0.1	0.3	Agencies ...	37	0.2	0.3
Cuddapah ...	83	0.1	0.5	Anantapur ...	277	0.3	0.7
Madras ...	60	0.1	0.9	Kistna ...	353	0.3	0.8
Malabar ...	165	0.1	0.4	Kurnool ...	301	0.3	0.6
Nilgiris ...	11	0.1	0.4	Nellore ...	392	0.3	0.5
Ramnad ...	276	0.1	0.4	North Arcot ...	614	0.3	0.8
South Kanara ...	103	0.1	0.4	Salem ...	504	0.3	0.5
Tinnevely ...	191	0.1	0.4	Tanjore ...	781	0.3	0.5
Chingleput ...	349	0.2	0.5	Trichinopoly ...	697	0.4	0.3
Chittoor ...	215	0.2	0.3	Madura ...	989	0.5	0.4
Ganjam ...	405	0.2	0.5	South Arcot ...	1,166	0.5	0.9
Godavari, East ...	328	0.2	0.5	Bellary ...	642	0.7	0.8
Guntur ...	435	0.2	0.4	Godavari, West ...	708	0.7	...
Vizagapatam ...	482	0.2	0.2				

2. Municipalities—Incidence of mortality from smallpox.

Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.	Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.
1. Hindupur ...	...	...	0.7	42. Calicut ...	1	0.01	1.6
2. Anantapur ...	...	...	1.0	43. Tirupati ...	1	0.1	0.2
3. Bellary ...	...	...	0.6	44. Tiruppur ...	1	0.1	1.1
4. Adoni ...	...	...	0.8	45. Proddatur ...	1	0.1	0.2
5. Hospet ...	...	...	0.3	46. Berhampur ...	2	0.1	0.2
6. Chingleput ...	...	...	0.2	47. Parlakimedi ...	1	0.1	0.4
7. Chittoor ...	...	...	0.3	48. Cocanada ...	4	0.1	1.0
8. Dharapuram ...	...	...	0.3	49. Bozwada ...	2	0.1	0.2
9. Cuddapah ...	...	...	1.0	50. Madras ...	60	0.1	0.9
10. Rajahmundry ...	...	...	2.9	51. Ootacamund ...	2	0.1	0.1
11. Peddapuram ...	...	...	0.1	52. Tiruvannamalai ...	2	0.1	0.4
12. Palakollu ...	...	...	2.6	53. Virudunagar ...	2	0.1	1.7
13. Chirala ...	...	...	1.5	54. Villupuram ...	1	0.1	0.7
14. Ongole ...	...	...	1.3	55. Kumbakonam ...	1	0.1	0.9
15. Masulipatam ...	...	...	0.8	56. Tanjore ...	8	0.1	0.6
16. Nandyal ...	...	...	0.9	57. Tinnevely ...	7	0.1	0.8
17. Bodinayakanur ...	...	...	0.9	58. Palamcottah ...	6	0.1	0.6
18. Palni ...	...	...	0.5	59. Karur ...	2	0.1	1.0
19. Kurnool ...	...	...	1.0	60. Saidapet ...	5	0.2	1.4
20. Periyakulam ...	...	...	0.6	61. Ellore ...	10	0.2	0.6
21. Kodaikanal ...	...	...	0.4	62. Dindigul ...	5	0.2	0.1
22. Cannanore ...	...	...	5.4	63. Palghat ...	11	0.2	1.2
23. Tellicherry ...	...	...	2.2	64. Coonoor ...	2	0.2	0.6
24. Cochin ...	...	...	2.8	65. Salem ...	9	0.2	1.8
25. Nellore ...	...	...	1.4	66. Vizianagram ...	8	0.2	0.5
26. Vellore ...	...	...	0.5	67. Mannargudi ...	7	0.3	0.6
27. Gudiyattam ...	...	...	1.0	68. Vizagapatam ...	11	0.3	1.0
28. Vaniyambadi ...	...	...	0.5	69. Mangalore ...	22	0.4	0.4
29. Tirupattur ...	...	...	0.5	70. Erode ...	3	0.5	0.8
30. Walajapet ...	...	...	0.02	71. Chicaole ...	8	0.5	0.3
31. Sivakasi ...	...	...	0.1	72. Negapatam ...	25	0.5	1.2
32. Chidambaram ...	...	...	1.2	73. Mayavaram ...	15	0.5	0.4
33. Tiruvalur ...	...	...	0.3	74. Anakapalle ...	11	0.5	0.3
34. Tuticorin ...	...	...	0.5	75. Tadpatri ...	7	0.6	2.0
35. Bimlipatam ...	...	...	0.04	76. Udamalpet ...	6	0.6	1.6
36. Guntur ...	2	0.04	0.6	77. Trichinopoly ...	93	0.8	0.4
37. Tenali ...	1	0.04	0.3	78. Pollachi ...	11	0.9	1.3
38. Srirangam ...	1	0.04	0.3	79. Coimbatore ...	74	1.1	1.0
39. Srivilliputtur ...	1	0.03	...	80. Narasaraopet ...	19	1.7	0.1
40. Conjeeveram ...	1	0.02	0.8	81. Madura ...	627	4.5	1.6
41. Cuddalore ...	1	0.02	0.2				

ANNEXURE I.

1. Districts—Incidence of mortality from plague.

Districts.	Number of deaths for 1926.	Rate for 1926.	Rate for 5 years ending 1925.	Districts.	Number of deaths for 1926.	Rate for 1926.	Rate for 5 years ending 1925.
1. Chingleput ...	...	...	0.0004	14. Anantapur ...	1	0.001	0.01
2. Cuddapah ...	...	...	0.0002	15. Chittoor ...	1	0.001	0.0007
3. Ganjam ...	...	...	...	16. Godavari, West ...	1	0.001	...
4. Godavari, East ...	...	...	...	17. Kistna ...	2	0.002	0.0006
5. Kurnool ...	...	...	0.0002	18. North Arcot ...	5	0.002	0.2
6. Madras ...	...	...	0.003	19. Guntur ...	8	0.004	0.002
7. Nellore ...	...	...	...	20. Malabar ...	40	0.01	0.03
8. South Arcot ...	...	...	0.01	21. South Kanara ...	7	0.01	0.04
9. Tanjore ...	...	...	0.0001	22. Madura ...	212	0.1	1.0
10. Tinnevely ...	...	...	0.02	23. Nilgiris ...	18	0.1	0.2
11. Trichinopoly ...	...	...	0.04	24. Ramnad ...	193	0.1	0.1
12. Vizagapatam ...	...	...	0.001	25. Coimbatore ...	483	0.2	1.1
13. Agencies ...	...	...	0.001	26. Salem ...	475	0.2	0.9
				27. Bellary ...	697	0.8	0.7

2. Municipalities—Incidence of mortality from plague.

Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.	Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.
1. Hindupur ...	...	...	0.1	42. Gudiyattam ...	...	...	7.1
2. Tadpatri ...	...	...	0.02	43. Tiruvannamalai ...	...	...	2.8
3. Adoni ...	...	...	...	44. Vaniyambadi ...	...	...	0.1
4. Conjeeveram ...	...	...	0.01	45. Tirupattur ...	...	...	2.0
5. Saidapet ...	...	...	...	46. Walajapet ...	...	...	0.1
6. Chingleput ...	...	...	...	47. Srivilliputtur ...	...	...	...
7. Chittoor ...	...	...	0.02	48. Virudunagar ...	...	...	1.7
8. Tirupati ...	...	...	...	49. Sivakasi ...	...	...	0.02
9. Coimbatore ...	...	...	3.9	50. Salem ...	...	...	13.7
10. Erode ...	...	...	0.9	51. Cuddalore ...	...	...	...
11. Dharapuram ...	...	...	2.3	52. Chidambaram ...	...	...	...
12. Tiruppur ...	...	...	8.7	53. Villupuram ...	...	...	0.02
13. Udamalpet ...	...	...	6.0	54. Kumbakonam ...	...	...	0.004
14. Cuddapah ...	...	...	0.02	55. Tanjore ...	...	...	...
15. Proddatur ...	...	...	...	56. Negapatam ...	...	...	...
16. Berhampur ...	...	...	...	57. Mayavaram ...	...	...	...
17. Parlakimedi ...	...	...	...	58. Tiruvalur ...	...	...	...
18. Chicaole ...	...	...	...	59. Mannargudi ...	...	...	...
19. Rajahmundry ...	...	...	...	60. Tinnevely ...	...	...	0.1
20. Cocanada ...	...	...	...	61. Palamcottah ...	...	...	...
21. Peddapuram ...	...	...	...	62. Tuticorin ...	...	...	1.0
22. Palakollu ...	...	...	...	63. Trichinopoly ...	...	...	0.1
23. Guntur ...	...	...	0.01	64. Srirangam ...	...	...	...
24. Ongole ...	...	...	...	65. Karur ...	...	...	1.2
25. Narasaraopet ...	...	...	...	66. Vizagapatam ...	...	...	0.004
26. Masulipatam ...	...	...	...	67. Vizianagram ...	...	...	...
27. Nandyal ...	...	...	...	68. Anakapalle ...	...	...	...
28. Kurnool ...	...	...	...	69. Bimlipatam ...	...	...	...
29. Madras ...	...	...	0.03	70. Tenali ...	1	0.04	...
30. Madura ...	...	...	1.3	71. Bellary ...	1	0.03	0.02
31. Dindigul ...	...	...	0.1	72. Ellore ...	1	0.02	...
32. Bodinayakanur ...	...	...	3.0	73. Anantapur ...	1	0.1	...
33. Palni ...	...	...	3.6	74. Pollachi ...	1	0.1	6.2
34. Periyakulam ...	...	...	11.1	75. Chirala ...	1	0.1	...
35. Kodaikanal ...	...	...	0.04	76. Bozwada ...	2	0.1	0.04
36. Palghat ...	...	...	0.01	77. Ootacamund ...	2	0.1	0.2
37. Cannanore ...	...	...	0.02	78. Mangalore ...	6	0.1	0.4
38. Tellicherry ...	...	...	0.3	79. Calicut ...	29	0.4	0.5
39. Cochin ...	...	...	...	80. Coonoor ...	6	0.5	0.9
40. Nellore ...	...	...	...	81. Hospet ...	111	6.1	4.4
41. Vellore ...	...	...	0.1				

ANNEXURE J.

1. Districts.—Incidence of mortality from fevers.

Districts.	Number of deaths in 1926.	Rate for 1926.	Rate for 5 years ending 1925.	Districts.	Number of deaths in 1926.	Rate for 1926.	Rate for 5 years ending 1925.
1. Tanjore ...	5,067	2.2	3.7	14. Bellary ...	6,369	7.3	6.8
2. Madura ...	5,976	3.0	3.5	15. Kistna ...	9,916	9.1	10.6
3. Trichinopoly ...	8,219	3.3	4.3	16. Malabar ...	28,548	9.2	8.1
4. Coimbatore ...	8,285	3.7	3.5	17. Guntur ...	18,098	10.0	12.3
5. North Arcot ...	8,143	4.0	3.3	18. Godavari, East ...	15,551	10.6	11.3
6. Chingleput ...	6,467	4.4	3.8	19. South Kanara ...	13,232	10.6	8.3
7. Tinnevely ...	8,728	4.6	4.1	20. Nellore ...	15,419	11.1	9.2
8. South Arcot ...	11,081	4.8	4.4	21. Godavari, West ...	11,713	11.2	
9. Madras ...	2,622	5.1	3.8	22. Nilgiris ...	1,441	11.8	11.9
10. Ramnad ...	9,757	5.7	6.1	23. Cuddapah ...	14,373	16.2	13.5
11. Anantapur ...	5,513	5.8	4.3	24. Kurnool ...	15,602	17.1	13.3
12. Chittoor ...	8,289	6.5	5.5	25. Agencies ...	4,135	19.5	16.4
13. Salem ...	14,578	6.9	7.6	26. Ganjam ...	36,291	19.8	16.7
				27. Vizagapatam ...	46,520	20.9	18.5

2. Municipalities.—Incidence of mortality from fevers.

Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.	Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.
1. Vaniyambadi ...	...	...	0.4	41. Tanjore ...	280	4.4	5.4
2. Coonoor ...	7	0.6	2.4	42. Walajapet ...	45	4.5	4.0
3. Ootacamund ...	13	0.7	2.8	43. Cuddapah ...	87	4.5	5.3
4. Hindupur ...	9	0.7	7.6	44. Tiruvannamalai ...	102	4.7	4.4
5. Dindigul ...	24	0.8	2.5	45. Tenali ...	112	4.8	6.9
6. Adoni ...	30	1.0	1.9	46. Parlakimedi ...	93	5.0	5.7
7. Ongole ...	15	1.1	12.0	47. Hospet ...	92	5.0	5.4
8. Mannargudi ...	27	1.2	3.4	48. Cuddalore ...	252	5.0	11.1
9. Conjeevaram ...	85	1.4	0.4	49. Madras ...	2,622	5.1	3.8
10. Palghat ...	63	1.4	6.4	50. Vizagapatam ...	230	5.1	7.3
11. Trichinopoly ...	184	1.5	1.9	51. Chingleput ...	61	5.2	3.3
12. Vellore ...	79	1.6	2.5	52. Tellicherry ...	144	5.2	3.9
13. Chittoor ...	23	1.6	3.2	53. Cochin ...	109	5.3	6.2
14. Tiruppur ...	19	1.7	2.9	54. Salem ...	275	5.3	5.0
15. Chidambaram ...	41	1.8	4.0	55. Tuticorin ...	236	5.3	5.5
16. Karur ...	39	2.1	4.5	56. Berhampur ...	175	5.3	7.5
17. Erode ...	52	2.3	3.1	57. Negapatam ...	290	5.4	3.0
18. Cannanore ...	67	2.4	6.4	58. Tiruvallur ...	130	5.4	4.3
19. Palamcottah ...	114	2.4	2.8	59. Kurnool ...	154	5.5	11.7
20. Palni ...	45	2.5	1.1	60. Periyakulam ...	93	5.6	8.2
21. Sivakasi ...	38	2.5	8.1	61. Ellore ...	255	5.6	4.9
22. Saidapet ...	70	2.6	1.1	62. Guntur ...	273	5.7	8.4
23. Proddatur ...	43	2.7	7.1	63. Vizianagram ...	228	5.8	7.0
24. Tirupattur ...	46	2.8	2.6	64. Dharapuram ...	93	5.8	2.8
25. Tinnevely ...	150	2.8	3.8	65. Nellore ...	213	5.9	5.0
26. Bellary ...	117	2.9	3.8	66. Udumalpet ...	61	5.9	2.8
27. Mayavaram ...	89	3.1	4.9	67. Srivilliputtur ...	183	5.9	4.4
28. Coimbatore ...	211	3.2	3.2	68. Masulipatam ...	262	6.0	5.8
29. Srirangam ...	75	3.2	4.5	69. Villupuram ...	111	6.4	5.9
30. Calicut ...	268	3.3	4.4	70. Peddapuram ...	96	6.6	6.4
31. Mangalore ...	107	3.5	1.8	71. Anakapalle ...	135	6.6	8.0
32. Tirupati ...	65	3.7	5.6	72. Virudhunagar ...	147	6.8	5.5
33. Chikacole ...	68	4.2	6.4	73. Rajahmundry ...	870	6.9	10.0
34. Bezwa ...	184	4.2	4.7	74. Cocanada ...	869	6.9	7.7
35. Madura ...	520	4.2	4.2	75. Palakkollu ...	103	7.1	8.1
36. Bodinayakanur ...	50	4.2	4.0	76. Anantapur ...	87	7.2	7.5
37. Kodaikanal ...	18	4.2	3.5	77. Bimlipatam ...	62	8.8	6.1
38. Kumbakonam ...	253	4.2	4.0	78. Chirala ...	133	8.7	10.4
39. Pollachi ...	52	4.4	4.7	79. Narasrampet ...	101	8.9	12.0
40. Gudiyattam ...	100	4.4	4.5	80. Nandyal ...	228	12.6	6.7
				81. Tadpatri ...	203	18.0	8.7

ANNEXURE K.

1. Districts.—Incidence of mortality from dysentery and diarrhoea.

Districts.	Number of deaths in 1926.	Rate for 1926.	Rate for 5 years ending 1925.	Districts.	Number of deaths in 1926.	Rate for 1926.	Rate for 5 years ending 1925.
1. Agencies ...	144	0.7	0.8	14. Salem ...	4,082	1.9	1.2
2. Nellore ...	1,117	0.8	0.5	15. Ganjam ...	3,593	2.0	1.3
3. Godavari, East ...	1,325	0.9	0.8	16. Bellary ...	1,714	2.0	1.5
4. Godavari, West ...	1,020	0.9	...	17. Madura ...	4,670	2.3	1.7
5. Kistna ...	1,115	1.0	0.9	18. South Arcot ...	5,599	2.4	1.7
6. Cuddapah ...	873	1.0	0.8	19. Chittoor ...	3,333	2.6	1.6
7. Guntur ...	1,816	1.0	0.9	20. Tinnevely ...	5,488	2.9	1.5
8. Kurnool ...	1,233	1.3	0.8	21. Coimbatore ...	6,582	3.0	2.7
9. Anantapur ...	1,554	1.6	0.9	22. North Arcot ...	6,194	3.0	1.8
10. Tanjore ...	3,702	1.2	1.2	23. Chingleput ...	4,883	3.3	2.3
11. Vizagapatam ...	2,568	1.6	0.8	24. South Kanara ...	4,629	3.7	2.1
12. Trichinopoly ...	3,535	1.8	1.3	25. Malabar ...	12,244	4.0	2.6
13. Ramnad ...	3,240	1.9	1.6	26. Nilgiris ...	725	6.0	5.0
				27. Madras ...	3,813	7.4	7.6

2. Municipalities.—Incidence of mortality from dysentery and diarrhoea.

Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.	Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.
1. Tadpatri ...	1	0.1	1.2	42. Tenali ...	81	3.5	1.7
2. Nandyal ...	16	0.9	1.5	43. Mangalore ...	190	3.5	2.1
3. Cochin ...	24	1.2	2.5	44. Mayavaram ...	101	3.5	1.7
4. Chittoor ...	26	1.4	1.6	45. Coonoor ...	45	3.7	3.1
5. Ellore ...	70	1.5	2.1	46. Conjeevaram ...	236	3.8	2.4
6. Kodaikanal ...	7	1.6	1.3	47. Parlakimedi ...	71	3.8	2.5
7. Vaniyambadi ...	33	1.6	1.7	48. Masulipatam ...	168	3.8	1.7
8. Sivakasi ...	24	1.6	2.4	49. Tiruvallur ...	94	3.9	1.6
9. Erode ...	38	1.7	2.4	50. Palghat ...	184	4.0	3.9
10. Peddapuram ...	25	1.7	1.9	51. Negapatam ...	220	4.0	3.0
11. Vellore ...	85	1.7	1.2	52. Adoni ...	126	4.2	2.0
12. Cuddapah ...	35	1.8	2.1	53. Palakkollu ...	62	4.2	3.5
13. Ongole ...	26	1.8	1.8	54. Cannanore ...	115	4.2	3.8
14. Cocanada ...	103	1.9	2.5	55. Dharapuram ...	70	4.3	5.3
15. Hindupur ...	25	2.0	1.6	56. Rajahmundry ...	233	4.3	1.8
16. Narasrampet ...	24	2.1	1.5	57. Mannargudi ...	94	4.3	2.7
17. Villupuram ...	38	2.2	2.1	58. Tellicherry ...	122	4.4	1.9
18. Nellore ...	82	2.3	1.2	59. Virudhunagar ...	101	4.4	5.1
19. Anantapur ...	28	2.4	1.3	60. Cuddalore ...	238	4.7	3.1
20. Kurnool ...	68	2.4	2.0	61. Madura ...	660	4.8	3.7
21. Proddatur ...	39	2.5	1.7	62. Salem ...	251	4.8	3.3
22. Tirupattur ...	43	2.6	2.6	63. Palamcottah ...	224	4.8	6.4
23. Chidambaram ...	53	2.6	3.2	64. Srirangam ...	110	4.8	2.5
24. Tinnevely ...	141	2.6	2.7	65. Trichinopoly ...	576	4.8	4.3
25. Vizianagram ...	104	2.6	5.2	66. Hospet ...	60	4.9	4.6
26. Chirala ...	42	2.7	1.2	67. Coimbatore ...	326	5.0	5.4
27. Srivilliputtur ...	83	2.7	3.0	68. Tiruvannamalai ...	117	5.3	4.1
28. Karur ...	49	2.7	2.5	69. Calicut ...	450	5.5	4.5
29. Bellary ...	113	2.8	2.1	70. Tirupati ...	98	5.6	3.2
30. Tiruppur ...	30	2.8	3.7	71. Tanjore ...	355	5.9	4.7
31. Bezwa ...	126	2.8	2.7	72. Chingleput ...	70	6.0	6.0
32. Kumbakonam ...	173	2.8	2.0	73. Tuticorin ...	277	6.2	4.3
33. Bodinayakanur ...	60	2.9	2.6	74. Pollachi ...	75	6.3	4.3
34. Palni ...	51	2.9	3.5	75. Periyakulam ...	109	6.6	7.1
35. Udumalpet ...	32	3.1	4.1	76. Chikacole ...	211	6.8	5.9
36. Walajapet ...	31	3.1	4.2	77. Bimlipatam ...	51	6.8	5.4
37. Berhampur ...	108	3.3	2.8	78. Vizagapatam ...	308	6.9	4.8
38. Guntur ...	159	3.3	1.7	79. Anakapalle ...	140	6.9	2.3
39. Gudiyattam ...	75	3.3	3.8	80. Madras ...	3,813	7.4	7.6
40. Ootacamund ...	67	3.4	4.4	81. Chikacole ...	132	8.1	5.1
41. Saidapet ...	97	3.5	1.9				

ANNEXURE L.

1. Districts.—Incidence of mortality from respiratory diseases.

Districts.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.	Districts.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.
Ganjam ...	1,472	0.8	0.4	Chingleput ...	3,107	2.1	1.5
Tanjore ...	2,148	0.9	0.7	Godavari, East ...	3,112	2.1	1.7
Nellore ...	1,580	1.1	0.6	South Kanara ...	2,073	2.1	1.4
Salem ...	2,500	1.2	0.7	Guntur ...	4,175	2.3	1.7
Trichinopoly ...	2,474	1.3	0.9	Anantapur ...	2,572	2.7	1.6
Tinnevely ...	2,906	1.5	0.8	Bellary ...	2,344	2.7	1.6
Vizagapatam ...	3,310	1.5	0.6	Madura ...	5,545	2.8	1.6
Agencies ...	326	1.5	1.3	Chittoor ...	3,661	2.9	2.0
North Arcot ...	3,170	1.6	1.1	Kurnool ...	3,403	3.7	1.7
South Arcot ...	4,027	1.7	1.1	Kistna ...	4,455	4.1	3.3
Coimbatore ...	3,959	1.8	1.4	Godavari, West ...	4,600	4.4	5.0
Ramnad ...	3,045	1.8	1.2	Nilgiris ...	558	4.6	10.1
Cuddapah ...	1,638	1.9	1.4	Madras ...	6,470	12.5	10.1
Malabar ...	6,179	2.0	1.4				

2. Municipalities.—Incidence of mortality from respiratory diseases.

Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.	Municipalities.	Number of deaths in 1926.	Rate for 1926.	Average rate for 5 years ending 1925.
1. Tadipatri ...	...	...	1.0	42. Coonada ...	173	3.2	2.6
2. Chirala ...	...	...	0.5	43. Virudhunagar ...	69	3.2	2.0
3. Ellore ...	12	0.3	0.6	44. Salem ...	189	3.2	2.3
4. Nandyal ...	8	0.3	2.9	45. Palghat ...	155	3.4	0.2
5. Mayavaram ...	12	0.4	0.6	46. Kumbakonam ...	208	3.4	3.1
6. Bodinayakanur ...	12	0.6	0.2	47. Mannargudi ...	74	3.4	1.9
7. Peddapuram ...	10	0.7	0.7	48. Vizagapatam ...	153	3.4	2.4
8. Dharsapuram ...	18	1.1	...	49. Guntur ...	167	3.5	1.5
9. Udumalpet ...	11	1.1	0.1	50. Cochin ...	72	3.5	2.7
10. Ongole ...	16	1.1	0.6	51. Saidapet ...	98	3.6	1.3
11. Tiruvallur ...	28	1.2	0.1	52. Gudiyattam ...	84	3.7	1.8
12. Berhampur ...	44	1.3	0.4	53. Narasaraopet ...	43	3.8	2.6
13. Calicut ...	118	1.4	0.3	54. Walajapet ...	38	3.8	2.4
14. Hospet ...	28	1.5	2.2	55. Bezvada ...	174	3.9	4.4
15. Srivilliputtur ...	48	1.5	1.5	56. Periyakulam ...	64	3.9	3.0
16. Rajahmundry ...	89	1.7	1.1	57. Bimlipatam ...	29	3.9	2.2
17. Masulipatam ...	79	1.8	0.9	58. Tenali ...	99	4.3	1.6
18. Tirupattur ...	29	1.8	2.2	59. Karar ...	80	4.4	1.5
19. Villupuram ...	32	1.8	0.9	60. Vizianagram ...	173	4.4	2.9
20. Pollachi ...	22	1.9	1.6	61. Tellicherry ...	133	4.8	3.4
21. Proddatur ...	31	1.9	0.1	62. Hindupur ...	61	4.9	2.8
22. Sivakasi ...	28	1.9	1.0	63. Madura ...	693	5.0	2.4
23. Chikacole ...	33	2.0	1.1	64. Kodaikanal ...	22	5.1	3.0
24. Coimbatore ...	135	2.1	2.1	65. Vaniyambadi ...	103	5.2	3.0
25. Tiruppur ...	23	2.1	1.0	66. Adoni ...	161	5.3	3.4
26. Nellore ...	74	2.1	2.7	67. Trichinopoly ...	637	5.3	5.3
27. Tiruvannamalai ...	48	2.1	1.5	68. Srirangam ...	126	5.4	2.0
28. Chidambaram ...	48	2.1	1.3	69. Chingleput ...	65	5.5	1.4
29. Cuddapah ...	44	2.3	3.3	70. Cannanore ...	152	5.5	3.9
30. Tinnevely ...	126	2.3	1.6	71. Tirupati ...	105	6.0	5.6
31. Tuticorin ...	109	2.4	2.8	72. Dindigul ...	196	6.3	2.7
32. Vellore ...	122	2.4	1.9	73. Mangalore ...	314	6.4	3.6
33. Chittoor ...	45	2.5	2.7	74. Coonoor ...	82	6.7	6.3
34. Palni ...	47	2.7	1.0	75. Kurnool ...	200	7.2	2.9
35. Erode ...	61	2.7	1.2	76. Bellary ...	300	7.5	4.6
36. Anakapalle ...	57	2.8	1.0	77. Anantapur ...	90	7.9	3.3
37. Cuddalore ...	148	2.9	2.5	78. Conjeeveram ...	503	8.2	5.8
38. Tanjore ...	176	2.9	2.8	79. Ootacamund ...	163	8.4	9.0
39. Negapatam ...	158	2.9	3.0	80. Palakimedi ...	199	10.6	5.6
40. Palakollu ...	44	3.0	2.8	81. Madras ...	6,470	12.5	10.1
41. Palamcottah ...	142	3.0	2.9				

ANNEXURE M.

Statement showing the total number of deaths from cholera during 1926 in the municipalities protected with water-supply.

Number and names of municipalities.	Total deaths from cholera during 1926.	Number and names of municipalities.	Total deaths from cholera during 1926.	Number and names of municipalities.	Total deaths from cholera during 1926.
1. Adoni ...	...	12. Ellore ...	1	23. Nellore ...	...
2. Anantapur ...	...	13. Erode ...	11	24. Ootacamund ...	...
3. Berhampur ...	...	14. Gudiyattam ...	8	25. Periyakulam ...	2
4. Bezvada ...	1	15. Guntur ...	37	26. Salem ...	247
5. Chidambaram ...	11	16. Kodaikanal ...	...	27. Tanjore ...	53
6. Chingleput ...	4	17. Kumbakonam ...	93	28. Tirupati ...	2
7. Cocanada ...	1	18. Kurnool ...	...	29. Trichinopoly ...	64
8. Conjeeveram ...	14	19. Madras ...	97	30. Vellore ...	36
9. Coonoor ...	...	20. Madura ...	108	31. Vizagapatam ...	1
10. Cuddapah ...	2	21. Masulipatam ...	...	32. Vizianagram ...	...
11. Dindigul ...	4	22. Negapatam ...	99		

No. III.—Deaths registered in the districts of the Madras Presidency during each month of the year 1936.

1	2	3												4
Number.	* Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.
1	Anantapur	2,080	1,735	2,121	2,244	2,522	2,209	2,210	2,091	1,990	2,092	2,295	2,164	25,693
2	Bellary	1,947	1,899	2,252	2,001	2,280	2,118	2,133	2,106	1,994	2,178	2,203	1,936	25,042
3	Chingleput	4,437	3,962	3,463	3,059	3,150	3,385	3,309	3,660	3,875	3,491	3,450	3,483	42,480
4	Chittoor	3,092	2,502	2,297	2,107	2,430	2,587	2,473	2,700	2,700	2,708	2,580	2,805	30,934
5	Coimbatore	2,881	2,581	2,522	2,880	3,143	3,261	3,049	3,004	4,063	4,214	4,847	5,048	46,219
6	Cuddapah	2,289	1,604	1,694	1,892	1,900	2,019	2,091	2,094	2,100	2,031	1,637	1,635	22,866
7	Ganjam	3,817	3,034	3,239	3,440	4,072	4,487	4,018	4,842	4,878	4,205	4,942	4,551	48,733
8	Godavari, East	2,335	1,591	1,566	2,093	2,789	3,283	2,784	3,846	3,897	4,272	2,930	3,108	34,899
9	Godavari, West	2,681	2,107	2,238	2,118	2,380	2,724	2,794	2,708	3,242	4,215	2,272	2,689	30,564
10	Guntur	2,748	2,781	3,026	2,971	4,025	4,087	3,794	4,503	4,781	4,215	3,368	3,661	45,295
11	Kistna	2,348	1,747	1,828	2,071	2,384	2,568	2,629	3,408	3,382	2,408	2,117	2,145	29,661
12	Kurnool	2,068	1,740	2,120	2,590	2,839	2,627	2,528	2,982	2,873	2,840	2,785	2,749	30,711
13	Madras	2,479	2,106	2,666	1,815	1,837	1,738	1,703	1,187	1,901	1,821	1,704	1,861	23,416
14	Natrag	5,607	3,742	3,195	2,725	3,050	3,232	3,200	3,195	2,905	3,137	3,753	4,024	41,931
15	Nalabar	6,699	5,807	5,830	6,008	6,839	8,118	10,861	10,500	7,623	5,772	5,400	5,750	85,008
16	Nellore	2,717	2,504	2,385	2,231	2,612	2,533	2,614	2,932	2,927	2,720	2,841	2,738	31,684
17	Nigiris, The	262	238	248	238	307	448	418	386	276	308	302	300	3,850
18	North Arcot	5,772	4,402	3,529	3,324	3,744	4,003	4,078	4,294	3,808	3,911	3,958	4,350	43,800
19	Ramanud	4,814	3,446	2,911	2,428	2,345	2,445	2,570	2,542	2,487	1,980	1,648	2,062	30,892
20	Salom	4,417	3,461	3,254	3,025	3,153	3,223	3,892	4,145	4,003	4,173	4,288	4,342	46,307
21	South Arcot	5,529	5,516	4,187	3,993	4,359	4,717	4,617	4,470	4,460	4,643	4,985	4,813	56,199
22	South Kanara	3,800	3,057	2,517	2,081	2,384	2,711	2,479	2,664	3,347	3,041	2,788	3,281	36,171
23	Tanjore	7,595	5,808	4,819	4,170	4,288	4,802	6,165	5,668	5,491	5,805	5,800	7,050	68,752
24	Tinnevelly	8,410	4,758	4,265	4,297	3,914	3,225	3,079	2,826	3,336	3,336	3,388	6,137	49,678
25	Trichinopoly	4,101	2,752	2,491	2,573	3,362	3,428	3,697	3,528	3,437	2,918	2,998	4,688	39,707
26	Vizagapatam	6,241	4,746	5,065	4,862	6,264	6,645	5,120	5,975	7,324	7,324	6,415	6,770	70,682
27	Aganotes	215	311	319	380	490	475	408	475	592	574	493	463	5,255
Total, Madras Presidency		104,939	89,465	75,614	73,870	82,002	86,547	90,073	90,132	93,119	87,518	84,812	93,487	1,048,529
Ratio of deaths per 1,000 in each district.		2.6	2.0	1.8	1.8	2.0	2.1	2.2	2.3	2.3	2.1	2.1	2.3	25.6

Note.—Born dead cases are not included in this or any of the other statements.

ANNEXURE N.

Midwifery Statement—Districts excluding Municipalities.

Name of districts.	Number of midwives.	Number of labour cases conducted.	Percentage of total births attended by qualified midwives.	Name of districts.	Number of midwives.	Number of labour cases conducted.	Percentage of total births attended by qualified midwives.
1. Anantapur ...	10	808	2	16. Nellore ...	20	2,240	5
2. Bellary ...	12	1,179	3	17. The Nilgiris ...	5	132	4
3. Chingleput ...	21	2,082	4	18. North Arcot ...	21	1,439	2
4. Chittoor ...	22	1,100	2	19. Ramnad ...	25	2,031	5
5. Coimbatore ...	17	1,062	2	20. Salem ...	21	1,818	2
6. Cuddapah ...	13	872	3	21. South Arcot ...	18	1,897	3
7. Ganjam ...	19	1,714	3	22. South Kanara ...	19	2,105	4
8. Godavari, East ...	22	1,639	4	23. Tanjore ...	43	2,253	4
9. Godavari, West ...	10	783	2	24. Tinnevely ...	21	1,593	3
10. Guntur ...	14	1,124	3	25. Trichinopoly ...	19	1,823	4
11. Kistna ...	12	1,144	3	26. Vizagapatam ...	21	1,889	2
12. Kurnool ...	8	579	1	27. Agencies ...	4	202	3
13. Madras ...	78	8,254	38				
14. Madras ...	17	1,869	3				
15. Malabar ...	80	1,841	2				
				Grand total for the Presidency.	542	45,301	3

Midwifery Statement—Municipalities.

Name of municipalities.	Number of midwives.	Number of labour cases conducted.	Percentage of total births attended by midwives.	Name of municipalities.	Number of midwives.	Number of labour cases conducted.	Percentage of total births attended by midwives.
1. Berhampur ...	3	137	11	43. Srivillipattur ...	1	115	9
2. Parlakimedi ...	2	205	30	44. Tiruchunagar ...	1	173	21
3. Chicaoola ...	1	138	30	45. Sivakasi ...	1	109	19
4. Vizagapatam ...	10	1,189	69	46. Tinnevely ...	5	459	25
5. Vizianagaram ...	5	439	36	47. Palanchothah ...	6	708	44
6. Anakapalle ...	2	171	31	48. Tuticorin ...	6	580	30
7. Bimlipatam ...	1	179	68	49. Vellore ...	13	805	46
8. Rajahmundry ...	14	1,078	46	50. Gudiyattam ...	1	91	12
9. Cocanada ...	5	622	28	51. Tiruvannamalai ...	1	155	14
10. Poddapuram ...	1	100	21	52. Vaniyambadi ...	1	153	25
11. Ellore ...	2	230	18	53. Tirupattur ...	1	103	14
12. Palakollu ...	1	93	24	54. Walajapet ...	1	97	23
13. Bozwada ...	2	342	18	55. Chittoor ...	3	464	68
14. Masulipatam ...	3	511	32	56. Tirupati ...	1	110	19
15. Guntur ...	7	1,221	54	57. Salem ...	4	551	17
16. Tenali ...	2	502	66	58. Coimbatore ...	12	780	29
17. Chirala ...	1	64	13	59. Erode ...	2	215	40
18. Ongole ...	1	122	21	60. Dharapuram ...	1	85	16
19. Narasaraopet ...	3	130	39	61. Pollachi ...	2	148	29
20. Nellore ...	7	329	23	62. Tiruppur ...	3	169	42
21. Madras ...	78	8,254	38	63. Udumalpet ...	2	183	50
22. Conjeeveram ...	8	955	39	64. Kurnool ...	5	434	35
23. Saidapet ...	2	169	14	65. Nandyal ...	1	63	12
24. Chingleput ...	2	426	77	66. Cuddapah ...	2	243	38
25. Cuddalore ...	5	384	21	67. Proddatur ...	2	66	15
26. Chidambaram ...	2	210	31	68. Bellary ...	2	114	7
27. Villupuram ...	3	245	49	69. Adoni ...	2	291	25
28. Trichinopoly ...	13	2,076	50	70. Hospet ...	2	330	44
29. Srirangam ...	2	197	35	71. Hindupur ...	1	152	27
30. Karur ...	3	225	44	72. Anantapur ...	2	173	45
31. Kumbakonam ...	10	485	27	73. Tadpatri ...	1	105	38
32. Tanjore ...	10	480	23	74. Ootacamund ...	15	565	72
33. Negapatam ...	8	414	27	75. Coonoor ...	11	169	44
34. Mayavaram ...	1	66	8	76. Mangalore ...	6	1,760	92
35. Tiruvallur ...	2	52	12	77. Calicut ...	14	530	17
36. Mannargudi ...	9	932	16	78. Palghat ...	5	311	16
37. Madras ...	4	385	31	79. Cannanore ...	5	137	13
38. Dindigul ...	1	205	20	80. Tellicherry ...	5	209	23
39. Bodinayakanur ...	1	63	11	81. Cochin ...	4	274	32
40. Palni ...	1	55	6				
41. Periyakulam ...	1	132	61				
42. Kodaikanal ...	4			Total ...	408	88,564	32

APPENDIX I.

VITAL STATISTICS OF THE GENERAL POPULATION.

No. I.—Statement showing the Births registered in the districts of the Madras Presidency during the year 1926.

Number.	Population (exclusive of Europeans and Anglo-Indians as per census of 1921).		Population (exclusive of Europeans and Anglo-Indians for which returns were received).		Number of births registered (exclusive of Europeans and Anglo-Indians and still-births).		Ratio of births per 1,000 of population.		Excess of births over deaths per 1,000 of population.		Mean ratio of births per 1,000 during the previous five years.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	482,122	463,355	482,122	463,355	955,477	955,477	206	206	108	108	16.2	16.2
2	445,337	428,363	445,337	428,363	873,700	873,700	216	216	108	108	17.5	17.5
3	749,360	738,239	749,360	738,239	1,488,199	1,488,199	200	200	107	107	18.2	18.2
4	647,527	621,410	647,527	621,410	1,268,937	1,268,937	183	183	130	130	15.5	15.5
5	1,105,542	1,112,931	1,105,542	1,112,931	2,218,523	2,218,523	167	167	103	103	15.0	15.0
6	452,150	435,727	452,150	435,727	887,877	887,877	182	179	101	101	14.4	14.4
7	718,800	751,581	718,800	751,581	1,470,381	1,470,381	182	176	103	103	16.1	15.6
8	514,246	532,136	514,246	532,136	1,046,382	1,046,382	201	193	103	103	16.7	16.5
9	613,650	595,437	613,650	595,437	1,209,087	1,209,087	201	198	103	103	18.5	17.6
10	548,851	537,907	548,851	537,907	1,086,758	1,086,758	202	196	103	103	18.7	18.0
11	481,779	468,728	481,779	468,728	950,507	950,507	213	205	103	103	17.9	17.5
12	270,879	245,958	270,879	245,958	516,837	516,837	213	205	103	103	21.6	20.4
13	986,911	1,018,986	986,911	1,018,986	2,005,897	2,005,897	214	205	103	103	16.7	15.0
14	1,611,628	1,580,327	1,611,628	1,580,327	3,191,955	3,191,955	171	171	103	103	18.0	17.2
15	697,035	687,809	697,035	687,809	1,384,844	1,384,844	181	175	103	103	12.7	12.2
16	64,714	56,982	64,714	56,982	121,696	121,696	212	202	103	103	14.5	14.5
17	1,020,694	1,034,110	1,020,694	1,034,110	2,054,804	2,054,804	212	202	103	103	16.6	15.9
18	818,878	803,198	818,878	803,198	1,622,076	1,622,076	196	186	103	103	13.5	11.9
19	1,050,928	1,060,992	1,050,928	1,060,992	2,111,920	2,111,920	196	186	103	103	15.3	14.6
20	1,152,010	1,167,315	1,152,010	1,167,315	2,319,325	2,319,325	191	183	103	103	13.8	13.2
21	606,231	640,986	606,231	640,986	1,247,217	1,247,217	191	183	103	103	13.0	12.3
22	1,118,217	1,203,202	1,118,217	1,203,202	2,321,419	2,321,419	183	174	103	103	14.5	13.9
23	928,405	974,751	928,405	974,751	1,903,156	1,903,156	183	174	103	103	17.3	16.6
24	1,136,545	1,192,311	1,136,545	1,192,311	2,328,856	2,328,856	187	182	103	103	12.5	12.1
25	1,079,467	1,151,010	1,079,467	1,151,010	2,230,477	2,230,477	187	182	103	103	17.2	16.5
26	748,868	747,457	748,868	747,457	1,496,325	1,496,325	188	171	103	103	16.8	16.3
27	21,082,825	21,677,092	21,082,825	21,677,092	42,759,917	42,759,917	184	177	103	103	16.2	15.5
28	2,567,628	2,580,590	2,567,628	2,580,590	5,148,218	5,148,218	189	180	103	103	17.2	16.2
29	18,516,197	19,086,412	18,516,197	19,086,412	37,602,609	37,602,609	183	177	103	103	18.1	15.4

* Calculated on the total population as per census of 1921 including Europeans and Anglo-Indians (though the statistics are exclusive of Europeans, Anglo-Indians and born-dead cases).

No. IV.—Deaths registered according to Age in the districts of the Madras Presidency during the year 1926—cont.

NOTE.—Calculated on the total population for the Presidency including Europeans and Anglo-Indians though the statistics are exclusive of Europeans and Anglo-Indians and born-lead cases.

NOTE.—Calculated on the total population for the Presidency including Europeans and Anglo-Indians though the statistics are exclusive of Europeans and Anglo-Indians and born-lead cases.

No. V.—Deaths registered according to Classes in the districts of the Madras Presidency during the year 1926.

Number.	Districts.	Population for which returns were received.				Number of deaths registered.			
		3				4			
		Indian Christians.		Muhammadans.		Hindus.		Other classes.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
		Total.		Total.		Total.		Total.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	Anantapur	2,417	2,068	43,726	41,281	445,055	419,260	924	748
2	Bellary	1,596	1,625	46,562	42,955	385,380	383,250	780	503
3	Chingleput	14,785	14,743	17,337	16,044	716,668	708,430	1,172	1,022
4	Chittoor	8,328	8,308	33,927	30,949	607,740	584,609	2,532	2,394
5	Coimbatore	14,339	12,644	21,054	21,860	1,067,064	1,078,333	55	24
6	Cuddalore	12,803	12,824	51,796	51,680	388,569	370,380	823	893
7	Ganjapur	942	852	2,640	2,531	798,557	850,356	24,614	25,195
8	Godavari, East	6,998	6,567	11,515	11,798	689,863	733,075	234	141
9	Godavari, West	18,041	18,545	10,881	10,844	484,478	501,073	861	774
10	Guntur	77,944	75,479	68,411	64,307	763,890	752,106	4,815	4,545
11	Kistna	27,812	28,435	27,096	25,982	493,118	484,701	735	729
12	Kurnoor	16,455	16,751	62,793	59,747	364,858	364,858	665	569
13	Madras	32,472	31,644	39,808	39,314	948,037	948,037	1,266	624
14	Madhar	27,894	27,497	492,004	503,088	987,372	1,033,759	273	286
15	Nellore	25,842	25,845	43,866	46,796	597,316	591,639	27,891	26,430
16	Nilgiris, The	7,715	7,640	4,156	2,611	52,619	46,491	4,323	4,234
17	North Arcot	17,585	17,644	58,362	58,983	940,424	822,248	11	2
18	Ramanad	40,771	44,293	47,504	48,652	730,276	730,276	11	13
19	Salem	7,383	7,788	24,890	22,585	1,018,836	1,030,516	18	2,307
20	South Arcot	31,588	32,306	38,882	33,223	1,084,292	1,089,479	2,822	3,065
21	South Kanara	51,859	54,344	75,207	76,549	471,907	506,127	4,238	3,965
22	Tanjore	42,808	45,806	57,622	73,131	1,015,491	1,090,005	298	290
23	Tinnevely	92,785	99,325	48,869	60,462	814,559	814,559	18	5
24	Trichinopoly	44,090	40,862	31,189	32,783	856,218	890,335	17	10
25	Vizagapatnam	2,020	2,239	9,381	10,279	1,066,309	1,136,853	1,737	1,639
26	Agencies	1,207	1,225	1,290	1,310	97,333	96,892	6,343	6,551
27	Total, Madras Presidency	619,229	663,831	1,399,500	1,431,861	18,075,753	18,612,024	87,344	84,104
								20,211,876	20,790,820
								15,533	15,228
								36,987	36,355

ANNEXURE

VITAL STATISTICS OF THE GENERAL POPULATION

No. V.—Deaths registered according to Classes in the districts of the Madras Presidency during the year 1926—cont.

Number.	Districts.	Number of deaths registered—cont.				Ratio of deaths per 1,000 of population.			
		4				5			
		Hindus.		Other classes.		Total.		Total.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
		Total.		Total.		Total.		Total.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	Anantapur	11,915	11,652	119	131	12,961	12,782	25,693	25,563
2	Bellary	11,514	10,861	165	187	12,507	12,335	25,042	25,042
3	Chingleput	20,406	20,370	171	160	21,270	21,180	42,430	42,430
4	Chittoor	14,780	14,543	18	14	15,640	15,294	30,834	30,834
5	Coimbatore	22,882	21,732	254	249	23,655	22,554	46,219	46,219
6	Cuddalore	9,755	9,408	75	76	11,537	11,329	22,866	22,866
7	Ganjapur	24,431	23,903	254	249	24,685	24,085	48,753	48,753
8	Godavari, East	17,414	16,580	26	25	17,440	16,605	34,045	34,045
9	Godavari, West	14,735	13,910	83	95	15,545	14,849	30,564	30,564
10	Guntur	19,518	18,608	122	108	20,646	19,716	40,362	40,362
11	Kistna	13,415	12,818	121	111	15,211	14,430	30,564	30,564
12	Kurnoor	12,302	12,506	210	207	15,179	15,532	30,711	30,711
13	Madras	9,833	9,721	...	...	11,787	11,693	23,416	23,416
14	Madhar	28,379	27,852	...	...	31,435	30,711	62,146	62,146
15	Nellore	11,337	10,941	...	...	16,319	15,385	31,684	31,684
16	Nilgiris, The	1,744	1,494	...	...	2,054	1,766	3,860	3,860
17	North Arcot	23,110	22,587	171	181	23,281	22,768	46,042	46,042
18	Ramanad	13,837	13,789	...	...	16,421	16,471	32,892	32,892
19	Salem	22,017	21,886	...	...	23,727	23,560	47,287	47,287
20	South Arcot	26,741	26,386	122	139	26,863	26,525	53,388	53,388
21	South Kanara	14,723	14,579	137	134	15,000	14,713	30,713	30,713
22	Tanjore	29,651	30,002	...	...	32,612	32,140	64,752	64,752
23	Tinnevely	21,420	21,141	...	...	25,030	24,630	49,668	49,668
24	Trichinopoly	35,353	34,867	82	112	35,809	34,783	70,592	70,592
25	Vizagapatnam	2,665	2,441	13	12	2,740	2,515	5,255	5,255
26	Agencies	...	...	...	...	...	...	...	...
27	Total, Madras Presidency	475,363	494,459	2,320	2,314	530,173	518,366	1,048,539	1,048,539
								254	254
								253	253
								262	262
								294	294
								256	256

44

No. VI.—Births and Deaths registered from different causes in the districts and towns of the Madras Presidency during the year 1926.

Number.	Districts and towns.	Population for which returns were received.	Births.		Deaths.		Injuries.		Total.		Ratio of deaths per 1,000 of population.	
			Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	From all causes.	From all causes.
1	2	3	4	5	6	7	8	9	10	11	12	13
A.—Rural districts.												
1	Anantapur	89,053	17,753	17,582	35,335	4,460	1,388	2,298	10	31	126	155
2	Bellary	728,277	15,835	15,425	31,260	5,675	1,208	1,751	15	11	73	84
3	Chingleput	1,366,900	26,124	24,467	50,591	5,440	4,028	2,259	19	7	151	115
4	Chittoor	1,109,640	22,855	22,045	44,900	7,976	3,151	3,416	27	29	355	179
5	Coimbatore	2,013,379	33,876	32,381	66,257	12,758	7,834	9,369	44	44	210	166
6	Cuddalore	894,133	14,836	14,673	29,509	3,252	1,191	1,369	13	30	150	91
7	Ganjam	1,731,422	31,532	30,544	62,076	13,966	870	2,606	15	36	188	138
8	Godavari, East	1,305,054	21,907	21,641	43,548	10,769	830	4,307	22	26	91	41
9	Godavari, West	1,253,735	18,982	18,311	37,293	10,769	830	4,307	22	26	91	41
10	Guntur	1,472,679	31,247	30,604	61,851	13,966	870	2,606	15	36	188	138
11	Kidara	955,076	19,447	18,674	38,121	3,947	1,305	3,496	30	33	234	180
12	Kurnool	865,733	20,640	20,235	40,875	9,031	731	3,597	29	33	135	103
13	Madura	1,706,273	26,471	25,983	52,454	15,220	11,149	3,397	12	20	110	87
14	Malabar	2,864,595	61,713	60,118	121,831	27,752	11,100	5,454	75	47	327	164
15	Nellore	1,203,572	23,803	22,110	45,913	14,653	960	1,453	35	42	259	180
16	Nizari, The	83,107	1,478	1,480	2,958	1,380	589	813	2	4	15	5
17	North Arcot	1,701,765	37,657	36,922	74,579	7,344	5,341	2,656	32	32	126	93
18	Ramanall	1,850,020	16,682	16,000	32,682	8,102	2,363	2,939	31	22	148	27
19	Salem	1,464,043	37,634	36,254	73,888	13,910	3,368	2,305	48	42	279	206
20	South Arcot	2,115,571	39,069	37,475	76,544	10,335	6,068	3,647	25	24	224	132
21	South Kanara	1,151,125	22,009	21,521	43,530	12,656	4,267	2,918	38	20	237	55
22	Tanjore	1,955,035	30,028	28,765	58,793	3,614	2,427	1,400	42	32	240	117
23	Tinnevely	1,469,180	25,377	24,719	50,096	6,810	4,087	2,134	13	10	284	17
24	Tiruchinopoly	1,650,141	21,620	20,552	42,172	5,722	2,647	1,581	50	31	292	138
25	Vizagapatnam	2,009,577	37,712	37,040	74,752	44,014	2,837	2,775	49	51	273	139
26	Agencies	212,151	3,678	3,631	7,309	4,133	114	320	0	24	44	1
Total, rural districts			35,554,473	35,120,412	70,674,885	13,962,311	75,622	6,583	715	780	5,151	2,853

ANNEXURE

No. VI.—Births and Deaths registered from different causes in the districts and towns of the Madras Presidency during the year 1926—cont.

1	2	3	4		5	6	7	8	9	10	11			12	13	14	15																																																																																																																																																																																																																																																																																																																																																																																																																			
			Births.								Deaths from child		Injuries.				Ratio of deaths per 1,000 of population.																																																																																																																																																																																																																																																																																																																																																																																																																			
Number.	Districts and towns.	Population for which returns were received.	Males.	Females.	Total.	Cholera.	Smallpox.	Plague.	Fever.	Dysentery and diarrhoea.	Respiratory diseases.	Males.	Females.	Suicides.	Wounds and accidents.	Snakebite and bites by wild beasts.	Rabies.	Total.	Deaths from child	All other causes.	Total deaths from all causes.	Ratio of deaths per 1,000 of population.																																																																																																																																																																																																																																																																																																																																																																																																														
																						Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child	Deaths from child

No. VI.—*Births and Deaths registered from different causes in the districts and towns of the Madras Presidency during the year 1926*—cont.

[illegible]

No. VI.—Births and Deaths registered from different causes in the districts and towns of the Madras Presidency during the year 1926—cont.

Number.	Districts and towns.	Population for which returns were received.	4		5	6	7	8	9	10	21			12	13	14	Ratio of deaths per 1,000 of population.							From all causes.	For the year.	From all causes.					
			Births.								Injuries.						Deaths from child.	All other causes.	Total deaths from all causes.	Cholera.	Smallpox.	Plague.	Dysentery and diarrhoea.				Respiratory diseases.	Injuries.	Deaths from child.	All other causes.	Total deaths from all causes.
			Males.	Females.							Males.	Females.	Total.																		
1	2	3	4		5	6	7	8	9	10	21			12	13	14	Ratio of deaths per 1,000 of population.							From all causes.	For the year.	From all causes.					
B-Yours-cont.																															
1	Malabar—	82,334	1,006	1,621	2,627	38.0	118	154	272	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
2	M.T.C. Calicut	45,487	556	913	1,469	32.7	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
3	M.T.C. Cannanore	27,705	336	506	842	30.4	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
4	M.T.C. Cochin	30,033	456	577	1,033	34.4	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
5	M.T.C. Kottayam	13,315	170	270	440	33.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
6	M.T.C. Madurai	9,994	146	232	378	37.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
Nellore—																															
7	M.T.C. Nellore	35,893	745	1,191	1,936	57.2	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
8	M.T.C. Bellary	14,586	211	343	554	38.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
9	M.T.C. Bidar	9,072	95	150	245	27.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
10	M.T.C. Channarayana	17,705	201	320	521	29.4	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
11	M.T.C. Channarayana	8,272	174	281	455	55.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
12	M.T.C. Channarayana	8,412	112	183	295	35.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
13	M.T.C. Channarayana	19,467	402	651	1,053	54.4	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
14	M.T.C. Channarayana	12,415	194	314	508	40.9	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
15	M.T.C. Channarayana	6,817	71	112	183	26.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
North Arcot—																															
16	M.T.C. Arcot	50,210	883	1,377	2,260	45.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
17	M.T.C. Arcot	22,563	324	517	841	37.5	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
18	M.T.C. Arcot	21,012	330	517	847	39.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
19	M.T.C. Arcot	20,090	307	487	794	39.5	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
20	M.T.C. Arcot	19,013	293	466	759	39.9	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
21	M.T.C. Arcot	18,230	274	437	711	39.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
22	M.T.C. Arcot	14,286	229	371	600	42.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
23	M.T.C. Arcot	13,359	213	344	557	41.7	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
24	M.T.C. Arcot	12,551	193	312	505	40.2	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
25	M.T.C. Arcot	11,551	183	293	476	41.2	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
26	M.T.C. Arcot	10,551	173	283	456	43.2	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
27	M.T.C. Arcot	9,551	163	273	436	45.7	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
28	M.T.C. Arcot	8,551	153	263	416	48.6	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
29	M.T.C. Arcot	7,551	143	253	396	52.3	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
30	M.T.C. Arcot	6,551	133	243	376	57.6	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
31	M.T.C. Arcot	5,551	123	233	356	64.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
32	M.T.C. Arcot	4,551	113	223	336	73.6	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
33	M.T.C. Arcot	3,551	103	213	316	89.3	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
34	M.T.C. Arcot	2,551	93	203	296	116.2	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
35	M.T.C. Arcot	7,717	125	205	330	42.7	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
36	M.T.C. Arcot	7,159	125	205	330	46.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
37	M.T.C. Arcot	7,159	125	205	330	46.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
38	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
39	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
40	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
41	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
42	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
43	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
44	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
45	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
46	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
47	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
48	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
49	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
50	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
51	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
52	M.T.C. Arcot	6,825	121	199	320	47.0	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335	241	335	241	335					
53	M.T.C. Arcot	6,8																													

No. VI.—Births and Deaths registered from different causes in the districts and towns of the Tanjore Presidency during the year 1926—cont.

1	2	3	4		5	6	7	8	9	10	11			12	13	14	15						16								
			Births.								Total number.	Males.	Females.				Suicides.	Wounds and accidents.	Stab-wounds and killed by wild beasts.	Rabies.	Total.	Deaths from child.		All other causes.	Total deaths from all causes.	Ratio of deaths per 1,000 of population.					
			Males.	Females.																						Cholera.	Smallpox.	Measles.	Dysentery and diarrhoea.	Fevers.	Plague.
Number.	Districts and towns.	Population for which returns were received.	Males.	Females.	Total number.	Birth-rate per 1,000 of population.	Males.	Females.	Total.	Cholera.	Smallpox.	Measles.	Dysentery and diarrhoea.	Fevers.	Plague.	Dysentery and diarrhoea.	Respiratory diseases.	Injuries.	Deaths from child.	All other causes.	From all causes.	From the year.									
B.—Towns—cont.																															
Ramanad—cont.																															
184	T.C. Sivacangam	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
185	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
186	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
187	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
188	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
189	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
190	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
191	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
192	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
193	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
194	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
195	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
196	T.C. Tirupattur	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
Salem—cont.																															
197	T.C. Salem	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
198	T.C. Salem	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
199	T.C. Salem	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
200	T.C. Salem	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
201	T.C. Salem	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
202	T.C. Salem	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
203	T.C. Salem	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
204	T.C. Salem	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
205	T.C. Salem	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
South Arcot—cont.																															
206	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
207	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
208	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
209	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
210	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
211	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
212	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
213	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
214	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
215	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
216	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
217	T.C. South Arcot	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
South Kanara—cont.																															
218	T.C. South Kanara	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
219	T.C. South Kanara	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
220	T.C. South Kanara	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
221	T.C. South Kanara	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
222	T.C. South Kanara	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
223	T.C. South Kanara	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
224	T.C. South Kanara	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
225	T.C. South Kanara	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
Tanjore—cont.																															
226	T.C. Tanjore	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
227	T.C. Tanjore	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
228	T.C. Tanjore	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
229	T.C. Tanjore	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
230	T.C. Tanjore	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
231	T.C. Tanjore	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
232	T.C. Tanjore	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									
233	T.C. Tanjore	9,768	126	204	330	33.8	115	154	269	450	293	1	10	0.1	0.2	0.4	3.3	5.5	1.4	0.5	241	335									

No. VII.—Deaths registered from Cholera in the districts of the Madras Presidency during each month of the year 1926.

Number.	Districts.	3		4		5												6		7		Mean ratio per 1,000 for previous 5 years.				
		Circles of registration.		Villages.	Number in each district.	Number from which deaths were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.		Males.	Females.	Total.	
		Number in each district.	Number from which deaths were reported.																							
1	Anantapur	21	850	3	850	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
2	Bellary	20	939	1	939	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
3	Chingleput	21	1,996	81	2,145	205	204	47	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
4	Chittoor	15	1,996	27	74	73	19	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
5	Coimbatore	23	1,109	309	626	180	17	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
6	Cuddalore	17	829	9	829	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
7	Ganjam	19	829	25	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
8	Godavari, East	19	829	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
9	Godavari, West	13	4	4	723	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
10	Guntur	29	10	944	19	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
11	Kistna	16	5	1,013	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
12	Kurnool	11	6	761	11	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
13	Madras	1	1	1	32	21	23	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
14	Madurai	18	1,071	141	463	240	151	9	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
15	Malabar	21	2,208	113	80	42	86	49	7	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
16	Nellore	20	1,021	62	1	27	6	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
17	Nilgiris, The	6	57	6	2	2	2	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
18	North Arcot	32	2,068	132	301	219	50	18	6	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
19	Raman	34	2,530	80	171	174	58	37	25	5	10	1	1	1	...	...	...	...	...	...	...	...	...	...	...	
20	Salem	19	2,803	231	219	263	290	170	39	8	203	36	18	1,000	818	1,816	1,08	98	99	...	...	...	...	...	...	
21	South Arcot	20	2,347	374	421	474	255	85	81	206	341	150	124	171	127	108	1,387	1,154	2,541	1,2	10	1	1	1	1	
22	South Kanara	13	805	45	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	Tanjore	30	2,631	808	1,851	958	897	108	149	839	735	732	700	588	768	1,478	4,462	4,331	8,783	40	38	88	1	1	1	
24	Tinnevelly	33	984	302	1,197	472	376	845	79	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
25	Trichinopoly	17	1,035	152	345	343	138	17	207	131	208	185	99	99	76	181	350	1,227	2,737	17	13	15	1	1	1	
26	Vizagapatnam	29	2,580	12	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	Agencies	6	1,170	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total, Madras Presidency ...		526	40,850	2,867	6,010	3,604	1,879	1,188	616	754	1,750	1,557	1,507	1,257	1,406	2,640	13,040	11,367	24,407	0.6	0.5	0.6	0.7	0.7	0.7	

ANNEXURE

No. VIII.—Deaths registered from Smallpox in the districts of the Madras Presidency during each month of the year 1926.

Number.	Districts.	3		4		5												6		7		8		Mean ratio per 1,000 for previous 5 years.		
		Circles of registration.		Villages.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Under 1 year.	From 1 to 10 years.	Males.		Females.	Total.
		Number in each district.	Number from which deaths were reported.	Number in each district.	Number from which deaths were reported.																					
1	Anantapur	21	11	850	102	15	13	32	25	34	20	37	14	27	18	8	24	145	132	277	159	80	0.2	0.3	0.7	
2	Bellary	20	8	939	143	53	38	69	69	77	10	63	58	33	38	12	40	329	313	642	382	221	0.7	0.7	0.8	
3	Chingleput	21	16	2,115	78	40	49	47	29	22	26	24	20	23	12	14	20	188	161	349	178	101	0.3	0.2	0.5	
4	Chittoor	15	11	1,998	98	28	23	15	8	3	22	60	30	13	11	11	20	110	99	215	85	91	0.2	0.2	0.3	
5	Coimbatore	23	17	1,103	64	51	20	40	30	35	26	24	12	23	23	27	24	157	178	335	122	106	0.1	0.1	0.3	
6	Cuddalore	17	11	894	32	23	23	15	7	34	2	2	2	1	1	1	2	49	34	83	38	42	0.1	0.1	0.5	
7	Ganjam	19	11	4,074	26	21	40	34	24	99	47	99	66	41	17	33	42	211	194	405	150	150	0.8	0.2	0.5	
8	Godavari, East	19	13	823	121	56	39	17	29	23	43	21	27	21	17	11	17	162	164	327	103	104	0.2	0.2	0.5	
9	Godavari, West	13	10	723	160	114	84	73	80	74	67	73	54	31	33	32	33	323	325	648	370	174	0.3	0.3	0.4	
10	Guntur	29	15	944	151	59	48	60	80	47	18	38	24	22	16	18	20	280	215	495	253	108	0.3	0.3	0.6	
11	Kistna	16	12	1,013	245	27	27	38	38	40	23	38	11	15	14	8	2	161	160	321	108	77	0.3	0.3	0.6	
12	Kurnool	11	9	781	92	66	66	44	40	40	23	38	11	15	14	8	2	31	29	60	5	5	0.1	0.1	0.9	
13	Madras	21	11	1,071	1	8	8	11	5	4	1	6	8	6	3	3	2	479	610	1,089	310	407	0.5	0.5	0.4	
14	Madurai	18	10	2,208	133	8	11	15	8	20	8	15	7	7	11	14	13	81	165	246	10	10	0.1	0.1	0.4	
15	Malabar	20	14	1,624	78	55	37	15	25	62	49	27	47	50	14	10	1	197	185	382	193	126	0.3	0.3	0.5	
16	Nellore	6	5	57	7	103	103	72	62	46	30	29	35	38	35	31	27	321	263	584	210	3	0.1	0.1	0.4	
17	Nilgiris, The	32	18	2,068	160	106	103	72	62	46	30	29	35	38	35	31	27	321	263	584	210	3	0.1	0.1	0.4	
18	North Arcot	34	21	2,530	76	36	23	23	22	14	4	10	19	42	23	38	17	155	121	276	122	69	0.2	0.1	0.4	
19	Ramanad	19	15	2,803	142	53	69	46	44	54	58	45	61	32	28	43	27	255	269	534	368	172	0.3	0.3	0.5	
20	South Arcot	20	16	2,347	139	168	155	139	77	81	72	103	64	102	93	66	76	407	579	1,156	377	445	0.5	0.5	0.9	
21	South Kanara	13	7	805	85	9	4	17	9	11	7	9	7	10	3	4	16	57	46	103	29	26	0.1	0.1	0.4	
22	Tanjore	30	19	2,531	168	50	43	72	64	69	58	81	69	71	54	75	86	390	391	781	344	255	0.4	0.3	0.5	
23	Tinnevely	33	18	984	45	39	28	16	12	22	18	5	5	2	11	3	23	105	86	191	116	46	0.1	0.1	0.4	
24	Trichinopoly	17	11	1,055	102	72	33	42	50	85	39	75	70	36	49	74	72	383	314	697	428	224	0.4	0.3	0.4	
25	Vizagapatnam	20	22	2,589	58	54	28	52	58	31	39	54	38	23	24	21	43	230	232	462	171	158	0.2	0.2	0.5	
26	Agencies	6	4	1,170	20	...	1	13	1	7	2	2	2	2	3	4	...	22	15	37	3	7	0.2	0.1	0.2	
27	Agencies	6	4	1,170	20	...	1	13	1	7	2	2	2	2	3	4	...	22	15	37	3	7	0.2	0.1	0.2	
Total, Madras Presidency		525	336	40,850	2,826	1,279	897	1,019	924	980	823	1,004	965	935	694	705	752	5,659	5,208	10,957	4,869	3,632	0.3	0.3	0.4	

No. IX.—Deaths registered from Fevers in the districts of the Madras Presidency during each month of the year 1926.

Number.	Districts.	Circles of registration.	4		5												6		Ratio of deaths per 1,000 of population.	Mean ratio per 1,000 for previous 5 years.	
			Number in each district.	Number from which deaths were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.				
																	Males.	Females.			
1	Anantapur	21	850	489	368	332	494	678	580	472	471	381	400	415	480	442	2,720	2,793	5,513	5,513	43
2	Bellary	20	939	508	568	506	728	554	677	544	514	442	415	437	540	498	3,248	3,121	6,369	6,369	63
3	Chingleput	20	2,145	1,116	729	634	598	408	492	530	516	588	543	602	505	536	3,155	3,232	6,407	6,407	38
4	Chittoor	15	1,896	1,095	729	634	598	408	492	530	516	588	543	602	505	536	3,155	3,232	6,407	6,407	38
5	Coimbatore	23	1,109	755	442	512	626	532	570	546	559	704	684	710	875	902	4,278	4,007	8,285	8,285	55
6	Cuddapah	17	894	778	1,442	912	1,066	1,244	1,239	1,277	1,288	1,319	1,316	1,259	1,073	902	4,278	4,007	8,285	8,285	35
7	Godavari, East	19	4,074	1,457	2,541	2,314	2,440	2,541	2,943	3,223	2,974	3,559	3,715	3,235	2,883	8,471	18,200	18,931	30,201	30,201	135
8	Godavari, West	13	723	770	1,014	775	681	577	1,145	1,279	1,102	1,618	1,846	2,113	1,379	1,724	8,070	7,381	15,551	15,551	107
9	Guntur	22	844	1,006	1,030	769	826	794	851	1,022	1,069	1,002	1,205	985	848	1,162	6,008	5,705	11,713	11,713	113
10	Kistna	16	1,013	752	762	555	628	689	749	955	886	1,083	1,341	1,737	1,272	1,417	9,113	8,983	18,096	18,096	123
11	Kurnool	11	781	672	989	812	1,097	1,401	1,556	1,309	1,226	1,481	1,383	1,450	1,477	779	3,851	3,936	9,916	9,916	106
12	Madras	1	1	1	293	282	256	213	175	197	182	244	353	431	493	540	2,762	2,762	10,512	10,512	88
13	Madras	21	1,071	835	849	582	452	401	483	444	390	544	353	431	493	540	3,119	2,957	9,976	9,976	36
14	Madras	18	1,208	760	1,874	1,874	1,899	2,106	3,353	2,802	3,591	3,381	2,516	2,035	1,316	2,040	14,412	14,412	33,548	33,548	81
15	Nellore	20	1,624	1,730	1,430	1,311	1,138	1,008	1,232	1,267	1,252	1,417	1,285	1,320	1,266	1,362	7,965	7,453	13,419	13,419	92
16	Nellore	6	57	57	111	168	84	103	137	193	186	130	79	69	126	118	779	662	1,441	1,441	119
17	Nilgiris, The	32	2,298	1,051	917	707	627	653	689	763	709	723	802	818	836	868	3,958	3,958	8,143	8,143	32
18	North Arcot	34	2,630	1,486	1,084	829	813	783	802	818	813	802	820	836	868	868	3,958	3,958	8,143	8,143	32
19	Raman	24	2,347	1,202	1,512	1,051	1,057	1,057	1,057	1,057	1,057	1,057	1,057	1,057	1,057	1,057	4,811	4,811	9,575	9,575	40
20	South Arcot	20	2,347	1,202	1,512	1,051	1,057	1,057	1,057	1,057	1,057	1,057	1,057	1,057	1,057	1,057	4,811	4,811	9,575	9,575	40
21	South Arcot	13	2,865	688	1,176	1,057	774	703	639	1,051	815	1,223	1,200	1,308	1,474	1,526	7,227	7,851	14,578	14,578	70
22	South Kanara	13	2,865	688	1,176	1,057	774	703	639	1,051	815	1,223	1,200	1,308	1,474	1,526	7,227	7,851	14,578	14,578	70
23	Tanjore	33	3,565	479	1,602	1,129	835	756	693	991	1,351	1,431	1,170	1,123	1,013	1,213	6,494	6,494	13,282	13,282	83
24	Tinnevely	35	3,565	479	1,602	1,129	835	756	693	991	1,351	1,431	1,170	1,123	1,013	1,213	6,494	6,494	13,282	13,282	83
25	Tiruchirappalli	17	1,065	572	658	444	266	361	532	602	601	422	531	628	565	565	4,388	4,388	8,729	8,729	45
26	Viragapatam	29	2,539	2,175	1,056	3,184	3,240	3,203	3,452	3,630	3,269	3,770	4,475	5,022	4,302	4,626	23,511	23,018	46,529	46,529	167
27	Agencies	6	1,170	732	132	246	253	305	353	374	370	361	453	467	393	373	2,180	1,955	4,135	4,135	164
Total, Madras Presidency		528	40,850	23,456	30,500	23,937	24,036	23,394	27,308	28,790	28,463	31,214	31,272	29,818	27,577	30,511	170,032	167,913	337,945	337,945	78

ANNEXURE

VITAL STATISTICS OF THE GENERAL POPULATION

No. X.—Deaths registered from Dysentery and Diarrhea in the districts of the Madras Presidency during each month of the year 1926.

Number.	Districts.	Circles of registration.	Number in each district.	Number from which deaths were reported.	Villages.		Months.												Ratio of deaths per 1,000 of population.		Mean ratio per 1,000 for previous 5 years.		
					Number in each district.	Number from which deaths were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.			
1	Anantapur	21	850	297	131	89	110	108	109	111	115	135	138	143	125	168	171	142	328	726	1.54	1.54	1.5
2	Bellary	20	930	1,041	119	110	110	108	109	111	115	135	160	163	163	180	183	187	918	809	1.718	1.718	2.3
3	Chingleput	21	2,145	1,004	684	434	434	434	431	431	431	431	431	431	431	431	431	431	2,468	2,468	3.333	3.333	2.3
4	Chittoor	15	1,896	1,095	729	654	598	408	492	530	516	588	543	602	505	536	3,155	3,232	6,407	7,244	6.827	6.827	1.4
5	Coimbatore	23	1,109	755	442	512	626	532	570	546	559	704	684	710	875	902	4,278	4,007	8,285	8,936	3.323	3.323	0.7
6	Cuddapah	17	894	778	1,442	912	1,066	1,244	1,239	1,277	1,288	1,319	1,316	1,259	1,073	893	7,255	7,123	14,378	16,013	6.873	6.873	0.8
7	Godavari, East	19	828	457	2,553	2,314	2,440	2,541	2,943	3,223	2,974	3,559	3,715	3,235	2,883	8,471	18,200	18,931	30,201	22,017	3.598	3.598	0.8
8	Godavari, West	13	723	770	1,014	775	681	577	1,145	1,279	1,102	1,618	1,846	2,113	1,379	1,724	8,070	7,381	15,551	11,297	1.825	1.825	0.8
9	Guntur	22	844	1,006	1,030	769	826	794	851	1,022	1,069	1,002	1,205	985	848	1,162	6,008	5,705	11,713	11,707	1.810	1.810	0.8
10	Kistna	16	1,013	752	762	555	628	689	749	955	886	1,083	1,341	1,737	1,272	1,417	9,113	8,983	18,096	10,100	1.825	1.825	0.8
11	Kurnool	11	781	672	989	812	1,097	1,401	1,556	1,309	1,226	1,481	1,383	1,450	1,477	779	3,851	3,936	9,916	9,921	1.115	1.115	0.9
12	Madras	21	1,071	835	223	256	213	175	197	182	244	353	431	493	540	235	1,332	1,300	2,622	2,953	1.872	1.872	0.8
13	Madras	21	1,071	835	223	256	213	175	197	182	244	353	431	493	540	235	1,332	1,300	2,622	2,953	2.276	2.276	0.8
14	Madras	21	1,071	835	223	256	213	175	197	182	244	353	431	493	540	235	1,332	1,300	2,622	2,953	6.190	6.190	0.8
15	Madras	21	1,071	835	223	256	213	175	197	182	244	353	431	493	540	235	1,332	1,300	2,622	2,953	1.117	1.117	0.8
16	Madras	21	1,071	835	223	256	213	175	197	182	244	353	431	493	540	235	1,332	1,300	2,622	2,953	725	725	0.8
17	Nellore	6	57	43	46	38	43	51	73	91	98	63	57	47	42	45	46	45	390	335	3.054	3.054	1.8
18	North Arcot	32	2,688	854	904	568	429	393	391	423	446	607	542	492	482	614	3,140	3,140	6,194	6,194	1.617	1.617	1.3
19	North Arcot	34	3,630	865	711	396	295	210	225	243	238	230	229	112	152	249	1,623	1,623	3,240	3,240	2.630	2.630	1.2
20	Salem	19	2,803	665	428	232	225	247	223	243	339	405	383	429	382	375	2,888	2,888	4,692	4,692	2.711	2.711	2.1
21	South Arcot	20	1,747	770	820	579	397	369	367	369	635	342	445	423	453	439	438	2,486	2,486	6.599	6.599	2.4	
22	South Arcot	12	805	526	719	432	273	189	264	303	373	451	470	404	305	324	1,832	1,832	4,629	4,629	4.1	4.1	2.1
23	South Arcot	13	2,531	460	404	380	224	187	266	169	257	394	395	311	334	407	1,850	1,850	3,702	3,702	1.715	1.715	1.6
24	Tanjore	30	954	510	1,318	854	450	405	467	267	294	296	321	297	313	282	2,804	2,804	5,488	5,488	2.684	2.684	1.5
25	Tinnevely	35	1,055	285	452	269	229	166	231	232	215	247	310	313	282	419	1,878	1,878	3,566	3,566	1.578	1.578	1.8
26	Vicarsapatam	29	2,548	264	321	239	274	238	285	243	254	405	457	316	300	211	1,890	1,890	3,566	3,566	1.44	1.44	0.8
27	Vicarsapatam	6	1,170	88	8	9	15	20	20	20	9	16	15	10	16	20	11	5	63	75	0.7	0.7	0.7
Total, Madras Presidency		528	40,850	23,410	11,091	7,383	6,187	5,613	6,621	7,152	8,203	10,048	8,611	7,196	6,680	7,178	47,131	44,627	91,758	91,758	2.3	2.3	1.6

No. XI.—Deaths registered from Respiratory Diseases in the districts of the Madras Presidency during each month of the year 1926.

1	2	3	4		5					6		7	8
			Number in each district.	Number from which deaths from respiratory diseases were reported.	Circles of registration.	Number in each district.	Number from which deaths from respiratory diseases were reported.	Number in each district.	Number from which deaths from respiratory diseases were reported.	Total.	Total.	Ratio of deaths per 1,000 of population.	Mean ratio per 1,000 for previous 5 years.
Number.	Districts.									Males.	Females.	Total.	
1	Anantapur	21	850	476	218	185	239	184	183	1,188	1,384	2,572	2.8
2	Bellary	20	939	533	190	189	269	177	177	1,302	1,402	2,704	2.9
3	Chingleput	21	2,145	1,084	320	310	277	273	277	1,717	1,480	3,197	2.3
4	Chittoor	16	1,986	1,085	322	267	299	270	314	1,661	1,713	3,374	3.2
5	Coimbatore	23	1,109	450	412	261	252	275	284	1,837	1,837	3,674	1.9
6	Cuddapah	17	894	314	160	134	144	132	133	1,037	1,037	2,074	1.9
7	Gajapati	17	4,074	53	141	114	105	105	119	1,037	1,037	2,074	1.9
8	Godavari, East	19	829	325	252	228	228	228	228	1,037	1,037	2,074	1.9
9	Godavari, West	13	723	709	408	319	360	357	357	1,037	1,037	2,074	1.9
10	Guntur	28	944	659	368	243	263	263	263	1,037	1,037	2,074	1.9
11	Kistna	16	1,013	510	337	229	229	229	229	1,037	1,037	2,074	1.9
12	Kurnoor	11	781	448	242	229	229	229	229	1,037	1,037	2,074	1.9
13	Madras	1	1	1	1	1	1	1	1	1,037	1,037	2,074	1.9
14	Madras	21	1,071	262	768	533	419	453	497	2,074	2,074	4,148	1.6
15	Malabar	18	2,208	185	425	406	419	453	497	2,074	2,074	4,148	1.6
16	Nellore	20	1,624	165	120	107	131	143	143	1,037	1,037	2,074	1.9
17	Nilgiris, The	6	57	34	49	32	34	49	32	1,037	1,037	2,074	1.9
18	North Arcot	32	2,268	472	346	298	300	298	298	1,037	1,037	2,074	1.9
19	Ramanad	34	2,580	492	493	308	247	213	213	1,037	1,037	2,074	1.9
20	Salen	19	2,303	488	278	187	162	166	166	1,037	1,037	2,074	1.9
21	South Arcot	20	2,347	371	306	208	269	269	269	1,037	1,037	2,074	1.9
22	South Kanara	13	805	367	267	218	215	207	207	1,037	1,037	2,074	1.9
23	Tanjore	30	2,531	493	262	172	207	177	147	1,037	1,037	2,074	1.9
24	Tinnevely	36	1,081	465	431	269	244	244	244	1,037	1,037	2,074	1.9
25	Tiruchirappalli	31	1,085	183	351	141	176	174	225	1,037	1,037	2,074	1.9
26	Vizagapatnam	17	2,589	283	311	186	251	246	251	1,037	1,037	2,074	1.9
27	Agencies	23	1,170	165	10	29	15	11	38	1,037	1,037	2,074	1.9
Total, Madras Presidency			40,850	11,115	8,888	6,575	6,451	6,432	7,051	7,645	7,183	14,828	1.4

ANNEXURE

VITAL STATISTICS OF THE GENERAL POPULATION

No. XII.—Deaths registered from Plague in the districts of the Madras Presidency during each month of the year 1926.

1	2	3	4		5					6		7	8
			Number in each district.	Number from which deaths from plague were reported.	Circles of registration.	Number in each district.	Number from which deaths from plague were reported.	Number in each district.	Number from which deaths from plague were reported.	Total.	Total.	Ratio of deaths per 1,000 of population.	Mean ratio per 1,000 for previous 5 years.
Number.	Districts.									Males.	Females.	Total.	
1	Anantapur	21	850	476	218	185	239	184	183	1,188	1,384	2,572	2.8
2	Bellary	20	939	533	190	189	269	177	177	1,302	1,402	2,704	2.9
3	Chingleput	21	2,145	1,084	320	310	277	273	277	1,717	1,480	3,197	2.3
4	Chittoor	16	1,986	1,085	322	267	299	270	314	1,661	1,713	3,374	3.2
5	Coimbatore	23	1,109	450	412	261	252	275	284	1,837	1,837	3,674	1.9
6	Cuddapah	17	894	314	160	134	144	132	133	1,037	1,037	2,074	1.9
7	Gajapati	17	4,074	53	141	114	105	105	119	1,037	1,037	2,074	1.9
8	Godavari, East	19	829	325	252	228	228	228	228	1,037	1,037	2,074	1.9
9	Godavari, West	13	723	709	408	319	360	357	357	1,037	1,037	2,074	1.9
10	Guntur	28	944	659	368	243	263	263	263	1,037	1,037	2,074	1.9
11	Kistna	16	1,013	510	337	229	229	229	229	1,037	1,037	2,074	1.9
12	Kurnoor	11	781	448	242	229	229	229	229	1,037	1,037	2,074	1.9
13	Madras	1	1	1	1	1	1	1	1	1,037	1,037	2,074	1.9
14	Madras	21	1,071	262	768	533	419	453	497	2,074	2,074	4,148	1.6
15	Malabar	18	2,208	185	425	406	419	453	497	2,074	2,074	4,148	1.6
16	Nellore	20	1,624	165	120	107	131	143	143	1,037	1,037	2,074	1.9
17	Nilgiris, The	6	57	34	49	32	34	49	32	1,037	1,037	2,074	1.9
18	North Arcot	32	2,268	472	346	298	300	298	298	1,037	1,037	2,074	1.9
19	Ramanad	34	2,580	492	493	308	247	213	213	1,037	1,037	2,074	1.9
20	Salen	19	2,303	488	278	187	162	166	166	1,037	1,037	2,074	1.9
21	South Arcot	20	2,347	371	306	208	269	269	269	1,037	1,037	2,074	1.9
22	South Kanara	13	805	367	267	218	215	207	207	1,037	1,037	2,074	1.9
23	Tanjore	30	2,531	493	262	172	207	177	147	1,037	1,037	2,074	1.9
24	Tinnevely	36	1,081	465	431	269	244	244	244	1,037	1,037	2,074	1.9
25	Tiruchirappalli	31	1,085	183	351	141	176	174	225	1,037	1,037	2,074	1.9
26	Vizagapatnam	17	2,589	283	311	186	251	246	251	1,037	1,037	2,074	1.9
27	Agencies	23	1,170	165	10	29	15	11	38	1,037	1,037	2,074	1.9
Total, Madras Presidency			40,850	11,115	8,888	6,575	6,451	6,432	7,051	7,645	7,183	14,828	1.4

No. XIII.—Statement prescribed by the Government of India, Home Department (Sanitary), in Letter No. 10—326, dated 8th December 1894, communicated with G. O. No. 2664 L., dated 20th December 1894.

(Comparative table showing percentage of mortality to total mortality from year to year under each head of death causation.)

86

1		2		3		4				5		6						
Name of municipality.		Date of completion of works of		Average annual death-rates since the introduction of drainage system or water-supply.		Percentage of deaths to total mortality under each head of death causation.				Average annual death-rate for the five-year period preceding the introduction of drainage system or water-supply.		Percentage of deaths to total mortality under each head of death causation.						
		Drainage.	Water-supply.	Years.	Death-rate.	Cholera.	Smallpox.	Fevers.	Dysentery and diarr.	All other causes.	Years.	Death-rate.	Cholera.	Smallpox.	Fevers.	Dysentery and diarr.	All other causes.	
Adoni	...	...	1895...	1895	23.6	0.3	...	38.1	0.3	61.9	...	...	...	...	...	...	...	
				1896	25.4	1.0	0.1	31.2	0.9	66.8	...	...	...	...	...	...	...	...
				1897	37.9	9.3	...	31.7	3.9	55.1	...	...	...	...	...	...	...	...
				1898	26.5	...	0.3	29.7	5.3	64.7	...	...	...	...	...	...	...	...
				1899	24.1	...	0.1	22.1	2.4	75.4	...	...	...	...	...	...	...	...
				1900	24.4	...	...	34.9	5.3	59.8	...	...	...	...	...	...	...	...
				1901	20.1	...	...	30.0	2.9	66.8	...	...	...	...	...	...	...	...
				1902	50.5	...	...	2.4	0.9	85.5	...	...	...	...	...	...	...	...
				1903	23.1	...	...	6.0	10.9	82.5	...	...	...	...	...	...	...	...
				1904	71.3	...	...	2.8	2.6	94.6	...	...	...	...	...	...	...	...
				1905	31.1	...	...	5.7	11.3	65.5	...	...	...	...	...	...	...	...
				1906	36.8	...	...	0.4	5.1	16.8	64.3	...	...	...	...	...	...	...
				1907	24.2	...	...	0.3	1.2	3.6	13.2	81.5	...	...	...	...	...	...
				1908	26.3	...	...	6.6	...	10.9	10.4	72.1	...	...	...	...	...	...
				1909	25.5	...	...	1.9	13.5	11.9	71.5	...	...	...	...	...	...	...
				1910	30.1	...	...	0.3	...	9.5	6.3	83.6	...	...	...	...	...	...
				1911	33.3	...	...	0.4	...	8.9	6.2	84.2	...	...	...	...	...	...
				1912	33.3	...	...	...	...	12.7	10.6	69.8	...	...	...	...	...	...
Ananapur	...	1924...	1913	29.4	...	...	11.6	8.3	75.5	...	...	...	...	...	...	...	...	
			1914	55.3	...	...	4.6	6.4	60.4	43.1	...	...	...	...	...	...	...	
			1915	29.3	...	...	0.2	23.3	8.7	8.0	53.1	...	...	...	...	...	...	
			1916	32.7	...	...	0.1	...	12.5	10.5	76.9	...	...	...	...	...	...	
			1917	37.9	...	...	0.1	...	7.9	3.0	89.9	...	...	...	...	...	...	
			1918	39.5	...	...	1.8	...	72.1	1.4	24.5	...	...	...	...	...	...	
			1919	10.3	...	...	1.3	13.2	33.1	3.7	43.5	...	...	...	...	...	...	
			1920	12.8	...	...	...	...	22.7	4.9	41.4	...	...	...	...	...	...	
			1921	17.1	...	...	0.6	...	30.0	10.4	56.7	...	...	...	...	...	...	
			1922	21.0	...	...	21.9	11.0	2.2	5.0	59.9	...	...	...	...	...	...	
			1923	18.9	...	...	...	...	5.8	14.3	79.9	...	...	...	...	...	...	
			1924	17.8	...	...	0.3	...	5.8	11.0	81.8	...	...	...	...	...	...	
			1925	14.7	...	...	...	...	1.1	13.3	15.1	71.6	...	...	...	...	...	
			1926	15.4	...	...	...	...	...	6.5	27.0	63.5	...	...	...	...	...	
			1927	23.7	...	...	...	...	...	...	...	...	...	...	...	...	...	
			1928	24.0	...	...	...	...	...	...	...	...	...	...	...	...	...	
			1929	23.5	...	...	...	...	...	...	...	...	...	...	...	...	...	

ANNEXURE

VITAL STATISTICS OF THE GENERAL POPULATION

87

Berhampur	1914	28.6	0.7	10.4	25.7	13.0	50.2	...	...	31.6	4.5	0.2	25.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...</
-----------	------	------	-----	------	------	------	------	-----	-----	------	-----	-----	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

No. XIII.—Statement prescribed by the Government of India, Home Department (Sanitary), in Letter No. 10—336, dated 8th December 1894, communicated with G. O. No. 2654 L., dated 20th December 1894—cont.

(Comparative table showing percentage of mortality to total mortality from year to year under each head of death causation.)

Name of municipality.	2		3		4			5		6			
	Date of completion of works of		Average annual death-rate since the introduction of drainage system or water-supply.		Percentage of deaths to total mortality under each head of death causation.			Average annual death-rate for the five-year period preceding the introduction of drainage system or water-supply.		Percentage of deaths to total mortality under each head of death causation.			
	Drainage.	Water-supply.	Years.	Death-rate.	Cholera.	Smallpox.	Typhoid.	Years.	Death-rate.	Cholera.	Smallpox.	Typhoid.	All other causes.
Cuddapah—cont. ...	...	1893 ...	1920	28.8	0.2	0.6	22.4	68.0	...	...	...	...	...
			1921	19.4	0.3	...	...	...	...	...	...	...	...
			1922	25.5	4.6	7.4	24.5	50.6	...	...	...	...	...
			1923	25.8	0.6	...	...	...	...	...	...	...	...
			1924	24.9	1.4	3.5	13.8	11.1	...	...	...	...	...
			1925	22.0	...	...	...	...	...	...	...	...	...
			1926	22.3	0.5	...	...	...	...	...	...	...	...
			1896	23.1	...	...	...	...	...	...	...	...	...
			1897	22.1	47.3	...	...	...	...	...	...	...	...
			1898	18.9	15.7	...	...	...	...	...	...	...	...
			1899	18.9	10.7	...	...	...	...	...	...	...	...
			1900	25.0	25.2	...	...	...	...	...	...	...	...
Dindigul ...	...	1898 ...	1901	16.6	11.0	...	...	...	...	...	...	...	...
			1902	17.5	...	...	...	...	...	...	...	...	...
			1903	24.5	...	...	...	...	...	...	...	...	...
			1904	23.1	...	...	...	...	...	...	...	...	...
			1905	23.1	...	...	...	...	...	...	...	...	...
			1906	39.6	...	...	...	...	...	...	...	...	...
			1907	37.1	...	...	...	...	...	...	...	...	...
			1908	38.9	...	...	...	...	...	...	...	...	...
			1909	34.9	...	...	...	...	...	...	...	...	...
			1910	34.4	...	...	...	...	...	...	...	...	...
			1911	33.1	...	...	...	...	...	...	...	...	...
			1912	33.1	...	...	...	...	...	...	...	...	...

VITAL STATISTICS OF THE GENERAL POPULATION

91

Elore ...	...	1919 ...	1919	27.5	...	1.4	25.2	66.6	...	...	...	...	...
			1920	25.9	...	...	...	...	...	...	...	...	...
			1921	21.0	...	...	...	...	...	...	...	...	...
			1922	16.9	...	...	...	...	...	...	...	...	...
			1923	21.4	...	...	...	...	...	...	...	...	...
			1924	20.9	...	...	...	...	...	...	...	...	...
			1925	18.8	...	...	...	...	...	...	...	...	...
			1926	18.2	...	...	...	...	...	...	...	...	...
			1918	32.6	...	...	...	...	...	...	...	...	...
			1909	28.7	...	...	...	...	...	...	...	...	...
			1910	22.0	...	...	...	...	...	...	...	...	...
			1911	22.1	...	...	...	...	...	...	...	...	...
Gudiyatham ...	...	1908 ...	1908	31.6	...	...	...	...	...	...	...	...	...
			1909	26.8	...	...	...	...	...	...	...	...	...
			1910	26.8	...	...	...	...	...	...	...	...	...
			1911	22.1	...	...	...	...	...	...	...	...	...
			1912	64.4	...	...	...	...	...	...	...	...	...
			1913	19.4	...	...	...	...	...	...	...	...	...
			1914	25.1	...	...	...	...	...	...	...	...	...
			1915	22.7	...	...	...	...	...	...	...	...	...
			1916	30.6	...	...	...	...	...	...	...	...	...
			1917	34.8	...	...	...	...	...	...	...	...	...
			1918	43.1	...	...	...	...	...	...	...	...	...
			1919	31.2	...	...	...	...	...	...	...	...	...

54

(Comparative table showing percentage of mortality to total mortality from year to year under each head of death causation.)

1	2		3	4				5	6								
	Date of completion of works of introduction of drainage system or water-supply.			Percentage of deaths to total mortality under each head of death causation.					Average annual death-rate for the five-year period preceding the intro- duction of drainage system or water- supply.				Percentage of deaths to total mortality under each head of death causation.				
				Cholera.	Smallpox.	Fever.	Dysentery and diar- rhoea.		All other causes.	Years.	Death-rate.	Cholera.	Smallpox.	Fever.	Dysentery and diar- rhoea.	All other causes.	
																	Drainage.
Guntur—cont.	...	1908	1923	34.4	...	0.5	27.7	4.0	67.8	...	...	...	...	...	...	...	...
	...	...	1924	32.6	...	0.1	30.6	2.0	67.3	...	...	...	...	...	...	...	...
	...	...	1925	34.3	0.1	5.2	20.3	5.1	69.3	...	...	...	...	...	...	...	...
	...	...	1926	39.5	1.9	0.1	14.3	8.4	75.3	...	...	...	...	...	...	...	...
	...	...	1914	19.3	...	...	16.1	14.3	69.6	...	...	...	...	...	...	...	...
	...	...	1915	20.9	...	3.4	13.5	13.6	69.5	...	...	...	...	...	...	...	...
	...	...	1916	21.0	...	...	19.7	19.8	70.5	...	...	...	...	...	...	...	...
	...	...	1917	22.7	...	3.0	7.6	10.6	76.8	...	...	...	...	...	...	...	...
	...	...	1918	36.4	...	...	39.1	2.9	68.0	...	...	...	...	...	...	...	...
	...	...	1919	39.0	...	6.3	29.0	8.3	59.4	...	...	...	...	...	...	...	...
	...	...	1920	38.9	...	...	35.1	9.0	55.9	...	...	...	...	...	...	...	...
	...	...	1921	13.2	...	1.5	13.8	3.1	81.8	...	...	...	...	...	...	...	...
	...	...	1922	19.1	...	...	6.1	7.3	86.6	...	...	...	...	...	...	...	...
	...	...	1923	20.1	...	...	15.1	16.3	68.6	...	...	...	...	...	...	...	...
...	...	1924	19.6	...	...	29.2	4.8	63.0	...	...	...	...	...	...	...	...	
...	...	1925	19.4	...	...	30.1	3.6	69.3	...	...	...	...	...	...	...	...	
...	...	1926	25.4	...	...	16.5	6.5	77.1	...	...	...	...	...	...	...	...	
Kodakana	...	...	1894	37.5	17.3	0.5	18.0	10.0	53.3	...	...	...	...	...	...	...	...
	...	...	1895	31.2	3.2	0.7	21.9	11.4	62.8	...	...	...	...	...	...	...	...
	...	...	1896	34.2	9.5	...	20.0	11.5	59.1	...	...	...	...	...	...	...	...
	...	...	1897	39.9	29.9	...	16.2	11.5	49.1	...	...	...	...	...	...	...	...
	...	...	1898	36.0	11.4	...	15.1	10.3	62.8	...	...	...	...	...	...	...	...
	...	...	1899	36.4	13.0	...	14.7	9.3	63.6	...	...	...	...	...	...	...	...
	...	...	1900	30.3	3.4	...	14.6	6.9	75.1	...	...	...	...	...	...	...	...
	...	...	1901	31.9	10.2	...	15.9	7.4	68.4	...	...	...	...	...	...	...	...
	...	...	1902	29.1	5.5	0.1	9.6	6.8	78.0	...	...	...	...	...	...	...	...
	...	...	1903	31.2	6.7	...	10.0	5.9	77.4	...	...	...	...	...	...	...	...
	...	...	1904	31.6	11.2	...	8.5	9.0	71.3	...	...	...	...	...	...	...	...
	...	...	1905	27.8	...	...	11.0	8.5	79.5	...	...	...	...	...	...	...	...
	...	...	1906	38.8	13.4	7.2	9.6	8.0	60.8	...	...	...	...	...	...	...	...
	...	...	1907	31.0	7.1	2.7	14.1	10.0	63.8	...	...	...	...	...	...	...	...
...	...	1908	29.9	9.8	0.1	14.5	7.3	68.3	...	...	...	...	...	...	...	...	
...	...	1909	29.7	2.7	0.3	15.5	9.7	71.8	...	...	...	...	...	...	...	...	
...	...	1910	31.0	4.1	0.0	12.0	10.0	73.8	...	...	...	...	...	...	...	...	
...	...	1911	25.2	4.3	1.3	14.3	6.7	69.4	...	...	...	...	...	...	...	...	
...	...	1912	31.1	4.3	1.5	15.7	9.7	68.8	...	...	...	...	...	...	...	...	
...	...	1913	22.4	3.6	0.7	13.3	9.9	72.5	...	...	...	...	...	...	...	...	
...	...	1914	31.3	7.3	0.9	7.3	12.7	71.3	...	...	...	...	...	...	...	...	
Kumbakonam	...	...	1894	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

Kumbakonam—cont.	1894	1915	27.9	1.2	1.9	11.0	108	75.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...</
------------------	------	------	------	-----	-----	------	-----	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

No. XIII.—Statement prescribed by the Government of India, Home Department (Sanitary), in Letter No. 10—328, dated 8th December 1894, communicated with G. O. No. 2634 L., dated 20th December 1894—cont.

(Comparative table showing percentage of mortality from year to year under each head of death causation.)

94

ANNEXURE

Name of municipality.	Date of completion of works of:		Average annual death-rate since the introduction of drainage-system or water-supply.	Percentage of deaths to total mortality under each head of death causation.					Average annual death-rate for the five-year period preceding the introduction of drainage system or water-supply.	Percentage of deaths to total mortality under each head of death causation.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	Drainage.	Water-supply.		Cholera.	Smallpox.	Typhera.	Dysentery and diarrhoea.	All other causes.		Cholera.	Smallpox.	Typhera.	Dysentery and diarrhoea.	All other causes.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
															Years.	Death-rate.	Years.	Death-rate.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Madras—cont.	...	1872	...	1888	37.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

VITAL STATISTICS OF THE GENERAL POPULATION

95

1894	32.6	13.6	0.9	15.9	11.7	55.1	1880	31.2	90	3.0	18.1	19.4	53.3
1895	20.1	1.2	0.6	17.6	9.3	71.3	1880	32.7	30	11.9	18.0	14.2	52.9
1896	23.2	0.4	0.6	22.3	10.6	68.1	1890	31.4	168	7.3	12.8	13.0	50.1
1897	25.6	11.3	0.7	18.7	12.5	50.8	1891	29.3	0.8	9.9	10.0	9.9	63.4
1898	25.1	4.5	0.5	18.7	15.4	65.3	1882	29.9	9.8	7.6	14.6	7.3	60.7
1899	24.5	3.0	3.4	18.8	10.9	63.9	1893	...	...	...	...	...	...
1900	31.9	30.3	1.2	14.3	9.8	44.4	...	...	...	...	...	...	...
1901	22.7	5.4	0.2	18.7	10.4	65.3	...	...	...	...	...	...	...
1902	22.7	5.6	0.3	16.6	13.0	61.5	...	...	...	...	...	...	...
1903	23.1	5.1	0.1	20.2	15.3	59.3	...	...	...	...	...	...	...
1904	30.4	4.4	1.3	16.8	9.5	57.4	...	...	...	...	...	...	...
1905	34.1	11.8	0.7	16.5	10.9	60.1	...	...	...	...	...	...	...
1906	34.1	10.3	1.0	10.6	12.4	50.7	...	...	...	...	...	...	...
1907	32.9	17.5	0.6	21.3	18.6	44.9	...	...	...	...	...	...	...
1908	35.9	7.5	...	22.6	19.1	50.8	...	...	...	...	...	...	...
1909	30.7	7.5	...	22.6	19.1	50.8	...	...	...	...	...	...	...
1910	34.1	17.1	0.6	13.4	15.6	53.3	...	...	...	...	...	...	...
1911	37.8	18.9	2.1	10.7	14.3	61.6	...	...	...	...	...	...	...
1912	30.3	4.0	0.5	18.6	12.4	59.5	...	...	...	...	...	...	...
1913	32.5	5.2	2.1	20.8	10.4	51.7	...	...	...	...	...	...	...
1914	35.6	6.6	10.9	20.4	11.4	57.8	...	...	...	...	...	...	...
1915	31.2	12.0	0.3	18.7	11.5	69.2	...	...	...	...	...	...	...
1916	26.8	2.5	0.1	19.7	11.5	69.2	...	...	...	...	...	...	...
1917	36.5	2.9	16.2	19.3	8.5	52.1	...	...	...	...	...	...	...
1918	35.7	7.1	2.3	31.7	7.9	51.6	...	...	...	...	...	...	...
1919	37.8	1.9	0.9	28.9	8.3	60.0	...	...	...	...	...	...	...
1920	37.0	6.2	...	64.9	9.0	64.9	...	...	...	...	...	...	...
1921	35.3	1.7	0.6	15.8	8.7	73.2	...	...	...	...	...	...	...
1922	36.1	0.1	21.3	8.7	7.5	62.4	...	...	...	...	...	...	...
1923	31.9	5.5	0.1	18.3	14.1	72.5	...	...	...	...	...	...	...
1924	35.0	0.04	10.6	11.4	68.2	...	...	...	...	...	...	...	...
1925	33.5	7.6	0.02	11.6	11.3	69.5	...	...	...	...	...	...	...
1926	39.9	2.0	11.3	10.5	12.0	64.2	...	...	...	...	...	...	...
1918	39.8	6.6	5.7	25.9	3.8	59.0	1913	23.0	53	3.7	33.2	6.3	60.8
1919	23.7	0.2	0.4	25.0	4.5	69.9	1914	29.6	0.3	0.8	25.3	5.9	59.5
1920	26.7	1.5	0.2	23.7	7.6	67.0	1915	31.3	3.8	3.0	21.3	6.1	68.5
1921	24.6	0.1	0.1	25.2	6.9	67.7	1916	33.7	13.3	12.1	13.3	6.2	66.7
1922	26.6	1.0	10.0	21.6	5.6	69.1	1917	45.0	...	...	...	4.5	56.9
1923	20.6	...	...	22.9	6.5	60.6	...	...	...	...	...	...	...
1924	25.7	...	3.4	23.2	7.6	66.8	...	...	...	...	...	...	...
1925	28.1	...	0.1	22.0	6.6	71.3	...	...	...	...	...	...	...
1926	31.5	...	...	18.9	12.1	69.0	...	...	...	...	...	...	...
1914	26.0	10.0	2.5	2.4	20.5	61.6	...	...	...	...	...	...	...
1915	29.5	0.9	3.8	4.7	16.4	74.2	1909	30.4	4.4	0.1	18.2	10.1	67.2
1916	27.2	2.4	2.0	7.1	11.6	75.9	1910	45.1	16.8	1.1	21.1	1.9	51.8
1917	31.4	2.1	8.1	8.9	10.2	79.7	1911	33.3	3.3	2.1	22.9	11.0	58.7
1918	37.1	1.6	8.6	20.9	11.0	57.9	1912	30.2	5.6	0.8	25.2	54.4	62.3
1919	33.2	2.1	3.2	19.3	12.2	63.2	1913	34.2	4.7	0.05	18.0	15.0	62.3
1920	31.2	4.8	1.0	18.2	10.3	66.7	...	...	...	...	...	...	...
1921	30.5	3.2	0.1	15.4	9.9	71.4	...	...	...	...	...	...	...
1922	30.7	0.4	9.2	8.6	10.9	71.8	...	...	...	...	...	...	...
1923	32.0	9.6	9.6	11.1	8.2	71.1	...	...	...	...	...	...	...
1924	27.1	2.5	0.1	11.2	11.6	74.6	...	...	...	...	...	...	...
1925	29.4	8.7	0.2	14.1	11.1	65.4	...	...	...	...	...	...	...
1926	33.5	5.5	1.4	16.9	12.1	65.0	...	...	...	...	...	...	...
1908	26.1	5.9	0.2	47.1	9.9	36.9	1903	27.6	7.0	0.2	27.1	5.1	60.6
1909	25.6	3.1	4.5	39.8	2.9	48.5	1904	31.9	25.1	0.1	24.0	5.3	45.5
1910	35.4	1.9	10.0	38.8	7.3	41.0	...	...	...	...	...	...	...
Masulipatan	...	...	...	...	...	...	...	...	...	...	...	...	...
Nagapatnam	...	...	...	...	...	...	...	...	...	...	...	...	...
Nellore	...	...	...	...	...	...	...	...	...	...	...	...	...

(Comparative table showing percentage of mortality to total mortality from year to year under each head of death causation.)

96

ANNEXURE

1	2	3	4	5	6													
Name of municipality.	Date of completion of works of drainage.	Water-supply.	Percentage of deaths to total mortality under each head of death causation.			Percentage of deaths to total mortality under each head of death causation.												
			Average annual death-rate since the introduction of drainage system or water-supply.				Average annual death-rate for the five-year period preceding the introduction of drainage system or water-supply.											
			Cholera.	Smallpox.	Fever.			Dysentery and diarrhoea.	All other causes.									
			Years.	Death-rate.				Years.	Death-rate.									
Nellore—cont.	1908	1908	1911	327	99	05	359	61	476	386	1906	386	179	22	288	82	479	
			1912	289	15	03	468	66	448	380	1906	380	200	84	307	66	343	
			1913	324	64	21	101	69	716	374	1907	374	192	09	334	110	355	
			1914	337	15	21	141	79	744	...	...	...	...	...	...	...	...	
			1915	406	21	22	176	61	720	...	...	...	...	...	...	...	...	
			1916	284	04	01	92	54	849	...	...	...	...	...	...	...	...	
			1917	391	01	22	162	70	745	...	...	...	...	...	...	...	...	
			1918	638	178	30	294	45	453	...	...	...	...	...	...	...	...	
			1919	375	59	03	145	75	718	...	...	...	...	...	...	...	...	
			1920	349	20	06	141	69	780	...	...	...	...	...	...	...	...	
			1921	301	02	06	176	51	765	...	...	...	...	...	...	...	...	
			1922	297	02	75	153	45	726	...	...	...	...	...	...	...	...	
			1923	364	25	75	193	47	660	...	...	...	...	...	...	...	...	
			1924	325	02	27	112	45	814	...	...	...	...	...	...	...	...	
			1925	354	04	24	128	53	791	...	...	...	...	...	...	...	...	
			1926	362	...	...	164	63	773	...	...	...	...	...	...	...	...	
Ootacamund	1900	1900	1900	296	...	05	162	103	780	...	...	...	...	...	...	...	...	
			1901	230	...	02	292	93	645	1596	235	...	...	...	...	...	...	
			1902	281	...	...	118	117	763	1896	301	11	...	...	...	...	...	
			1903	379	...	...	58	106	836	1897	301	11	...	...	...	...	...	
			1904	250	...	...	24	125	851	1898	360	...	...	...	...	...	...	
			1905	318	...	...	44	120	836	1899	291	...	...	...	...	...	...	
			1906	264	...	05	26	141	826	...	...	...	...	...	...	...	...	
			1907	206	...	...	38	152	808	...	...	...	...	...	...	...	...	
			1908	313	...	...	57	103	852	...	...	...	...	...	...	...	...	
			1909	358	...	...	33	113	852	...	...	...	...	...	...	...	...	
			1910	284	...	15	27	153	806	...	...	...	...	...	...	...	...	
			1911	262	...	06	24	120	850	...	...	...	...	...	...	...	...	
			1912	297	...	09	26	118	882	...	...	...	...	...	...	...	...	
			1913	291	...	...	11	120	854	...	...	...	...	...	...	...	...	
			1914	324	...	02	44	147	807	...	...	...	...	...	...	...	...	
			1915	307	...	...	36	106	855	...	...	...	...	...	...	...	...	
Pattadakal	1907	1907	1915	272	...	12	55	125	808	...	...	...	...	...	...	...	...	
			1916	272	...	...	38	193	707	...	...	...	...	...	...	...	...	
			1917	306	...	05	330	89	544	...	...	...	...	...	...	...	...	
			1918	428	...	05	220	78	610	...	...	...	...	...	...	...	...	
			1919	394	...	05	204	74	741	...	...	...	...	...	...	...	...	
			1920	394	...	05	45	153	766	...	...	...	...	...	...	...	...	
			1921	296	...	36	...	...	...	...	...	...	...	...	...	...	...	
			1922	281	...	15	...	...	...	...	...	...	...	...	...	...	...	
			1923	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			1924	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			1925	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			1926	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			1927	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			1928	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			1929	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

25

VITAL STATISTICS OF THE GENERAL POPULATION

97

Ootacamund—cont.	1913	...	1900	...	389	01	03	177	132	637	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...</
------------------	------	-----	------	-----	-----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

[illegible]

VITAL STATISTICS OF THE GENERAL POPULATION

[illegible]

(Comparative table showing percentage of mortality to total mortality from year to year under each head of death causation.)

1	2		3	4					5		6							
	Date of completion of works of			Percentage of deaths to total mortality under each head of death causation.					Average annual death-rate for the five-year period preceding the introduction of drainage system or water-supply.		Percentage of deaths to total mortality under each head of death causation.							
	Name of municipality.	Drainage.		Water-supply.	Years.	Death-rate.	Cholera.	Smallpox.	Fever.	Dysentery and diarrhoea.	All other causes.	Years.	Death-rate.	Cholera.	Smallpox.	Fever.	Dysentery and diarrhoea.	All other causes.
Viragapatam—cont.				1912	32.6	8.0	0.1	23.8	12.8	54.3	...	...	...	...	...	...	...	...
				1913	24.3	0.2	3.8	20.5	12.3	38.4	...	...	...	...	...	...	...	...
				1914	27.7	0.1	1.0	27.1	13.6	38.5	...	...	...	...	...	...	...	...
				1915	31.4	1.1	1.0	28.6	13.4	58.9	...	...	...	...	...	...	...	...
				1916	31.5	0.4	0.1	27.4	12.6	50.5	...	...	...	...	...	...	...	...
				1917	32.5	0.4	0.1	25.5	13.3	58.0	...	...	...	...	...	...	...	...
				1918	33.5	2.2	2.9	24.7	16.3	53.9	...	...	...	...	...	...	...	...
				1919	35.3	4.2	6.1	20.8	28.4	41.0	...	...	...	...	...	...	...	...
				1920	27.4	0.2	3.1	20.8	32.4	43.5	...	...	...	...	...	...	...	...
				1921	27.9	0.9	...	24.5	32.6	42.0	...	...	...	...	...	...	...	...
				1922	26.0	0.2	0.5	23.3	15.1	60.9	...	...	...	...	...	...	...	...
				1923	36.1	0.8	0.3	24.9	7.5	86.5	...	...	...	...	...	...	...	...
			1924	32.0	0.3	0.6	25.4	14.6	59.1	...	...	...	...	...	...	...	...	
			1925	35.0	...	13.1	22.3	11.4	53.2	...	...	...	...	...	...	...	...	
			1926	37.5	0.1	0.6	13.7	18.4	67.2	...	...	...	...	...	...	...	...	
			1914	29.2	0.2	...	35.8	32.2	30.8	...	...	...	...	...	...	...	...	
			1915	27.1	0.1	...	35.8	28.6	37.3	...	...	...	...	...	...	...	...	
			1916	31.6	0.1	1.4	14.6	31.6	52.3	...	...	...	...	...	...	...	...	
			1917	33.2	...	0.5	21.7	33.1	41.7	...	...	...	...	...	...	...	...	
			1918	38.2	0.4	5.3	22.1	25.6	36.6	...	...	...	...	...	...	...	...	
			1919	36.1	0.8	2.3	30.8	30.0	36.1	...	...	...	...	...	...	...	...	
			1920	33.5	0.1	0.3	32.2	27.8	39.6	...	...	...	...	...	...	...	...	
			1921	34.1	0.2	6.0	30.6	27.0	35.7	...	...	...	...	...	...	...	...	
			1922	25.8	0.1	0.1	32.6	19.9	47.3	...	...	...	...	...	...	...	...	
			1923	24.2	...	0.1	21.0	21.2	57.7	...	...	...	...	...	...	...	...	
			1924	18.8	...	...	36.1	18.0	45.3	...	...	...	...	...	...	...	...	
			1925	21.8	...	...	29.3	13.0	64.9	...	...	...	...	...	...	...	...	
			1926	28.3	...	...	0.7	20.5	9.4	69.4	...	...	...	...	...	...	...	
			1914	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

ANNEXURE

THE
THIRTY-SEVENTH ANNUAL REPORT

OF THE

SANITARY ENGINEER TO THE GOVERNMENT OF MADRAS
1926.

In the year under report the Chingleput Water-supply Scheme was brought into operation, raising the number of Municipalities provided with protected water-supply from 50 to 31 out of a total of 81. One out of 548 Union Boards in the Presidency was provided with a complete protected water-supply.

2. The Bellary and Coimbatore water-supply schemes were under execution by the Public Works Department. In the case of the Bellary scheme, the pumping main, engine house, workshops and stores were completed, suction well was sunk and built up to water level, and the service reservoir and distribution system to Brucepettah were under construction. Water was actually pumped into the town during the year during a period of severe shortages. In regard to the Coimbatore Scheme, 6½ miles of 18" gravitation main were laid and tested, and engine and machine sheds for the rock drills for the tunnel work and driver's quarters were completed.

3. The Tuticorin Municipal Council having agreed to meet half the cost of the revised scheme for the supply of water to the town, the Government in G.O. No. 1713 P.H., dated 18th August 1925 ordered the revision of the detailed plans and estimates for the work. In G.O. No. 1144 W., dated 2nd September 1926 revised plans and estimates amounting to Rs. 26 26 lakhs omitting the service reservoir were sanctioned and the resumption of work was ordered. The Council, however, subsequently desired that the provision for the service reservoir may be restored, and in G.O. No. 1859 W., dated 3rd December 1926 revised estimates for Rs. 27 84 lakhs including provision for the service reservoir were sanctioned. Preliminary arrangements were made by the Public Works Department to start the work.

Detailed bills of quantities of cast iron pipes and specials required for the pumping main, the distribution system and the connection to the Valanad storage reservoir and proposals in regard to the type of pumping plant suitable for the scheme were drawn up in this office and submitted to the Chief Engineer.

4. The Vellore and Madura drainage schemes were still under execution by the Public Works Department. In the former case, the sewage disposal works were under execution. The pipes laid across the river bed which were found leaky were uncaulked and experiments for jointing them with leadite were made. At Madura, the sewage farm was completed and was ready to be handed over to the Municipality. A large portion of the sewerage system was also in operation and about 11 lakhs of gallons of sewage on an average was being pumped daily to the sewage farm.

5. Improvements to the following water-works were in charge of the Public Works Department:—

- (1) *Ouddapah*.—Improvements at the headworks.
- (2) *Tanjore*.—Increasing the supply at the headworks. A few borings were put down and the results tested.
- (3) *Negapatam*.—The service reservoir was completed and handed over to the Municipality in November 1926. As it was reported that there was a slight dripping of water from the reservoir, it was recommended by the Sanitary Engineer that its surface should be treated with silicate of soda.

- (4) *Coonoor*.—The gravitation main from Bandami reservoir to Gray's Hill reservoir and the new service reservoir at Mount Pleasant were completed.
- (5) *Salem*.—Infiltration gallery below the tank bund. On the Sanitary Engineer's recommendation the work was taken over by the Public Works Department as the Municipal staff found difficulty in executing it. The construction of the gallery was practically completed. The work of connecting it with the existing pipe line remained to be done.
- (6) *Anantapur*.—Extensions and improvements. An estimate for Rs. 35,700 for the extensions and improvements was approved by the Government in G.O. No. 719 W., dated 5th July 1926. The work was under execution.

6. Improvements to the following water-supply works were under execution by the municipalities concerned under the supervision of this Department:—

- (1) *Adani*.—The construction of the valve tower and one of the wells and the laying of a cast-iron main through the old irrigation sluice to take the place of the syphon outlet from the tank were nearly completed.
- (2) *Vellore Pālār scheme*.—The portable pump was fitted and tested.
- (3) *Vizagapatam*.—In G.O. No. 751 P.H., dated 29th April 1926 the Government approved the proposal of the Municipal Council to supply water to the Harbour authorities for the construction of the Harbour works by utilizing the seepage and developing additional supply from the subsoil water at the head works and to carry out the work through its own agency under the control of the Sanitary Engineer. The plans and estimates for these improvements were prepared by the Municipal staff and were under the scrutiny of the Deputy Sanitary Engineer.
- (4) *Cocanada water-supply improvements*.—The construction of an experimental well at the headworks was in progress.

7. Plans and estimates for the following schemes in the priority list were prepared and submitted to Government:—

- (1) *Palacole water-supply*.—Detailed plans and estimates for a scheme for supplying water to Palacole with the Narasapur canal as the source and providing for chemical treatment and filtration of the water through two Jewel Pressure Filters were forwarded to the Chief Engineer in October 1926. The scheme has since been approved by Government in G.O. No. 368 W., dated 21st February 1927. Estimated cost Rs. 3,60,000.
- (2) *Ellore Water-works Improvements*.—Detailed plans and estimates for additional storage tank and clear water reservoir were forwarded to the Chief Engineer in February 1926. These were approved by Government in G.O. No. 1080 W., dated 24th Aug. 1926. Estimated cost Rs. 1,29,100.
- (3) *Guntakal Water-supply*.—Plans and estimates for supplying water to Timmencherla, a portion of Guntakal, were forwarded to the Chief Engineer in March 1926. The Government approved the scheme in G.O. No. 891 P.H., dated 22nd May 1926. Estimated cost Rs. 51,900. Certain recuperative tests carried out by the Executive Engineer, however, showed that the yield from the proposed source was much less than the yield obtained when the original investigation was carried out in 1921. The question of carrying out further investigations before proceeding with the scheme is under consideration.
- (4) *Bellary Water-supply*.—Extension to Cowl Bazaar and town extensions. Plans and estimates amounting to Rs. 1,65,000 were forwarded to the Chief Engineer in June 1926. These were approved in G.O. No. 1380 W., dated 30th September 1926.

- (5) *Yemmiganur Water-supply*.—Plans and estimates amounting to Rs. 37,430 for a scheme for supplying water to Yemmiganur Union from a well about five furlongs off were approved in this office No. 185 M., dated 9th February 1926.

8. Plans and estimates for the following works in the priority list were under preparation to:—

- (1) *Madura Water-works Improvements*—Third stage.
- (2) *Prodattur Water-supply*.
- (3) *Erode Drainage*.
- (4) *Tiruppur Water-supply*. The further investigation of the scheme approved in G.O. No. 509 P.H., dated 26th March 1926 was completed and the Deputy Sanitary Engineer's report received. This was under consideration.
- (5) *Bezwada Drainage*. Revision of plans and estimates was taken up with reference to G.O. No. 365 P.H., dated 2nd March 1926 and in progress.
- (6) *Tirupati Drainage*. Work on this scheme remained suspended pending completion of Bezwada drainage scheme which was given a higher place in the priority list.
- (7) *Rajahmundry Water-supply*.
- (8) *Dindigul Barrage wall at the headworks*. After examining the Deputy Sanitary Engineer's proposals and inspecting the headworks it was recommended that the proposals should be dropped as impracticable. This was dropped by Government in G.O. No. 1970 P.H., dated 3rd November 1926.

There has been very considerable delay over items Nos. 1, 3 and 7 on account of insufficient drawing office staff. These are large and complicated schemes requiring a lot of technical calculations and drawing office work and it was possible to do very little work on them during the year as the establishment was fully occupied on other works.

9. The following schemes were under investigation:—

- (1) *Kumbakonam 2nd borehole*.—The investigation was completed and proposals for utilizing the water from the borehole for the town-supply were forwarded to the Chief Engineer in this office No. 543 G., dated 23rd November 1926.
- (2) *Cochin Water-supply*.—The investigation of the scheme was not taken up by the Council during the year. Government has since ordered it to be taken up by this department.
- (3) *Virudhunagar Water-supply*.—The investigation was resumed and samples of water from the proposed source were taken and sent to the King Institute, Guindy, for analysis.
- (4) *Devakottai Water-supply*.—An experimental well was sunk to a depth of 27 feet and a boring put down therein. At a depth of nine feet below the bottom of the well, good water-bearing stratum was met with, but samples of water taken from the well and the borehole were reported to be unsatisfactory by the King Institute, Guindy. Further work on the scheme remains suspended.
- (5) *Bodinayakanur Water-supply*.
- (6) *Tiruppur Drainage*.
- (7) *Rāmnād Drainage*.

The investigations of these three works were completed and the investigation reports received from the Deputy Sanitary Engineers. These were under examination.

- (8) *Tiruttani Water-supply*.
- (9) *Vizianagram Drainage*.
- (10) *Sembiyam Water-supply*.
- (11) *Sembiyam Drainage*.

Field work of the above investigations was completed. Reports were awaited from the Deputy Sanitary Engineers.

- (12) *General Hospital and Medical College, Madras*.—Intercepting sewer to prevent discharge of sewage into the Cooum. The field work was completed and plans and estimates were under preparation.
- (13) Hospet Water Supply.
- (14) Vizagapatam (Mehadri Gedda) Water-supply.
- (15) Vizagapatam Drainage.
- (16) Cuddalore Drainage of the Reserve Police Lines.

The above works were under investigation.

- (17) *Srirangam Drainage*.—The work remained suspended pending the acquisition of sanitary lanes by the Municipality.
- (18) Karaikkudi Water-supply.
- (19) Walajapet Water-supply.
- (20) Mangalore Water-supply.
- (21) Arkonam Water-supply.
- (22) Government Mental Hospital, Madras, Drainage Scheme.
- (23) Guntur Water-supply.
- (24) Masulipatam Water-supply Improvement to storage tanks.

The above investigations were not taken up for want of establishment.

- (25) *Rajahmundry Water-supply* to proposed Arts College buildings. The investigation of the scheme was sanctioned in G.O. No. 1278 W., dated 16th September 1926. But as no suitable subordinate could be obtained for the pay of Rs. 50 fixed by the Government, it was recommended by the Sanitary Engineer that the investigation should be carried out by the Supervisor, Quarry Section, Dowlaisheram. This was approved in Chief Engineer's Memorandum No. 3418 Wks., 35, dated 9th November 1926.

10. *Municipal Water-works—Analyses of water*.—The half-yearly analyses of samples of water from the municipal water-supplies made by the King Institute continued to show that in most cases the water supplied was considerably below the standard desirable for public water-supplies. The works were inspected and measures to improve the quality of the supply were suggested to the municipalities. It was observed that the poor quality of the supply was in some cases due to raw water having been added to the filtered water to cope with the increased demand for water. Much improvement in this direction cannot be effected until the municipalities employ qualified Engineers in charge of their water works and carry out promptly the recommendations made by this department to improve the quality of supply.

11. *Inspection of water-works*.—Periodical inspections of the water works were made by the Sanitary Engineer and the Deputy Sanitary Engineers as far as was possible with the insufficient staff available.

12. *Water-works by-laws*.—During the year the Municipal Council of Masulipatam adopted the Water Works By-laws recommended by the Government.

13. *Experimental filters at Guindy*.—(a) The experiments with "submerged" and "non-submerged" sand filters were continued during the year. Some very interesting and promising results were obtained. A coarser quality of sand is now being tried to effect better aeration and to prevent "ponding" which occurred when fine sand was used and the experiment is still in progress.

(b) Tests on evaporation of water in both the sand and percolating filters were tried and it was found that there was not much difference in evaporation in the two filters.

(c) The experience gained at the Experimental Filters was utilized for improving the results obtained from the Paterson Mechanical Filters at Chidambaram. Satisfactory results are now obtained from these filters.

(d) Experiments were carried out with a highly turbid and alkaline water that was being treated through slow sand filters with unsatisfactory results at

the Alipuram Jail water-supply and proposals were drawn up for improving the conditions by construction of a continuous setting tank with alum treatment before filtration.

(e) Proposals were submitted during the year for construction of experimental filters at Kilpauk to carry out experiments with a water which is similar to that available at most of the mufassal water-supplies and to find out whether results obtained at Guindy are obtainable with such a water. Experiments will be carried on there with a rapid filter and percolating and slow sand filters. The proposals have since been approved by Government.

14. *Sewage Purification Experiments*.—The experiments sanctioned in G.O. No. 728 W., dated 1st June 1925, were started in April 1926 and carried out throughout the year. A small laboratory was fitted up near the sewage works in order to analyse the samples on the spot. Varying periods of detention were tried in the two septic tanks, open and closed, and sufficient data have been collected. It is proposed to extend the experiments to other sewage disposal works in the city of Madras as directed in the above Government Order.

15. *Testing of pumps, elevators, etc.*—The Boulton Elevator that was fixed to the well at the Deputy Collector's office at Guindy continued to work satisfactorily, except that the caruelle Band showed signs of wearing out.

A Waste Not Tap called "Krishna Type Tap" received from the Chairman, Municipal Council, Tirupati, was tested and reported on during the year.

16. *Training of Municipal subordinates in the maintenance and management of water purification plants*.—None of the Municipal Councils took advantage of the training in the maintenance and management of the filter plants recommended in G.Os. Nos. 604 M, dated 11th April 1918 and 303, P.H., dated 27th July 1922.

17. *Inspection of water-works plants*.—The various Municipal pumping plants were inspected by the Chief Inspector of Boilers and the Inspectors of Boilers and several proposals for improvements to and replacement of existing plant were made. In the absence, however, of special staff, the matter could not be pursued further and the municipalities made to carry out the recommendations without delay.

The following were some of the more important recommendations made and work carried out by this department, in connexion with Municipal Pumping Stations:—

Chingleput.—Proposals were made for a feed heater around the chimney and for substitution of gas plant for the steam plant.

Cochin.—Arrangements were made for fitting a new set of tubes to the boiler at the borehole.

Conjeevaram.—No. 1 engine and pump were thoroughly overhauled and altered.

Dindigul.—The engines and pumps were erected at Odukkam.

Ellore.—The three boilers at the water works were re-turbed under the supervision of the Boiler Inspection Department. The Council was advised to instal an unchokable centrifugal pump in place of the scour pump under repair.

Erode.—Estimate was prepared and sent for the provision of a workshop.

Kumbakonam.—Arrangements were made for the supply of a 22" pulley for the Blackstone oil engine installed in 1924 as it was not working satisfactorily with an 18 inches pulley.

Kurnool.—Estimate was prepared for a new suction gas plant and engine. Drawings and estimate for the erection of the plant were also sent to the Chairman.

Madura.—The main and air pumps of No. 1 engine at Kochadai were thoroughly overhauled.

Nellore.—Venturi meter was put into working order.

Tanjore.—No. 1 engine and pump were sent to Messrs. Massey & Co. for being thoroughly overhauled and fitted with balance cylinders.

Trichinopoly.—No. 3 engine and pump were thoroughly overhauled and fitted with balance cylinders.

Vellore.—The pump obtained for the Pālār scheme was fitted and tested. The Venturi meter was examined and necessary alterations suggested.

Vizianagram.—A steel chimney to replace the collapsed chimney at the water-works was manufactured and erected partially under the supervision of the Chief Inspector of Boilers.

18. *Minor Sanitary Works.*—In the statement appended hereto as Annexure A are shown the number and aggregate estimated cost of Minor Sanitary Works under different heads sanctioned or recommended for sanction by the Sanitary Engineer during the year.

Another statement showing Sanitary Type Design works constructed by Municipalities and District and Local Boards during 1926 is appended as Annexure B.

19. The following indents were forwarded to the Director-General of Stores, London:—

(1) Testing apparatus for the Boiler Department.

(2) Mechanical water level recorder for sewage purification experiments, Guindy.

20. *Engine Drivers Examination.*—Two examinations were held during the year for the grant of certificates of "Competency" and "Service" as engine drivers in March and October 1926, by a Board of Examiners consisting of the Sanitary Engineer, the Superintendent, Public Works Workshops and Stores and the Chief Inspector of Boilers.

The following were the results:—

Date of examination.	Competency or service.	Number of candidates appeared.	Total number of successful candidates.	Number passed in first class.
8th and 9th March 1926 ...	Competency ...	46	18	1
Do. ...	Service ...	5	3	...
3rd and 4th October 1926 ...	Competency ...	48	16	...
Do. ...	Service ...	6	6	...

21. *Water-works Fitters Examination.*—One examination was held during the year on 17th March 1926. Four candidates appeared for the Head Water-works Fitters Examination and two for the Pipe Line Fitters Examination. Three out of the former and both the latter were successful.

22. *Boring Class.*—This class was not held during the year for want of a sufficient number of candidates.

23. *Minor Sanitary Engineering Class.*—Out of 63 candidates that appeared for the examination, 14 passed in the First class and 36 in second-class, the class being as usual held in this office for five months from July to November.

24. The usual two months' course for Health Officers and Sanitary Inspectors in advanced Minor Sanitary Engineering was conducted in the Medical College by Mr. Raman, the Special Assistant Sanitary Engineer, and Mr. Subba Row, one of the Technical Superintendents of this office.

25. *Sanitary Engineer's Staff.*—The undersigned continued, as Sanitary Engineer during the year and held also charge of the Deputy Sanitary Engineer Southern and Western Circles up to 27th April 1926. Mr. J. R. Thuraisingham Deputy Sanitary Engineer, Southern and Western Circles returned to duty from leave on average pay for eight months on 25th April 1926 and joined duty after availing of joining time on 6th May 1926. He was again on leave on average pay for one month from 16th August 1926.

Mr. G. V. Rao continued to be the Deputy Sanitary Engineer, Northern Circle, and Mr. A. V. Raman continued to be Special Assistant Sanitary Engineer

and during the period from 31st August to 15th September 1926 he officiated as Deputy Sanitary Engineer, Southern and Western Circles, in addition to his own duties.

26. The Boiler Inspection staff continued to work under the administrative control of this office. Mr. G. L. W. O'Brian, Chief Inspector of Boilers, was on leave on average pay out of India for eight months from 28th May 1926 and Mr. J. L. Thompson, Inspector of Boilers, Madras Circle, officiated as Chief Inspector of Boilers during this period. Mr. O. W. Baskett returned from leave on 24th April 1926 and was posted to Coimbatore Circle. Messrs. S. A. Davis and H. Knight continued to be in charge of Bellary and Trichinopoly Circles, respectively. Mr. W. A. Baskett, Inspector of Boilers, Waltair Circle, was on leave on average pay from 9th July to 10th October 1926. Mr. S. A. Davis, Inspector of Boilers, Bellary Circle, held additional charge of this circle during this period. Mr. R. L. Lazarus was officiating as Inspector of Boilers, Madras Circle, from 1st July 1926 during the period Mr. J. L. Thompson was acting as Chief Inspector of Boilers. With reference to G.O. No. 1074 W., dated 20th August 1926, the Inspector of Boilers, Coimbatore Circle, inspected the boilers in Coorg during the year.

MADRAS,
23rd May 1927.

J. S. WESTERDALE,
Sanitary Engineer to Government.

ANNEXURE A.

Statement showing the number and aggregate estimated cost of the minor sanitary works sanctioned or recommended for sanction by the Sanitary Engineer to Government of Madras during the year 1926.

Particulars.	Medical institutions.		Slaughter-houses.		Markets.		Wells.		Water-supply.		Drainage.		Latrines.		Miscellaneous.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
Estimates of Rs. 2,500 and under ..	...	...	...	...	1	2,255	...	...	20	14,305	1	1,355	...	...	...	...
Estimates of above Rs. 2,500 up to Rs. 50,000 ..	13	1,43,148	...	...	5	54,727	1	6,250	5	80,254	...	...	...	...	1	20,000
Estimates of above Rs. 50,000 ..	1	64,020	...	...	...	...	...	...	1	51,900	...	...	...	...	...	...
Total ...	14	2,07,168	...	...	6	56,982	1	6,250	26	1,46,468	1	1,355	...	...	1	20,000

Grand total— Works estimated to cost Rs. 4,38,224.

ANNEXURE B.

Statement of works constructed on sanitary type-designs by Municipalities and District Boards during the year 1926.

Name of Municipalities or Local Fund or District Boards.	Locality.	Name or description of work.	Number of type-design on which work is based.	Number and date of Sanitary Engineer's professional sanction.	Date of completion of work.	Remarks as to success or failure as a type-design construction.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Tanjore District Board.	Kuttalam	Dispensary	No. 184	No. 1484-M., 8 Sep. 1925	...	Successful.
Rāmānāth District Board.	Rajapalayam	Out-patient dispensary.	C.A. No. 174 of 1918.	Sanitary Engineer's letter No. 158-186, 1926.	31 Mar. 1926.	Do.
		Casualty ward	T.D. No. 171.			
		Store, kitchen and latrine.	C.A. No. 203 of 1912, No. 143-A.			
Do.	Kamudi	Casualty ward	T.D. No. 171.	Sanitary Engineer's letter No. 1609, dated 11 Sep. 1926.	6 May 1925.	Do.
Do.	Elayangudi	Do.	Do.	Do.	19 Feb. 1925.	Do.
Chingleput District Board.	Tirukkalkundram.	Lying-in ward	...	Sanitary Engineer's letter No. 11 of 1926.	November 1926.	Do.
Kernool Municipality.	Kernool	Lethal Chamber	No. 124, G.O. No. 155-P.11, 30 Oct. 1924.	31 Dec. 1926.	31 Aug. 1926.	The Lethal Chamber was not put up into use.
	Do.	Latrine for males	G.O. No. 178, 30 Jan. 1926.	Do.	Do.	
	Do.	Latrine for females	Do.	Do.	Do.	
West Godavari District Board.	Tani	Gosha Hospital	Nos. 130, 134, 183, 169, C.A. Nos. 144, 170 and 148-A.	Sanitary Engineer's letter No. 316-M., dated 24 Mar. 1912.	September 1926.	Successful.

OFFICE OF THE CHIEF ENGINEER, P.W.D.
(GENERAL, BUILDINGS AND ROADS),
CHENNAI, MADRAS.

Endorsement No. 2012, Wks./27-1, dated 16th June 1927.

Forwarded to Government.

For Chief Engineer, Public Works Department.

To the Secretary to Government,
Public Works and Labour Department.

Government of Madras

LOCAL SELF-GOVERNMENT (PUBLIC HEALTH) DEPARTMENT

G.O. No. 1148-P.H., 13th June 1927

Public Health Report—1926—Reviewed.

READ—the following paper:—

Letter from Lieut.-Col. A. J. H. RUSSELL, C.B.E., M.D., D.P.H., I.M.S.,
Director of Public Health, Madras, to the Secretary to Government, Local
Self-Government (Public Health) Department, dated Ootacamund, the 14th
May 1927, No. R. 1954/P.H.

Order—No. 1148-P.H., dated 13th June 1927.

Recorded.

2. The most noticeable feature during the year was the large decrease in the mortality from cholera and smallpox. The mortality from both these diseases fell by 50 per cent and was the lowest for the triennium 1924—26. The decrease of 20,000 in the recorded number of deaths from cholera was, however, to some extent counterbalanced by an increase of approximately 13,000 in mortality from "dysentery and diarrhoea." The total number of deaths from all causes during the year under review exceeded that for the previous year by 47,971 and the year must, on the whole, be regarded as an unhealthy one. Details in regard to the more important diseases are given below.

3. Cholera.—There was a marked decrease in the number of deaths from cholera, which amounted to 24,407 compared with 44,815 in 1925, these figures representing death-rates of 0.6 and 1.1 per mille, respectively, as compared with 0.7, the quinquennial average. The disease was, as in 1925, almost entirely confined to the southern and south-western districts of the Presidency and was severe in the districts of Tanjore, Tinnevely, South Arcot, Trichinopoly, Coimbatore and Salem where more than 80 per cent of the total number of deaths occurred. The maximum and minimum incidence were recorded during the first and second quarters of the year, respectively. The only district which enjoyed complete immunity from the disease was Anantapur, while the Tanjore District suffered more severely than any other district in the Presidency, more than one-third of the total number of deaths occurring within this district, and it must now be accepted as an established fact that the deltaic taluks in the north of the district constitute an endemic focus for the disease. The Director reports that it was in this area that most of the experimental field-work for the purpose of testing Besrodka's bili-vaccine was carried out and that in order to test further the value of anti-cholera vaccines it is proposed to treat with this vaccine the entire population of certain villages which are known to have been infected every year for the past ten years. The Government await with interest the result of the proposed experiments, and are glad to learn that inoculation with anti-cholera vaccine conferred a very considerable degree of protection, the case rate and the mortality rate being 3.3 and 1.1 per cent as compared with 18.6 and 6.2 per cent in unprotected groups. It is reported that in Gobichettipalayam (Coimbatore District) out of 1,070 persons who were inoculated with anti-cholera vaccine three persons alone contracted the disease and all recovered. The revised rules relating

to cholera preventive measures in municipalities are under the consideration of the Government. The proposal to supply local bodies with anti-cholera vaccine free of cost has been accepted by the Government.

The Government are interested to learn that the epidemiological studies on cholera mentioned in the report of the previous year were continued throughout 1926 with the assistance of a grant from the Indian Research Fund Association and that a method, which has been proved without exception successful, has been discovered by which it is possible to forecast cholera epidemics two to three months before their actual occurrence. The possession of this knowledge will be invaluable to the Health Department, and the Government congratulate the Director upon the successful termination of his researches.

4. *Smallpox*.—The mortality fell from 20,478 to 10,957. The death-rate was 0.3 per mille of the population against 0.5 in 1925 and 0.4, the quinquennial average. More than half the total number of deaths occurred in the South Arcot, Madura, Tanjore, West Gōdāvari, Trichinopoly, Bellary and North Arcot districts. Deaths from smallpox were reported in only 46 municipalities out of 81, the aggregate mortality being 1,100 against 2,442 in the previous year. Fifty-seven per cent of these deaths occurred in the Madura Municipality. This is attributed to the persistently bad vaccination work carried out by an inefficient and undisciplined staff of vaccinators. The attention of the Chairman of the Municipal Council is in this connexion invited to G.O. No. 483-P.H., dated 19th March 1927, in which the Government have passed orders on the improvement of the staff. Of the total number of deaths from smallpox in the Presidency, 78 per cent occurred among children under ten years, and nearly 45 per cent among children under one year. These figures indicate that, although the mortality from smallpox has steadily decreased during the last five years (the figure for the year under report being only about 45 per cent of that for 1922), the child population is still inadequately protected. The attention of the Presidents of District Boards is invited to paragraph 4 of G.O. No. 1415-P.H., dated 13th August 1926, in which all district boards have been requested to consider carefully the possibility of introducing compulsory vaccination into further areas, and to see that all reasonable steps are taken to make compulsory vaccination effective in areas in which it has been introduced. The Government note with regret that the vaccination staff in the Bellary District was most inefficient, and are concerned to be informed that the President, Taluk Board, Hospet, was entirely indifferent to vaccination work; they trust that the local fund authorities in this district will realize the importance of this branch of public health administration and take effective steps to improve the work of the staff employed.

5. *Plague*.—The number of deaths from Plague rose slightly from 2,014 in 1925 to 2,143 in 1926. This represents a death-rate of 0.1 per mille as compared with 0.1 in 1925 and 0.2, the quinquennial average. This disease was prevalent in fourteen districts and 12 municipalities, and over 75 per cent of the total number of deaths occurred in the Bellary, Coimbatore and Salem districts, while nearly 70 per cent of the number of plague deaths registered in municipal areas occurred in the Hospet Municipality. The maximum and minimum incidence were recorded during the first and second quarters respectively in the year.

It is observed that, although the epidemic which broke out in Rāmnād towards the close of 1925 and continued till March of 1926 extended to other parts of the district, the whole district became free from the disease from the month of May, as a result of a campaign of inoculation and rat-catching operations. The preventive measures taken in this district and in parts of Salem and Coimbatore districts afford ample proof of the great benefit arising from inoculation. It is satisfactory to note that in the village of Mangalam in Hadagalli Taluk (Bellary District) as many as 2,012 persons out of a total population of 2,100 were inoculated, with the result that the infection at once disappeared. The Government await with interest the result of the investigation of the presence of infection in the rat population of the villages in the Cumbum Valley (Madura District), a well-known endemic centre for plague.

6. *Malaria* is usually recognized as being one of the most serious diseases with which the population of a tropical country has to contend. It is not only the cause of more sickness and deaths than any other disease, but it leaves the population predisposed to attacks from other diseases, and it seriously affects the general prosperity and development of the country. During the year under review the disease was prevalent in practically every district in the Presidency. Owing to defective registration, the incidence of mortality from the disease is difficult to ascertain with reasonable accuracy. The Government have recently accepted the proposal of the Director of Public Health to appoint a special officer, with the requisite establishment, to investigate the conditions regarding malaria in the several parts of the Presidency, and to advise the local bodies as to the measures to be taken to eradicate the disease. Investigations by this officer will be confined to selected localities, and a beginning will be made in those municipalities in which the malaria problem is known to be serious. The Government have also under consideration the question of arranging for the free distribution of quinine in specially malarial tracts at the cost of Provincial funds, and they have asked the Director of Public Health to submit, in consultation with the Deputy Director of Agriculture (Cinchona), detailed proposals on the subject for consideration in connexion with the budget for 1928-29.

7. *Relapsing fever* continued to be confined generally to the poorer classes and was prevalent in only six districts, and in no district assumed the proportions of an epidemic. The disease was milder in type than in previous years, and for this reason did not attract the same attention as previously. Outbreaks which occurred in certain villages of the Karūr Taluk (Trichinopoly District) and in the Palni Taluk of the Madura District were effectively controlled by the prompt action of the health staff. In the Coimbatore District cases of relapsing fever continued to occur for some months in the taluks of Udamalpet and Dharapuram, the chief centre of infection being the municipality of Udamalpet. The Government regret to note that in spite of repeated advice and instructions from the District Health staff the municipal authorities of Udamalpet failed to carry out preventive measures with any vigour, the result being a number of deaths in the infected area and the spread of infection to neighbouring districts. This disease, which necessitated a special campaign in the Nilgiri District in previous years, made its appearance in only five villages in the district during 1926, and the Government are glad to learn that the villagers of this district are now well acquainted with the disease, its treatment and its prevention. The infection in the Markapur Taluk in Kurnool District continued during the year, causing 295 attacks and 56 deaths. The manner in which infection continues to break out in different parts of the Presidency, indicates the necessity for continuous watchfulness both on the part of local bodies and of the Public Health Department.

8. *Respiratory diseases*.—The number of registered deaths from these diseases was 85,602 against 45,180 in 1921 and 74,591 in 1925 or 2.1 per mille of the population against 1.1 and 1.8 per mille in 1921 and 1925, respectively. The Director considers that it is not easy to account satisfactorily for the steady increase in the numbers of deaths recorded under this head. The Director is requested to investigate the question as far as is possible.

9. *Hookworm*.—The report of the Director of the Ankylostomiasis Campaign on this subject has been received and dealt with by the Government separately. The campaign was conducted mainly in the Southern and West Coast districts of the Presidency, and on several planting estates in the Malabar-Wynaad. At the Penitentiary in Madras investigations were made in order to determine the length of life of the adult hookworm in the human body, and to ascertain the rate of dying-off of these parasites.

The number of persons examined during the year was 31,493, of whom 26,464 or 84 per cent were found to harbour hookworms. The prevalence of the disease was found to be greatest in the Malabar District, where the intensity of infestation is reported to be two or three times that of any other district. During the course of the intensity surveys carried out during the year, observations were made to

determine the factors, natural or artificial, which acted either favourably or adversely upon the spread of hookworm infection. It was established that all the factors favourable to the development of the disease are almost constantly present in the West Coast Divisions of the Presidency, and that the one inhibiting factor in the Central and East Coast districts is the paucity of rain combined with the intense heat of the sun's rays during the greater part of the year.

During the year attempts were made with some success to teach the largest possible number of people the chief factors involved in the pollution of the soil. Special efforts were made by means of lectures and lantern slide demonstrations, motion picture exhibitions, and by striking demonstrations of hookworms, eggs and larvae, to familiarize the students of every school visited by the staff with the essential facts about the disease and the methods by which it can be controlled.

The failure of the efforts made in the North Arcot District to eradicate the disease has demonstrated the fact that treatment and educational propaganda alone are insufficient, and that the solution of the problem depends mainly upon the prevention of soil pollution, which can only be effected if the rural population can be induced to cultivate the habitual use of sanitary latrines.

A determined beginning in this direction was made in the Madura District. The District Board agreed to try the experiment in one or two villages, and allotted a sum of Rs. 20,000 for the construction of latrines. The scheme was inaugurated at Usilampatti, where a number of latrines of approved design were constructed, and every possible step was taken to bring the use of the latrines into favour with the people. The results achieved in this area are so far satisfactory, and a demand for more latrines has been made to the District Board, which is also making arrangements for the construction of similar latrines in the other villages in the district. The Government await the result of these experiments with interest.

In order to organize and assist in an anti-hookworm campaign in the rubber and tea estates in the Presidency, where the disease is especially prevalent owing to climatic conditions, the Government have sanctioned the appointment of an additional first-class Health Officer, who will work under the Director of the Campaign, and will tour in these areas and advise the planting community on the preventive measures required.

10. *Registration of Vital Statistics.*—It is satisfactory that in the registration of births and deaths much greater accuracy has, during recent years, been attained, and steady improvement effected through the efforts of the district health staffs in detecting omissions and setting right irregularities in the village registers. The fact that so many as 99,446 unregistered births were detected by the health staffs during the year under review compared with 72,432 in the previous year indicates clearly however that there is still great scope for improvement. The Government trust that the authorities responsible for the registration of vital statistics will take steps to impress upon their registering officers the need for the correct maintenance of their registers.

The special report referred to by the Director of Public Health on the working of the scheme recommended by the Government in order to ensure greater accuracy in the preparation of district returns is separately under consideration together with the report received from the Board of Revenue on the same subject.

In accordance with the Director's recommendation contained in his Public Health Report for 1925 and in the vaccination report for the triennium ending 1925-26 that the provisions of the Madras Registration of Births and Deaths Act, III of 1899, should be extended to all the rural areas in the Presidency, the Collectors of all districts have been asked to report the areas within their districts to which the Act may be extended and proposals are being dealt with by the Government as they are received.

11. *Birth-rate.*—There was a rise in the recorded birth-rate of the Presidency from 33.7 to 36.1 per mille compared with an average birth rate of 28.4 per mille for the quinquennium 1919-23. Increases were reported from all districts except Rāmnād, Tanjore, Madura, Gōdāvari East, Tinnevely, the Agencies, Guntūr, Gōdāvari West, Kistna and Madras. The highest rates were registered

in the Kurnool, Bellary and Malabar districts, while the birth-rate exceeded the death-rate in all districts except Madras City. The registered birth-rate in rural towns and municipal towns increased slightly from 35.0 and 37.1 to 35.4 and 38.0, respectively. The highest birth-rate in municipalities (63.1) was recorded in Salem Town, while the lowest rate (18.7) was, as in last year, reported from Tiruvalur, the rate being only 1.5 above the figure of that year. The only other towns in which rates below 25 per mille were recorded were Srirangam, Tadpatri and Erode. The fact that very low rates were also recorded in these four towns (Tiruvalur, Srirangam, Tadpatri and Erode) in the previous year indicates that registration in these towns continued to be defective. The municipal councils concerned should accordingly take immediate steps to improve this important branch of the municipal administration.

12. *Death-rate.*—The recorded death-rate for the Presidency rose from 24.4 to 25.6 per mille. An increase was reported from seventeen districts, the largest variation from the figures of the previous year being recorded in the Kurnool, Malabar and Trichinopoly districts. The increase is attributed partly to the improvement effected in registration and partly to the fact that the rates are only crude ones calculated on the 1921 census population. The Director is of opinion that, if calculated with reference to the natural increase in population, the death-rate for 1926 would work out to 23.2 per mille. The decrease in the death-rate was most marked in the Rāmnād, Madura and Madras districts. The recorded death-rate for rural areas fell from 24.8 to 24.6 while that for the municipal areas rose from 32.3 to 32.6. The infantile death-rate during the year under review was 189.5 per mille of registered births compared with 180.9 in the previous year. The Director has given no specific reason for this increase in infant deaths over last year's figures, but it is probably due to the general improvement in the registration of births and deaths. The fact that the recorded infantile death-rate has risen from 160.9 per mille in 1921 to 189.5 per mille in 1926 shows the urgent necessity for the establishment, in increasing numbers, of child-welfare centres and for the provision of facilities for the care of the mother during "the ante-natal period," and for the teaching of mothercraft so that the infant may have a fairer chance of survival during the first months of life. The Government observe with regret that there was a decrease in the number of child-welfare centres from 58 in 1925 to 53 in 1926.

The necessity for the creation of these centres in all towns and large villages is demonstrated by the figures, which have been given above, and their establishment affords unrivalled scope for philanthropic efforts and voluntary service on behalf of the masses, and an admirable outlet for the social activities of educated Indian women. The Government await the proposals, which the Director has under consideration for the establishment of a training school for Health visitors.

13. *Maternity and Child Welfare.*—The total number of deaths registered from causes associated with child-birth in the Presidency was 7,142 or 4.8 per 1,000 births compared with 3,788 or 2.7 per 1,000 births in 1925. It is reported that the increase in the figure is due to more accurate registration, and that the extent of mortality from these causes is still very much under-estimated. With the aid of the statistics submitted for those municipal towns in which health officers are employed, the Director of Public Health has shown that the actual total mortality of women in the Presidency during confinement cannot be less than 24,000. It is observed that in only 55 cases per thousand did women receive skilled attention during labour. These figures show the deplorable inadequacy of the existing facilities for maternity relief, and the consequent urgent need for the development of this branch of preventive medicine. The Government trust that, with these figures before them, local authorities will seriously consider the importance to the people of the Presidency of safeguarding the mother during the period of confinement, and take steps to employ qualified midwives in much larger numbers than hitherto, and also take proper advantage of the scheme sanctioned by the Government in the previous year for the training of "dhais," so that the number of women, who are without skilled attention during labour, may be reduced to a minimum.

14. *Propaganda.*—The great value of propaganda work as a preventive measure has been proved in an increasing degree, since the introduction of the District Health Scheme in 1923. During the year under review, as many as 70,300 lectures were delivered at 44,200 centres to audiences numbering approximately 34,00,000. The Government observe that only 6,400 of these lectures were illustrated by means of lantern slides and they agree with the Director, that, until every taluk board realizes the necessity for providing its Health staff with magic lanterns, lectures on health subjects will not attract so large an audience as they otherwise would. Those local bodies, which have not yet provided Health Inspectors with this equipment, are requested to do so as early as possible.

The Government note with regret that in a considerable proportion of municipal towns no propaganda work has so far been attempted. As the Director points out, health propaganda work can without difficulty be organized in the compact area of a municipality and it is in those areas that health conditions so urgently demand improvement. The Government can find no justification for the neglect on the part of the municipal councils concerned of this important branch of public health work, and they trust that necessary steps will be taken to remedy the defect at a very early date.

The largest amount of propaganda work was, as usual, carried out during the National Health and Baby Week. Advantage was taken of the occasion to carry on an intensive campaign for a week with the aid of lectures, leaflets, posters, lantern demonstrations, health dramas and health exhibitions. The Government are glad to observe that the Madras Health Council continued to play an active part in connexion with health propaganda and afforded considerable assistance to the Public Health Department, by distributing posters, leaflets and lantern slides on a large scale. The Government also congratulate the Trichinopoly District Health Association, under the energetic presidency of Sir T. Desika Acharya, on its determined activities and hope that other districts will soon follow the lead given by this Association.

The Government have accepted the Director's proposal that health propaganda work should in future be carried out in a special propaganda section in his office and that the existing system under which this work is performed through the Agency of the Madras Health Council should be discontinued.

The Government take this opportunity of tendering its thanks to Sir Alexander McDougall and the members of the Health Council for their public-spirited work and their helpful co-operation with the Government and the Public Health Department in this important educational work. The Government have approved the Director's proposal that non-official public opinion on propaganda work should be associated with the propaganda section of his office by means of an informal advisory council.

15. *Sanitary works.*—During the year the Chingleput water-supply scheme and the construction of a service reservoir for the Negapatam water works were completed. The execution of the Bellary and Coimbatore water-supply schemes, the Madura and Vellore drainage schemes, and several schemes for the improvement of the existing water-supply systems were in progress. A revised estimate for the Tuticorin water-supply schemes was sanctioned during the year and preparations were made by the Public Works Department to begin the work. Detailed plans and estimates were prepared for improvement of the Ellore water works, for the extension of the Bellary water-supply system to Cowl Bazaar area, and for the Palacole, Guntakal, Yemmiganūr and Chōlavaram water-supply schemes. Plans and estimates were under preparation for the Madura water-works improvement scheme (third stage), the Proddatūr, Tiruppūr and Rajahmundry water-supply schemes and the Erode, Bezwada and Tirupati drainage schemes. Sixteen schemes were under investigation.

On the recommendations of the Board of Public Health the Director of Public Health has been requested to prepare, in consultation with Sanitary Engineer, a list of all water-supply and drainage schemes, which remain to be executed, arranged in the order of relative urgency and importance from the

Public Health point of view, and on receipt of this list the Government will consider the question of financing the various schemes in the order of priority.

During the year, the Masulipatam Municipality adopted the water-works by-laws. The Councils of those municipalities, in which there is a protected water-supply, and which have not yet adopted the model water-works by-laws are requested to do so without further delay. A report in the matter should be submitted to the Government through the Sanitary Engineer not later than 1st September 1927.

The Government have carefully considered the question of re-organizing the Sanitary Engineering Department, and have decided that, if the Sanitary Engineer is relieved of the direct charge of the Central Circle and the work connected with it, the present requirements of the Department will be met. They have accordingly sanctioned the constitution of a separate office for the Central Circle with effect from 1st April 1927.

The Government commend for the consideration of local bodies the suggestion of the Director of Public Health that presidents of local boards and chairmen of municipal councils should delegate to their health officers their powers under the Madras Local Boards Act, 1920, and the Madras District Municipalities Act, 1920, respectively, relating to sanitation and public health.

16. *Administration.*—During the year under review the Director submitted certain proposals for the framing of a consolidated Public Health Act for the Presidency. After a careful consideration of the proposals, the Government have decided that it is unnecessary at present to attempt the framing of such an Act. They are of opinion that the most suitable course is to make such amendments to the existing Acts, as will ensure the preservation of the public health in the areas under the control of local bodies. The Director has accordingly been requested to suggest the amendments to the Acts which he considers to be necessary.

The Government desire to record with gratitude that the progress of research work during the year owed much to the generous financial assistance received from the Indian Research Fund Association.

The Government have read with great interest the detailed and enlightening report of Lieut.-Col. Russell and they once again have reason to congratulate him and the Assistant Directors on the successful administration of the department during another year. They also note with pleasure the Director's testimony to the useful work performed by the health staff generally.

[By order of the Government, Ministry of Local Self-Government,
(Public Health) Department]

C. B. COTTERELL,
Secretary to Government.

To the Director of Public Health.
„ the Surgeon-General.
„ the Sanitary Engineer.
„ the Inspector-General of Prisons.
„ the Inspector-General of Police.
„ the Examiner of Local Fund Accounts.
„ the Director of Public Instruction.
„ all Collectors.
„ all Presidents of District Boards.
„ all Chairmen of Municipal Councils.
„ the President, Corporation of Madras.
„ the Inspector of Municipal Councils and Local Boards.
„ the Assistant Quartermaster-General.
„ the Secretary, L.S.G. Department, Bihar and Orissa (with C.L.).
„ the Consul-General for Siam at Calcutta (with C.L.).
„ the Revenue Department.
„ the Public Works Department.
„ the Librarian, Legislative Council Library.
Editors' Table.

