

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

Contributors

Madras (India). Health Department.

Publication/Creation

Madras : [Health Dept.], [1938]

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CORPORATION OF MADRAS

ANNUAL REPORT

OF

THE HEALTH DEPARTMENT

FOR

1938

PRINTED BY RATHNAM PRESS
MADRAS :: 1939



22501407082



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INTRODUCTION

Commissioner,

Sir,

I submit herewith my report on the health of Madras during 1938.

The year 1938 witnessed the lowest recorded rainfall in recent years. It has also witnessed an explosive out-break of cerebro-spinal fever for the first time giving a new experience to the people accustomed to live in the placid atmosphere of Egmore. Small-pox continued to prevail throughout the year. In spite of these disturbing factors, much work was done to promote the health and welfare of the citizens as the following pages will show.

The estimated population for 1938 was 7,50,630 as against 6,47,230 in 1931 (census figure). The number of live-births exceeded the number of deaths by 4,703. This excess of births over deaths was equivalent to 6.3 per 1000 of the population. This 4,703 represented the "Natural increase" recorded ten times in succession.

The total number of births, 30,985 shows an increase of 27 births over the previous year and an increase of 1,413 births over the average of the quinquennium, 1933-1937. The birth-rate was 41.3 and it was highest amongst Hindus.

The total number of deaths 26,282 shows an increase of 608 as compared to 1937. 4,349 non-residents died in the city. Excluding these, the death-rate was 29.2 as against 29.4 of the preceding year. The infantile mortality shows only a small increase of 1.3 per thousand births.

As stated already, the most out-standing feature of the epidemiology of the year was the prevalence of cholera, small-pox and cerebro-spinal fever during the year.

36 deaths from cholera occurred during the year accounting for 0.35% of the total deaths from cholera in the province. With its chlorinated and protected water supply, the city should be free from cholera. The disease can only be brought and spread from outside. Thanks to the great vigilance of the staff, epidemics of cholera are nipped in the bud. Statement on page 11 shows that during the last 10 years there has been a very satisfactory decline in the incidence and mortality from cholera as compared with the previous ten years. The average number of deaths from cholera during 1929-1938 is 99.8 as against 245.9 during 1919-1928. This gives a reduction of nearly 60% despite the increase in the population.

But the position regarding small-pox has not been so encouraging. The average yearly mortality from small-pox for 1927-1938 (both years included) is 247 as against 352 for the corresponding previous 12 years. This gives an average reduction of 105 deaths per year or 33%. During the year under report 561 deaths occurred from small-pox in the city. Of these 78 deaths occurred either amongst the cases brought for treatment from outside city limits or amongst those who came into the city incubating the disease (imported cases). Excluding these there were 483 deaths from small-pox which accounts for nearly 20.89 of deaths in the province.

The trouble in the control of small-pox is increased by the long incubation period of the disease extending upto 12 and even 14 days. A person contracting this disease can remain apparently healthy and travel long distances, develop the disease and introduce it into the city without anybody becoming aware of it. It is infectious from the very commencement of the symptoms to the disappearance of the last scab from the body, which may take place only after such a long period of 6 to 8 weeks. It is these two factors peculiar to this disease which enable it to take a heavy toll in congested cities.

The following figures show the mortality from small-pox in the city and province during the last ten years :

Year.	Madras Province.	Madras city.
1929	9,708	506
1930	6,942	188
1931	4,005	24
1932	5,363	176
1933	10,745	837
1934	18,088	131
1935	12,330	59
1936	4,581	3
1937	2,446	196
1938	2,273	561

It will be seen that small-pox was prevailing in the city in 1937. In January, 1938, it assumed an epidemic form. Vigorous measures were adopted immediately. 92 students of the Madras Medical College, deputed for training in vaccination and sanitation, assisted the permanent staff in pushing on vaccination and re-vaccination. They performed over 35,000 vaccinations. But for this timely co-operation the Corporation would have been forced to spend a lot of money on special staff. Some of them had been trained vaccinators and the others were given necessary training and put on work under the divisional sanitary inspectors and medical officers in charge of vaccination and registration. 1,51,504 vaccinations were performed during the year which is the second largest in the annals of the Corporation.

97% of the cases were hospitalised. Patients' belongings and houses were thoroughly disinfected; contacts were traced and vaccinated. They were kept under strict watch for a period of 21 days. It is by strict adherence to the above practice that the mortality was kept as low as possible. A comparison of the mortality from small-pox in Bombay and Calcutta will show that Madras has been more fortunate.

	Population (Census for 1931).	Deaths from small-pox.	Rate per 1000 of the population.
Calcutta.	11,40,882	2,193	1.92
Bombay.	11,61,383	1,882	1.6
Madras.	6,47,230	561	0.87

Vaccination and re-vaccination once in 4 years give sufficient protection to any one to ward off a severe attack. Early notification of cases and prompt segregation are equally important. But the trouble in Madras is that we have a population who bitterly oppose re-vaccination even during the height of an epidemic. They fear that the introduction of the vaccine may cause some harm to their health.

Concealment of cases had been very common and early cases had to be detected by the staff. Added to all these is the fact that from October, 1937, small-pox had been raging in the district of Chingleput and it has not yet fully subsided in that district. During this period as many as 230 severe cases were brought for treatment at the infectious diseases hospitals in the city from the adjoining villages. Often as many as 5 or 6 cases had to be brought in one trip. The Corporation has spent several thousands of rupees on the treatment of these cases. I have been urging the necessity of opening an isolation hospital outside the city for Chingleput cases. The present practice of bringing virulent cases of small-pox in advanced stages of the disease through congested streets like Tiruvottiyur High Road cannot be too strongly condemned. Anybody coming near a case of small-pox can contract the disease, if unprotected, even though he does not touch the patient or any infected material. In England small-pox hospitals are located outside cities. For the successful prevention of small-pox the following conditions are essential.

1. There should be strict isolation of small-pox cases in all parts of the province, particularly in Chingleput district in the interest of the city's health. Small-pox hospitals need not be expensive structures. All that is required is some well ventilated rooms where patients can be given proper nursing and treatment. There is no specific cure for small-pox. The utmost that a physician can do is to administer symptomatic treatment to prevent grave complications. In England *variola major* has practically disappeared. The prevailing type of small-pox is the mild form known as *variola minor*. For isolating about 1,500 cases—the annual incidence for England and Wales—there are over 6,000 beds distributed all over the country so that as soon as a case is notified segregation is effected without any difficulty whatsoever.

2. Re-vaccination once in four years should be made compulsory for all. The bylaws relating to this have been modified and are now before the Standing Committee and Council.

3. People must be more responsive and should have greater faith in the efficacy of vaccination. This is the pivot of the whole preventive scheme and without it any amount of expenditure will not bear fruition. In this connection it will be refreshing to quote what Sir George Newman has to say as to how people in England respond to the appeal of health authorities (Reports on Public Health and Medical Subject No. 62, page 20). He says, "The inhabitants of the district flocked to the public vaccinator or to their own doctors. In course of time a substantial proportion of the people became protected. This statement, it should be noted, applies even to those parts of England where habitual vaccination of infants under the Vaccination Act has long been partly or largely in abeyance. It is as applicable to anti-vaccination Leicester and counties in the midland as to other parts of the country where vaccination under the Vaccination Act has proceeded normally and there has been little use of the conscientious objection clause. The success obtained moreover was largely to be attributed to a combination of effort of the local authorities which the Central Department actively encouraged not only by promoting combinations of areas for the provision of small-pox hospitals, but also by pressing special arrangements for inter-communications between adjoining districts in all matters which might affect the extension of the outbreak. In the London area for example there has long been a system of inter-communication regarding individual cases and contacts between several borough councils, the London County Council and the small-pox hospital authority which has left little to be desired by way of completeness." The clear exposition of the arrangements and the response from the

public makes a striking contrast to the conditions under which a public health authority has to work in a provincial metropolitan city. Arrangements for inter-communication are either primitive or nil. Recently, on hearing that there were cases of small-pox in Sembium, I made an inspection and detected over 18 severe cases of small-pox which were removed to the infectious diseases hospital at Tondiarpet. How difficult it is to keep an out-break under control when such large number of cases are allowed to be kept on the outskirts of the city—on the other side of the road within a distance of 100 yards—without any sort of intimation, official or private. Under the existing conditions the only remedy is to incorporate Sembium and the other villages on the outskirts of the city within city limits. This has been urged more than once before.

Statement on page 14 shows the satisfactory decline in malaria mortality during the last 10 years. The year under report has recorded the lowest mortality *viz.*, 50 deaths from malaria. The average number of deaths from malaria during the quinquennium, 1934–1938, was 120 as against 309 for the preceding quinquennium, 1929–1933. This is an excellent achievement for the malaria section.

Statements on pages 35 and 36 show clearly the value of the work done by the home-visiting staff newly sanctioned by the Council. Mosquito nuisance has greatly diminished as evidenced by the fact that the mosquito home-index was brought down from 9.5 in 1937 to 1.7. 92,983 unnecessary articles were removed from dwelling houses which would have otherwise acted as breeding places for mosquitoes. There is an appreciable reduction in the total number of malaria cases treated in the dispensaries and the splenic rates of school children.

Slight increase is noticed in the incidence of typhoid and tuberculosis.

Cerebro-spinal fever:—In the 2nd. week of October, 1938, an explosive out-break of cerebro-spinal fever occurred in the Egmore division resulting in 41 attacks and 22 deaths. The first three cases occurred on the 7th. of October and preventive measures were started immediately.

The infection was confined mostly to one community with the exception of 4 cases of Brahmin boys. The spread of the epidemic was by direct contact. The out-break occurred just before the advent of north-east monsoon and was chiefly confined to houses tenanted by a number of families. All cases including cases of fever were removed as speedily as possible to the isolation hospitals. An ambulance was kept ready in the infected area. All the infected houses were thoroughly disinfected and lime-washed. In many cases tiles were removed for sun-disinfection and ventilation. The families migrated during the epidemic to other parts of the city and were kept under observation. This led to the early detection of one or two cases which were also immediately isolated in the hospital. Antiseptic gargles were freely distributed to the people in the affected locality in the mornings and evenings. Hand bills were distributed in Tamil and English informing them of the nature of the epidemic and instructing them in the methods of prevention and control. The schools in the locality and the neighbourhood were closed. A few cases suspected to be carriers were kept in the isolation hospitals until they were declared negative. The staff worked vigorously and the public co-operated with them in their arduous task. The Public Health Minister visited the locality.

Medical relief was extended in 3 areas *viz.*, Egmore, Krishnampet and Otteri. 3 more dispensaries were opened increasing the total number of dispensaries to 26. Nearly 27 lakhs of patients underwent treatment in the Corporation public dispensaries indicating in no uncertain measure the extreme popularity of these institutions. 6,555 skin cases, including leprosy, were treated in the leprosy clinics. The venereal clinic opened in Pulianthope in December, 1937, continued to function efficiently. 12,368 patients were treated at this clinic. 884 smears were examined for gonococci at the clinic and 338 specimens of blood were sent to Guindy for serological examination. 1,634 injections were administered. There is no doubt that the clinic is becoming more and more popular and is meeting a great need in the locality which is inhabited by labouring classes.

The school medical service continued to demonstrate the existence of a very high rate of physical defect among the boys and girls attending our primary schools. No perceptible reduction is noticed under any of the important heads like mal-nutrition, bad teeth, want of cleanliness, skin diseases etc. This is a reflection of the poor standard of living of the parents and the extremely unsatisfactory sanitary environments at home. The work of dealing with the leper children was reorganised during the year. This has resulted in greater regularity of treatment. 681 children were on the leprosy list. Re-inspections revealed varying results. In 6 cases symptoms disappeared. In 88 children improvement was noticed. 400 children continued treatment without much relief. 707 under-nourished regained health after a course of cod liver oil. 134 children had their tonsils removed by operation. 831 cases of stomatitis were cured and 648 improved. 20 children with enlarged spleen were cured. 1,117 cases of scabies and other skin lesions were cured. 5,500 children were given mid-day meals.

The medical inspectors conducted a thorough inspection of school premises, their latrines, playgrounds etc. School furniture particularly those for the lower classes should be replaced by benches with backs and desks.

The work of the Food Analysis Section showed increased activity. 1,455 samples were taken as against 1,119 in the previous year with the rate of adulteration at 30.4 as against 22.5 for 1937. This increase in the adulteration is due to the large number of samples taken from street hawkers. Not a single sample of ghee of the 148 samples taken from street hawkers was genuine and the degree of adulteration was more than 80%. It should be understood by every one that hawkers' ghee is very inferior stuff which should on no account be purchased. Arrangements were made to round up these men and to seize the stuff for destruction. Analysis of ghee samples taken from some of the coffee hotels in Madras showed gross adulteration. It is unfortunate that seizure under section 9 was not upheld by the trying Magistrate as the hotels did not sell ghee as such.

The general quality of ghee from established shops and stores as well as the quality of other articles of food continued to be fairly good. Milk sellers should label cow's and buffalo's milk separately. Consumers have a right to know the exact article they are getting. Buffalo's milk is richer in fat and its addition to cow's milk enables a dishonest trader to add water to the mixture and earn an illegal profit.

The year under report is remarkable for a greater out-turn of sanitary works when compared to previous years. 57,847 feet of sewers were laid during the year as against 41,307 feet in 1937. The drive to convert

dry latrines into the water carriage system was kept up and 4,989 flush-out latrines were installed in private dwelling houses as against 4,008 in the previous year. Unless this progress is maintained steadily there will be no chance to close the pail depots in the immediate future and to put a stop to the abominable practice of transporting human filth through busy streets of Madras.

17,682 houses were inspected during the year for noting sanitary defects. 3,911 houses were repaired and set right for human habitation. 325 houses were provided with new latrines. 790 insanitary cattle yards were improved. A vigorous campaign of prosecution was kept up throughout the year to improve the sanitary condition of the cattle yards in the city. 4 model sanitary public conveniences were constructed and brought into use during the year. Several others were in the course of construction. 15 ponds and 294 wells were filled up. Many acres of low land were reclaimed during the year as in the past, chiefly those behind the Record Office in Egmore, in Cooransmith Nagar, at Theagaraya Road, opposite the Slaughter Houses, at Chetpet Cross Road and at Elaya Mudali Street.

Improvement of slums and hutting grounds was taken up in right earnest and a definite programme was drawn up for action under section 257. Several hutting grounds were inspected, standard plans were prepared and notices were served on the owners. It was very soon apparent that the owners were in no mood to shoulder such costly improvements. The subject is now before the authorities for a decision as to the further procedure, i.e., acquisition of these hutting grounds or advance funds to effect the improvements, with a view to their realisation by launching suits.

1,400 new houses were constructed by private individuals and 34 lay-outs were sanctioned. The construction of 72 tenements by the Corporation at the Harbour division was completed. 84 tenements in Bunder Rama Naickan Garden were in progress. In addition to the above, schemes for the construction of tenements at Bishop Cheri, Bogipalayam, Parasawalkam, Seni Amman Koil Street, Korukkupet, Nariangadu and Kodambakkam were under preparation. A sum of Rs. 50,000 was spent on improving the sanitation of some of the Corporation owned hutting grounds. Huts were re-arranged so as to form wide streets. Sewers were laid and flush-out latrine with a bathing platform was given to each hut. A few electric lights and taps with metalled roads completed the reform. This is the cheapest scheme to re-model such areas and the scheme has been a complete success. The hutting grounds at Krishnampet and Royapuram were improved as stated above. The occupiers are breathing a better atmosphere and the dirty cess-pools and channels have become a thing of the past.

The growth of population has resulted in the utilisation of all available open spaces for putting up huts and houses. But our water supply problem is still unsolved. The detrimental effect of drought on the quality of water did not lead to the adoption of any new process of purification. Increased dose of chlorine was required for sterilisation purposes. Taking into account the exceptional conditions the fact that there had been no serious out-breaks of water borne diseases during the year is an excellent testimony to the efficient chlorination of our water supply which, though physically unsatisfactory, was safe.

The period of drought has aroused the authority concerned to take the necessary steps for providing an unfailing source of water supply to the city. Since the maximum of health production can only be gained through a clean and wholesome water, efforts should be immediately directed not only to augment the city's sources of water supply but also to replace the existing method of slow sand filtration by rapid sand filtration as has been pointed out by me in my earlier reports and by the Government Committee on water filtration in their general reports during the last 20 years. As long as this vital need of the city is not supplied we cannot look for a steady downward trend of the city's mortality.

In conclusion, I wish to take the opportunity to record my appreciation of the excellent service rendered by every one in the department during a strenuous and anxious year. The epidemics that prevailed during the year taxed their energy to the utmost. It has also revealed the absolute inadequacy of the supervising and inspectorial staff. Activities of the department have increased during the recent years. The population has also increased by about 50% of what it was 20 years ago. I trust the Council will remove this serious defect by sanctioning more officers and inspectors.

G. S. GOVINDA PILLAI,

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

Health Officer.

Forwarded to the Council.

R. SUBBAYYA,

Commissioner.

TABLE I
MORTALITY IN THE CITY OF MADRAS

Year	Population	Mortality	Rate per 1000
1900	1,00,000	100	1.0
1901	1,05,000	105	1.0
1902	1,10,000	110	1.0
1903	1,15,000	115	1.0
1904	1,20,000	120	1.0
1905	1,25,000	125	1.0
1906	1,30,000	130	1.0
1907	1,35,000	135	1.0
1908	1,40,000	140	1.0
1909	1,45,000	145	1.0
1910	1,50,000	150	1.0
1911	1,55,000	155	1.0
1912	1,60,000	160	1.0
1913	1,65,000	165	1.0
1914	1,70,000	170	1.0
1915	1,75,000	175	1.0
1916	1,80,000	180	1.0
1917	1,85,000	185	1.0
1918	1,90,000	190	1.0
1919	1,95,000	195	1.0
1920	2,00,000	200	1.0

SUMMARY OF VITAL STATISTICS FOR 1938

Area	....	29,396	sq. miles
Population (Census, 1931)	... 6,47,230		
Population (Estimated to the middle of the year 1938)	.... 7,50,630		
Average density per acre	... 39.9		
Inhabited houses (Census, 1931)	.... 73,845		
Births	... 30,985		
Birth-rate	... 41.3	per 1000	esti- mated population
Birth-rate (average for the 5 years 1933-37)	... 41.9		,,
Still-births	... 1,321		
Deaths	.... 26,282		
Death-rate	... 35.0	per 1000	esti- mated population
Death-rate (average for the 5 years 1933-37)	.... 34.7		,,
Natural increase	... 4,703		
Infantile mortality rate	... 222.1	per 1000	births
Infantile mortality rate (average for the 5 years 1933-37)	... 230.7		,,
Maternal mortality rate	... 9.2		,,
Maternal mortality rate (average for the 5 years 1933-37)	... 10.3		,,

DEATHS FROM PRINCIPAL DISEASES IN 1938

Diseases		Number of deaths	Rate per 1000 esti- mated population
Cholera	...	36	0.05
Diarrhoea and Dysentery	...	2,308	3.1
Small-pox	...	561	0.7
Measles	...	8	0.01
Cerebro-spinal fever	...	27	0.04
Malaria	...	50	0.07
Enteric fever	...	119	0.16
Phthisis	....	1,193	1.6
Respiratory diseases	...	6,088	8.1

VITAL STATISTICS

Rainfall:—During the year the total rainfall was 26·46 inches as compared with 61·38 inches in 1937 and 44·25 inches in 1936, the average rainfall for the past 5 years (1933-37) being 44·56 inches. A scrutiny of the available records relating to the rainfall in the city for the past 27 years reveals that in no year had the rainfall been so low as during the year under report. In 1926 and 1927, there had been at least a rainfall of 31·42 inches and 32·4 inches respectively.

The seasonal distribution was as follows :

	Average for 5 years (1933-1937)	1937	1938
Inter-monsoon period (January to May)	.... 2·72 inches	2·68 inches	2·11 inches
South-west monsoon (June to September)	.... 13·56 „	17·64 „	13·86 „
North-east monsoon (October to December)	... 28·28 „	41·06 „	10·49 „
Total	... 44·56 „	61·38 „	26·46 „

As compared with 1937 and with the average rainfall for the past 5 years, there was a distinct failure of the north-east monsoon during the year forecasting unfavourable economic conditions.

The atmospheric conditions recorded during 1938 are furnished in the Annual Form A and Table B.

Area and population:—Madras city has an area of 29·396 sq. miles with a population of 6,47,230 according to 1931 census. The estimated mid-year population for 1938 works out to 7,50,630 giving a density of 39·9 per acre. This estimate has been arrived at by the method of geometrical progression. The birth and death rates calculated on the census population do not take into account the growth of the population in the intervening years and as such fail to show the exact state of public health. For purposes of comparison the rates based on the estimated mid-year population should be preferred as these rates take into account the growth of the population.

The important rates in the report are based on the estimated population. The rates in the various statistical tables appended to this report are based on the census population.

The population for each of the 40 municipal divisions into which the city is divided as per Madras City Municipal (Amendment) Act, 1936, not being available, it has not been possible to work out the various divisional rates in the statements.

Registration of births and deaths is compulsory in the city and the work is done by a staff of 17 sub-assistant surgeons.

Births:—The total number of births registered during 1938 was 30,985 recording an increase of 27 births over the previous year and an increase of 1,413 births over the average for the quinquennium (1933–37). The number of births registered during the year comes next to the year 1935 which recorded the highest (31,031).

Calculated on the estimated population the birth-rate was 41·3 per mille as compared with 42·1 in 1937 and 41·9 being the average for the quinquennium (1933–37).

The birth-rate, calculated on the census population, is given in the Annual Form No. I appended to this report. It was 47·9 per mille as against 47·8 in 1937, the quinquennial (1933–37) average being 45·7.

Of the total births, 16,001 were males and 14,984 females i. e., 107 male births to 100 female births. Excess of male births over female births was recorded in 31 municipal divisions.

Illegitimate births:—The number of illegitimate births registered during the year was 145 or 0·5% of the total births as compared with 210 births or 0·7% in 1937.

The seasonal distribution of births during the year was as follows:

		Births.	Percentage to total births.
1st. Quarter	January	2,111	21·3
	February	2,045	
	March	2,434	
2nd. Quarter	April	2,716	25·3
	May	2,652	
	June	2,486	
3rd. Quarter	July	2,759	26·5
	August	2,860	
	September	2,588	
4th. Quarter	October	2,762	26·9
	November	2,617	
	December	2,955	
Total		30,985	100·0

A comparative statement of the births registered in each quarter of 1937 and 1938 with the quarterly averages for the quinquennium (1933–37) is furnished below.

Year.	1st. Quarter.	2nd. Quarter.	3rd. Quarter.	4th. Quarter.
1933–37	6,147	7,160	7,942	8,323
1937	6,247	7,768	8,045	8,898
1938	6,590	7,854	8,207	8,334

The first and fourth quarters usually record the lowest and the highest number of births respectively.

The birth-rates in the chief communities are as follows :

Community.	Number of births registered.	Rate per 1000 estimated population in each community.
European	44	10.8
Anglo-Indian	383	31.9
Indian Christian	1,658	35.6
Hindu	25,559	42.7
Muhammadan	3,338	39.2
All communities	30,985	41.3

The birth-rate was highest among the Hindus. The Muhammadan community recorded the next highest rate. The European community recorded the lowest rate. Table C appended to the report gives the number of births and birth-rates in the above communities based on the census population.

Still-births :—The number of still-births registered during the year was 1,321 as against 1,400 in 1937. This represented 42.6 per 1000 live-births as compared with 45.2 in the preceding year.

Deaths :—The total number of deaths registered during the year was 26,282 as against 25,674 in 1937. There was prevalence of small-pox, cerebro-spinal fever and cholera during the year. The migration of people into the city influences the growth of the population and swells the number of deaths. Further, the presence of various hospitals and clinics attracts a large number of patients from the mofussil parts for treatment and the deaths among them are registered and taken into account. These deaths ought to find a place in the statistics of the various districts wherefrom the deceased persons come for treatment. If this is done, the number of deaths and the death-rate for the city would be far less, indicating the exact state of the health of the city.

Calculated on the mid-year population, the death-rate was 35.0 as compared with 34.9 in the preceding year, the quinquennial (1933-37) average being 34.7.

As many as 4,349 deaths were among the non-residents including destitutes and homeless. Excluding these deaths, the death-rate would be 29.2 which should be considered more or less the correct rate for the city for statistical purposes.

Calculated on the census population, the death-rate was 40.6 as compared with 39.7 in 1937, the average for the 5 years (1933-37) being 37.9 (Annual Form No. III).

An excess of 4,703 births over deaths was recorded as compared with 5,284 in 1937. The rate of natural increase worked out to 6.3 per mille of estimated population as against 7.2 in the previous year.

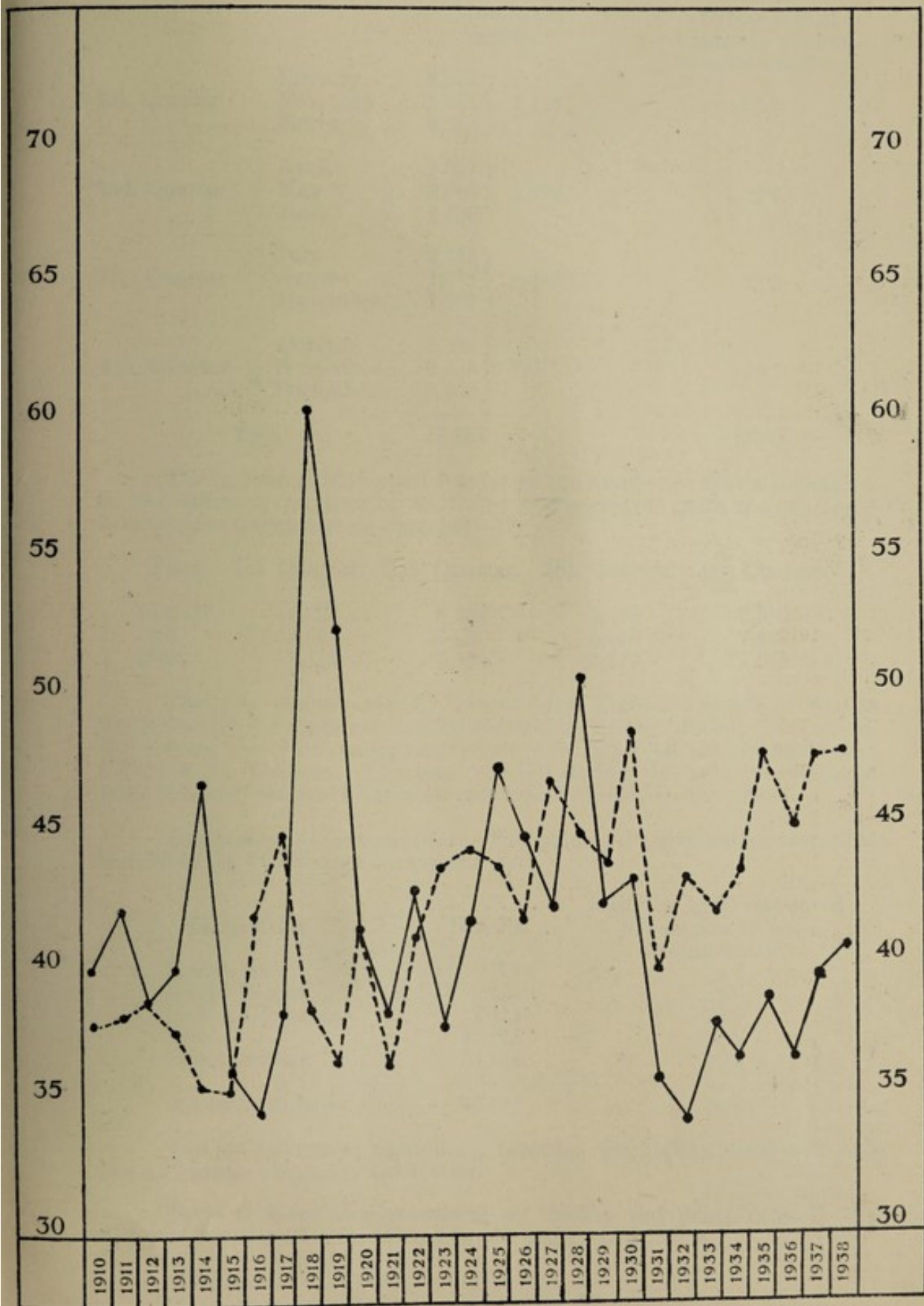
A statement of births and deaths recorded in the city from 1900 to 1938 is furnished below with special reference to the natural increase. It will be observed that this increase is being recorded continuously from 1929.

Year.	Births.	Deaths.	Natural increase or decrease.
1900	20,672	20,937	-265
1901	18,872	28,031	-9,159
1902	17,743	21,395	-3,652
1903	19,830	19,205	+625
1904	20,439	19,305	+1,134
1905	23,263	30,060	-6,797
1906	18,608	23,749	-5,141
1907	19,808	20,638	-830
1908	19,980	22,285	-2,305
1909	18,981	19,354	-373
1910	19,340	20,312	-972
1911	19,735	21,771	-2,036
1912	20,099	20,132	-33
1913	19,470	20,675	-1,205
1914	18,241	24,174	-5,933
1915	18,331	18,688	-357
1916	21,675	17,872	+3,803
1917	23,296	19,917	+3,379
1918	19,897	31,262	-11,365
1919	18,936	27,187	-8,251
1920	21,396	21,418	-22
1921	19,187	20,268	-1,081
1922	21,650	22,475	-825
1923	22,975	19,933	+3,042
1924	23,275	21,960	+1,315
1925	23,070	25,000	-1,930
1926	22,000	23,776	-1,776
1927	24,760	22,364	+2,396
1928	23,729	26,715	-2,986
1929	23,124	22,415	+709
1930	25,662	22,839	+2,823
1931	25,738	23,162	+2,576
1932	27,996	22,290	+5,706
1933	28,533	24,500	+4,033
1934	28,149	23,659	+4,490
1935	31,031	24,955	+6,076
1936	29,189	23,660	+5,529
1937	30,958	25,674	+5,284
1938	30,985	26,282	+4,703

During the year under report 36 municipal divisions recorded natural increase.

CITY OF MADRAS BIRTH AND DEATH-RATES 1910-1938

RATE PER 1,000 POPULATION (CENSUS)



-----BIRTH RATE

—————DEATH RATE

LITHO BY GOLDEN & CO., MADRAS.

CITY OF ALBANY
BIRTH AND DEATH STATISTICS
1910

Year	Month	Day	Name	Sex	Age	Color	Parents	Place of Birth	Parents' Birthplaces
1910	Jan	1	...	M	...	...	...	...	...
1910	Jan	2	...	F	...	...	...	...	...
1910	Jan	3	...	M	...	...	...	...	...
1910	Jan	4	...	F	...	...	...	...	...
1910	Jan	5	...	M	...	...	...	...	...
1910	Jan	6	...	F	...	...	...	...	...
1910	Jan	7	...	M	...	...	...	...	...
1910	Jan	8	...	F	...	...	...	...	...
1910	Jan	9	...	M	...	...	...	...	...
1910	Jan	10	...	F	...	...	...	...	...
1910	Jan	11	...	M	...	...	...	...	...
1910	Jan	12	...	F	...	...	...	...	...
1910	Jan	13	...	M	...	...	...	...	...
1910	Jan	14	...	F	...	...	...	...	...
1910	Jan	15	...	M	...	...	...	...	...
1910	Jan	16	...	F	...	...	...	...	...
1910	Jan	17	...	M	...	...	...	...	...
1910	Jan	18	...	F	...	...	...	...	...
1910	Jan	19	...	M	...	...	...	...	...
1910	Jan	20	...	F	...	...	...	...	...
1910	Jan	21	...	M	...	...	...	...	...
1910	Jan	22	...	F	...	...	...	...	...
1910	Jan	23	...	M	...	...	...	...	...
1910	Jan	24	...	F	...	...	...	...	...
1910	Jan	25	...	M	...	...	...	...	...
1910	Jan	26	...	F	...	...	...	...	...
1910	Jan	27	...	M	...	...	...	...	...
1910	Jan	28	...	F	...	...	...	...	...
1910	Jan	29	...	M	...	...	...	...	...
1910	Jan	30	...	F	...	...	...	...	...
1910	Jan	31	...	M	...	...	...	...	...
1910	Feb	1	...	F	...	...	...	...	...
1910	Feb	2	...	M	...	...	...	...	...
1910	Feb	3	...	F	...	...	...	...	...
1910	Feb	4	...	M	...	...	...	...	...
1910	Feb	5	...	F	...	...	...	...	...
1910	Feb	6	...	M	...	...	...	...	...
1910	Feb	7	...	F	...	...	...	...	...
1910	Feb	8	...	M	...	...	...	...	...
1910	Feb	9	...	F	...	...	...	...	...
1910	Feb	10	...	M	...	...	...	...	...
1910	Feb	11	...	F	...	...	...	...	...
1910	Feb	12	...	M	...	...	...	...	...
1910	Feb	13	...	F	...	...	...	...	...
1910	Feb	14	...	M	...	...	...	...	...
1910	Feb	15	...	F	...	...	...	...	...
1910	Feb	16	...	M	...	...	...	...	...
1910	Feb	17	...	F	...	...	...	...	...
1910	Feb	18	...	M	...	...	...	...	...
1910	Feb	19	...	F	...	...	...	...	...
1910	Feb	20	...	M	...	...	...	...	...
1910	Feb	21	...	F	...	...	...	...	...
1910	Feb	22	...	M	...	...	...	...	...
1910	Feb	23	...	F	...	...	...	...	...
1910	Feb	24	...	M	...	...	...	...	...
1910	Feb	25	...	F	...	...	...	...	...
1910	Feb	26	...	M	...	...	...	...	...
1910	Feb	27	...	F	...	...	...	...	...
1910	Feb	28	...	M	...	...	...	...	...
1910	Feb	29	...	F	...	...	...	...	...
1910	Feb	30	...	M	...	...	...	...	...
1910	Feb	31	...	F	...	...	...	...	...

The distribution of the deaths during the quarters of the year was as follows:

		Number of deaths.	Percentage of quarterly deaths to total deaths.
1st. Quarter	January	2,574	27.1
	February ...	2,281	
	March	2,264	
2nd. Quarter	April	1,927	22.4
	May	2,086	
	June ...	1,886	
3rd. Quarter	July	2,242	23.8
	August ...	2,078	
	September...	1,929	
4th. Quarter	October	2,383	26.7
	November...	2,232	
	December	2,400	
Total		26,282	100.0

The following statement furnishes the number of deaths registered in the different quarters of 1937 and 1938 compared with the quarterly averages for the quinquennium (1933-37).

Year.	1st. Quarter.	2nd. Quarter.	3rd. Quarter.	4th. Quarter.
1933-37	5,956	5,634	5,929	6,970
1937	6,054	5,587	6,046	7,987
1938	7,119	5,899	6,249	7,015

The 4th. quarter usually records the highest number of deaths influenced by the monsoon conditions which prevail during this period. But during the year under report this has not occurred owing to the failure of the monsoon. The total rainfall during the year as compared with the previous years has been mentioned already in the report.

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

Community.	Deaths.	Rate per 1,000 estimated population in each community.
European	17	4.2
Anglo-Indian	228	19.0
Indian Christian	1,211	26.0
Hindu	21,475	35.9
Muhammadan	3,346	39.3
All communities	26,282	35.0

The Muhammadan community recorded the highest death-rate and the European community the lowest.

Table C gives the statement of deaths and death-rates in the different communities calculated on the census population.

Age and sex distribution of deaths:—Of the total deaths registered during the year, 13,588 deaths were among males and 12,694 deaths among females. As usual male deaths predominated over female deaths. There were 107 male deaths for every 100 female deaths as in the previous year. The excess of male deaths over female deaths was recorded in 28 municipal divisions.

The specific death-rates among males and females during the year were 34.2 and 36.0 per mille of the estimated population respectively.

The statement furnished below gives the number of deaths at the various age-periods and the death-rates per mille of the estimated population and the percentage of deaths to the total mortality in each age-period.

Age-period.	Number of deaths.	Rate per 1,000 estimated population in each age-period.	Percentage to total deaths.
Under 1 year ...	6,881	*222.1	26.2
1 to 5 years ...	4,476	58.7	17.0
5 to 10 years ...	970	12.3	3.7
10 to 15 years ...	485	6.3	1.8
15 to 20 years ...	781	9.7	3.0
20 to 30 years ...	2,256	14.0	8.6
30 to 40 years ...	1,922	16.0	7.3
40 to 50 years ...	1,829	25.7	7.0
50 to 60 years ...	1,945	54.0	7.4
60 years and above ...	4,737	244.2	18.0
	26,282	35.0	100.0

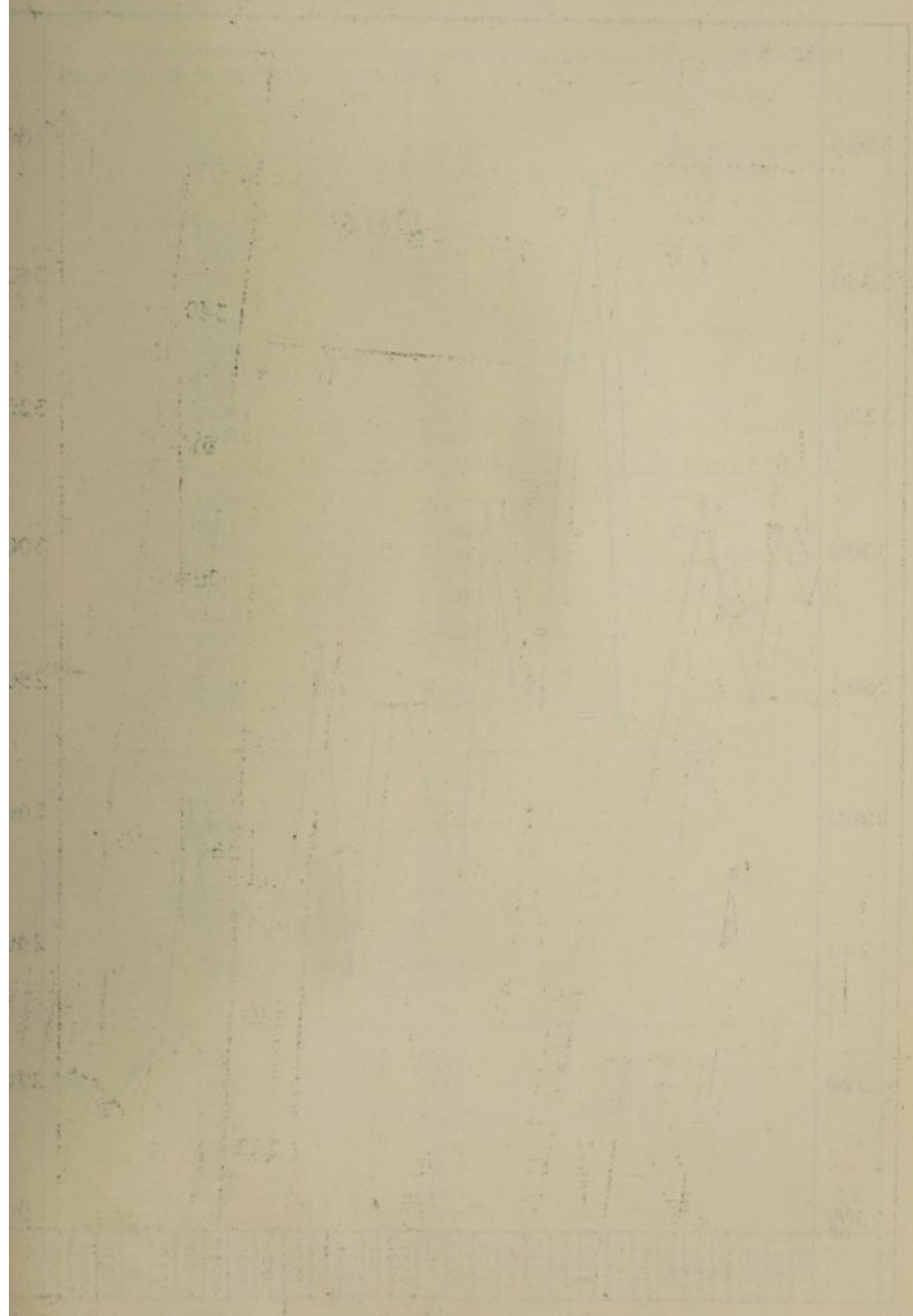
* Calculated on 1000 live-births registered during the year.

There has been no deviation from the usual features. The death-rate is highest at both ends of life. There is marked fall in the death-rate in the age-period 1 to 5 years. A gradual fall in the death-rates is noticed in the next two periods, the rate for the age-period 10 to 15 years being the lowest of all the age-periods. The rates in the other periods show a gradual increase till a sharp rise is noticed in the age-period over 60 years.

Annual Form No. V furnishes the death-rates in the different age-periods calculated on the census population.

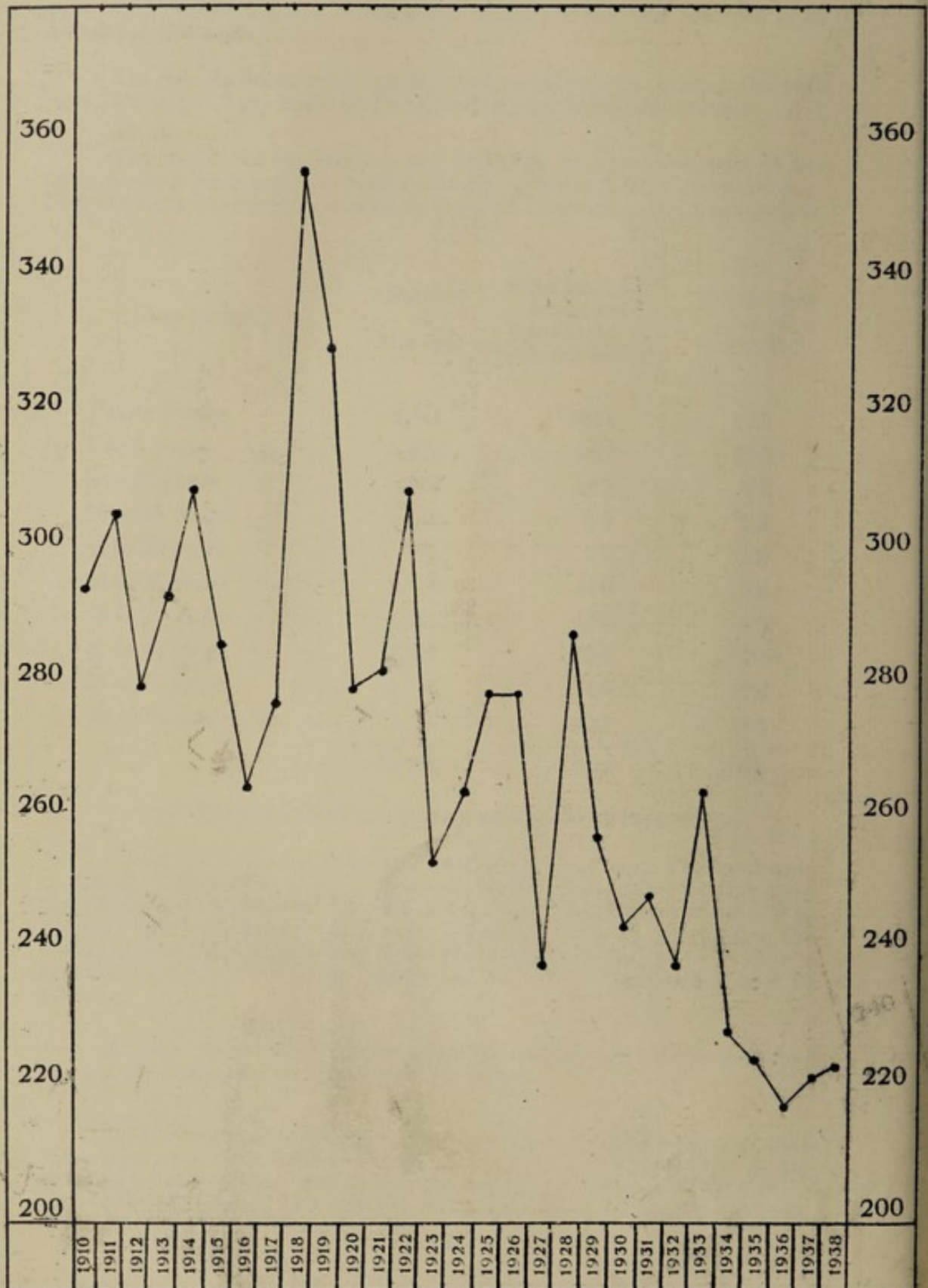
Infantile mortality:—During the year 6,881 infants under one year of age died as against 6,836 in the preceding year. Of these, 4,706 deaths occurred among infants born in the city and 2,175 deaths among infants born in the moffussil. The number of infant deaths accounted for 26.2% of the total mortality during the year.

CITY OF MADRAS
MUNICIPALITY WATER SUPPLY
DATE 1911



CITY OF MADRAS INFANTILE MORTALITY RATES 1910-1938

(RATE PER 1,000 LIVE BIRTHS)



The infantile mortality rate was 222.1 per 1,000 births as compared with 220.8 in the previous year, the average rate for the 5 years (1933-37) being 230.7. Excluding the deaths of infants born out-side the city, the infantile mortality rate would be 151.9.

The infantile mortality rates recorded in the city from 1900 to 1938 are set forth in the statement below.

Year.	Rate per 1,000 births.	Average for 10 years.
1900	272.0	
1901	328.3	
1902	303.9	
1903	283.3	
1904	280.9	
1905	316.3	298.8
1906	341.2	
1907	270.7	
1908	296.3	
1909	295.0	
<hr/>		
1910	294.1	
1911	305.4	
1912	280.4	
1913	293.4	
1914	308.9	
1915	286.1	299.5
1916	265.1	
1917	277.3	
1918	355.2	
1919	329.0	
<hr/>		
1920	279.3	
1921	281.9	
1922	308.0	
1923	254.0	
1924	264.1	
1925	278.8	272.6
1926	279.3	
1927	237.6	
1928	286.8	
1929	256.6	
<hr/>		
1930	243.9	
1931	248.3	
1932	236.5	
1933	264.3	
1934	228.2	
1935	223.9	
1936	216.5	
1937	220.8	
1938	222.1	

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

Age-Periods.	Small-pox.	Measles.	Malaria.	Other fevers.	Diarrhoea and Dysentery.	Premature births.	Debility.	Nervous system (Infantile convulsion.)	Respiratory Diseases.	Other causes.	Total.	Percentage of deaths to total Infantile deaths.
Under 7 days ...	...	...	...	4	10	1,268	17	52	14	159	1,504	21·8
7 days and under one month.	...	...	...	7	41	668	22	90	38	66	932	13·6
1 month and under four months.	7	...	...	51	194	159	34	160	514	154	1,273	18·5
4 months and under seven months.	15	1	1	69	186	12	24	117	704	141	1,270	18·4
7 months and under ten months.	11	1	1	100	177	...	9	70	565	103	1,037	15·1
10 months and under one year.	13	...	...	86	133	...	7	51	459	116	865	12·6
Total ...	46	2	2	317	741	2,107	113	540	2,294	719	6,881	...

35·4% of the infantile deaths occurred within one month after birth.

Ignorance, poverty, economic distress of the parents living in squalid and ill-ventilated houses and the indifference to the maternity and child welfare assistance in the city are the chief contributory causes for the high infantile mortality rate.

Infant deaths by months.—Table E in the appendix gives in detail the number of infant deaths and infantile mortality rates according to months as compared with 1937. The highest mortality rate was recorded in January (305·1) and the lowest in April (172·7).

Infantile mortality rates in divisions:—The number of births and the No. of infantile deaths registered in the 40 municipal divisions with the infantile mortality rates per 1000 births during the year are given in the following statement.

Municipal Divisions.	Number of births registered.	Number of infantile deaths.	Infantile mortality rates per 1000 births.
1	556	154	277.0
2	668	142	212.6
3	1,523	332	218.0
4	1,373	290	211.2
5	1,166	267	228.9
6	324	109	336.4
7	643	153	237.9
8	327	49	149.8
9	671	130	193.7
10	406	94	231.5
11	708	146	206.2
12	328	55	167.7
13	1,093	253	231.5
14	723	195	268.7
15	363	92	253.4
16	492	86	174.8
17	1,222	321	262.7
18	793	215	271.1
19	1,460	368	252.1
20	865	219	253.2
21	881	175	198.6
22	599	82	136.9
23	870	193	221.8
24	523	102	195.0
25	803	106	256.5
26	874	194	221.9
27	892	140	156.9
28	605	33	219.8
29	443	270	158.0
30	827	214	258.8
31	1,049	150	238.3
32	910	160	175.8
33	619	141	227.8
34	688	150	218.0
35	1,684	405	240.5
36	752	131	174.2
37	804	170	211.4
38	513	85	165.7
39	539	105	194.8
40	406	105	258.6
Total	<u>30,985</u>	<u>6,881</u>	<u>222.1</u>

22 Municipal divisions returned rates less than the annual infantile mortality rate for the whole city. High death-rates occurred in divisions which are congested and contain poorer classes.

*Infantile mortality rates in communities:—*The infantile mortality rates in the principal communities during 1938 are as follows:

Community.	Births registered.	Infantile deaths.	Rate per 1000 births in each community.
European ...	44	2	45.5
Anglo-Indian ...	383	42	109.7
Indian Christian...	1,658	312	188.2
Hindu ...	25,559	5,587	218.6
Muhammadan ...	3,338	938	281.0
All communities ...	30,985	6,881	222.1

The Muhammadan community recorded the highest infantile mortality rate during the year.

The births, infantile deaths and the infantile mortality rates in the principal sub-castes of the Hindu community for 1938 are set forth in the table below.

Caste.	Births in each caste.	Infant deaths in each caste.	Rate per 1000 births in each caste.
Brahmin ...	2,442	363	148.6
Chetty ...	1,865	461	247.1
Vellala or Mudaliar ...	3,649	943	258.4
Balijah or Naidu ...	2,531	553	218.4
Vannia or Naicker ...	3,443	1,124	326.5
Adi-Dravida ...	3,635	992	272.9
Patnavar ...	436	172	394.4
Yadawal or Edayar ...	1,005	260	258.7
Viswakarma Brahmin or Kammalar ...	815	200	245.4
Others ...	5,738	519	90.3
Total ...	25,559	5,587	218.6

*Principal causes of deaths:—*The following table gives the number of deaths from various causes together with the death-rates per 1000 of the estimated population and the percentage to the total number of deaths registered during the year.

Causes of death.	No. of deaths registered.	Rate per 1000 estimated population.	Percentage to total deaths.
Cholera ...	36	0.05	0.14
Dysentery and diarrhoea.	2,308	3.1	8.77
Small-pox ...	561	0.7	2.13
Measles ...	8	0.01	0.03
Cerebro-spinal fever ...	27	0.04	0.10
Malaria ...	50	0.07	0.19
Enteric fever ...	119	0.16	0.45
Other fevers ...	2,183	2.9	8.31
General respiratory diseases ...	6,088	8.1	23.16
Tuberculosis ...	1,301	1.7	4.96
Deaths from child-birth.	284	0.38	1.08
All other causes including deaths from injuries ...	13,317	17.7	50.68
Total ...	26,282	35.0	100.00

Cholera:—137 attacks and 36 deaths from cholera occurred during the year as against 795 attacks and 232 deaths in the preceding year. The death-rate was 0·05 per mille of the estimated population as compared with 0·32 in 1937, the average for the quinquennium (1933–37) being 0·21. The deaths from cholera accounted for 0·14 % of the total deaths.

The death-rate, calculated on the census population, was 0·06 as compared with 0·36 in the preceding year, the quinquennial (1933–37) average being 0·24.

The statistics of mortality from cholera for the last 20 years are given below.

Year.	Deaths.	Year.	Deaths.
1919	642	1929	16
1920	22	1930	43
1921	139	1931	153
1922	17	1932	5
1923	21	1933	62
1924	97	1934	166
1925	203	1935	145
1926	98	1936	140
1927	512	1937	232
1928	708	1938	36

The distribution of attacks and deaths in each of the quarters of 1938 was as follows:

Quarter.	Attacks.	Deaths.
1st. Quarter	108	26
2nd. Quarter	11	5
3rd. Quarter	7	nil
4th. Quarter	11	5
Total	137	36

Sporadic cases occurred throughout the year and the infection in the previous year gave rise to this incidence. The first quarter recorded the highest incidence. The highest number of attacks and deaths occurred in January (90 attacks and 20 deaths). In February there were 14 attacks and 4 deaths.

34 municipal divisions were affected and 6 divisions were free from the infection. The highest incidence took place in the 18th. division (16 attacks and 2 deaths) followed by the 17th. division (12 attacks and 3 deaths) and 20th. division (10 attacks and 2 deaths). Though 34 divisions returned cases, deaths were reported from only 20 divisions—vide Annual Form No. VII. Out of the total of 137 cases, 134 cases were isolated and treated in the infectious diseases hospitals. Of these, 5 cases were from outside the city, i. e., from the adjoining infected areas. Among these, death occurred in 4 cases.

Preventive measures such as isolation, disinfection and inoculation of the contacts were strictly enforced. 6,469 persons were inoculated with anti-cholera vaccine.

The number of cases treated and the results of the treatment are given in the statements of the infectious diseases hospitals.

Diarrhoea and dysentery:—Diarrhoea and dysentery accounted for 2,308 deaths, i. e., 8·77% of the total deaths with a death-rate of 3·1 per mille

of the estimated population as against 2.9 in 1937, the average of the past 5 years (1933-37) being 3.2. Calculated on the census population, the death-rate was 3.6 as against 3.3 in 1937, the average rate for the previous 5 years being 3.5. The mortality from diarrhoea and dysentery is given below.

Year.	Deaths.	Year.	Deaths.
1929	3,127	1934	2,008
1930	3,056	1935	2,320
1931	2,746	1936	2,208
1932	2,644	1937	2,133
1933	2,670	1938	2,308

The seasonal incidence was as follows :—

Quarter.	Deaths.
1st. Quarter	615
2nd. Quarter	469
3rd. Quarter	617
4th. Quarter	607
Total	2,308

The Annual Form No. XV furnishes the number of deaths in the various divisions.

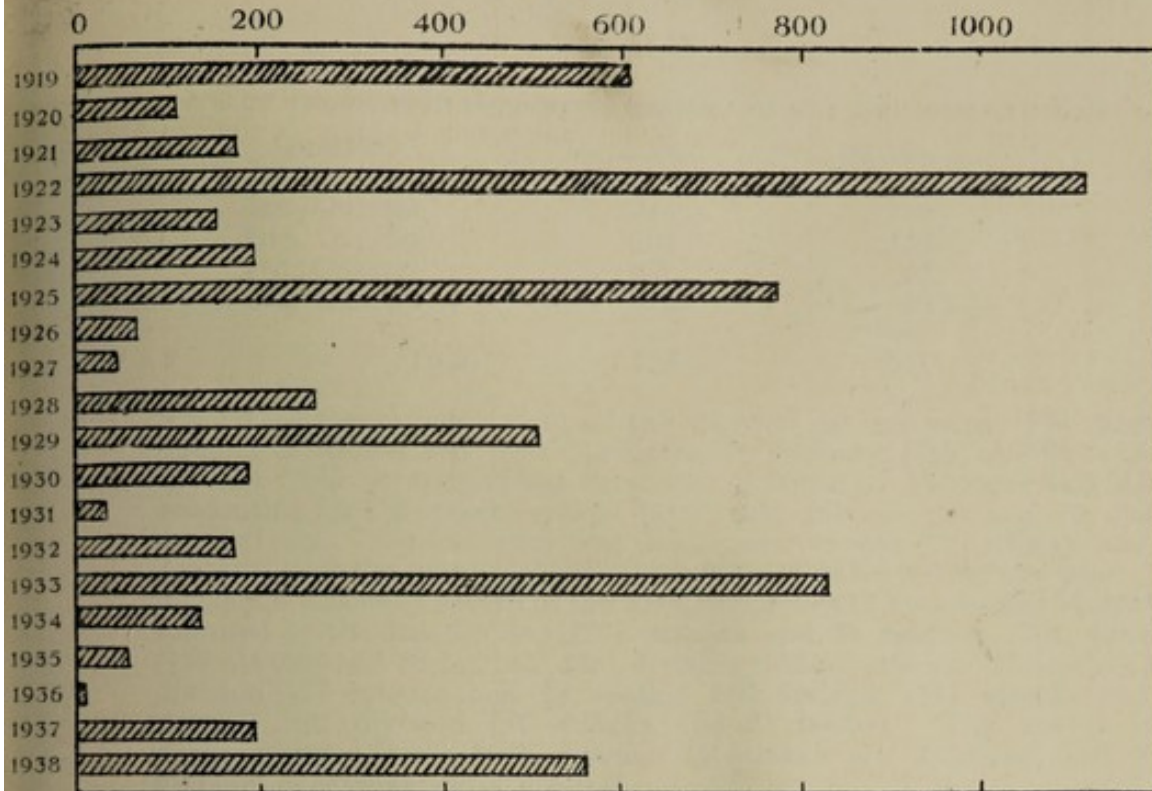
Small-pox:—The infection that was prevalent in 1937 continued during the year under report and gave rise to 2,110 attacks and 561 deaths as against 756 attacks and 196 deaths in the previous year. The disease was also prevalent in the neighbouring areas outside the city. The annual death-rate was 0.7 per mille of the estimated population as against 0.27 in the previous year and 0.35, being the average of the quinquennium (1933-37). The number of deaths during the year was 2.13% of the total mortality.

Calculated on the census population the death-rate was 0.87 as against 0.3 in 1937, the rate for the previous 5 years (1933-37) being 0.38. The following is the statement of the incidence of small-pox in the city during the last 20 years.

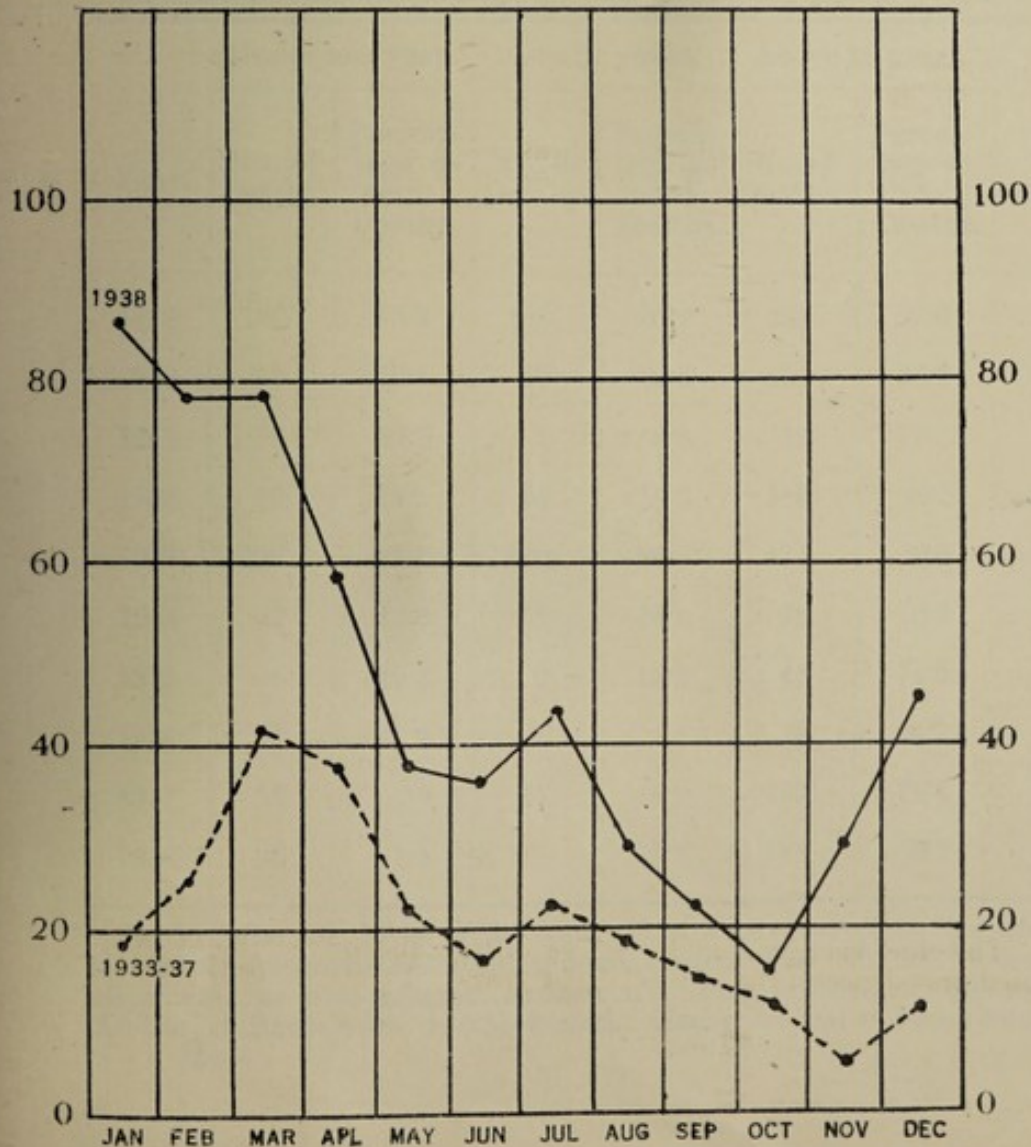
Year.	Attacks.	Deaths.	Year.	Attacks.	Deaths.
1919	1,227	611	1929	2,019	506
1920	315	109	1930	877	188
1921	569	180	1931	109	24
1922	2,727	1,121	1932	842	176
1923	481	151	1933	3,503	837
1924	665	197	1934	638	131
1925	1,807	763	1935	295	59
1926	300	60	1936	37	3
1927	385	32	1937	756	196
1928	1,066	251	1938	2,110	561

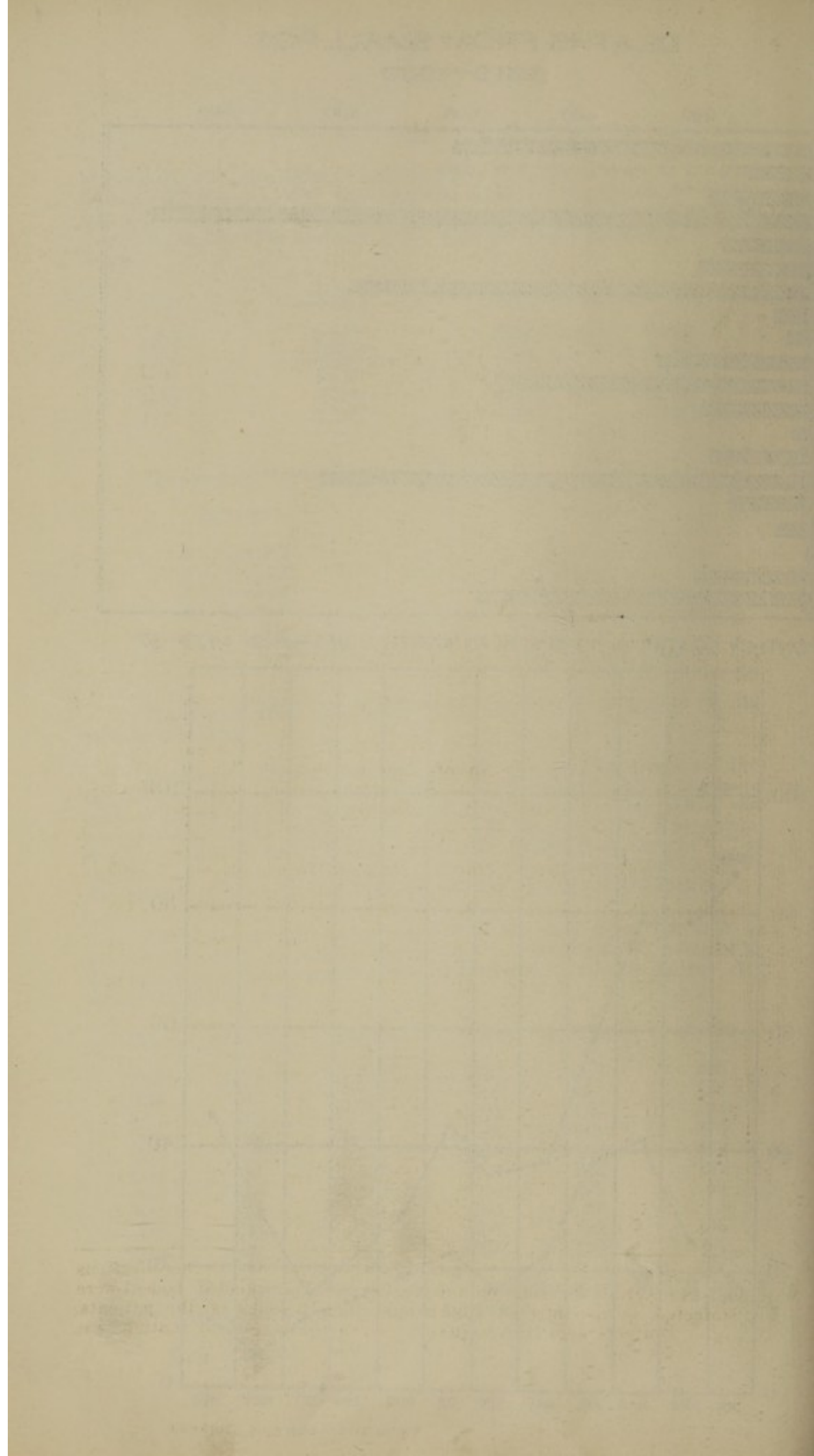
The chief epidemiological feature of this disease is that it has a seasonal prevalence in the city once in 4 years.

DEATHS FROM SMALLPOX 1919-1938



MONTHLY DEATHS IN 1938 & MEAN MONTHLY DEATHS IN 1933-37





The incidence in the several quarters of the year was as follows :

Quarter.	Attacks.	Deaths.
1st. Quarter	... 848	244
2nd. Quarter	... 484	133
3rd. Quarter	... 406	95
4th. Quarter	... 372	89
Total	... 2,110	561

Cases were reported in all the months of the year. The highest number of attacks and deaths occurred in January (329 attacks and 86 deaths). The severity of the infection continued in February and March accounting for 238 attacks and 79 deaths and 281 attacks and 79 deaths respectively. The incidence was lowest in October (70 attacks and 15 deaths). All the municipal divisions returned cases during the year. The incidence was most severe in the 35th. division (212 attacks and 54 deaths) followed by the 3rd. division (161 attacks and 38 deaths), 17th. division (159 attacks and 38 deaths), 33rd. division (132 attacks and 37 deaths), 4th. division (117 attacks and 28 deaths) 2nd. division (111 attacks and 28 deaths) 1st. division (87 attacks and 22 deaths). The lowest incidence occurred in the 22nd. division (4 attacks and 4 deaths) and 40th. division (4 attacks and 2 deaths).

The following statement furnishes the distribution of mortality from small-pox in different age-periods during the last 10 years.

Year.	Under one year.		1 to 10 years.		Above 10 years.		Total Deaths.
	No. of Deaths.	Percentage to total Deaths.	No. of Deaths.	Percentage to total Deaths.	No. of Deaths.	Percentage to total Deaths.	
1929	80	15·8	168	33·2	258	57·0	506
1930	19	10·1	67	35·6	102	54·3	188
1931	3	12·5	2	8·3	19	79·2	24
1932	32	18·2	34	19·3	110	62·5	176
1933	143	17·1	220	26·3	474	56·6	837
1934	17	13·0	22	16·8	92	70·2	131
1935	6	10·2	9	15·2	44	74·6	59
1936	1	33·3	...	...	2	66·7	3
1937	15	7·7	41	20·9	140	71·4	196
1938	46	8·2	1 27	22·6	388	69·2	561

2,050 cases, i.e., 97·1% of the total cases were removed to the infectious diseases hospitals for isolation and treatment. The infected houses were disinfected as also infected clothes and other articles of the patients. All the contacts were re-vaccinated. House to house vaccination was

pushed on in the infected localities. Schools, firms, offices and other public institutions in the city were visited by the staff and re-vaccination was conducted on a large scale. A wide propaganda was made against small-pox by the distribution of pamphlets, by conducting magic lantern shows and lectures and through communiques in the press.

As many as 68 cases were admitted into the infectious diseases hospitals for isolation and treatment from Thiruvottiyur, Sembium, Inavaram, Villivakam and other infected areas outside the city limits. Of these, 13 cases proved fatal.

Annual Form No. VIII gives the number of deaths in the various divisions during the year.

Vaccinations and re-vaccinations performed during the year are given in a separate report. The number of cases isolated and treated during the year is given in the statements of the infectious diseases hospitals at the end of the report.

Measles :—8 deaths from measles were registered, being the same as in the previous year with the annual death-rate of 0.01 per mille of the estimated population in both these years. Only seven municipal divisions recorded deaths from measles (Annual Form No. IX).

Malaria :—Malaria accounted for 50 deaths during the year as compared with 78 in the previous year 1937. The annual death-rate was 0.07 per mille of the estimated population as against 0.11 in 1937, the average rate for the quinquennium (1933-37) being 0.2. Calculated on the census population the death-rate was 0.08 in 1938 and 0.12 in 1937, and 0.21 being the average rate for the previous 5 years (1933-37).

The mortality from malaria for the past 10 years (1929-38) is furnished below.

Year.	Deaths.	Year.	Deaths.
1929	681	1934	193
1930	283	1935	167
1931	277	1936	113
1932	165	1937	78
1933	140	1938	50

There has been a further reduction in the number of deaths during the year and the number of deaths is the lowest. The distribution of deaths during the quarters of the year was as follows :

Quarter.	Deaths.
1st. Quarter	10
2nd. Quarter	12
3rd. Quarter	16
4th. Quarter	12
Total	50

Annual Form No. XI gives the number of deaths registered in each of the municipal divisions.

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

Enteric fever :—273 cases were notified during the year as against 274 cases in the previous year 1937. Of these, 119 cases proved fatal with

an annual death-rate of 0.16 per mille of the estimated population as compared with 0.13 in 1937, the quinquennial (1933-37) average being 0.18. The deaths from enteric fever accounted for 0.45% of the total mortality. Calculated on the census population the death-rate was 0.2 during the year as against 0.15 in 1937, the average rate for the previous 5 years (1933-37) being 0.2.

The mortality from enteric fever for the past 10 years (1929-1938) is stated below.

Year.	Deaths.	Year.	Deaths.
1929	130	1934	145
1930	126	1935	186
1931	166	1936	163
1932	101	1937	96
1933	90	1938	119

The incidence occurred throughout the year. The highest number of attacks was reported in February (34 attacks) and in September (34 attacks) followed by March (29 attacks) and May (29 attacks). The lowest incidence was in January (10 attacks).

The distribution of the 273 cases during the quarters of the year was as follows :

Quarter.	Attacks.	Deaths.
1st. Quarter	73	33
2nd. Quarter	64	28
3rd. Quarter	75	28
4th. Quarter	61	30
Total	273	119

With the exception of the 1st., 10th. and 29th. divisions, all the other divisions reported the incidence. Among the 37 divisions which reported cases, no death occurred in 3 municipal divisions (Annual Form No. XII.)

Preventive measures were carried out in all infected houses and 2,199 contacts were inoculated with anti-typhoid vaccine as a prophylactic measure.

Cerebro-spinal fever:—During the year 51 attacks and 27 deaths from cerebro-spinal fever were reported. The death-rate based on the estimated population was 0.04 per mille.

The disease suddenly broke out in October in an epidemic form accounting for 44 attacks and 19 deaths. Egmore was the division that was first affected with 40 attacks and 17 deaths. The chief feature of the disease was that the infection was confined to certain families and their relatives though they were living apart from one another. 9th. division, 20th. division, 24th. division and 28th. division reported one case in each. In November, 3 cases were reported, one from the 2nd. division, one from the 5th. division and one from the 27th. division. In December a case was reported from the 12th. division. Prior to this out-break in October, one case had occurred in the 34th. division in January, one in the 22nd. division in February and another in the 25th. division in July.

Annual Form No. XIV furnishes the deaths in the various divisions during the year.

Other fevers:—2,183 deaths were registered as against 2,036 deaths in the preceding year with a death-rate of 2·9 per mille of the estimated population, the rate for 1937 and the average rate for the previous 5 years (1933-37) being 2·8 and 2·9 respectively. The deaths from this cause accounted for 8·3 % of the total mortality during the year. Calculated on the census population the death-rate was 3·4 in 1938 and 3·1 in 1937, the quinquennial average being 3·2 (Annual Form No. XIII).

General respiratory diseases:—6,088 deaths were registered under this group as against 6,676 in 1937. The annual death-rate was 8·1 per mille of the estimated population as compared with 9·1 in 1937, the average rate for the previous 5 years (1933-37) being 8·8. These deaths represented 23% of the total mortality from all causes. Calculated on the census population the death-rate was 9·4 in 1938, 10·3 in 1937, and 9·6 for the quinquennium (1933-37).

The distribution of mortality during the quarters of the year was as follows :

Quarter.	Deaths.
1st. Quarter	1,659
2nd. Quarter	1,410
3rd. Quarter	1,336
4th. Quarter	1,683
Total	6,088

The number of deaths registered in each division is given in the Annual Form No. XVII.

Tuberculosis:—1,301 deaths were registered from tuberculosis during the year as compared with 1,155 deaths in 1937. Calculated on the estimated population the death-rate was 1·7 during the year. The rate for 1937 was 1·6 being the same as for the quinquennium (1933-37). The deaths from tuberculosis accounted for 4·96% of the total mortality. Calculated on the census population the death-rate was 2·0 as against 1·8 in 1937 which was the same as the rate for the past 5 years (1933-37).

The number of deaths due to tuberculosis of lungs was 1,193 or 1·6 per mille of the estimated population as against 1,104 deaths or 1·5 per mille in 1937.

The mortality from tuberculosis for the past 10 years is furnished below.

Year.	Deaths.	Year.	Deaths.
1929	1,371	1934	1,122
1930	1,075	1935	1,209
1931	1,020	1936	1,136
1932	917	1937	1,155
1933	1,011	1938	1,301

The number of deaths registered in the different quarters of the year was as follows :

Quarter.	Deaths.
1st. Quarter	276
2nd. Quarter	307
3rd. Quarter	313
4th. Quarter	405
Total	1,301

The Annual Form No. XVI gives the number of deaths registered in several municipal divisions.

Deaths from child-birth:—284 mothers died after child-birth as against 289 in 1937. The maternal mortality rate was 9·2 per 1000 live births as compared with 9·3 in the preceding year. The average for the quinquennium (1933-37) was 10·3.

The maternal mortality rates from 1929 to 1938 are given below.

Year.	Rate per 1000 births.
1929	13·1
1930	12·7
1931	11·6
1932	10·0
1933	11·6
1934	11·1
1935	9·5
1936	10·1
1937	9·3
1938	9·2

A further reduction is noticed during the year under report as compared with the previous year and the rate recorded for the year 1938 is the lowest.

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

Causes of death.	Deaths in age-periods				Total deaths.	Percentage to total deaths.
	15-20 years.	20-30 years.	30-40 years.	40 and above.		
Puerperal sepsis	33	72	53	7	165	58·1
Abortion	4	6	1	2	13	4·6
Other accidents & diseases of pregnancy.	28	45	23	10	106	37·3
	65	123	77	19	284	100·0

Puerperal sepsis accounted for 165 deaths or 58·1% of the total deaths. Calculated with reference to the births registered during the year, the death-rate from puerperal sepsis was 5·3 per thousand births as compared with 4·6 in 1937. Annual Form No. XIX gives the maternal deaths and death-rates in the various divisions. High rates are noticed in the divisions which contain a large percentage of poorer classes.

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

Deaths from other causes :—13,102 deaths were registered under this group of causes as against 12,605 deaths in 1937. The annual death-rate was 17·5 per mille of the estimated population as against 17·1 in 1937, the average rate for the past 5 years (1933–37) being 16·4

Calculated on the census population, the death-rate was 20·2, the rates for 1937 and the quinquennium (1933–37) being 19·5 and 17·9 respectively. These deaths accounted for 49·9 % of the total mortality. (Annual Form No. XX)

Certified deaths :—5,037 deaths were certified by the various hospitals in the city and 944 deaths by private medical practitioners as to the causes of death. The certified deaths represented 22·8% of the total deaths as against 24·9 in 1937. The Medical Registrars of births and deaths verified the causes of the other deaths.

Burial and burning grounds :—The divisional Sanitary Inspectors supervised the burial and the burning grounds in the city. Out of 26,282 deaths 21,119 corpses were buried and 5,163 corpses were burnt.

VACCINATION

Staff :—17 sub-assistant surgeons were in charge of the vaccination work assisted by 38 vaccinators and 2 female vaccinators.

Operations :—The statement below furnishes the total number of vaccinations performed during the year 1938 as compared with the previous year.

	1937.	1938.	Increase or decrease during 1938.
Primary Vaccinations ...	28,192	34,363	+ 6,171
Re-vaccinations ...	52,058	1,17,141	+ 65,083
	—	—	—
Total ...	80,250	1,51,504	+ 71,254

An increase of 71,254 in the total number of persons vaccinated is recorded and this has been chiefly due to the large number of re-vaccinations done on account of the wide prevalence of small-pox in the city. The public were made aware through the press and posters of the prevalence of the disease and of the necessity to get themselves and their families vaccinated so as to prevent it. Thus, every attempt was made to make re-vaccination popular so that the public may offer themselves voluntarily for re-vaccination.

The vaccination statistics for the last 20 years are given below.

Year.	Primary vaccinations.	Re-vaccinations.	Total.
1919	17,192	14,035	31,227.
1920	16,500	7,772	24,272.
1921	16,459	9,756	26,215.
1922	16,985	33,905	50,890.
1923	17,900	18,218	36,118.
1924	17,633	18,603	36,236.
1925	19,428	57,652	77,080.
1926	19,330	6,481	25,811.
1927	20,763	11,875	32,638.
1928	22,051	29,591	51,642.
1929	23,250	43,356	66,606.
1930	25,958	33,257	59,215.
1931	27,260	9,377	36,637.
1932	27,076	21,757	48,833.
1933	30,851	1,68,601	1,99,452.
1934	28,233	19,805	48,038.
1935	26,414	35,505	61,919.
1936	27,286	15,893	43,179.
1937	28,192	52,058	80,250.
1938	34,363	1,17,141	1,51,504.

The number of primary vaccinations has been steadily on the increase especially since 1927 indicating that a larger number of children have been protected by vaccination. The number of primary vaccinations performed during the year is the highest in the vaccination records of the city. The number of re-vaccinations during the year is the second highest. The total number of vaccinations during the year under report comes next to 1933 which recorded the highest.

An increase of 6,171 under primary vaccinations and an increase of 65,083 under re-vaccinations were recorded as compared with the preceding year.

Number of successful vaccinations:—The number of successful vaccinations for the past 10 years is furnished in the following statement.

Year.	Primary vaccinations.	Re-vaccinations.	Total.
1929	22,272	10,860	33,132.
1930	25,201	6,492	31,693.
1931	27,042	1,997	29,039.
1932	27,011	4,610	31,621.
1933	30,692	29,591	60,283.
1934	28,053	2,817	30,870.
1935	26,251	3,983	30,234.
1936	27,052	1,459	28,511.
1937	27,997	5,261	33,258.
1938	34,262	14,667	48,929.

Success rate:—The success rate in primary vaccinations was 99·7% as compared with 99·8% in the preceding year. The success rate in re-vaccinations was 15·9% as against 15·1% in 1937.

The success rates in the municipal divisions varied from 98·4% to 100%. 33 municipal divisions recorded rates above the rate of 99·7% for the whole city. Of these, 26 divisions obtained success rate of 100%.

Number of persons successfully vaccinated per 1000 population:— The number of persons successfully vaccinated per mille of the population rose from 51.4 in 1937 to 75.6 during the year under report.

Infantile vaccinations:— 22,441 infants under one year of age were vaccinated as against 18,779 in the preceding year, thus recording an increase of 3,662. Of these, 22,399 infants were successfully vaccinated as compared with 18,669 in 1937.

Out of 22,441 infants vaccinated, 17,572 infants were born in the city and 4,869 in the mofussil.

The number of infants vaccinated during the past 10 years is given below.

Year.	Number of primary vaccinations performed. (under one year of age)	Number of successful vaccinations.
1929	16,420	15,929.
1930	18,187	17,774.
1931	19,823	19,703.
1932	18,976	18,940.
1933	22,105	22,012.
1934	21,034	20,931.
1935	19,245	19,148.
1936	19,053	18,918.
1937	18,779	18,669.
1938	22,441	22,399.

The number of infants under one year of age successfully vaccinated was the highest in 1938.

Verification of births:— 31,135 births were verified for the purpose of vaccination as compared with 30,920 births in 1937. 4,548 children died before being vaccinated. 6,251 children were removed from the city before they could be vaccinated. The number of children available for vaccination was 20,336. Of these, 14,187 children or 69.8% were vaccinated as against 72.0% in 1937.

Postponement of vaccination in children:— The vaccination of 1,606 children was postponed for medical reasons.

Inspection of vaccinated persons:— The results of vaccination were verified by the Health Officer, the Asst. Health Officers and the Medical Vaccinators. The results of 34,238 or 99.9% of the total primary vaccinations and 92,228 or 78.7% of the total number of re-vaccinations were verified by them.

Prosecution:— 468 persons were prosecuted for failure to get their children vaccinated and 26 were convicted.

Further, 29 parents were prosecuted for not notifying the change of address and they were convicted.

Cost of vaccination:— The cost of each successful vaccination in 1938 was Re. 0-15-5 as compared with Re. 0-14-1 in 1937.

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

SANITATION

The sanitation of the two ranges of the city continued to be under the immediate charge of the two Asst. Health Officers. Dr. G. Srinivasan, B.A., M.B.B.S., B.S.Sc., officiated as Asst. Health Officer till 6-5-1938 on which date Dr. P. Sadasivan, L. M.&S., B. S. Sc., returned from leave. The Health Officer officiated as Commissioner from 9-5-1938 to 31-5-1938 during which period Dr. P. Sadasivan officiated as Health Officer and Dr. G. Srinivasan as Asst. Health Officer. The Health Officer proceeded on leave from 2-11-1938 and Dr. P. Sadasivan again officiated as Health Officer till the end of the year when Dr. G. Srinivasan officiated as Asst. Health Officer. From 13-4-1938 the city was divided into three ranges and Dr. N. Parthasarathy, L. M.&S., B. S. Sc., Conservancy Supervisor, was placed in charge of the new range. This was a tentative measure adopted to gauge whether a more effective control could be had in the administration. When Dr. Parthasarathy proceeded on long leave from 1-7-1938 this temporary arrangement was given up. Sri V. Venkatachalam, M.A., A.I.C., continued as the Public Analyst of the Corporation. Sri S. V. Ganapati, M.Sc., A.I.C., the Corporation Water Analyst, was awarded the Maharaja of Travancore's Curzon prize for 1938 by the University of Madras for his thesis entitled "Limnological studies on three South Indian lakes."

Water supply:--The north-east monsoon failed completely and the rainfall recorded during the year was the lowest for the past two or three decades. Water supplied to the city was bacteriologically safe throughout the year. Chlorination continued to be the chief feature of water purification. No substantial improvement has been effected in the method of filtration as recommended by the Water Filtration Committees. The report of the Corporation Water Analyst will be found elsewhere. Both the quality and quantity of water supplied need improvement.

148 public water taps, 3 bathing fountains and one cattle trough were constructed during the year.

Sewerage:--57,847 feet of sewers were laid during the year. The total length of sewers laid up to the end of the year was 13,66,672 feet. The scheme for the compulsory construction of flush-out latrines continued to be in force. 4,989 flush-out latrines were installed in private premises during the year. 4 public conveniences were constructed during the year and 9 were under construction.

Housing:--The number of plans received for the construction and reconstruction of buildings in the city was 2,876. Of these, 626 were rejected for sanitary reasons. In sewered areas provision of flush-out latrines was insisted upon in the case of every building application. 1,400 new houses were built in the city during the year. The city continued to keep up the rapid progress in the matter of new buildings most of which sprang up in the outlying areas like Theagarayanagar, Nungambakkam and Royapettah. The housing condition of the poor and the lower middle classes was far from satisfactory. If the recommendations of the "Housing Committee" are given effect to a change for the better could be expected in this direction.

17,682 houses were inspected by the Sanitary Inspectors during the year and the following defects were noticed.

(i) Want of proper drainage	741 houses
(ii) Want of sufficient latrine accommodation	892 "
(iii) Defective water supply	507 "

(iv) Bad ventilation	907	houses
(v) Miscellaneous defects	1,878	„

As a result of action taken to remedy these defects, the sanitation of 3,911 houses came to be improved. 94 prosecutions were instituted for failure to provide proper latrine accommodation and 325 houses were provided with latrines during the year. The construction of 72 tenements in Harbour division was completed and the construction of 84 tenements in Bunder Rama Naicken Garden was in progress.

Factories:—At the beginning of the year there were 132 factories in the city. The Assistant Health Officers, in the capacity of Additional Inspectors of factories under the Factory Act, inspected the factories. Sanitary defects noticed during their inspections were reported to the Chief Inspector of factories for taking necessary action.

Offensive trades:—7,755 applications for offensive trades were dealt with during the year. Of these, 6,879 were sanctioned and 453 were refused. 423 were pending at the end of the year. As a result of the new by-laws under section 349 sanctioned by the Government, hair cutting saloons came to be licensed. 650 persons were prosecuted for carrying on offensive trades without licence. 317 licensees were prosecuted for failing to observe the conditions of licences granted to them.

Cattle yards:—1,436 cattle yards were fit for licence at the beginning of the year and 790 were rendered fit after effecting improvements as a result of action taken. 511 cattle yards were found unfit for licensing. After repeated prosecutions 128 condemned cattle yards were vacated.

The Corporation continued to maintain the cattle yards at Basin Road, Purasawalkam and Chintadripet. 280 animals were housed in these three cattle yards. Proposals for the extension of the existing ones and for the construction of new ones were pending.

Cart stands:—There were 18 cart stands during the year as against 14 in the previous year. The Elephant Gate cart stand of the Corporation was let on contract for Rs. 3,500 for 1938-39.

Dhobykhanas:—There were two Corporation dhobykhanas, one at Chetput and the other at Robinson Park. The pavements between the washing platforms in the Chetput dhobykhana were cemented. The construction of a dhobykhana was in progress in Purasawalkam.

Eating houses:—1,082 licences were issued during the year for eating houses. The tendency in the number of eating houses to increase is very apparent. Great care had been bestowed in the matter of granting licences in accordance with the by-laws. The continuous drive maintained against the sale of trash and cheap food in the streets has mainly contributed to this ever growing demand for eating houses in the city.

Slums and cheries:—After taking the preliminary steps to declare the cheries and hutting grounds as such under section 257 A (a) with the sanction of the Council, action was commenced in the case of Chetty Gardens and Islambada cheries. Notices were issued under sec. 257 calling on the owners to carry out improvements. As expected, there was no response from them. Standard plans and estimates were under preparation for taking action as provided in the special chapter of the Act.

Meat supply:—In the Corporation Slaughter Houses at Perambur 4,81,380 sheep and goats, 19,054 cattle and 1,365 pigs were slaughtered during the year. The Veterinary Superintendent examined the animals brought for slaughter. He also examined the carcasses after slaughter. A statement of animals and carcasses examined and rejected is given below.

Animals.	Number brought and examined.	Number rejected.	Carcasses examined.	Carcasses rejected.
Sheep and Goats ...	4,89,181	7,801	4,81,380	24
Cattle ...	19,582	528	19,054	1
Pigs ...	1,410	45	1,365	19

In certain cases the organs of slaughtered animals had to be condemned and they were as follows :

Animals.	Organs condemned.
Sheep and Goats	11,849
Cattle	9,996
Pigs	1,141

The 3 public and 39 private markets where mutton is sold and all the mutton stalls outside these markets were visited by the sanitary staff regularly and the sale of unwholesome meat was prevented.

229 stray pigs were caught in the city. They were brought to the Slaughter Houses where 207 were auctioned and subsequently slaughtered. Eight died and 14 were released on payment of penalty and allowed to be removed from the city.

Food control:—There were 6 Corporation markets and 42 private markets in the City. The Sanitary Inspector in charge of markets inspected all the public and private markets periodically to ensure their proper up-keep. The divisional Sanitary Inspectors frequently inspected the markets in their divisions to see that they were kept clean and tidy. Six Market Superintendents were appointed to look after the sanitation and maintenance of some of the larger private markets. During the year, regulations for the sale of dry fish in fly-proof cases were enforced. A flush-out latrine was constructed in the Manthavali private market and electric lights were provided in the D'mellows Road market. In the Moore Market, a new model public convenience was constructed at a cost of Rs. 3,200. The quarters of the Superintendent was also provided with a flush-out latrine. In the Fruit Market a gate was opened in the south-west corner for the convenience of the flower sellers. The Council, at its meeting held on 6-7-1938, sanctioned the proposal to acquire 8 private markets at a cost of 7 lakhs of rupees from the loan funds. A temporary licence for a private market in Thambu Chetty Street was sanctioned by the Council during the year.

The vigorous and continued drive against the sale of articles of food on road-sides and unauthorised places was kept up. The use of a motor lorry for this work was continued. A list of articles seized and destroyed is appended to this report.

Weights and Measures :—The 2 Inspectors of Weights and Measures continued to be in charge of the work relating to the enforcement of the by-laws under section 349 (20) prescribing standard weights, measures and scales. They made periodical inspections of all the public and private markets in the city and checked the scales, weights and measures used by vendors. They also inspected and checked the weights, measures and scales used for sale in shops, bazaars, godowns and depots. They intercepted itinerant vendors for testing the scales, weights and measures used by them. Defective scales, weights and measures were seized and confiscated. Vendors found using them at the time of seizure were prosecuted. During the course of the year 502 seizures were made. 27 prosecutions were instituted. Petty vendors resorting to the various markets now and then and itinerant vendors in the streets were often found to use defective scales, weights and measures. Though they could not be prosecuted for want of definite address, their non-standard scales, weights and measures were immediately seized and confiscated.

Medical relief :—At the beginning of the year there were 23 out-patient dispensaries consisting of 19 allopathic, 2 unani, 1 siddha and 1 ayurvedic institutions. The allopathic dispensary for women and children at the Child Welfare Centre, Perambore, continued to function. In 7 of the allopathic dispensaries, separate sections for ladies were continued.

During the year new dispensaries were opened in Egmore on 18-8-1938, in Otteri on 26-8-1938 and in Krishnampet on 22-9-1938. The new unani dispensary was located at Mannady and the allopathic dispensary there was shifted to Egmore. The dispensaries at Otteri and Krishnampet are of the siddha and allopathic systems respectively. During the year 26,98,504 patients were treated in all the dispensaries. A statement of cases treated in these dispensaries is appended.

From 1-11-1938, the Mannady dispensary was shifted to 269, Lingha Chetty Street and the Theagarayanagar dispensary to Gopathy Narayanaswami Chetty Road.

In pursuance of a resolution of the Council dated 3-8-1938, the working hours of the dispensaries were changed to 6-30 to 10-30 in the mornings and 4 to 6 in the evenings.

The leprosy and skin clinic at Vyasarpady continued to be under the additional charge of the Medical Officer of the allopathic dispensary there. The other leprosy and skin clinic at Ice House Road was under the management of the Honorary Leprosy Officer, Rao Sahib Dr. P. Parthasarathy Naidu, till 3-5-1938 after which date a paid Medical Officer was appointed to be in charge. Skin diseases and early cases of leprosy were treated in all the Corporation dispensaries. The main feature during the year under report was the thorough re-organisation of leprosy work among the Corporation school leper pupils. The Medical Inspectors of schools on detecting leprosy cases sent them to the clinics for confirmation of their diagnosis and distributed them among the various Corporation dispensaries for regular and systematic treatment. Details of work in this direction will be found in the report on the medical inspection of schools. The Medical Officers of allopathic dispensaries underwent training in the treatment of leprosy and skin diseases under Rao Sahib Dr. P. Parthasarathy Naidu.

The total number of new cases treated at both the clinics was 6,555. The total number of skin cases treated at the Corporation dispen-

saries alone was 81,958. A statement of cases treated is annexed to this report.

The free venereal clinic opened in December, 1937, at Pulianthope had an attendance of 400 patients during that month. In January 1938, the attendance increased to 774 and in December it rose to 1,406. It is evident that the clinic is meeting the requirements of the public and is getting popular. The total number of patients treated during the year was 12,368. 338 blood smears were sent to the Guindy Institute for serological examination. The number of smears examined for gonococci in the clinic was 884. The total number of injections given during the year was 1,634.

The two infectious diseases hospitals at Tondiarpet and Krishnampet were full during the year on account of the prevalence of small-pox, chicken-pox, measles and cholera. The total number of patients admitted in the two hospitals was 4,032. Both the hospitals treated cases of small-pox and cholera. Additional staff was employed during the epidemics in both the hospitals. There were 68 admissions for small-pox and 5 for cholera from the mofussil. Separate statements regarding cases treated in these hospitals will be found in the appendix.

Anti-rabic measures :—6,971 dogs and 7,951 bitches were seized during the course of the year and removed to the Lethal Chamber. Of these, 6,726 dogs and 7,848 bitches were destroyed by electrocution. 121 dogs and 50 bitches were claimed by owners and restored to them. One valuable dog was auctioned. 82 dogs and 3 bitches were given to the Medical College laboratory. The highest number caught was in the month of August consisting of 863 dogs and 1,010 bitches. It is noteworthy that 980 bitches were caught in excess of dogs during the year.

Poor House :—The Poor House continued to be a very popular institution. There were 194 new admissions during the year. There were 57 deaths among the inmates during the year, of which 38 took place in the Government Royapuram Hospital and 19 deaths occurred in the institution itself on account of debility and senility. The strength of the House at the end of the year was 224.

During the year the flooring of the general wards and the kitchen were cemented. The female section was provided with expanded metal iron gates and the matron's quarters with a door. A portion of the wall on the southern side of the compound was raised. As usual feasts were given on important festival days in the year. The Travancore Maharaja's birth-day feast was given on 23-10-1938.

The Council at its meeting held on 15-11-1938 approved the proposal to start an industrial home for the able-bodied beggars in the city. The question of enacting necessary legislation to provide powers to commit the beggars into the Home was under correspondence with the Government at the end of the year.

A scheme to start a home for 500 lepers and syphilitic beggars has been deferred by the Standing Committee (Taxation and Finance) at its meeting held on 5-8-1938 to be taken up when funds permitted.

Zoological garden and swimming bath :—Under the scheme of improvements to the zoo a further instalment of improvements was carried out meeting the cost thereof from the grant of Rs. 15,000 sanctioned in the budget for 1938-39. The zoo was also improved by the addition of

several new animals. The right of collecting entrance fees let on contract for three years for a sum of Rs. 59,500 continued. The annual contract for the right of plying pleasure boats in the zoo lake was let on 1-4-1938 for Rs. 590. A detailed report on the administration of the zoo will be found in the Commissioner's administration report for 1938-39.

The control of the swimming bath by the side of the zoo was transferred from the Revenue Department to the Health Department in July, 1938. The Superintendent of the zoo was placed in additional charge of the bath. Instruction in swimming was given by an instructor. The periodical cleaning of the bath and re-filling it with water were carried out by the Water Works Department. The Water Analyst carried out tests of the water in the bath. The Council sanctioned Rs. 5,000 for improving the bath. It was closed to the public in December on account of scarcity of water and the work of improvements was taken up.

Health propaganda :—Health propaganda was carried on throughout the year to draw the attention of the public to the importance of observing sanitary and hygienic principles in their daily life. 1,020 magic lantern lectures, 58 cinema shows, 19 health dramas, 4 health exhibitions were conducted during the year. 2,382 health lectures and 1,341 talks were also conducted. Pamphlets on health subjects and dangerous diseases were freely distributed to the public. A civic exhibition was, as usual, conducted in the exhibition section of the annual Park Fair and Exhibition held by the South Indian Athletic Association.

Report of the Port Health Officer on the working of the Quarantine Regulations at the Port of Madras for the calendar year 1938.

In Coming Vessels :—688 vessels arrived here during the year with 61,425 crew and 84,491 passengers as against 684 vessels with 61,290 crew and 59,809 passengers in the previous year.

Out Going Vessels :—688 out going vessels with 60,489 crew and 48,705 passengers were inspected and granted Bills of Health during the year as against 684 vessels with 61,038 crew and 1,00,822 passengers in 1937.

Epidemics :—3 cases of chicken-pox and 1 case of cholera were removed from the vessels and sent to the Infectious Diseases Hospital, Madras.

Disinfection of bedding, clothing and other personal effects of passengers and crew was carried out whenever it was found to be necessary.

Public Health Activities of Private Institutions

Ambal Siddha Vaidya Free Dispensary, 2-48, St. Xavier Street, George Town, treated 16,089 patients.

Arya Vaisya Maternity and Child Welfare Centre, 141, Anna Pillai Street, treated 142 labour cases.

Bairava Free Dispensary, 21, Sundaramurthi Vinayagar Koil Street, Triplicane, treated 49,174 patients and conducted health propaganda work.

Chengalroya Naick Free Dispensary, Rundalls Road, Vepery, treated 2,34,838 patients.

Chennai Maignana Dharma Siddha Vaidyasala, 2-18, Nagappier Street, Thiruvateeswaranpet, rendered medical aid to 15,169 patients.

Chennapuri Annadhana Samajam, No. 9, Nainiappa Naick Street, Park Town, fed the disabled poor, supplied food to 467 boys and provided boarding and lodging to 80 boys studying in various schools and colleges.]

Free Unani Dispensary, 31 Hussain Mulk Street, Triplicane, rendered medical aid to 27,954 patients.

Free Unani Dispensary, 83, Ellis Road, Thiruvateeswaranpet, treated 7,300 patients.

Friend-in-need Society 3, Poonamallee High Road, lodged, clothed and fed about 60 inmates and supplied special food to 132 children.

Kalyani Hospital, Edward Elliots Road, Mylapore, rendered medical aid to 3,043 in-patients and 13,852 out-patients. The number of maternity cases treated was 1,193.

Marvari Free Ayurvedic Dispensary, 419, Mint Street, Sowcarpet, treated 1,92,863 patients.

Madras Siddha Ayurvedic Free Dispensary, 1-130, Royapettah High Road, Mylapore, treated 22,159 patients.

Monegar Choultry, Monegar Choultry Road, fed 1,16,012 poor persons.

Oddarpalayam Free Dispensary, 123, Lloyds Road, Mylopore, treated 21,335 patients.

Osmania Shafa Khana, Thayar Sahib Street, Thiruvateeswarnpet, treated 12,308 patients.

Pandit Anandam's Medical Hall, Raghaviah Road, Theagarayanagar, treated about 40,000 patients and distributed Tamil pamphlets on 'Guide to Health.'

Panduranga Free Dispensary, 66, Monegar Choultry Road, treated about 5,471 patients.

Saraswathi Sangam Dharma Oushadalaya, 28, Pidariar Koil Street, George Town, treated 21,943 patients.

Saraswathi Sangam Free Dispensary, 13, Olagappa Maistry Street, Chintadripet, treated 17,387 patients.

Sree Kanyaka Parameswari Devasthanam Dispensary, Anna Pillai Street, George Town, treated 22,486 patients.

Sri Ramakrishna Mutt Charitable Dispensary, Brodies Road, Mylapore, treated 93,650 patients.

St. Thomas Convent Dispensary, San Thome, rendered medical aid to 25,397 patients.

Siddhananda Free Dispensary, 330, Mint Street, George Town, treated 18,313 patients.

Triplicane Annadhana Samajam, Pillayar Koil Street, Thiruvateeswaranpet, fed 43,103 poor persons.

Thirivarnika Mahasanga Free Ayurvedic Dispensary, Mint Street, Madras, treated 39,837 patients.

Unani Dharush Shifa Free Dispensary, 515, Triplicane High Road, treated 1,14,809 patients.

Vasudevananda Free Dispensary, 8, Parthasarathy Swami Street, Triplicane, treated 13,416 patients.

Venkatramana Dispensary, Kutcheri Road, Mylapore, treated 60,808 patients and 5,567 surgical cases. In its branches at George Town, Triplicane and Theagarayanagar 14,743 patients, 4,460 patients and 3,496 patients were respectively treated. 212 patients were treated at the newly opened Sowcarpet branch.

Vupputtur Alwar Chetty Free Ayurvedic Dispensary, 3-6 Tulasinga Perumal Koil Street, Triplicane, treated 1,55,317 patients.

CONSERVANCY

Mr. W. L. Edwards, the Drainage Superintendent, continued to be in charge of the conservancy work of the city till 9-5-1938 when he went on leave preparatory to retirement. He was succeeded by Sri A. Ramiah, Foreman, Water Works Department. From 11-5-1938 the Drainage Superintendent was transferred to the Special Works Department along with the sewer cleaning staff of 1 foreman, 19 sewer superintendents, 224 syphon coolies, 100 main drain coolies and 12 syphon peons and the two Assistant Health Officers were put in charge of the conservancy work.

The following labourers were engaged during the year for cleaning streets, drains, syphons, water tables and latrines.

2,181 male coolies

202 women coolies

458 boy coolies

The following carts were engaged for removing rubbish, filth sewage and silt from the divisions.

428 trollies and double and single draught rubbish carts

92 night-soil carts

63 sewage and silt carts

30 adults and 60 boys sanctioned temporarily for one year were continued for another year. 20 boys were newly sanctioned during 1938-39. Out of these 20 boys, 10 boys were directed to work during non-conservancy hours for picking up papers, dung etc. in places such as China Bazaar Road, Mount Road etc. During prevalence of small-pox separate gangs of coolies were formed for the special conservancy of slum areas.

Motor lorries:—The conservancy lorries were under the control of the Mechanical Engineer and the charges for the supply of these lorries were debited to the Health Department at 5 annas per mile or Rs. 10 per day per lorry. The total amount debited to the conservancy grant during 1938-39 is Rs. 1,39,882. 4 new lorries were purchased during the year at a cost of Rs. 11,600.

Tipping platforms:—There were two tipping platforms one at the Basin Bridge depot and the other at the Langs Garden pail depot. Both of them worked satisfactorily.

Carts:—A sum of Rs. 20,000 was sanctioned in the budget for the manufacture of carts and dust bins and the following were manufactured in the Corporation workshop.

30 hand carts with buckets at a cost of	...	Rs. 2,310
1,135 dust bins at a cost of	...	Rs. 7,308
380 night-soil buckets at a cost of	...	Rs. 7,150

Disposal of rubbish:—About 6,17,221 cart-loads of rubbish were removed during the year as against 5,93,653 in the previous year. Of these 53,746 cart-loads were burnt at the two incinerators maintained by the Corporation after separating the earth and other incombustible materials. 2,16,440 cart-loads were dumped at the Korukupet, Otteri and Mylapore dumping grounds. 3,47,035 cart-loads were used for raising lowlands. 92,237 cart-loads of incinerator ashes and screened earth were removed by private parties, free of charge, for raising lowlands.

Disposal of filth:—Three pail depots and 2 night-soil depots were maintained for the disposal of filth. The pail depots at D'mellows Road, Ice House Road and Langs Garden worked satisfactorily throughout the year. Coal tar was burnt at these depots to mitigate stench. The pail depot at Langs Garden was closed in December, 1938. 91,640 cart-loads of filth were removed as against 90,914 cart-loads removed during the previous year. Of these, 48,232 cart-loads were flushed into the sewers at the pail depots and the rest trenched in the two night-soil depots at Korukupet and Otteri. The amount realised by the sale of manure at the trenching grounds during 1938-39 was Rs. 4,000.

Public latrines:—301 public latrines existed in the city during the year under report. Of these, 245 were of the flush-out type and 34 were masonry ones. The remaining were sanded latrines. 4 modern public conveniences were constructed during the year at the following places.

- (1) Moore Market Quadrangle
- (2) Behind B.N. Dispy., Kalathiappa Mudali Street
- (3) Band Stand, Peoples Park
- (4) Behind Park in Ponnappan Lane, P. R. Square

All the public latrines were lime washed. 1,475 gallons of disinfectants were utilised during the course of the year for the disinfection of these latrines and drains. 3,953 parabs of chunam were used near dust bins, road-sides, street corners and other places rendered untidy by the committal of nuisance.

Festivals:—Special conservancy arrangements were provided for the convenience of the public during the annual festivals at Mylapore and Triplicane. The conservancy arrangements during the annual Park Fair and Exhibition was, as usual, undertaken on payment of charges.

Private scavenging:—The removal of rubbish and filth from several public institutions in the city was carried out by the department as per section 197 of the City Municipal Act. The total income realized by way of fees during 1938-39 was Rs. 23,274-15-1.

Nuisance:—The health staff paid personal attention to the cleaning and disinfection of places where there was frequent committal of nuisance. Notice boards were put up in several parts of the city prohibiting committal of nuisance.

General:—The total expenditure on conservancy for the year 1938-39 was Rs. 10,18,225 (Rs. 37,933 capital and Rs. 9,80,292 ordinary) against Rs. 10,79,261 for 1937-38. The amount spent on wages for conservancy labour was Rs. 6,16,701.

Labour:—In pursuance of the instructions issued in G.O.No. 4,942 L & M dated 22nd. December, 1931, coolies who retired on account of old age and infirmity were granted bonus. 306 coolies occupied tenements in the Corporation model lines. 383 lived in huts on Corporation land. The labourers had their needs well attended to. Their grievances were personally enquired into and redressed.

Animals:—The number of bullocks on hand on 1-1-1938 was 779 as against 825 on 1-1-1937. 151 bullocks were purchased during the year making up a total of 930 bullocks. 159 bullocks died during the year as against 144 in the previous year, leaving a balance of 771 bullocks at the end of the year.

Of the casualties during the year, 82 died of old age and general debility, 32 of tuberculosis, 7 of piroplasmosis, 2 of bovine lymphangitis, 1 of tetanus, 11 of cardiac diseases, 8 of respiratory diseases, 7 of gastric troubles and 9 of other causes.

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

Piroplasmosis:—There were 7 deaths from piroplasmosis. Prompt measures were adopted to stamp out the disease.

Bovine Lymphangitis:—There were only 2 deaths from bovine lymphangitis. The affected ones were immediately segregated and treated and thus the disease was brought under control.

Tetanus:—There was one death from tetanus during the year.

Tuberculosis:—There were 32 deaths from tuberculosis. By the nature of their work, conservancy bullocks are easily exposed to tubercular infection and they contract this disease very quickly. All possible preventive measures were adopted. Every animal showing clinical symptoms of tuberculosis was immediately destroyed. Animals suspected of tuberculosis were segregated at the veterinary isolation hospital, Vyasarpady, and tested with tuberculine. All the reactors were destroyed immediately.

Foot and mouth disease:—There was an out-break of foot and mouth disease. 22 cases were affected with the disease at the Harris depot during February, 19 cases at the Basin Bridge depot during June and 2 cases at the Choolai depot during December. All the affected ones were immediately segregated at the isolation hospital, Vyasarpady, and were successfully treated. There were no casualties.

Animals treated at the conservancy cattle depots and the Veterinary Isolation Hospital, Vyasarpady:—696 cases were treated for various illnesses in the conservancy cattle depots. 108 cases which either suffered from contagious diseases or required special attention or expert treatment were brought to the veterinary isolation hospital and treated there.

ANTI-MOSQUITO MEASURES

During the year under report Sri J. Muthia, L.M.P., L.P.H., Medical Officer in charge of the anti-mosquito section, was deputed to attend the special malaria class at Karnal organised by the Director, Malaria Survey for India. The period of training lasted for a month and a half. The Medical Officer obtained a successful certificate after attending the examinations held after the course. During his absence Sri N. Rangaswamy L.M.P., was in charge of the section.

The staff consisted of 3 supervisors, 8 overseers, 36 maistries, 1 laboratory attendant and 144 coolies. This included the special staff appointed in the preceding year, 1937, for house inspections, well inspections and oiling.

The various aspects of anti-mosquito work are dealt with below.

Tanks and ponds :—463 ponds and tanks existed at the beginning of the year. The malaria staff cleaned periodically 179 ponds and tanks and collected Rs. 2,098-2-0 from the owners. 187 ponds and tanks were attended to by the owners themselves. 5 private ponds were cleaned free of charge on account of their receiving storm water from the surrounding areas. 9 Corporation tanks were also attended to by the staff. All the ponds and tanks were stocked with larvicidal fish. Action was not taken in respect of ponds that were clean and free from larval breeding and those that were dry.

As a result of action taken against the owners, 15 ponds were reclaimed during the year.

Wells :—The staff continued to examine the wells for the presence of mosquito larvae and stocked them with larvicidal fish. The results of the inspections made by the staff during the year are summarised in the statement below.

	Percentage of wells with fish alive.	Percentage of wells with mosquito larvae.	Percentage of wells with ano- pheles larvae.
1st. Round	83.5	2.9	1.1
2nd. Round	83.3	2.4	0.8
3rd. Round	85.0	3.0	1.0
4th. Round	85.7	3.6	1.3
5th. Round	86.9	3.5	1.0
* 6th. Round	87.7	3.2	0.7

* Incomplete round and the figures are based on the number of wells examined upto 31-12-1938.

A comparative statement of the findings of the staff during 1936, 1937 and 1938 is given below.

	Percentage of wells with fish alive.	Percentage of wells with mosquito larvae.	Percentage of wells with anopheles larvae.
1936	41.0	17.6	11.6
1937	85.3	5.3	2.0
1938	86.9	3.5	1.0

The figures relate to the complete rounds made at the end of the years under reference.

It will be seen from the above statement that a further improvement was effected during the year under report as compared with the preceding year and a distinct improvement as compared with 1936. This marked improvement in the condition of wells was due to their inspection at short intervals of a little over 2 months and stocking them with *Gambusia*.

The staff removed all floating matter before introducing larvicidal fish. Most of the un-used wells were found to contain such matter and to breed mosquitoes. Apart from leaves from trees near-by, rags of cloth, paper, toys etc., that fall accidentally into the wells, flowers are thrown into them by some people after puja. It has been the experience to find the progress achieved in improving the condition of wells being rendered ineffective throughout the city on the day of Vinayaga Chaturthi festival. On religious grounds flowers and idols are thrown into the wells. The general condition of most of the wells in all parts of the city deteriorated by this practice and mosquitoes began to breed in them. In addition to the personal propaganda made by the staff during the course of their daily work, a press communique was also issued a few days before the occurrence of this festival soliciting public co-operation. A great deal of work had to be done by the staff before these wells were brought back under control.

During the year 294 wells were filled up and 515 wells were found to be covered with cuddapah slabs and 1,647 wells provided with trap-doors. Bad wells were oiled with kerosene oil and stocked with fish after 10 days. 369 such wells received this attention and action was taken in respect of these wells for enforcing permanent measures such as filling or covering with cuddapah slabs.

As pointed out in the previous reports, wells form the permanent breeding places of *Anopheles stephensi* (malaria carrier), *Aedes aegypti* (vector for yellow fever) and *Culex fatigans* (vector for filariasis). Special attention was paid to the wells which were breeding *A. stephensi* by frequent inspections and stocking fish till the breeding in these wells was controlled.

In addition to stocking wells with fish, the fish gangs inspected the entire premises during the course of their work and destroyed 841 breeding grounds of mosquitoes such as collections of water in broken vessels, tins, cisterns, tubs, drums etc., after showing them to the occupants. 709 odd receptacles were removed from houses by them.

Nearly 15,300 wells exist in the city and more wells are being sunk in areas where extension is going on. During the year, the staff detected and registered 681 wells including those newly sunk.

In view of the fact that dangerous types of mosquitoes breed in wells it behoves that a general policy, as advocated in the previous reports, should be adopted to enforce, as a permanent measure, covering of all wells in premises where tap water is available. If a demand is made to use the water from any well, it should be provided with a pump.

Gambusia was put into wells as well as into ponds, tanks, garden-cisterns and fountains. The fish pond in the compound of the Infectious Diseases Hospital, Tondiarpet, and several other ponds and tanks kept as nurseries in different parts of the city gave sufficient supply of larvicidal fish required for the work.

Anti-stegomyia service:—The stegomyia control measures in the portion of the city half a mile round the Madras Port limits were continued during the year as in the previous year. The special area was inspected 17 times during the year and 33 times from the time of the stegomyia survey in 1936.

The mosquito and stegomyia house indices for the 17 rounds made by the staff during the year are set forth in the following statement.

Number of rounds.	Mosquito house index.	Stegomyia house index.
1	1.3	0.78
2	1.7	1.06
3	1.1	0.62
4	1.2	0.9
5	0.96	0.58
6	0.79	0.53
7	0.69	0.37
8	0.97	0.52
9	0.87	0.56
10	1.11	0.78
11	1.15	0.86
12	1.15	0.85
13	1.3	1.05
14	1.24	0.93
15	1.41	0.99
16	0.94	0.59
17	0.97	0.50

The mosquito house index and the stegomyia house index at the time of the survey in 1936 were 14.0 and 9.9 respectively. The above statement shows the reduction in the indices during the year. The graph illustrates the trend of the stegomyia house index from the time of the survey in 1936 upto the time under report. Owing to the failure of the monsoon there were less facilities for the stegomyia mosquitoes to breed on account of the absence of collections of water.

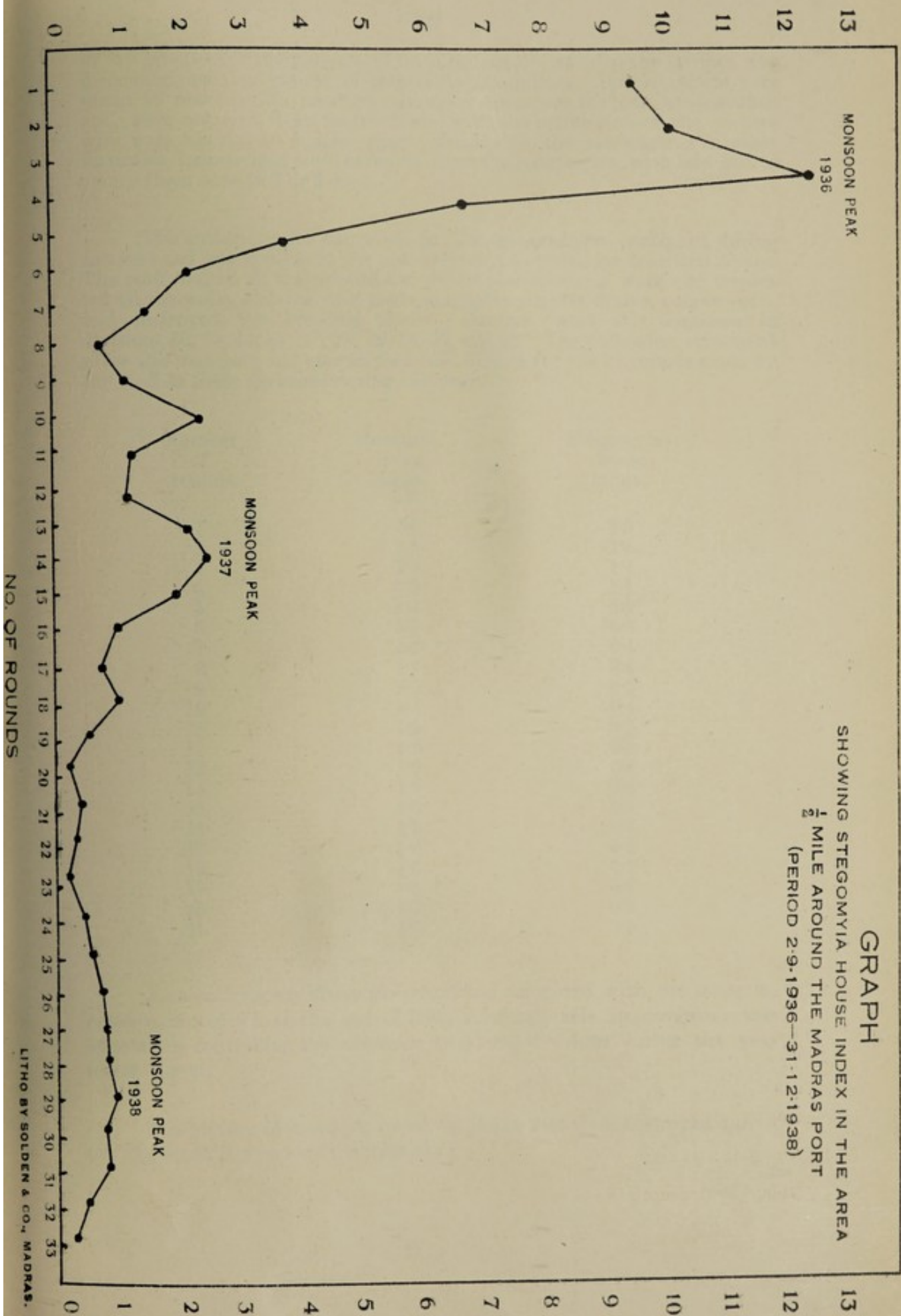
The stegomyia house index for each round was furnished to the Director of Public Health for his information.

The number of mosquito breeding places detected by the staff from the commencement of the anti-stegomyia work in the special area is given in the following statement.

Number of rounds.	Number of mosquito breeding places (including Stegomyia)	Number of stegomyia breeding places.
1	1238	959
2	1532	1184
3	1793	1264
4	1176	888
5	720	351
6	569	238
7	365	227
8	161	81
9	182	118
10	387	241
11	217	163
12	156	118
13	311	225
14	377	304
15	238	188
16	148	96
17	165	101
18	198	127
19	131	73
20	136	96
21	101	61
22	98	65
23	77	39
24	109	59
25	101	63
26	125	84
27	122	89
28	135	98
29	147	116
30	134	98
31	185	134
32	105	62
33	101	52

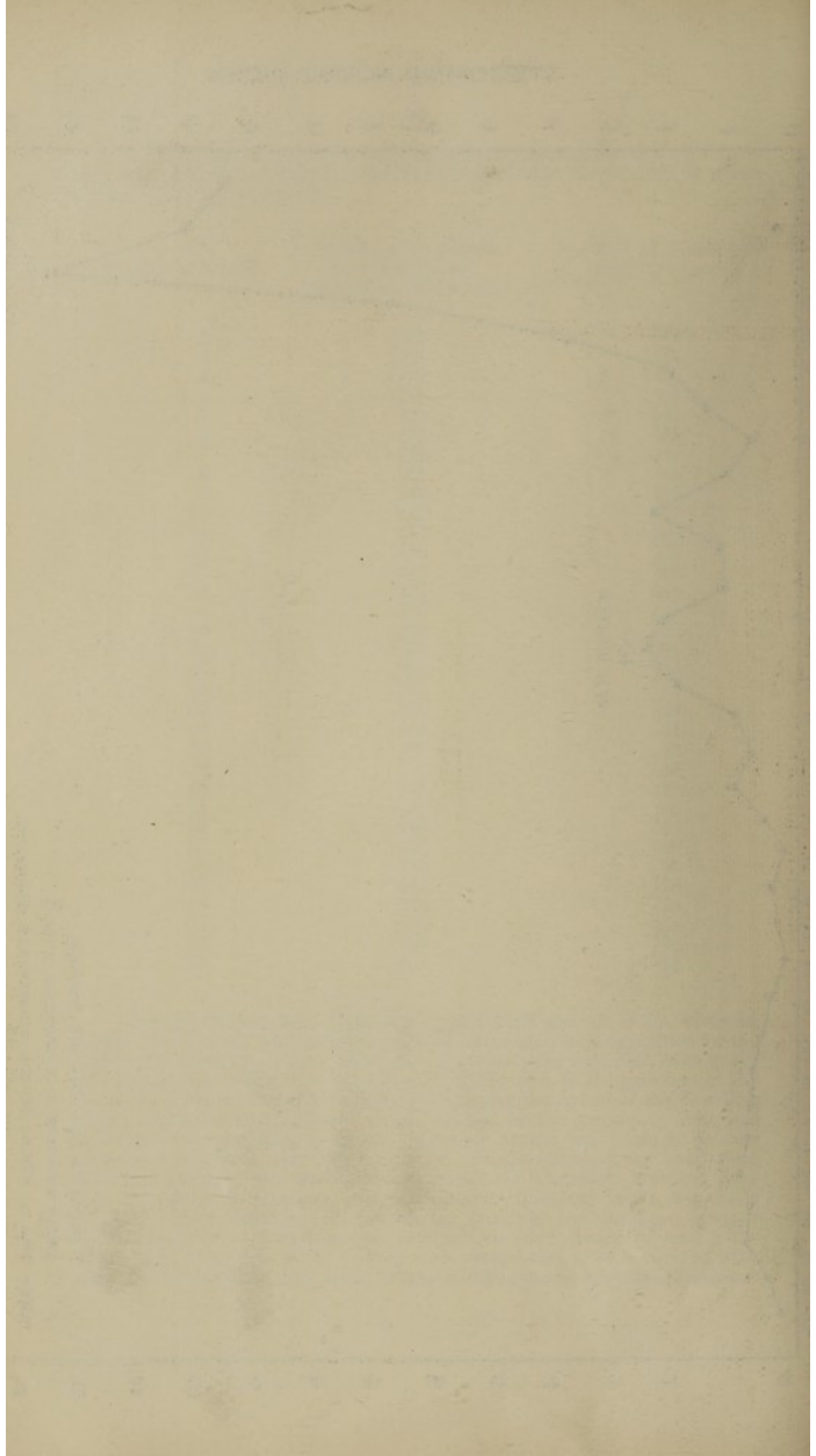
Every premises was inspected by the staff and all wells, cisterns, drums, fire-buckets, ant-wells, storages of water etc., were examined for the presence of mosquito larvae. Samples of larvae were collected from every breeding ground which was subsequently destroyed in the presence of the occupiers. 1,158 printed advice Memos containing the nature of the breeding places and the methods of control were served on the owners or occupiers to prevent such breeding in future. Regular action was taken to enforce permanent measures wherever necessary. Public offices, firms etc., were addressed to carry out the necessary measures whenever breeding was noticed in wells, fire-buckets, overhead cisterns, flush-out tanks, ant-wells etc. within their premises. To prevent the breeding in storages of water in brass and earthen vessels general instructions were issued to renew the water once in 2 or 3 days and to keep such receptacles always covered with lids. Water stored in pots, tubs, drums or cisterns and kept near flush-out

STEGOMYIA HOUSE INDEX



GRAPH
 SHOWING STEGOMYIA HOUSE INDEX IN THE AREA
 1/2 MILE AROUND THE MADRAS PORT
 (PERIOD 2.9.1936-31.12.1938)

LITHO BY GOLDEN & CO., MADRAS.



or dry latrines for the purpose of flushing out or washing the latrines was a common breeding ground of stegomyia mosquitoes. Special efforts were made to prevent this practice. In many instances the pots, tubs, drums, etc., were removed from the premises with the permission of the owners who were advised to supply water directly to the scavenger. In other instances, instructions were given to cover the receptacles with lids and to empty them once in 2 or 3 days.

The anti-mosquito campaign in Theagarayanagar continued during the year and was similar to the anti-stegomyia operations described above. The staff visited all the private and public places once a week and inspected all the wells, cisterns, cess pools, stagnation in pits, drains, culverts etc., and destroyed the breeding places. Similar work was continued in divisions 20, 21, 22, 26, 27, 28, 29, 36, 37 and 40. The following statement gives the mosquito and stegomyia house indices for the 21 rounds made by the staff in these divisions during the year.

Number of rounds.	Mosquito house index.	Stegomyia house index.
1	3.8	2.3
2	3.5	1.4
3	2.9	1.1
4	2.5	1.1
5	2.4	0.9
6	2.1	0.8
7	1.7	0.4
8	1.7	0.4
9	1.3	0.3
10	1.4	0.4
11	1.3	0.3
12	1.6	0.2
13	1.9	0.4
14	1.9	0.4
15	1.8	0.5
16	1.5	0.4
17	1.6	0.2
18	1.6	0.2
19	1.6	0.2
20	1.7	0.2
21	1.7	0.2

As seen from the above statement and compared with the mosquito house index of 9.5 at the end of 1937, a considerable improvement was effected in controlling the nuisance in these divisions during the year under report.

The number of mosquito breeding places that were destroyed during the 21 rounds is given on the next page.

Number of rounds.	Number of mosquito breeding places (including stegomyia)	Number of stegomyia breeding places.
1	929	555
2	803	390
3	669	359
4	550	250
5	504	213
6	478	205
7	375	177
8	552	307
9	324	145
10	343	165
11	330	138
12	390	130
13	334	141
14	389	143
15	371	181
16	396	167
17	310	105
18	367	132
19	346	121
20	363	104
21	359	103

During the course of work, the staff cleared away from the premises 92,983 odd and unserviceable articles which would otherwise have become breeding places of mosquitoes after rains. On account of the periodical inspections of the staff, the residents in these areas were having great relief from mosquito nuisance.

The fact that numerous facilities for the breeding of mosquitoes exist within residential premises has been established in the previous reports. It is therefore necessary that mosquito control measures should be enforced in private premises throughout the entire city. From the point of view of the prevention of yellow fever, it is not safe to carry on this work in limited areas only. The stegomyia mosquitoes are found breeding through-out the city and, being carriers of this dreadful disease, any measure to control them, in order to prevent the extension of yellow fever, should cover the entire area of the city.

Public drains, cess-pools, stagnation, etc.:—All covered drains, open drains, ditch drains, cess-pools, gully-traps, stagnant pits, lowlands, ditches etc., in public places were petrolised once a week. A mixture of liquid fuel and kerosene oil was used as a larvicide. Oil balls and saw dust soaked in the mixture were used whenever necessary.

River Cooum and Buckingham canal:—During the year the river Cooum and the Buckingham canal were gone round once a week by a separate staff which removed all the weeds and moss and thus helped the larvicidal fish to control the mosquito breeding. The edges were also oiled whenever necessary. Paris-green mixture was dusted whenever the river was breeding anopheline larvae. Stagnant pools on the banks of the river were also attended to by the staff. This periodical and regular attention helped a great deal to control the nuisance from the river Cooum and the Buckingham canal.

Lowlands:—In addition to 15 ponds reclaimed during the year, portions of lowlands next to Record Office, near Conran Smith Nagar, in Perambur

Tank, in Theagarayanagar, at Kodambakkam Road, opposite the Slaughter Houses, in Chetput, at Cross Road and at Elaya Mudali Street were reclaimed. The sum of Rs. 5,000 provided for reclamation was utilised for filling up portions of lowlands in Mylapore Burial Ground, Slaughter Houses, Perambur and Conran Smith Nagar.

Malaria cases treated in Corporation dispensaries :—During the year 5,750 malaria cases were treated in the several Corporation dispensaries as against 9,767 in 1937.

Cases of enlarged spleen among Corporation school children :—During the school year 1938-39, the medical inspection staff attached to the Corporation schools detected 38 cases of enlarged spleen among children attending the Corporation schools as against 49 cases in the previous year. Of these, 34 cases were found among the children attending the Corporation schools situated in the north range of the city as compared with 46 cases in 1937.

The spleen-rates among the children attending the Corporation schools for the past 12 years are given below.

Year.	Number of children examined.	Number of children with enlarged spleen.	Spleen rate.
1927-28	8,545	122	1.4
1928-29	17,587	198	1.1
1929-30	21,113	371	1.8
1930-31	25,342	327	1.3
1931-32	28,001	133	0.5
1932-33	27,506	96	0.4
1933-34	28,578	274	1.0
1934-35	29,737	229	0.8
1935-36	30,705	173	0.6
1936-37	29,376	118	0.4
1937-38	31,187	49	0.2
1938-39	30,352	38	0.13

The spleen-rate is one of the important indices to judge the utility of the anti-malaria services. The reduction in the spleen-rate since 1933-34 is evident. The wells in the city are the chief breeding grounds of *Anopheles stephensi* (malaria carrier) and the frequent inspections of these wells with the aid of the additional staff sanctioned from 1937 helped to maintain the control over these mosquitoes.

There has been a reduction in the number of deaths due to malaria side by side.

Medical Inspection of Corporation Schools, 1938-39.

Staff :—During the year under report there were many changes in the honorary staff. The honorary Medical Inspectress resigned at the commencement of the year with the result that only two Medical Inspectresses had to do the work. One more Honorary Medical Inspector was appointed on 5-11-1938 and took charge of certain schools in the north range of the city but he resigned on 11-4-1939. The Honorary Medical Inspector, south range, resigned at the end of December, 1938. On 14-3-1939 another honorary Medical Officer was appointed with a view to treat the ear, nose and throat complaints of the school children.

Findings of medical inspection :—The total number on rolls during the time of the inspections was 22,379 in boys' schools and 13,569 in girls' schools. The average attendance was 17,834 among boys and 10,402 among girls. 19,166 boys and 11,186 girls were medically examined. The percentages of children examined to the total number on rolls were 85·64 among boys and 82·44 among girls.

Out of the total number examined, 10,926 boys (57·01%) and 3,796 girls (33·94%) were ailing and required treatment. The percentages of defectives during the previous year were 48·56 among boys and 36·36 among girls.

Due to the prevalence of eruptive fevers during the greater part of the year, the health of the school children suffered as is evidenced by the increase in the defectives.

Cleanliness, condition of scalp, body and nails :—1,639 boys (8·55%) and 360 girls (3·22%) were found wanting in cleanliness of person and clothing. The percentages for the previous year were 7·18 among boys and 3·87 among girls. The school staff were frequently reminded of their duty in paying attention to the personal hygiene of the children and such children as were found dirty were given baths in the school premises.

Malnutrition :—2,615 boys (13·64%) and 267 girls (2·39%) were under-nourished and required attention. The corresponding percentages in the previous year were 12·45 and 3·05 respectively. As had been explained in previous reports under-nourishment was mainly due to lack of balanced diet and vitamins necessary for the proper growth and development of the children. Cod liver oil was supplied to them at the dispensaries and their parents were also advised regarding the necessity for suitable and nourishing food to their children.

Teeth and mouth :—2,954 boys (15·41%) and 840 girls (7·51%) had dental and oral complaints, the corresponding percentages of defectives for the previous year being 9·31 and 8·08 respectively. 2,585 had stomatitis and were treated at the dispensaries. 153 of the children having tartar were advised scaling at the dental sections of hospitals. 546 were referred to the same sections for extraction of carious teeth.

Nose and throat :—3,371 boys (17·59%) and 2,039 girls (18·23%) had nasal and throat diseases, the corresponding percentages for the previous year being 17·00 and 19·33 respectively. 3,753 children had simple enlargement of the tonsils without other complications and were treated at the dispensaries. 758 had the same defect with other complications and were advised to have the enlarged tonsils removed early. 376 children had enlarged glands of the neck and 444 had nasal catarrh. Suitable treatment was given to them at the dispensaries.

Eye diseases :—780 boys (4·07%) and 331 girls (2·96%) had defects and diseases of the eyes. During the previous year the percentages of defectives were 2·00 among boys and 2·35 among girls. All the minor complaints of the eyes were treated at the Corporation dispensaries. 350 children had conjunctivitis. 29 of the squinting cases were referred to the eye hospital for correcting errors of refraction.

Defective vision :—169 boys (0·88%) and 7 girls (0·06%) had defects of vision, the corresponding percentages in the previous year being 0·52 and 0·08 respectively. 88 had defects of a minor degree and were advised to take cod liver oil to improve their general health and thereby have their

vision rectified. 76 were referred to the ophthalmic hospital or the eye sections of other hospitals for correcting errors of refraction.

Ear diseases :—500 boys (2·61%) and 88 girls (0·79%) had otitis, otorrhoea and other complaints pertaining to the ear, the corresponding percentages during the previous year being 1·32 among boys and 0·99 among girls. 84 children had otitis and 336 were having otorrhoea. Chronic and resistant cases were referred to the specialist for treatment.

Hearing :—6 boys (0·03%) and 2 girls (0·02%) were short of hearing. The percentage during the previous year was 0·03 among boys. No girls had defective hearing in the previous year.

Speech :—56 boys (0·29%) and 2 girls (0·02%) were having defects in speech. The percentages in the previous year under this head were 0·18 among boys and 0·02 among girls. 48 were stammerers and 8 had defects of articulation. Two were dumb.

Circulatory system :—209 boys (1·09%) and 22 girls (0·20%) had diseases relating to heart or blood. The corresponding percentages during the previous year were 0·52 and 0·20 respectively. Organic diseases of heart were detected in 45 children while an equal number had functional disorders. 132 had anaemia and were treated at the Corporation dispensaries.

Tuberculosis :—23 boys (0·12%) and 2 girls (0·02%) had signs and symptoms of early tuberculosis of the lungs and other organs. The percentages during the previous year were 0·04 and 0·04 respectively. The Medical Inspectors arranged lectures and talks on the subject in the schools with a view to impress on the parents the need for early diagnosis and treatment. Action was taken to give them necessary treatment.

Respiratory diseases :—374 boys (1·95%) and 72 girls (0·64%) as against 1·30% and 0·90% respectively in the previous year had bronchitis and other non-tubercular diseases of the lungs. 422 children had bronchitis and 66 were having bronchial asthma. They were treated at the local dispensaries.

Abdominal organs :—218 boys (1·14%) and 380 girls (0·34%) were found defective under this head. The percentages of defectives during the previous year were 0·69 among boys and 0·39 among girls. Only 38 children were having enlarged spleen due to malaria as against 49 in the previous year. 34 of them were residing in north range. They have been carefully followed up by the school staff and the Medical Inspectors. The result of the treatment given to them are shown in the statement on "following up" work. Cases of inguinal hernia and hydrocele requiring operative treatment were directed to the Government hospitals.

Bones and joints :—476 boys (2·48%) and 32 girls (0·29%) had diseases of the bones and joints. The percentages of defectives during the previous year were 1·79 among boys and 0·25 among girls. 294 children had deformed chest of varying degrees. The details of defects are shown in the detailed table.

Nervous and psychic systems :—22 boys (0·11%) had defects under this head. No girls were defective during this year under this head. 0·08% of boys and 0·02% of girls were defective during the previous year. 10 boys had infantile palsies while the rest had functional disorders.

Infectious and contagious diseases :—2,370 boys (12·37%) and 648 girls (5·79%) had infectious diseases including skin conditions. The corresponding percentages during the previous year were 8·52 and 6·42 respectively. 1,057 children had scabies and 681 had signs and symptoms of leprosy. Of these, 191 were new admissions and the rest were old cases already under treatment. They were sent to the skin clinic, Ice House Road, and other Corporation dispensaries for treatment. The details of a findings are given under separate head. Cases of eczema and other skin diseases while undergoing treatment at the local dispensaries were isolated in the classes and given baths.

Other diseases and defects :—1,076 boys (5·61%) and 211 girls (1·89%) had diseases and defects not included in the other items. The percentages for the previous year were 3·95 among boys and 2·13 among girls. 236 children harboured intestinal worms. 418 had phimosis and were advised circumcision.

Deformities :—46 boys (0·24%) and 18 girls (0·16%) had deformities. During the previous year, the percentages of defectives under this head were 0·09 among boys and 0·16 among girls. The details of deformities have been shown in the table.

Number without marks of vaccination :—60 boys (0·31%) and 19 girls (0·17%) had no visible marks of vaccination. They were subsequently vaccinated.

Medical treatment :—14,809 children received treatment for various ailments after medical advice. The details of the number of children sent to various institutions have been shown in the treatment table. During the year under report arrangements were made to treat all the leper children in the Corporation dispensaries and the skin clinic, Ice House Road.

Leprosy :—681 children were on the leprosy list during the year. 490 were old cases detected previously and 191 were new admissions. Systematic following up was continued during the year to ensure their regular and continuous attendance at the dispensaries. The parents of all these children were seen and given medical advice and those that had the disease were persuaded to get themselves treated.

A comprehensive scheme of treatment was devised during the year. An old ambulance van was made available for the work and was placed in charge of the Ice House Road skin clinic. The leper children detected by the Medical Inspectors were taken in the ambulance for examination and expert advice before treatment was begun at the dispensaries.

402 children were examined by the Medical Officer of the skin clinic till the closing of the schools. All the leper children could not be examined at the above clinic before the end of the year since the van was not available during the latter part of the year being detailed out for bringing small-pox patients to the infectious diseases hospitals.

With a view to obtain effective and continuous treatment all the leper children were divided into three batches. The first batch comprised of children from schools situated far away from the dispensaries and the leprosy car was utilised to take them to the treatment centres. The second batch consisted of children from schools situated in the near vicinity of the dispensaries. In such cases, the head-masters made arrangements to send them to the dispensaries in the afternoons. The third batch consisted of children from schools near the Ice House Road skin clinic

and the ambulance van was utilised on two days in a week to take them to the clinic for treatment. All these detailed arrangements resulted in the regular attendance of the children at the centres which was a very encouraging factor.

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

Group.	Number defective.	Percentage to the total examined.	Percentage to the total leprosy cases.
Boys	611	3.19	89.72
Girls	70	0.63	10.28
	<hr/> 681	<hr/> 2.24	<hr/> 100.00

Careful following up revealed varying results. In 6 children the symptoms of the disease could not be seen and they were advised discontinuance of treatment. In 88 children improvement was noted after a prolonged course of treatment. 400 children continued treatment at the institutions as they did not show visible signs of improvement. 149 children did not attend the centres regularly and their parents remained indifferent in spite of repeated advice and persuasion. 36 who left the schools after inspection could not be traced. Two were found suffering from leprosy in an infective stage and were excluded from the school.

Re-inspections and following-up work:—During the year 236 revisits were paid to the schools in addition to routine inspections. 15,697 re-examinations of children were made to note the improvement and to change the course of treatment when necessary. Leprous children were kept under observation throughout the year and the parents were invited to the schools frequently for being advised. The details of the results obtained are given below.

Malnutrition:—Of the children who were undernourished 707 regained normal health after a course of cod liver oil and tonics. 645 obtained benefit after the course while 1,031 had to continue treatment as no signs of improvement could be noted.

Teeth and mouth:—132 had their carious teeth extracted and 25 had their tartar teeth scaled at the dental sections of hospitals. 831 cases of stomatitis were cured and 648 improved after treatment. Seven children had their tongue tie clipped.

Nose and throat:—134 had their tonsils removed by operation while 382 were treated at the dispensaries and cured. 1,630 improved after treatment.

Defective vision:—19 children had their defective vision corrected after medical advice. 15 improved after taking cod liver oil.

Tuberculosis:—8 of the children showed improvement after treatment, while the rest continued treatment.

Abdominal organs:—20 children having enlarged spleen were cured after treatment. Ten improved and 5 continued treatment. 3 children left the school and could not be traced.

Infectious and contagious diseases:--1,117 children having skin conditions as scabies, eczema, fungus etc., were cured. 428 improved after treatment. The scheme of treatment included instructions on personal hygiene and frequent baths in the school. The results of treatment given to leprous children have already been stated.

Other diseases and defects:--95 children underwent operation for phimosis after medical advice. 67 children attending the schools with fever due to various causes were sent home with suitable advice and medicines and were later found cured.

Co-operation of parents:--5,158 parents responded to the invitation of the Medical Inspectors to be present during the medical examination of their children. In many cases the parents themselves asked for and obtained treatment for their ailments.

Co-operation of teachers:--The school staff continued their co-operation in the work and effectively followed up the treatment given to children. A separate list of all the leper children was maintained and the treatment given to them was carefully followed. Any slackness on the part of the children was brought to the notice of the Medical Inspectors and the parents were sent for and suitably advised.

School sanitation:--The Medical Inspectors continued to inspect the school buildings with a view to bring to the notice of the authorities any existing sanitary defect. 4 school buildings were considered unsuitable for school purposes and an early change of premises was suggested. In 34 schools improvements were suggested to rectify defects concerning ventilation, sunlight etc.

School latrines:--94 schools had flush-out type of latrines which were generally kept clean. In all other schools in sewered areas flush-out type of latrine was recommended.

Play grounds:--45 schools required play ground accommodation and the children had their drill indoors.

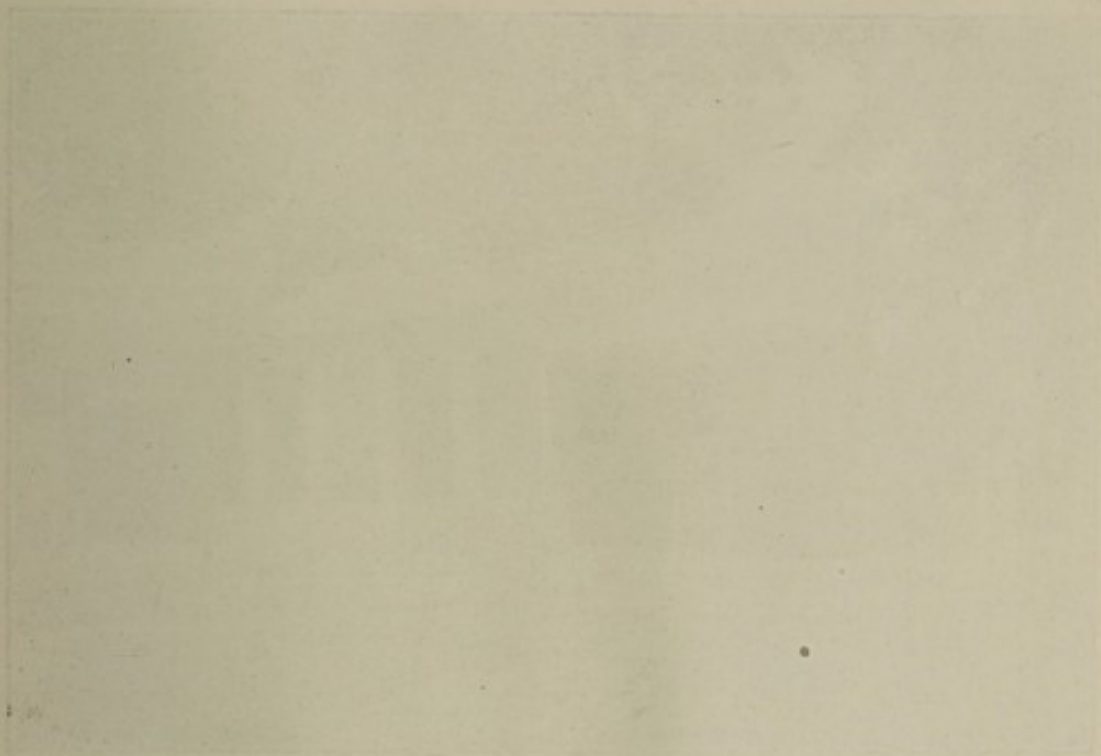
Water supply:--All the schools have been provided with a sufficient number of taps. Strained tap water was supplied to school children for drinking.

School equipment:--Every school had adequate and suitable furniture and equipment.

School baths:--58 schools had bathing rooms. Dirty children utilised them during the recess hours.

Midday meals:--In 90 schools 5,500 children were provided with midday meals daily. The Medical Inspectors supervised the arrangements made for the distribution of meals at the schools.

Propaganda:--191 lectures and 179 talks were conducted in the schools. The total attendance at these was 23,247.



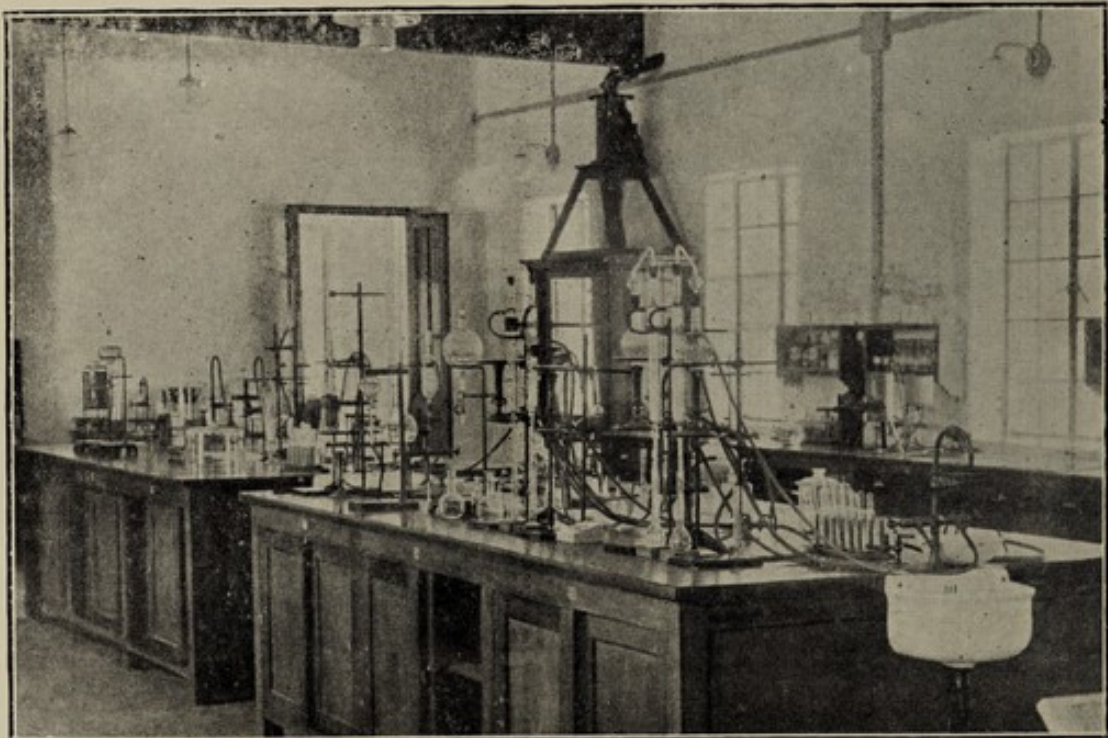
THE UNIVERSITY OF CHICAGO



THE UNIVERSITY OF CHICAGO



Food Analysis Laboratory, Ripon Buildings.



Interior View, Food Analysis Laboratory.

Report of the Public Analyst for the City of Madras for 1938.

(1) During the year ending 31st. December, 1938, the number of samples received for analysis under the Madras Prevention of Adulteration Act, 1918, was 1,455 as against 1,119 in the previous year.

Of the 1,455 samples received, 1,451 were analysed and reported upon during the year under report. Report on the remaining 4 samples was pending on 31st. December, 1938. Among the 1,451 samples analysed 1,010 samples were found to be genuine and the remaining 441 were certified as adulterated. The percentage of adulterated samples calculated on the total number of samples analysed during the year was 30.4 as against 22.5 during the previous year.

(2) The samples consisted of ghee, butter, milk, gingelly oil, groundnut oil, coffee powder, tea and artificially prepared ghee substitutes. A statement of the samples analysed and the results of analysis during the year under report and the four previous years, namely, 1934, 1935, 1936 and 1937 is given in Table I in the appendix.

(3) From Table I, it will be seen that 1,451 samples were analysed during the year under report while the corresponding figures for 1934, 1935, 1936 and 1937 were 986, 806, 1,028 and 1,094 respectively. Among the samples examined, the percentage of adulteration was 30.4 during the year under report as against 35.7 in 1934, 32.9 in 1935, 23.9 in 1936 and 22.5 in 1937.

It will be seen that there has been a progressive decrease in the percentage of adulteration from 1934 to 1937, but an increase in this figure during the year under report. It will also be seen from the table that during 1938, the samples of ghee formed nearly 50 per cent of the total number of samples analysed. Of these, 148 samples were either seized or purchased from street hawkers whereas in previous years samples were mostly taken from established shops and stores. Not a single sample of ghee out of the 148 samples taken from street hawkers was genuine and usually the degree of adulteration was more than 80 per cent. This 100 per cent adulteration among the samples of street hawkers is responsible for the rather high figure of 30.4 for the percentage of adulteration during the year 1938. It may, however, be mentioned that the general quality of ghee from established shops and stores as well as the quality of other articles of food such as gingelly oil, coffee powder and tea continued to be good.

(4) The problem of street hawkers, however, is one which must be tackled effectively if adulteration is to be put down completely.

The best solution of the problem is to educate the public to buy their articles only from established shops, stores or depots which are strictly controlled by the Corporation by taking samples regularly and not to buy any such articles from street hawkers who are so numerous and so difficult to control.

(5) The problem of bad-smelling ghee and butter, about which mention was made in the Analyst's previous report, continues to be the same. Government should make some specific provision either in the Food Adulteration Act or in the Public Health Act empowering the Food Inspectors to seize and destroy any bad-smelling ghee or butter as unwholesome for human consumption. Until such provision is made, a good many of these samples have to be passed as they may not be adulterated. If an

analytical evidence is required to prove the unwholesomeness of the butter or ghee, Government may fix a limit for the acid value of butter-fat or ghee as suggested in my previous report.

(6) During the year under report samples of gingelly oil and ground-nut oil were seized under section 9 of the Act from consignments to wholesale merchants and representative samples were analysed as the number of tins sometimes was more than 200. The Magistrate ruled that only such tins could be forfeited to the Corporation whose contents were analysed and certified adulterated. As the analysis of such a large number of samples is not possible within a reasonably short time and as many such consignments have to be tackled during festival months, there should be a provision in the Act to enable the Magistrate to forfeit any consignment consisting of identical receptacles with no labels as to the identity of the contents if adulteration is proved in a reasonable number of representative samples taken from the consignment. Any vendor who sends a consignment of genuine and adulterated articles together will have to do so at the risk of the whole consignment being seized and forfeited.

(7) Samples of ghee were also seized under section 9 of the Act from some prominent hotels. In some hotels extraordinarily good ghee was used whereas in others it was just the other way about. It was contended that this seizure under section 9 was not legal as the hotels do not sell ghee as such, but only use it for preparing sweets etc., and the Magistrate upheld the contention and further seizing of samples from hotels had, therefore, to be stopped.

(8) The nature and extent of adulteration of the various articles dealt with are given below :

Ghee: 715 samples were analysed during the year out of which 428 were found to be genuine and 287 were adulterated. The adulterants were almost entirely hydrogenated (hardened) oils and the extent of adulteration ranged from 15 per cent to entire substitution.

Butter: 73 samples were analysed of which 60 were genuine and 13 were adulterated. Of the 13 adulterated samples, 5 contained water in excess of the prescribed limit of 20 per cent; 7 samples contained fat not derived from milk or cream and one sample contained both excess water and fat not derived from milk or cream.

Milk: 110 samples were analysed of which 60 were cow's milk, 44 buffalo's milk and 6 samples were declared as mixtures of cow's and buffalo's milk. Among 60 samples of cow's milk, 22 were adulterated; among 44 of buffalo's milk, 11 were adulterated and among 6 mixtures of cow's and buffalo's milk, 3 were adulterated. The adulteration in all cases was with extraneous water ranging from 4 to 56 per cent.

No deficiency of fat was noticed in any of the samples.

Gingelly Oil: 341 samples were analysed and 39 were found to be adulterated with ground-nut oil, the percentages of adulteration varying from 15 to entire substitution.

Ground-nut Oil: 134 samples were analysed and 57 were reported as adulterated. Of these, one was pure gingelly oil and the rest contained gingelly oil ranging from 10 to 95 per cent.

Coffee Powder : 23 samples were analysed and all were genuine.

Tea : 32 samples were analysed and all were genuine.

Other Articles : These included two samples described as 'Mixture Oil' and 'Kamalapuram Oil' respectively. Both of them were found to be mixtures of gingelly oil and ground-nut oil. These were declared adulterated as the sale of mixtures of gingelly oil with other oils is prohibited.

(9) Besides the formal samples taken under the Food Adulteration Act and dealt with above, 17 informal samples were also analysed in the laboratory during the year under report.

(10) Table II in the appendix gives a statement of the adulterated samples of 1938 and of the previous year or years dealt with in 1938.

The number of samples received and reported as adulterated during 1938 was 441 out of which convictions were obtained in 157 cases. In the case of 184 samples, the vendors were not prosecuted, but the articles having been seized under section 9 of the Food Adulteration Act, were produced before the Magistrates and destroyed or forfeited as per the Magistrates' orders under section 12 of the Act. 4 ended in acquittal and prosecutions in the case of 22 samples were withdrawn as vendors were not traceable. The remaining 74 cases were pending disposal on 31-12-1938. Out of 25 samples pending from 1937, 14 proved to be adulterated and certified as such during the year under report. Of the 14 prosecutions launched in these cases, 12 ended in convictions and the remaining 2 were pending disposal on 31-12-1938. 104 cases of adulterated samples were pending disposal on 1-1-1938 from the previous year. Of these 104, 67 ended in convictions, 4 were still pending disposal at the end of 1938, 29 cases were withdrawn and 2 ended in the acquittal of the vendors. In the remaining two cases no prosecutions were launched.

(11) It will be seen from Table II that the total number of convictions under the Prevention of Adulteration Act, 1918, was 226 as against 209 in the previous year. The total fines levied in 1938 amounted to Rs. 6,215. The corresponding figure for 1937 was Rs. 6,210. The average fine per conviction during 1938 was Rs. 28 as against Rs. 30 during 1937. The figure for the average fine shows that the fines are quite inadequate and not sufficiently deterrent. Very many vendors are hauled up for second and subsequent offences and there is no reason why such low fines should be imposed when the Act provides upto Rs. 500 for second and subsequent convictions. The Analyst has again to point out that unless sufficiently deterrent fines are imposed, the working of the Food Adulteration Act cannot be completely successful.

(12) In conclusion, the Analyst has to mention that while this report is going to the press, the new laboratory for food analysis is ready for work and will provide sufficient working space for food analysis, the lack of which was a serious handicap in the previous laboratory.

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

Public Analyst.

Report of the Water Analyst for 1938

General :—Another year has elapsed without any radical change being made in the method of filtration as recommended by the "Government

Committee on Water Purification" and the Health Officer of the Corporation. The lake water was indifferently filtered through a thin layer of about 6" of fine sand. The filtrate was chlorinated throughout the year and a safe water was thus supplied to the city. The average output from the filters was 25.18 m.g.d.

The city experienced an exceptionally low rainfall during the north-east monsoon season. The total yearly rainfall was only 26.46" as against 49.02" which is the normal for a year at Madras. The total rainfall for the year was also much less than in 1927—previous drought year—when the total rainfall recorded was only 32.40". Compared with the previous year of abundant rainfall (61.38"), this year's total rainfall was considerably low.

Meteorological notes:—It will be seen from Table II that the cold weather period (January and February) was moderately sunny and highly windy with an average mean temperature of 77°F and with 0.54" of rainfall.

The hot weather period (March, April and May) was very sunny and very highly windy and had high temperature. The total rainfall was only 1.57" as against 2.61" during the same period in the previous year.

The south-west monsoon season (June, July, August and September) had greater hours of bright sunshine and slightly higher temperature than during the same period in a normal year. Wind was blowing with a considerably higher velocity than during 1927 or a normal year. The total rainfall during this period was 13.86" as against 17.64" in the previous year and against 11.60" in 1927 and against 15.23" in a normal year.

In the north-east monsoon season (October, November and December) the average number of hours of bright sunshine was fairly higher than in 1927 or in a normal year. The mean temperature was also slightly higher and the velocity of wind considerably greater than in a normal year. The total rainfall during this period was only 10.49" as against 41.06" in the previous year and against 19.88" in 1927 and against 29.49" in a normal year.

Red Hills Lake:—The lake water was examined almost throughout the year. It was bacteriologically of fair quality (Table III). Chemically it contained a fairly large amount of organic matter of vegetable origin. The amount of oxidisable organic matter (Tidy's) was found to be highest in October and lowest in February (Table IV).

Raw water, Kilpauk end:—The raw water samples drawn at the Kilpauk end of the raw water conduit was also of a fair quality bacteriologically. Lactose fermenting organisms were absent in 60 c. c. in 2.1%, were present in 60 c. c. and upwards in 17.8%, in 10 c. c. and upwards in 18.2%, in 5 c. c. and upwards in 53.9%, and in 1 c. c. and upwards in 5.0% of the samples examined. The average total colonies per c. c. growing on nutrient agar at 37°C after 48 hours was 688 as against 811 in the preceding year (Table III).

The chemical characteristics of the raw water were very similar to those of the lake water. The figures for "ammoniacal N" varied from a mere trace to 0.006 part per 100,000, for "albuminoid N" from 0.038 to 0.059 part per 100,000 and for oxidisable matter from 0.101 to 0.148 part per 100,000 (Table IV). The figure for oxidisable organic matter was highest in October and lowest in March.

Filtrates from beds:—The method of treatment of the raw water continued to be the same as in last year. The depth of fine sand in each filter was very low (about 6") and the filters were worked with no fixed rate of filtration, so that the chemical and bacteriological results of the filtrates from these beds were very poor. The yearly average percentage of first class samples (L. F. in - 60 c. c.) was 27.0 and the average colonies per c. c. was 477 (Table III).

Chemically, the figures for "ammoniacal N" varied from 0.001 to 0.005 part per 100,000, those for "albuminoid N" from 0.029 to 0.043 part per 100,000 and those for oxidisable organic matter (Tidy's) from 0.075 to 0.114 part per 100,000 (Table IV). Maximum percentage reduction of organic matter (Tidy's) was effected by the filters in February (31.8%) and minimum in March (12.9%) (Table VI).

The average dose of chlorine applied to the filtered water varied from a minimum of 0.80 p. p. m. in January to a maximum of 1.07 p. p. m. in December and the average dose for the year was 0.997 p. p. m. (Table V).

Test tap, K. P. S.:—Samples drawn from the test tap at the Kilpauk Pumping Station were examined daily. In 94.6% of the samples examined during the year lactose fermenters were absent and in 4.7% they were present in 60 c. c. and upwards. The average total colonies per c. c. was 71 (Table III).

On the chemical side the "ammoniacal N" varied from a trace to 0.006 part per 100,000, the "albuminoid N" from 0.024 to 0.043 part per 100,000 and the oxidisable organic matter (Tidy's) from 0.066 to 0.097 part per 100,000 (Table IV). The annual average percentage reduction of organic matter was found to be 34.5% (Table VI).

Distribution System:—On the bacteriological side, lactose fermenters were absent in 60 c. c. in 60.08% of the samples and the average colonies per c. c. was 236. Chemically an all round reduction over the test tap samples was noticed.

S. V. GANAPATI, M. Sc., A. I. C.,

Water Analyst.

VITAL STATISTICS.

ANNUAL FORM No. A.

Showing the Meteorological Data for 1938--Madras.

Latitude:--- 13° 4' Longitude:--- 80° 15'

Months.	Barometer.		Reading of Thermometer.						Difference between dew point temperature and mean air temperature.	Degree of humidity complete being 100.	Prevailing direction of wind.	Rainfall.		
	Mean daily reading reduced to 32° F Sea Level and gravity.		Dry.		Dew point.		Mean Maximum solar radiation.	Number of days on which rain fell.				Total fall of rain during the month.	Maximum fall of rain during 24 hours.	
	Maximum.	Minimum.	Mean daily range.	Mean daily value.	Mean daily value.									
January	29.945	68.6	84.3	15.7	75.7	67.2	Information not available.	8.5	77	N W by N	nil	nil	nil	
February	.887	72.3	85.7	13.4	78.3	68.8		9.5	75	N N E	0.54	0.39	0.39	
March	.783	74.4	89.9	15.5	81.3	71.4		9.9	75	N E	1.45	1.45	1.45	
April	.764	78.2	91.9	13.7	84.4	75.9		10.5	74	E by S	nil	nil	nil	
May	.618	82.9	101.0	18.1	89.5	71.4		18.1	59	S by W	0.12	0.12	0.12	
June	.638	79.5	95.6	16.1	85.8	70.1		15.7	65	SW by S	1.92	1.41	1.41	
July	.649	79.5	95.5	16.0	85.4	69.8		15.6	63	S by W	1.89	0.37	0.37	
August	.669	78.1	93.2	15.1	84.0	71.9		12.1	71	SW by S	4.24	2.29	2.29	
September	.683	76.8	91.0	14.2	82.5	74.3		8.2	79	S S W	5.81	2.01	2.01	
October	.776	76.5	91.3	14.8	83.1	68.0		15.1	65	N N E	7.90	3.45	3.45	
November	.872	70.7	86.0	15.3	77.8	66.7		11.1	71	N E by N	0.25	0.17	0.17	
December	.907	69.1	83.2	14.1	75.6	65.3		10.3	73	N N E	2.54	2.23	2.23	
Annual Mean	29.766	75.5	90.7	15.2	82.0	69.9		12.1	71	S E	26.46	3.45	3.45	

VITAL STATISTICS.

ANNUAL FORM No. I.

Showing Births Registered by Divisions during 1938.

1	2	3			4			5			6	7	8	9			10	11	
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.				Males.	Females.	Total.			
Divisions.	Districts.	Population according to the census of 1931:			No. of Births Registered.			Ratio of Births per 1000 of Population.			Number of Males born to every 100 Females born.	Excess of births over deaths per 1000 population.	Excess of deaths over births per 1000 of population.	Mean Ratio of Births per 1000 during previous five years.			Still Births.	Illegitimate Births.	
1					278	278	556				100.0						23	14	
2					331	337	668				98.2						22	9	
3					795	728	1523				109.2						107	9	
4					716	657	1373				108.9						58	2	
5					635	541	1165				115.5						32	1	
6					169	155	324				109.0						16	15	
7					334	309	643				108.1						40	8	
8					171	156	327				109.6						18	4	
9					364	307	671				118.6						19	2	
10					194	212	406				91.5						19	5	
11					383	325	708				117.8						28	3	
12					163	165	328				98.8						15	3	
13					560	533	1093				105.1						38	2	
14					370	353	723				104.8						22	...	
15					190	173	363				109.8						20	...	
16					267	225	492				118.7						32	1	
17					645	577	1222				111.8						22	...	
18					383	410	793				93.4						51	2	
19					724	736	1460				98.4						28	2	
20					450	415	865				108.4						32	...	
21					443	438	881				101.1						43	...	
22					314	285	599				110.2						24	...	
23					480	390	870				103.9						30	...	
24					269	254	523				103.3						28	...	
25					408	395	803				97.7						75	...	
26					432	442	874				106.5						19	...	
27					460	432	892				93.3						11	...	
28					292	313	605				110.9						38	...	
29					233	210	443				102.7						41	...	
30					419	408	827				106.5						67	...	
31					541	508	1049				117.2						32	...	
32					491	419	910				104.9						30	...	
33					317	302	619				103.7						74	...	
34					360	328	688				111.3						26	...	
35					887	797	1684				98.5						35	...	
36					390	362	752				101.2						30	...	
37					399	405	804				113.0						20	...	
38					258	255	513				46.9						45.7	145	
39					286	253	539				7.3						44.3	13.1	
40					210	195	405				106.8						47.2	20	
					341223	306007	647230	16,001	14,984	30,985	47.9	106.8	7.3	...	44.3	47.2	45.7	13.1	145

N. B. The population for each of the newly constituted divisions as per amended Act not being available, figures in certain columns have not been furnished.

VITAL STATISTICS.

Showing Births Registered during each month in 1938.

ANNUAL FORM No. II.

H-13

1 Divisions.	2 Districts.	3												4 Total Births Registered during the year.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1		27	43	47	67	42	45	40	52	42	41	54	56	556
2		41	50	58	57	61	53	70	49	52	60	50	67	668
3		96	115	123	117	152	94	127	153	116	142	127	146	1533
4		89	97	117	135	97	131	110	118	111	118	121	129	1373
5		84	87	102	111	117	92	103	110	62	88	101	109	1166
6		22	33	29	23	25	22	23	29	24	31	22	36	334
7		44	61	45	51	51	55	47	63	52	65	51	51	643
8		28	19	27	30	20	37	26	33	29	23	26	29	327
9		33	44	52	58	65	55	65	72	44	58	56	69	671
10		24	18	21	52	31	28	38	39	41	34	41	39	406
11		50	47	44	68	50	59	75	71	65	52	53	69	708
12		24	14	22	25	29	14	25	33	37	36	35	33	328
13		90	76	72	88	101	91	95	103	84	82	103	102	1093
14		54	47	53	60	72	57	63	62	47	69	64	75	723
15		23	17	21	32	35	32	32	41	42	32	31	32	363
16		35	26	42	40	45	36	43	41	42	45	43	54	492
17		83	73	10	113	96	104	112	99	109	120	96	107	1222
18		59	51	62	64	63	70	66	68	61	81	72	76	793
19		101	87	105	148	119	112	130	149	134	140	134	139	1460
20		83	50	73	70	65	67	92	82	72	63	67	81	865
21		63	46	82	82	68	69	76	65	65	80	85	100	881
22		32	50	43	51	52	63	45	63	49	53	41	52	599
23		50	58	55	70	71	78	87	82	81	69	88	71	870
24		43	29	33	35	40	41	49	40	47	63	45	58	523
25		78	37	69	73	62	78	68	69	57	79	63	70	803
26		51	39	65	74	74	70	69	83	97	79	66	107	874
27		58	48	69	76	77	54	115	92	50	73	65	115	892
28		36	42	39	47	55	43	67	56	53	51	65	45	605
29		19	28	37	39	38	43	49	38	36	33	27	36	443
30		49	82	61	81	60	61	77	70	64	87	79	56	827
31		64	72	78	82	120	67	114	87	84	78	92	111	1049
32		55	57	89	67	90	91	65	80	92	81	65	78	910
33		47	34	48	53	55	44	46	60	63	61	62	48	619
34		46	75	52	59	59	42	71	55	61	54	57	57	688
35		128	113	151	176	139	134	126	161	131	154	119	152	1684
36		53	42	59	54	71	65	60	79	65	68	64	72	753
37		52	51	63	63	78	65	59	75	81	71	57	88	804
38		21	34	36	44	35	56	38	51	50	49	50	50	513
39		43	29	32	48	47	33	63	48	58	48	39	51	539
40		25	24	37	33	52	34	35	28	38	47	35	38	406
Total ...		2111	2045	2434	2716	2652	2486	2759	2850	2588	2762	2617	2955	30,985

Showing Deaths by Divisions during 1938.

1	2	3	4	5		6		7	8												9		10							
				Districts.	Area in acres.	Density per acre.	Population according to the Census of 1931.		No. of deaths registered.		No. of deaths of Males to every 100 deaths of females.	Deaths per 1,000 of population from:												All causes.		Mean ratio of deaths per 1,000 during previous 5 yrs.				
Divisions.				Males.	Females.	Total.	Males.	Females.	Total.	Cholera.	Small-pox.	Measles.	Plague.	Malaria.	Enteric.	Other fevers.	Dysentery and Diarrhoea.	Tuberculosis.	Other Respiratory Diseases.	Injuries.	Deaths from child birth.	All other causes.	Males.	Females.	Total.	Males.	Females.	Total.		
1		1674.11					338	326	664	103.7																				
2		284.42					267	268	535	99.6																				
3		383.52					569	584	1153	97.4																				
4		335.94					619	538	1157	115.0																				
5		853.06					563	539	1102	104.5																				
6		98.94					198	184	382	107.6																				
7		91.97					299	257	556	116.3																				
8		204.80					97	104	201	93.3																				
9		67.26					275	262	537	104.9																				
10		80.0					185	144	329	128.5																				
11		95.42					471	324	795	145.4																				
12		66.50					148	123	271	120.3																				
13		149.25					429	414	843	103.6																				
14		98.11					351	327	678	107.3																				
15		217.66					562	268	830	209.7																				
16		69.76					188	166	354	113.3																				
17		1339.58					541	539	1080	100.4																				
18		1224.13					369	380	749	97.1																				
19		220.40					586	608	1194	96.4																				
20		334.91					403	342	745	117.8																				
21		747.20					433	427	860	101.4																				
22		556.98					184	165	349	111.5																				
23		362.69					402	372	774	108.1																				
24		126.72					218	225	443	96.9																				
25		88.58					342	353	695	96.9																				
26		203.58					335	331	666	101.2																				
27		494.66					189	245	434	77.1																				
28		863.68					246	234	480	105.1																				
29		884.54					155	146	301	106.2																				
30		143.23					384	403	787	95.3																				
31		736.70					507	475	982	106.7																				
32		191.81					287	287	574	100.0																				
33		112.64					284	232	516	100.7																				
34		679.68					760	707	1467	107.5																				
35		89.02					310	251	561	123.5																				
36		535.10					299	309	608	96.8																				
37		1052.61					148	146	294	101.4																				
38		1182.0					153	205	358	94.1																				
39		275.14					190	176	366	107.9																				
40		1725.14					13,588	12,694	26,282	107.0	0.06	0.87	0.012	...	0.08	0.2	3.4	3.6	2.0	9.4	0.3	9.2	20.3	39.8	41.5	40.6	37.0	38.7	37.9	
Total		18813.44	34.4	341223	306007	647230	13,588	12,694	26,282	107.0	0.06	0.87	0.012	...	0.08	0.2	3.4	3.6	2.0	9.4	0.3	9.2	20.3	39.8	41.5	40.6	37.0	38.7	37.9	

N. B.—The population for each of the newly constituted divisions as per amended Act not being available, figures in certain columns have not been furnished.

Showing Deaths Registered by Divisions during each month in 1938.

1 Divisions.	3												4 Total Deaths Registered during the year.
	Districts.												
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
1	61	58	52	50	30	46	55	50	49	65	83	65	664
2	54	35	36	45	34	41	43	46	40	57	44	60	535
3	112	93	84	73	102	83	127	88	80	87	104	120	1153
4	118	95	103	93	95	79	85	77	70	118	114	110	1157
5	117	101	108	67	67	63	111	88	75	98	97	110	1102
6	26	53	24	20	29	34	33	29	32	44	33	27	382
7	45	41	52	41	37	42	58	53	53	53	47	54	556
8	17	9	21	17	14	17	19	13	14	21	18	21	201
9	45	50	35	37	48	48	42	55	35	57	34	51	537
10	40	23	26	20	33	24	22	25	29	26	29	32	329
11	64	74	58	62	56	69	68	64	59	75	67	79	795
12	18	17	22	33	21	18	21	22	19	25	16	25	271
13	77	46	63	59	86	74	70	56	59	86	74	93	843
14	68	71	51	51	57	48	55	54	51	42	58	72	678
15	61	66	69	61	72	67	73	75	76	75	67	68	830
16	26	37	29	23	24	28	34	27	28	34	23	41	354
17	131	98	71	61	87	66	85	84	81	122	98	96	1080
18	97	59	72	53	62	50	69	63	61	58	67	38	749
19	126	95	85	100	110	83	91	109	88	123	98	86	1194
20	83	56	55	68	71	47	61	58	52	58	68	68	745
21	94	66	77	60	81	63	54	53	62	75	64	106	860
22	31	32	33	33	28	32	29	31	26	26	31	27	349
23	67	70	68	67	70	54	72	55	52	71	49	79	774
24	39	39	29	29	32	33	35	53	34	37	37	46	443
25	67	56	60	47	54	57	69	57	57	71	49	61	695
26	63	55	56	55	60	47	45	50	44	67	57	75	666
27	38	30	34	27	29	25	47	36	36	55	39	67	434
28	49	50	32	40	33	21	41	45	33	50	48	38	480
29	33	33	38	20	25	17	24	26	19	20	24	22	301
30	97	100	111	53	39	55	58	55	51	61	64	43	787
31	99	96	111	95	78	74	82	72	50	78	72	75	982
32	56	57	52	47	54	39	54	36	33	48	38	60	574
33	37	37	49	44	50	56	55	47	43	37	35	32	522
34	61	64	63	36	47	32	44	37	40	45	45	51	566
35	160	125	143	92	119	96	121	107	120	124	124	124	1467
36	60	78	48	36	42	32	44	43	46	83	44	50	561
37	61	42	59	41	38	43	58	49	61	58	54	45	608
38	13	22	24	23	27	19	34	31	28	20	27	28	294
39	38	26	32	33	17	35	33	29	27	41	35	50	398
40	25	26	29	23	23	25	41	30	26	37	45	31	366
Total	2574	2281	2264	1927	2085	1886	2252	2078	1929	2383	2332	2400	26,282

1	2	3		4		5		6		7		8		9		10		11		12	
		Under 1 year.		1 year and under 5 years.		5 years and under 10 years.		10 years and under 15 years.		15 years and under 20 years.		20 years and under 30 years.		30 years and under 40 years.		40 years and under 50 years.		50 years and under 60 years.		60 years and upwards.	
Divisions.	Districts.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
		1		77	46	13	19	4	2	7	13	22	29	27	24	26	33	22	85	65	
2		80	43	8	14	6	9	5	8	16	30	15	19	16	19	14	52	44			
3		185	112	22	21	8	13	9	18	40	64	40	42	26	98	36	83	93			
4		171	84	26	19	12	21	26	19	35	50	22	40	35	53	47	150	114			
5		143	124	18	25	18	12	27	17	32	45	37	42	50	46	53	125	108			
6		54	31	7	3	1	4	4	4	13	19	14	27	5	18	5	23	26			
7		89	64	13	9	4	2	4	10	16	22	15	30	18	24	13	41	55			
8		33	16	1	4	1	4	2	4	17	18	3	7	7	10	6	9	20			
9		81	49	4	12	3	5	5	12	16	32	15	30	16	28	19	48	58			
10		51	24	4	8	2	2	4	7	20	15	18	9	9	17	6	25	30			
11		87	59	10	15	9	14	9	16	45	34	67	27	59	94	61	35	73			
12		38	17	1	3	1	3	2	4	12	17	6	20	13	19	9	31	30			
13		135	118	14	17	3	8	10	13	38	41	35	24	34	39	26	47	73			
14		81	58	9	14	3	4	15	18	17	32	25	18	34	32	53	58				
15		49	36	4	13	1	11	25	12	79	35	116	31	81	79	24	67	38			
16		49	37	6	3	3	2	2	5	16	15	5	17	5	16	15	40	39			
17		170	122	22	30	10	2	13	10	31	60	28	42	17	25	22	78	84			
18		124	91	12	12	5	5	6	16	28	27	19	23	17	26	26	54	84			
19		200	168	11	22	8	10	14	31	33	45	29	43	42	43	36	82	105			
20		119	116	8	24	5	7	11	29	17	29	19	21	23	34	21	68	73			
21		94	88	13	14	6	7	11	21	34	43	51	33	47	30	35	66	96			
22		43	56	6	16	6	7	7	11	18	18	13	6	27	13	15	34	39			
23		39	77	6	4	2	2	4	4	18	16	13	6	27	13	15	34	39			
24		105	88	6	14	6	7	11	15	33	34	31	33	26	21	40	25	67	63		
25		53	71	6	15	7	4	6	7	20	33	9	11	20	10	24	20	33	49		
26		107	70	12	10	6	4	8	14	24	34	14	26	26	23	20	53	51			
27		104	90	5	19	5	4	5	9	21	29	23	21	29	20	27	17	52	52		
28		69	71	5	3	3	7	8	10	16	34	19	35	13	26	9	8	22	30		
29		73	60	7	6	2	5	2	7	26	21	19	11	17	9	11	12	52	54		
30		40	30	9	5	2	2	3	3	6	14	11	17	8	14	6	31	42			
31		110	69	14	14	7	8	5	19	25	37	23	28	24	26	31	20	76	70		
32		134	113	32	28	7	10	8	11	32	45	19	19	21	34	34	109	96			
33		97	63	11	5	6	6	8	17	18	41	14	19	18	12	26	22	45	56		
34		77	64	47	62	17	10	5	4	21	31	11	14	18	8	23	16	42	41		
35		91	59	6	10	3	6	4	10	15	42	19	20	27	12	20	15	52	62		
36		225	179	35	33	12	22	20	14	53	61	50	46	50	40	40	37	133	125		
37		55	48	11	10	6	7	7	4	19	21	23	20	13	24	20	73	48			
38		83	39	13	12	11	9	7	11	21	25	24	19	14	26	14	55	74			
39		55	30	5	8	1	3	3	5	6	19	8	15	7	11	8	17	26	25		
40		50	29	6	4	2	1	3	6	9	13	13	20	9	9	11	42	32	52		
		60	45	6	8	2	6	4	6	7	16	13	14	9	13	12	37	37	37	37	
	Total ...	3,798	3,083	480	490	228	257	332	449	981	1,275	1,002	1,103	726	1,120	825	2,329	2,408			
	Ratio per 1000 ...	237.4	206.0	13.4	14.4	6.7	8.0	9.8	13.2	13.6	18.6	16.8	29.1	25.8	57.2	51.2	196.4	247.1			

VITAL STATISTICS.

ANNUAL FORM No. VI

Showing Deaths Registered according to class by Divisions during 1938.

1	2	3					4					5												
		Population as per census of 1931.					Number of Deaths registered.					Ratio of Deaths per 1000 of population.												
Divisions.	Districts.	Europeans.	Anglo-Indians.	Indian Christians.	Hindus.	Mohamedans.	Others.	Total.	Europeans.	Anglo-Indians.	Indian Christians.	Hindus.	Mohamedans.	Others.	Total.	Europeans.	Anglo-Indians.	Indian Christians.	Hindus.	Mohamedans.	Others.	Total.		
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36																								
37																								
38																								
39																								
40																								
	Total ...	3581	10657	39884	520,176	70,031	2901	647230	17	228	1211	21,475	3346	5	25282	4.8	21.4	30.4	41.3	47.8	2.0	40.6		

N. B. The population of the newly constituted divisions as per amended Act not being available the figures in certain columns have not been furnished.

VITAL STATISTICS.

Showing Deaths registered from Small-pox by divisions during each month in 1938.

1 Divisions.	2												3			4			5		6 Mean ratio per 1000 during previous five years.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.			
1	5	5	5	4	1	...	2	1	3	2	3	4	12	10	22	...	...	...
2	4	6	6	...	4	1	8	2	5	1	3	3	5	8	13	...	...	...
3	4	6	6	...	4	4	11	1	5	1	3	3	12	16	28	...	...	...
4	2	2	3	4	4	1	...	...	3	...	...	...	19	19	38	...	...	...
5	1	4	1	1	2	...	...	3	1	...	...	...	13	15	28	...	...	...
6	...	4	...	...	...	...	...	3	1	...	...	...	9	9	18	...	...	...
7	...	4	...	...	...	...	...	3	1	...	...	...	8	5	13	...	...	...
8	...	...	...	...	...	...	...	...	...	...	...	...	4	1	5	...	...	...
9	1	2	...	...	...	...	...	...	...	...	...	...	5	2	7	...	...	...
10	1	1	1	1	...	...	...	...	...	...	...	...	5	5	10	...	...	...
11	1	1	1	2	...	...	...	...	...	...	...	...	2	3	5	...	...	...
12	2	1	1	1	...	...	...	...	...	...	...	...	4	2	6	...	...	...
13	3	3	1	2	1	...	...	2	1	...	...	...	9	11	20	...	...	...
14	3	3	2	1	1	1	1	2	1	...	...	...	5	3	8	...	...	...
15	1	1	1	1	2	2	2	...	1	...	...	...	3	3	6	...	...	...
16	12	7	1	...	1	2	1	...	1	...	...	...	18	20	38	...	...	...
17	8	5	1	1	2	2	...	...	1	...	...	...	9	12	21	...	...	...
18	1	5	5	4	2	1	...	...	...	...	...	...	4	5	9	...	...	...
19	1	...	2	1	1	1	...	1	1	...	...	...	3	6	9	...	...	...
20	1	...	2	1	1	1	...	...	...	...	...	...	3	6	9	...	...	...
21	3	3	2	1	1	1	...	...	...	...	...	...	9	2	11	...	...	...
22	3	3	2	2	1	1	...	...	...	...	...	...	3	5	8	...	...	...
23	3	3	2	1	1	1	...	...	...	...	...	...	3	5	8	...	...	...
24	1	1	1	3	2	1	4	1	2	1	1	1	6	5	11	...	...	...
25	1	1	1	1	1	1	1	1	2	1	1	1	6	5	11	...	...	...
26	...	2	1	2	1	1	1	...	...	...	...	...	2	2	4	...	...	...
27	...	1	1	1	1	1	1	...	...	...	...	...	3	4	7	...	...	...
28	...	1	1	1	1	1	1	...	...	...	...	...	3	4	7	...	...	...
29	...	1	1	1	1	1	1	...	...	...	...	...	3	4	7	...	...	...
30	4	5	4	4	1	...	...	...	...	...	...	...	...	...	14	...	...	...
31	3	4	5	4	1	2	2	...	...	...	...	...	11	10	21	...	...	...
32	3	4	6	4	1	3	1	...	...	...	...	...	7	10	17	...	...	...
33	3	5	7	3	1	6	8	1	1	...	...	...	12	25	37	...	...	...
34	4	...	1	2	1	...	1	1	...	...	...	...	6	5	11	...	...	...
35	19	6	10	6	2	2	1	3	1	...	...	...	33	21	54	...	...	...
36	2	5	5	2	6	2	1	1	1	...	...	...	8	10	18	...	...	...
37	1	3	3	1	2	2	...	1	2	...	...	...	3	8	11	...	...	...
38	1	1	1	1	...	...	...	...	...	...	...	...	...	...	2	...	...	...
39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
Total	86	79	79	59	38	36	44	29	22	15	29	45	267	294	561	0.78	0.96	0.87	0.38		

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

Showing Deaths registered from Other Fevers by divisions during each month in 1958.

H-4

1	2		3												4			5		6		
	Divisions.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.		Total.	Ratio of deaths per 1000 of population.
			Total.												Ratio of deaths per 1000 of population.		Mean Ratio per 1000 during the previous five years.					
1			2	6	5	3	...	3	3	3	4	4	5	6	17	21	38	17	21	38		
2			2	6	7	...	4	3	4	4	4	2	5	9	12	21	33	12	21	33		
3			5	7	7	...	8	4	9	4	4	8	11	12	12	41	45	41	45	86		
4			4	15	12	...	13	11	10	11	6	11	13	15	65	64	129	65	64	129		
5			8	9	6	...	12	7	9	12	9	8	9	11	59	45	104	59	45	104		
6			6	11	8	...	5	9	10	5	6	5	4	4	29	38	67	47	32	79		
7			7	7	8	...	4	7	4	12	9	5	3	4	47	32	79	47	32	79		
8			2	2	4	...	2	3	3	2	2	2	2	1	15	13	28	15	13	28		
9			7	4	4	...	5	3	4	5	3	8	1	1	24	25	49	24	25	49		
10			4	5	9	...	2	4	4	7	5	6	2	4	33	21	54	33	21	54		
11			4	6	5	...	6	2	1	5	5	4	4	3	21	28	49	9	23	32		
12			8	2	5	...	6	2	1	5	5	4	4	3	9	13	22	9	13	22		
13			10	9	7	...	4	4	4	1	...	9	4	1	45	37	82	45	37	82		
14			4	7	5	...	5	4	2	4	4	1	6	9	29	27	56	29	27	56		
15			5	4	3	...	2	7	3	6	1	2	2	1	10	14	24	10	14	24		
16			1	3	4	...	3	6	3	...	3	4	...	2	11	15	26	11	15	26		
17			4	2	4	...	2	7	7	...	4	4	...	2	14	17	31	14	17	31		
18			4	2	4	...	6	7	7	...	4	12	...	5	37	30	67	37	30	67		
19			1	...	6	...	10	6	7	...	1	1	...	2	14	26	40	14	26	40		
20			6	1	1	...	8	6	8	...	3	3	...	3	27	39	66	27	39	66		
21			4	4	3	...	4	4	3	...	2	1	...	3	21	22	43	21	22	43		
22			1	...	1	...	2	4	...	2	2	1	...	13	12	28	13	12	28			
23			1	...	...	2	...	1	1	2	...	3	6	9	3	6	9			
24			1	3	9	...	6	13	4	...	4	7	...	16	42	80	16	42	80			
25			6	1	3	...	1	14	7	...	10	4	...	32	28	60	32	28	60			
26			8	9	6	...	7	12	13	...	14	8	...	52	49	101	52	49	101			
27			2	2	5	...	5	7	5	...	8	17	...	28	43	71	28	43	71			
28			2	1	6	...	1	3	1	...	1	17	...	17	39	56	22	17	39			
29			1	1	2	...	3	1	2	...	2	1	...	...	4	4	8	...	4	4	
30			...	1	1	...	1	1	2	...	...	1	...	2	9	16	25	9	16	25	
31			7	3	14	...	3	...	...	...	...	...	...	6	4	10	6	4	10		
32			9	17	18	...	18	10	6	...	11	5	...	...	30	44	74	30	44	74	
33			4	3	4	...	4	3	2	...	3	1	...	3	62	50	112	62	50	112		
34			6	3	2	...	3	3	2	...	3	1	...	3	18	20	38	18	20	38		
35			27	15	13	...	6	9	8	...	6	4	...	6	24	15	39	24	15	39		
36			7	9	4	...	7	4	2	...	1	1	...	2	17	26	43	17	26	43		
37			11	8	12	...	11	5	3	...	10	10	...	4	47	43	90	47	43	90		
38			...	4	4	...	1	4	2	...	...	8	...	...	8	12	20	8	12	20	
39			...	1	4	...	1	2	...	...	...	4	...	...	5	10	15	5	10	15	
40			1	...	...	...	...	...	...	...	...	...	...	...	2	2	4	2	2	4	
Total ...			188	191	217	176	184	186	172	192	178	181	143	175	1077	1106	2183	1077	1106	2183	3.2	
																						3.4
																						3.2

* Deaths in the Government Hospitals in the city of patients admitted from mofussil places.

Showing Deaths registered from Dysentery and Diarrhoea by Divisions during each month in 1938.

Divisions.	3												4			5																	
	1	2	3	4	5	6	7	8	9	10	11	12	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Ratio of deaths per 1000 of population.	Mean Ratio per 1000 during previous five years.	
1	14	8	1	3	3	8	3	11	6	21	7	30	50	30	80	2	3	5	12	15	63	47	110	8*	5	3	8	8*	22	22	48	8*	
2	10	2	4	4	2	6	4	2	3	5	3	3	5	3	3	3	4	4	12	9	5	7	3	5	5	3	8	26	22	48	8*		
3	11	10	7	4	7	22	9	5	7	5	3	8	8	5	3	9	9	12	22	9	63	47	110	8*	3	3	6	63	47	110	8*		
4	17	7	6	7	7	10	12	10	12	13	13	13	10	12	13	10	12	13	10	12	13	10	12	13	10	12	13	64	60	124	124		
5	16	14	4	2	5	14	17	8	14	9	8	8	14	14	8	14	17	8	14	17	8	14	17	8	14	17	8	71	50	121	121		
6	1	3	1	1	4	4	1	2	2	2	3	3	4	2	2	2	3	4	2	2	3	4	2	2	3	4	2	12	7	19	19		
7	1	1	3	3	1	6	3	1	2	4	3	3	1	2	4	3	3	1	6	3	3	3	4	6	13	21	34	21	34	34	34		
8	1	1	1	1	4	4	2	1	3	4	4	4	4	1	2	3	2	2	4	2	2	3	3	3	3	8	11	3	8	11	11		
9	1	5	1	3	4	1	2	4	4	1	1	1	1	2	2	2	2	2	4	2	2	3	3	3	3	5	5	18	18	18	18		
10	...	3	3	7	4	1	1	3	1	1	4	5	7	3	3	3	3	3	3	5	5	7	7	4	21	10	31	10	31	31	31		
11	4	6	7	7	4	4	5	3	7	4	4	5	3	3	4	3	3	7	4	5	5	9	5	25	10	35	10	35	35	35	35		
12	...	...	1	...	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	6	1	7	6	1	7	7	7
13	1	3	6	4	3	6	3	6	6	6	6	3	6	6	6	6	3	6	6	3	3	3	3	3	2	2	2	24	22	46	46		
14	6	5	5	2	2	2	1	2	2	2	2	2	2	4	4	2	2	2	2	1	1	3	3	3	16	15	31	15	31	31	31		
15	4	3	2	1	2	1	5	7	2	...	...	...	...	7	7	...	...	...	...	5	5	...	...	...	19	19	28	19	28	28	28	28
16	...	...	1	2	3	1	3	1	3	1	1	3	3	1	1	3	3	3	1	3	3	3	1	1	9	9	6	9	6	15	15	15
17	2	1	1	2	...	4	7	6	6	4	4	7	6	6	2	2	2	2	4	7	7	6	10	10	33	33	40	33	40	40	40	40	
18	5	3	3	1	1	5	5	6	6	5	5	5	6	6	6	5	5	5	5	5	5	6	10	10	30	30	49	30	49	49	49	49	
19	19	9	13	8	8	12	12	9	9	12	12	9	9	9	9	16	11	11	12	12	12	11	11	11	49	47	96	49	96	96	96	96	
20	14	6	7	8	7	8	11	9	9	8	8	8	9	8	8	12	12	12	11	11	11	16	16	16	10	10	47	10	47	47	47	47	
21	8	7	8	7	6	4	11	12	12	12	12	11	12	12	12	12	12	12	11	11	11	12	3	3	35	35	47	35	47	47	47	47	
22	3	...	1	1	...	4	2	3	2	4	2	4	2	2	2	2	3	3	4	2	2	3	2	1	13	13	8	13	8	21	21	21	
23	4	7	6	4	6	9	3	4	4	3	4	2	3	3	3	3	3	3	4	2	2	3	1	1	14	14	6	14	6	20	20	20	
24	6	7	7	3	3	8	3	7	9	3	7	3	7	7	7	9	10	10	9	3	3	3	2	2	28	28	40	28	40	40	40	40	
25	8	8	6	4	5	9	6	6	6	6	6	6	6	6	6	14	14	14	6	6	6	14	6	6	20	20	42	20	42	42	42	42	
26	7	1	7	8	11	8	11	8	8	11	11	8	8	8	8	10	10	10	8	11	11	10	6	6	39	39	44	39	44	44	44	44	
27	1	1	5	1	...	2	3	1	3	2	2	2	2	3	3	3	3	3	3	3	3	3	4	2	6	6	9	6	9	15	15	15	
28	5	1	7	3	6	8	3	4	6	3	8	3	4	4	4	6	6	6	3	3	3	6	4	4	27	27	52	27	52	52	52	52	
29	2	3	3	1	4	6	2	4	5	2	6	2	4	5	5	5	5	5	4	2	2	5	2	3	27	27	32	27	32	32	32	32	
30	11	3	3	8	2	7	7	7	7	7	7	7	7	7	7	10	10	10	7	7	7	10	10	10	15	15	38	15	38	38	38	38	
31	4	4	6	14	8	4	5	4	8	4	4	4	4	4	4	8	8	8	4	5	5	4	5	5	39	39	41	39	41	41	41	41	
32	5	7	4	9	4	6	6	5	5	6	6	5	5	5	5	10	10	10	6	6	6	5	2	7	39	39	44	39	44	44	44	44	
33	3	6	6	3	6	6	4	4	4	6	4	4	4	4	4	6	6	6	4	4	4	4	4	4	...	...	4	...	...	50	50	50
34	8	9	3	6	3	5	5	3	3	5	5	3	3	3	3	3	3	3	6	4	4	3	2	2	27	27	23	27	23	23	23	23	
35	17	15	21	10	16	20	6	6	6	20	6	6	6	6	6	6	6	6	8	6	6	6	8	8	61	61	74	61	74	74	74	74	
36	5	6	6	1	6	4	1	1	1	4	1	3	4	4	4	4	4	4	4	1	1	1	1	3	19	19	20	19	20	39	39	39	
37	11	2	1	4	4	7	8	4	3	6	4	4	4	3	3	3	3	3	7	8	8	6	6	7	27	27	34	27	34	34	34	34	
38	2	5	5	3	3	6	1	3	3	3	3	3	3	3	3	3	3	3	6	3	3	3	3	3	18	18	21	18	21	21	21	21	
39	1	1	1	1	3	2	5	3	2	5	5	2	2	2	14	14	10	14	10	24	24	24	24
40	2	2	3	...	1	6	6	4	3	6	6	6	6	3	3	3	3	3	6	6	6	4	4	4	21	21	20	21	20	41	41	41	41
Total ...	240	187	188	153	158	244	203	168	219	195	193	1184	1124	2308	35	36	35	37	36	35	37	36	35	37	36	35	37	36	35	37	36	35	

*Deaths in Government Hospitals in the city, among patients admitted from mofussil.

VITAL STATISTICS.

ANNUAL FORM No. XVI.

Showing Deaths registered from Tubercle including tubercle of lungs during each month in 1958.

Divisions.	3												4			5			Mean Ratio per 1000 during previous five years.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	
1	1	1	1	3	3	1	1	1	1	3	4	2	14	9	23	14	9	23	
2	1	1	1	3	3	1	1	1	1	3	4	2	12	7	19	12	7	19	
3	1	1	1	3	3	1	1	1	1	3	4	2	27	17	44	27	17	44	
4	1	1	1	3	3	1	1	1	1	3	4	2	46	28	74	46	28	74	
5	3	4	5	7	7	3	12	4	13	7	6	6	31	11	42	31	11	42	
6	3	4	5	7	7	3	12	4	13	7	6	6	11	4	15	11	4	15	
7	3	4	5	7	7	3	12	4	13	7	6	6	14	7	21	14	7	21	
8	1	1	1	3	3	1	3	1	4	1	1	1	6	6	12	6	6	12	
9	4	5	3	5	4	2	3	6	4	3	2	2	17	24	41	17	24	41	
10	4	5	3	5	4	2	3	6	4	3	2	2	4	6	10	4	6	10	
11	6	5	1	5	6	4	6	4	4	6	7	12	17	15	32	17	15	32	
12	1	1	1	3	3	1	1	1	1	3	4	2	34	4	38	34	4	38	
13	1	1	1	3	3	1	1	1	1	3	4	2	33	7	40	33	7	40	
14	1	1	1	3	3	1	1	1	1	3	4	2	34	31	65	34	31	65	
15	2	3	1	3	6	1	3	5	2	3	2	3	11	4	15	11	4	15	
16	1	1	1	3	3	1	1	1	1	3	4	2	5	2	7	5	2	7	
17	2	3	1	3	4	3	5	4	3	3	1	1	23	11	34	23	11	34	
18	2	3	1	3	4	3	5	4	3	3	1	1	15	10	25	15	10	25	
19	5	6	2	3	10	7	3	4	9	8	5	5	28	41	69	28	41	69	
20	4	7	4	9	5	5	1	4	3	3	2	4	31	22	43	31	22	43	
21	6	7	6	7	6	4	4	3	2	3	3	6	22	19	41	22	19	41	
22	...	1	4	1	2	4	1	3	...	1	3	2	16	5	21	16	5	21	
23	6	7	3	3	...	2	2	3	4	3	4	4	13	7	20	13	7	20	
24	4	1	1	1	...	1	4	2	2	4	2	4	19	16	35	19	16	35	
25	1	5	4	2	1	1	4	2	2	1	1	1	4	15	19	4	15	19	
26	3	2	3	1	3	5	3	4	...	2	4	4	16	17	33	16	17	33	
27	1	3	1	2	...	...	1	3	...	1	4	4	22	12	34	22	12	34
28	2	1	...	2	...	1	1	3	1	1	...	2	7	8	15	7	8	15	
29	2	1	...	2	...	1	1	3	1	1	...	2	1	1	2	1	1	2	
30	1	4	4	2	...	1	6	4	3	8	...	1	10	2	12	10	2	12	
31	4	1	1	2	...	1	1	4	...	3	...	1	17	20	37	17	20	37	
32	2	1	...	3	1	5	9	5	6	6	7	7	19	26	45	19	26	45	
33	1	2	3	5	3	4	1	1	4	1	5	5	17	17	34	17	17	34	
34	...	1	6	1	3	4	5	2	1	1	...	3	15	13	28	15	13	28	
35	4	2	9	4	10	6	4	4	2	4	5	9	9	19	28	9	19	28	
36	1	2	3	4	1	1	3	2	4	5	9	9	41	26	67	41	26	67	
37	...	2	3	4	1	1	1	1	3	4	2	2	10	10	20	10	10	20	
38	...	2	6	3	4	3	4	5	4	5	4	4	5	3	8	5	3	8	
39	1	1	2	2	1	1	1	...	2	4	5	4	23	19	42	23	19	42	
40	1	1	2	1	...	1	1	1	...	1	...	2	4	4	8	4	4	8	
Total.	85	93	98	99	100	108	111	105	97	133	135	142	733	578	1301	733	578	1301	
													2.1	1.9	2.0	2.1	1.9	2.0	
													1.8			1.8			

VITAL STATISTICS.

ANNUAL FORM No. XVII.

Showing Deaths registered from Respiratory diseases excluding Tubercle of lungs by divisions during each month in 1938

1	2	3												4			6			
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.				
Divis. nos.	Districts.													Males.	Females.	Total.	Males.	Females.	Total.	Mean Ratio per 1,000 during five years.
1		4	10	8	13	8	10	5	13	18	9	13	55	56	111	7				
2		11	8	7	11	10	6	14	8	11	6	12	53	63	116	7				
3		13	12	15	20	18	25	21	10	17	19	22	99	83	182	32				
4		30	21	33	27	29	15	16	12	30	35	24	156	136	292	32				
5		23	21	30	19	19	21	18	11	11	27	31	127	128	255	7				
6		10	15	8	4	7	6	9	12	12	11	16	84	74	158	7				
7		13	11	20	7	5	12	11	13	18	16	26	84	74	158	7				
8		4	3	3	5	2	2	4	2	8	6	6	21	25	47	7				
9		12	17	3	6	16	19	20	7	19	10	16	90	68	158	7				
10		12	7	3	5	7	7	6	7	7	5	7	41	33	76	7				
11		15	17	15	12	10	18	13	16	23	19	16	96	12	108	18				
12		6	2	7	12	3	4	5	5	10	8	8	32	35	67	7				
13		20	13	15	21	29	24	21	23	36	26	31	148	128	276	7				
14		16	14	11	7	17	11	14	13	10	15	16	83	76	159	7				
15		12	9	14	11	14	6	11	15	14	2	4	13	54	67	117	7			
16		7	6	9	6	9	5	8	4	9	7	7	46	38	84	7				
17		21	11	9	10	13	11	15	20	33	28	32	114	104	218	7				
18		18	13	15	14	10	12	11	16	14	16	11	85	78	163	7				
19		24	16	17	30	27	20	20	20	38	16	22	158	110	268	7				
20		18	15	11	14	15	14	15	13	12	19	19	115	57	172	7				
21		22	18	24	14	23	17	14	14	20	23	23	111	60	171	9				
22		2	10	7	4	9	7	8	8	5	5	3	32	39	71	4				
23		20	18	16	11	19	5	20	13	11	18	16	102	79	181	4				
24		10	5	9	5	8	6	7	9	10	6	13	47	49	96	7				
25		19	21	17	15	20	14	21	12	12	18	18	100	96	196	7				
26		12	22	19	17	18	11	14	12	17	15	16	93	83	176	7				
27		8	5	4	5	10	7	13	6	5	7	4	37	34	71	7				
28		13	17	10	4	5	4	4	5	5	1	4	39	36	75	7				
29		9	10	7	2	4	2	2	2	2	5	1	29	22	51	7				
30		31	30	24	10	8	17	14	10	15	19	12	106	101	207	7				
31		35	24	16	19	20	26	23	11	19	18	13	144	101	245	7				
32		6	12	13	10	11	8	10	6	5	9	8	52	49	101	7				
33		3	6	7	4	14	16	11	10	9	11	6	62	40	102	7				
34		20	12	14	4	11	10	10	6	18	14	15	81	62	143	7				
35		43	29	46	20	22	21	37	34	21	27	26	184	161	345	7				
36		18	26	15	6	9	5	7	8	13	7	12	71	64	135	7				
37		12	12	6	5	7	13	16	11	12	13	14	64	67	131	7				
38		1	1	5	7	8	4	8	6	6	9	7	39	29	68	7				
39		11	12	11	13	4	11	7	8	9	11	9	44	62	106	7				
40		8	6	7	5	10	12	11	4	8	8	5	52	37	89	7				
	Total	592	537	530	434	508	468	501	441	394	595	542	546	3259	2829	6088	9.5	9.2	9.4	9.6

* Deaths in Govt. Hospitals among patients admitted from mofussil.

VITAL STATISTICS.

ANNUAL FORM No. XVIII.

Showing Deaths Registered from Injuries by divisions during each month in 1938.

1	2												3			4			6
	Districts.												Divisions.			Ratio of deaths per 1000 of population.				Mean Ratio per 1000 during previous five years.
Divisions.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Mean Ratio per 1000 during previous five years.
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
27	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
29	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
31	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
33	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
34	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
35	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
36	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
37	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
38	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
39	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total.	15	17	18	17	13	11	29	25	23	21	13	12	141	74	215	0.4	0.2	0.3	0.4

* Deaths in Government Hospitals in the city among patients admitted from mofussil for treatment.

VITAL STATISTICS.

ANNUAL FORM No. XX.

Showing Deaths Registered from Other Causes by Divisions during each month in 1938.

Divisions.	3												4			5			Mean ratio per 1000 during previous years.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	
1	31	32	30	22	17	27	29	35	18	31	41	30	171	172	343				
2	28	17	14	26	21	20	16	21	18	33	23	33	145	130	275				
3	75	52	42	40	52	34	49	46	53	49	56	58	267	281	548				
4	57	42	43	42	20	28	40	25	33	57	33	49	267	217	484				
5	64	47	61	35	21	27	52	31	33	43	40	48	244	264	508				
6	7	21	12	12	14	8	12	9	12	15	7	9	79	60	139				
7	20	21	19	18	23	17	18	23	25	24	18	13	133	108	241				
8	9	1	13	5	8	8	10	4	8	7	8	6	43	44	87				
9	19	16	24	17	19	19	21	22	16	22	17	29	139	111	250				
10	21	5	9	11	22	10	14	10	14	9	17	13	84	71	155				
11	30	37	28	25	26	35	34	32	26	28	31	37	144	118	262				
12	9	11	11	12	11	13	9	13	10	12	11	19	81	60	141				
13	39	15	31	19	31	37	27	22	20	24	30	45	166	174	340				
14	38	40	29	31	30	30	34	33	28	25	36	38	208	181	389				
15	28	42	43	41	47	50	50	45	51	45	56	54	67	83	150				
16	15	20	14	13	10	13	21	15	19	16	14	30	107	93	200				
17	86	69	45	42	39	39	51	53	46	55	43	42	310	320	630				
18	68	37	43	30	35	31	41	34	33	38	33	13	212	229	441				
19	63	56	46	45	53	38	46	67	45	57	58	44	290	328	618				
20	41	29	23	28	40	18	32	27	24	34	37	32	187	178	365				
21	53	32	36	28	42	38	32	25	31	32	32	39	188	199	387				
22	24	19	20	15	17	16	15	17	13	16	21	17	89	93	182				
23	32	32	32	36	33	23	36	29	22	35	22	37	188	181	369				
24	12	24	14	13	19	15	14	20	8	17	17	26	104	95	199				
25	30	19	26	22	20	21	16	23	17	33	21	33	143	138	281				
26	34	26	20	18	21	15	13	22	15	28	28	39	145	135	280				
27	25	11	17	16	17	12	13	23	25	8	15	28	52	62	114				
28	28	28	12	26	18	15	25	35	22	37	33	24	153	150	303				
29	19	16	17	15	15	13	15	21	11	12	16	18	88	100	188				
30	42	53	61	24	21	22	24	20	19	33	25	22	192	175	367				
31	42	45	64	40	38	24	40	28	27	40	41	45	237	247	484				
32	35	33	22	16	27	16	30	16	17	24	20	36	130	130	260				
33	23	14	19	30	22	20	23	22	27	23	18	17	126	132	258				
34	22	33	38	22	29	11	23	22	20	16	19	25	137	138	275				
35	50	50	40	43	56	47	49	56	82	76	89	75	361	336	697				
36	26	28	13	16	20	17	26	31	29	19	28	31	173	111	284				
37	25	13	31	15	18	16	23	18	31	27	24	21	132	130	262				
38	8	10	5	10	11	10	18	17	17	13	11	15	73	70	143				
39	25	10	15	16	9	21	21	20	18	23	16	37	124	107	231				
40	12	17	15	13	16	10	21	17	14	23	27	20	106	99	205				
Total ...	1315	1193	1097	947	1040	885	1095	1041	1007	1165	1140	1247	6796	6336	13102	199	202	206	179

Showing deaths during 1958 compared with deaths during the previous 5 years.

Years.	Cholera.		Small-pox.		Measles.		Plague.		Malaria.		Enteric Fever.		Other Fevers.		Dysentery and Diarrhoea.		Tuberculosis other than Pulmonary.		Respiratory diseases.				Injuries.		Deaths from Child birth.		All other causes.		Total Deaths.	
	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000	Deaths.	Ratio per 1,000
1933	62	0.1	837	1.3	44	0.07	...	...	140	0.2	90	0.1	2095	3.2	2670	4.1	156	0.2	855	1.3	5957	9.2	303	0.5	551	11.6	10950	16.9	24500	37.9
1934	166	0.3	131	0.2	7	0.01	...	...	193	0.3	145	0.2	2097	3.2	2008	3.1	151	0.2	971	1.5	5783	8.9	270	0.4	313	11.1	11424	17.7	23659	36.6
1935	145	0.22	59	0.09	7	0.01	...	...	167	0.26	186	0.29	2305	3.6	2320	3.6	177	0.27	1032	1.6	6254	9.7	198	0.3	295	11.4	11810	18.2	24955	35.6
1936	140	0.22	3	0.005	5	0.01	...	...	115	0.18	163	0.25	1799	2.8	2208	3.4	126	0.19	1010	1.6	6410	9.9	252	0.4	294	10.1	11157	17.2	23660	36.6
1937	232	0.36	196	0.3	8	0.1	...	...	78	0.12	96	0.15	2036	3.1	2133	3.3	51	0.08	1104	1.8	6676	10.3	170	0.3	289	9.3	12605	19.5	25574	39.7
Mean of the last 5 years	149	0.24	245	0.38	14	0.02	...	...	138	0.2	156	0.19	2066	3.2	2268	3.5	152	0.19	994	1.5	6218	9.6	235	0.4	304	10.7	11589	17.9	24189	37.9
1958	36	0.06	561	0.87	8	0.01	...	...	50	0.08	119	0.2	2183	3.4	2308	3.6	108	0.17	1193	2.0	6088	9.4	215	0.3	284	9.2	13102	20.2	26282	40.6

VITAL STATISTICS.

ANNUAL FORM No. XXII.

Table of Deaths for 1938 arranged in accordance with the International List (Fourth Revision 1929.)
as adopted for use in England, Wales, Scotland and Northern Ireland.

Classification Number.	Causes of Deaths.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
I. INFECTIOUS AND PARASITIC DISEASES.														
1	Typhoid Fever	8	13	12	3	15	10	7	5	16	9	13	8	119
3	Typhus Fever	...	...	...	...	1	...	...	...	...	...	...	...	1
6	Small Pox	86	79	79	59	88	36	44	29	22	15	29	45	561
7	Measles	...	...	2	...	...	1	1	...	...	...	2	2	8
9	Whooping Cough	7	10	5	7	7	6	2	6	1	3	4	1	59
10	Diphtheria	1	...	3	2	1	1	1	2	1	3	2	3	20
11	Influenza (including Influenzal Pneumonia)	...	...	...	...	...	2	1	...	1	...	3	...	7
12	Cholera	20	4	2	4	...	1	...	...	...	2	2	1	36
13	Dysentery	145	106	114	75	88	93	140	104	100	113	112	99	1289
15	Erysipelas	...	2	9	5	3	...	...	1	...	1	...	1	22
16	Acute Poliomyelitis	...	1	...	...	...	...	...	...	...	...	...	...	2
18	Cerebro-Spinal Meningitis	1	...	...	...	...	...	1	...	...	19	4	1	27
21	Rabies	2	1	...	...	2	2	4	3	1	1	1	2	19
22	Tetanus	3	10	10	6	10	7	8	7	4	10	7	7	89
23	Tuberculosis of the Respiratory System	79	90	94	93	94	91	97	92	90	125	113	135	1193
24	Tubercule of Larynx	...	1	...	...	...	...	...	...	...	...	1	...	2
24	Tuberculous Meningitis	2	...	2	...	3	2	4	2	3	2	2	1	23
25-b	Other Tuberculosis of intestine and peritoneum	1	...	1	2	...	9	7	8	1	7	4	5	45

Infectious and Parasitic Diseases.

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Classifications Number.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
45	II. CANCER AND OTHER TUMOURS.													
	Cancer of the buccal cavity and pharynx	6	2	2	3	2	2	4	3	2	1	3	4	34
46	CANCER OF THE DIGESTIVE ORGANS AND PERITONEUM.													
	Cancer of the liver	1	2	1	1	...	...	1	1	2	...	3	...	12
	Cancer of the rectum	...	1	1	...	...	1	3	1	2	...	2	...	11
	Cancer of the stomach	...	...	2	...	4	1	...	4	2	...	1	2	16
47	Cancer of the other digestive organs and peritoneum	1	...	...	...	1	2	...	...	...	...	...	...	4
	CANCER OF THE RESPIRATORY ORGANS.													
48	Cancer of the larynx	2	2	1	2	2	1	1	1	...	...	2	...	14
	Malignant goitre	...	...	...	...	...	...	...	...	...	1	...	...	1
50	Cancer of the cervix and Uterus	4	2	3	3	5	4	3	2	7	3	2	3	41
	Cancer of lung	2	1	3
	Cancer of the Breast	1	1	2	1	...	5	1	1	1	3	16

Cancer and other Tumours, 22

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Classification Number.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
61 63	DIABETES—Contd.													
	Diabetic Carbuncle	5	2	...	2	2	6	5	9	3	5	4	1	44
	Diabetic Coma	1	...	3	1	3	3	...	1	...	3	...	3	18
	Diabetic Gangrene	1	...	...	1	1	1	...	2	...	1	...	2	9
	Beri Beri	1	...	...	...	...	...	...	...	...	...	...	2	3
63	Rickets	53	30	34	22	26	23	45	34	25	36	29	23	380
66-a 66-d 69-1 69-2	DISEASES OF THE THYROID AND PARATHYROID GLANDS.													
	Goitre	...	...	...	...	...	...	...	...	...	...	...	...	1
	Tetany	...	1	...	1	...	...	...	...	1	...	1	1	4
	Amyloid Disease	2	...	...	...	...	...	...	...	...	...	...	...	2
	Addisons Disease	...	...	...	...	...	...	...	...	...	1	...	...	1
69-2	Toxaemia	...	...	...	...	...	...	...	...	...	3	...	...	3
70-a 70 b	IV. DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS—ANAEMIA, CHLOROSIS.													
	Purpura Haemorrhagica	...	...	3	...	...	...	...	...	...	...	1	...	4
70 b	Haemophilia	1	...	...	...	...	...	...	...	...	...	3	...	4

General Diseases.

71-a 71-b-2	Pernicious Anaemia Anaemia Chlorosis	...	3	4	6	4	8	4	...	1	1	1	1	1	1	2	35
		...	19	31	24	24	24	24	20	...	10	10	13	12	12	12	203
		...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	3
72-b	Leukaemia	...	1	...	1	1	...	...	1	2	1	1	1	1	1	10	
	
73-2	DISEASES OF THE SPLEEN. Enlargement of spleen Rupture of spleen	...	2	2	...	3	1	...	1	...	4	...	...	2	...	15	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	
	
75	V. CHRONIC POISONING. Alcoholism	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	
	
78-b 79 81	VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS. Encephalitis Cerebral Meningitis Other Meningitis (not includ- ing meningococcal meningitis. Myelitis	...	2	2	1	2	1	...	...	...	...	...	...	1	1	10	
		...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	
		...	3	1	1	1	1	1	...	3	3	1	2	2	2	20	
		1	1	1	1	1	4

General Diseases.

Diseases of the Nervous system and sense organs.

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Classification Number	Causes of Death.	Diseases of the Nervous system and sense organs.												Total.		
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.			
82-a	CEREBRAL HAEMORRHAGE APOPLEXY, ETC.	5	3	2	3	3	3	5	4	2	2	3	3	4	2	38
a-1	Cerebral Haemorrhage	1	2	3	3	3	3	...	2	2	2	3	4	1	2	21
a-2	Intra-Cranial Haemorrhage	2	2	...	...	...	...	1	...	1	1	1	...	...	3	8
b-2	Apoplexy (Lesion unstated)	2	1	...	...	...	...	...	...	...	...	...	...	...	1	11
c-1	Cerebral thrombosis	21	21	15	20	21	20	21	17	21	21	24	23	4	27	245
c-2	Hemiplegia	1	1	1	1	3	1	1	...	2	2	1	4	...	...	16
	Paraplegia	...	...	...	1	...	1	...	...	...	...	3	...	...	...	4
	Infantile paralysis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Paralysis of unstated Origin	20	16	12	3	20	3	19	17	12	13	16	...	16	175	
83	General Paralysis of the Insane	...	1	...	...	1	...	...	1	...	...	1	...	...	...	5
	OTHER FORMS OF INSANITY.															
84-b	Mania	1	...	2	...	1	...	1	...	...	...	...	...	1	1	5
	Melancholia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	Other forms of insanity	3	4	3	1	...	...	2	1	2	...	3	...	...	3	3
85	Epilepsy	1	...	...	...	...	...	2	...	2	1	...	...	2	24	
	Status epilepticus	...	...	...	...	...	...	1	...	...	...	...	...	...	4	
86	Infantile convulsions (under 5 years of age)	69	60	61	37	43	38	69	54	64	59	53	...	53	...	660

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Classification Number.	Causes of death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
OTHER DISEASES OF THE HEART—Contd.														
95-b-2	Heart Disease (Undefined)	5	1	3	2	2	3	1	1	2	...	...	1	21
	Cardiac Asthma	...	...	...	...	...	...	...	1	1	1	...	1	4
	Cardiac Dropsy	3	...	...	...	2	1	1	1	...	1	1	4	14
96	Aneurysm	1	...	1	...	4	...	1	1	1	...	...	...	5
98	Gangrene	1	2	1	2	1	1	...	2	5	1	6	2	27
	Cancrumoris	1	...	...	1	1	1	2	...	1	2	1	2	12
	Gangrene scrotum	...	1	...	1	1	1	2	...	...	2	...	1	9
DISEASES OF THE VEINS.														
Diseases of the Circulatory system.														
100-1	Haemorrhoids	3	1	2	6	7	...	...	3	2	1	1	2	28
2	Thrombophlebitis	...	...	...	...	...	...	1	1	...	...	...	...	1
	Phlegmasia alba dolens	...	...	...	...	...	...	...	...	...	...	...	...	1
101	Other diseases of the Lymphatic system.	...	1	1	...	...	3	1	...	...	2	...	...	9
102	Hyperpiesis	1	1	2	3	1	1	...	2	...	2	...	2	15
	Oedema of Larynx	...	...	...	1	...	...	...	...	...	...	...	...	1
	Pansinusitis	...	...	...	...	...	1	...	...	...	...	...	...	1

	8	4	4	7	4	3	1	8	2	5	3	7	56
VIII. DISEASES OF THE RESPIRATORY SYSTEM.													
BRONCHITIS.													
106-a Acute Bronchitis	8	4	4	7	4	3	1	8	2	5	3	7	56
b Chronic Bronchitis	36	38	34	33	42	20	26	32	29	21	40	42	393
Bronchiectasis	—	—	1	—	—	—	—	1	1	1	—	—	4
c Bronchitis not distinguished as													
Acute or Chronic	11	6	9	11	6	5	8	4	5	4	3	7	79
107 Broncho-Pneumonia	372	304	323	271	330	317	340	299	259	404	357	350	3926
108 Lobar-Pneumonia	4	7	10	8	11	5	9	8	5	22	13	18	120
109 Pneumonia (not otherwise defined)	132	140	112	82	81	93	102	77	77	115	96	107	1214
110-1 Empyema	...	3	6	2	1	1	—	—	2	—	3	—	18
2 Other Pleurisy	1	1	2	4	5	1	2	—	2	—	2	2	22
Pneumothorax	...	...	...	—	—	—	—	—	—	—	1	1	2
CONGESTION AND HAEMORRHAGIC INFARCT OF LUNG, ETC.													
111-2 Pulmonary Embolism	1	...	—	—	3	—	1	—	—	—	—	1	6
112 Asthma	18	19	21	7	16	17	9	5	10	16	20	7	165
114b-2 Abscess of Lung	1	2	2	1	—	—	—	1	1	2	—	2	12
Other diseases of the respiratory system	1	3	1	1	2	—	1	—	—	2	—	1	12
IX. DISEASES OF THE DIGESTIVE SYSTEM													
DISEASES OF THE BUCCAL CAVITY, PHARYNX, ETC.													
115-1 Diseases of the Teeth and gums.	1	—	—	—	—	1	—	2	2	—	—	—	4
3 Diseases of the Tonsils	—	—	—	—	—	—	—	—	1	—	1	—	4
Septic Tonsil	—	—	—	—	—	—	—	1	—	1	—	1	3

Diseases of the Respiratory system.

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Classification Number.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	DISEASES OF THE OESOPHAGUS.													
	ULCER OF THE STOMACH OR DUODENUM.													
117-a	Ulcer of the stomach	5	10	6	5	5	5	10	4	9	7	4	4	74
b	Ulcer of the Duodenum	—	1	3	3	3	2	1	2	4	5	1	1	26
	Perforation of Duodenum	2	1	2	5	—	5	5	3	5	2	2	5	33
	OTHER DISEASES OF THE STOMACH.													
118	Peri Gastric Abscess	—	—	—	—	—	—	1	—	—	—	—	—	1
1	Gastritis	15	10	10	12	10	3	11	8	5	6	7	5	102
2	Haematemesis	1	1	—	2	1	—	—	—	2	—	1	1	9
	Dyspepsia (age 2 and over)	3	1	—	1	—	1	2	1	1	4	6	1	21
	Obstruction of Pylorus	—	—	—	2	—	—	—	1	1	—	—	1	4
	Stenosis of Pylorus	1	—	—	—	—	—	—	—	1	—	1	2	5
	DIARRHOEA AND ENTERITIS.													
119 & 120-a	Other Diarrhoea and Enteritis...	58	47	39	41	26	28	34	41	30	35	28	42	449
a1	Colitis	3	—	6	1	1	2	1	—	2	—	3	4	23

Diseases of the Digestive System.

Annual Form No. XXII.—Table of Deaths for 1938 arranged in accordance with the International List (Fourth Revision 1929)
as adopted for use in England, Wales, Scotland and Northern Ireland.

Classifi- cation Number.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
127-1	OTHER DISEASES OF THE GALL BLADDER AND DUCTS.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cholecystitis	—	—	—	1	—	—	1	1	—	—	1	3	7
	Biliary calculi	—	1	—	—	—	—	—	—	—	—	—	—	1
128 129 a	DISEASES OF THE PANCREAS.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Acute Pancreatitis	—	—	—	—	—	—	—	—	1	—	—	—	1
	Peritonitis	5	—	5	3	3	3	5	3	3	4	4	2	40
	Sub-phrenic abscess	—	—	—	—	—	—	—	—	1	—	—	1	2
130	X. NON-VENEREAL DISEASES OF THE GENITO- URINARY SYSTEM AND ANNEXA.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Acute Nephritis	15	9	14	12	12	13	13	11	10	13	22	17	161
	Acute Bright's disease	1	3	4	3	—	1	4	5	3	5	3	2	34
131	Chronic nephritis	31	13	13	23	16	9	13	15	15	18	21	24	211
	Chronic Bright's disease	2	5	6	3	4	2	1	1	2	3	3	5	37
132	Albuminuria	—	1	—	1	2	1	1	1	—	—	—	—	7
	Nephritis not stated to be acute or chronic	8	13	8	6	13	14	8	13	6	4	5	6	104
	Renal Dropsy	6	...	8	1	5	6	5	3	2	4	2	2	44

Diseases of the
Digestive System.

Uraemia	...	5	3	1	4	4	4	7	4	3	4	50
Sub-Diaphragmatic Abscess	...	...	1	...	...	...	...	...	...	...	...	1
OTHER DISEASES OF THE KIDNEY AND ANNEXA.												
133-a Pyelitis	...	...	...	1	...	...	...	...	1	...	1	4
Pyelo-nephritis	...	...	...	...	...	...	...	...	...	...	...	1
b Haematuria	...	...	...	...	...	...	...	...	...	...	...	1
CALCULI OF THE URINARY PASSAGES.												
134-a Renal calculus	...	...	...	2	...	...	...	...	1	2	1	7
b Calculi of the Bladder	...	...	...	...	...	...	...	...	...	...	...	2
DISEASES OF THE BLADDER.												
135-a Cystitis	...	...	1	3	...	...	...	1	...	1	...	7
b Retention of Urine	...	...	1	1	...	...	...	1	...	1	3	14
DISEASES OF THE URETHRA, URINARY ABSCESS, ETC.												
136-a Stricture of the urethra	...	...	1	...	...	...	...	...	1	2	...	5
b Extravasation of urine	...	...	...	1	...	...	...	1	...	...	...	7
Peri-urethral abscess	...	...	...	...	...	...	...	1	...	...	...	2
DISEASES OF THE PROSTATE.												
137 Enlargement of Prostate	...	...	...	...	...	...	...	...	...	...	...	...
	...	1	1	...	...	...	...	1	1	2	2	11

Annual Form No. XXII.—Table of Deaths for 1938-arranged in accordance with the International List (Fourth Revision 1929) as adopted for use in England, Wales, Scotland and Northern Ireland.

Classification Number.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Diseases of the Genito-Urinary System.	DISEASES OF THE MALE GENITAL ORGANS.													
	138 Hydrocele	1	—	—	1	—	1	—	1	1	1	1	—	7
	DISEASES OF THE FEMALE GENITAL ORGANS.													
	139-a2 Pyosalpinx	—	1	—	—	—	—	—	1	—	—	—	—	2
	b Dysmenorrhoea and Endometritis	1	—	—	—	—	—	—	2	—	—	1	—	4
	XI. DISEASES OF PREGNANCY, CHILD-BIRTH AND THE PUERPERAL STATE.													
	140 Septic Abortion	3	2	—	1	—	—	1	2	—	—	1	—	10
	141-2 Abortion (unqualified)	1	—	—	—	—	—	—	—	—	—	1	—	3
	142 Ectopic Gestation	—	1	—	—	—	—	—	—	—	—	1	—	2
	Puerperal State.													
144-a Placenta Praevia	—	2	—	2	1	1	—	1	—	—	—	—	6	
b Accidental Haemorrhage (unqualified)	—	—	—	1	2	2	—	2	1	1	—	1	10	

145	Post-Partum Haemorrhage ...	—	1	4	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19
	Retention of Placenta ...	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10
	Puerperal Sepsis ...	15	18	13	—	—	14	—	—	—	—	—	—	—	—	—	—	—	—	165
146-1 2	PUERPERAL ALBUMINURIA AND CONVULSIONS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Eclampsia ...	1	3	2	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	21
	Albuminuria of Pregnancy ...	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
147	OTHER TOXAEMIAS OF PREGNANCY.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Anaemia of Pregnancy ...	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7
	Other Toxaemias of pregnancy..	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9
149	OTHER ACCIDENTS OF CHILD BIRTH.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Caesarean ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Prolonged Labour ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
	Rupture of Uterus ...	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	3
	Other accidents of Child Birth.	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8
151 152-1 2	XII. DISEASES OF THE SKIN AND CELLULAR TISSUE.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Carbuncle ...	2	1	2	—	—	7	6	2	3	—	—	—	—	—	—	—	—	—	32
	Cellulitis ...	6	5	6	5	9	3	10	4	3	3	1	—	—	—	—	—	—	—	66
	Acute Abscess and ulcer (unqualified)	9	16	19	15	12	9	17	15	12	5	—	—	—	—	—	—	—	—	139
	Other diseases of the skin including Elephantiasis (unqualified)	2	5	12	5	4	—	—	1	—	—	—	—	—	—	—	—	—	—	—
153	Diseases of the Skin.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Diseases of the Skin.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Puerperal state

Diseases of the Skin.

Annual Form No. XXII.—Table of Deaths for 1938 arranged in accordance with the International List (Fourth Revision 1929)
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Classification Number.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
154 156-a	XIII. DISEASES OF THE BONES AND ORGANS OF LOCOMOTION.	3	—	—	1	3	2	1	1	—	1	1	2	15
	Osteomyelitis	—	—	—	1	—	—	1	—	—	—	—	—	3
	Acute Arthritis	—	—	1	—	—	—	—	—	—	—	—	—	1
	Chronic arthritis	—	—	—	—	2	—	1	—	—	—	1	—	4
157-b c	XIV. CONGENITAL MALFORMATIONS	1	—	—	—	—	—	—	—	—	—	—	—	1
	Meningocele	—	—	—	—	—	—	—	—	—	—	—	—	—
	Spina Bifida	—	—	—	—	1	—	—	—	—	—	—	—	1
	Congenital Heart Disease	1	1	—	—	—	—	—	1	—	2	1	2	8
157-e 3 e5	OTHER CONGENITAL MALFORMATIONS.	—	1	1	2	—	—	4	2	2	1	1	2	16
	Imperforate Anus	—	1	—	—	—	—	—	—	—	—	—	—	1
	Congenital Phimosi	—	1	—	—	—	—	—	2	—	—	1	—	3
	Congenital Deformity	—	—	—	—	—	—	—	—	—	—	—	—	—

Diseases of the Bones and organs of Locomotion.

Congenital Malformations.

Annual Form No. XXII.—Table of Deaths for 1938 arranged in accordance with the International list (Fourth Revision 1929) as adopted for use in England, Wales, Scotland and Northern Ireland.

Classification Number.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Deaths from Violence.														
	XVII. DEATHS FROM VIOLENCE.													
163	Suicide by Arsenic or Drug poison	—	—	1	—	—	2	1	—	2	—	—	1	7
165	Suicide by other solid or liquid Poisons and Corrosive substances	—	3	—	—	2	—	—	2	—	1	—	—	9
166	Suicide by Hanging	—	—	3	1	—	1	2	2	4	3	1	—	18
	Suicide by Drowning	3	2	1	5	—	1	2	1	4	1	1	—	21
	SUICIDE BY OTHER MEANS.													
174	Homicide by Strangulation	—	—	—	1	—	—	—	—	—	—	—	—	1
	Homicide by cutting or Piercing Instruments	—	—	—	1	—	1	1	—	—	1	—	—	6
	ATTACK BY VENOMOUS ANIMALS.													
176	Snake bite	—	—	—	—	—	—	—	—	—	—	—	—	—
	Sting of Scorpion	—	1	1	—	—	1	1	—	—	1	—	—	4
	Rat Bite	—	—	—	—	—	—	—	—	—	—	—	—	1

Annual Form No. XXII.—Table of Deaths for 1938 arranged in accordance with the International list (Fourth Revision 1929)
as adopted for use in England, Wales, Scotland and Northern Ireland.

Classification Number.	Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
199	XVIII. ILL DEFINED DISEASES.													
	Sudden death (Syncope) ...	—	—	—	—	—	—	1	—	—	—	—	—	1
	CAUSE OF DEATH UNSTATED OR ILL-DEFINED.													
200-1	Heart failure	33	35	41	35	37	38	17	21	46	45	52	42	442
2	Acute Abdomen	—	4	1	3	2	2	5	3	—	1	1	1	23
	Anasarca	3	4	4	1	2	2	—	—	4	4	—	2	26
	Ascites	4	6	4	5	7	6	3	1	5	4	8	4	57
	Coma	2	—	—	—	1	—	1	1	2	1	—	1	9
	Debility (Age 10 to 70)	94	90	82	67	68	76	64	61	72	96	91	100	961
	Dropsy	2	3	2	—	2	6	3	4	8	7	2	4	43
	Inanition (10 years and over)	1	—	—	—	1	—	—	1	—	—	—	—	3
	Oedema	—	—	—	—	—	1	—	—	—	—	1	1	3
3	Collapse	1	1	1	—	1	3	3	1	2	1	—	2	16
	Pyrexia of uncertain origin	135	143	185	162	152	161	134	166	140	140	111	132	1761
	Post-operative Shock	2	2	—	—	1	3	4	3	4	—	1	1	21
	Surgical Shock	—	—	—	—	—	—	—	—	—	—	—	—	1
	Natural causes	1	—	—	—	—	—	—	—	—	—	—	—	16
	Unknown	4	3	2	3	1	3	4	5	3	4	3	4	40

Ill Defined Diseases.

VITAL STATISTICS.

TABLE A.

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

Year.	Births.		Deaths.		Cholera.		Small-pox.		Malaria.		Other Fevers.		Other infectious diseases.		Plague.		Dysentery and Diarrhoea.		Respiratory Diseases.		Infantile mortality under 1 year.		Children between 1 and 5 years		Still-Births.
	No. of Registered exclusive of still-births.	Birth-rate.	No. of Deaths Registered exclusive of still-births.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.	
1927	24,760	46.8	22,564	42.5	512	1.0	32	0.06	1367	2.6	1259	2.1	...	...	...	...	3268	6.2	6816	12.9	5883	237.6	3806	92.3	1258
1928	25,729	44.9	26,715	50.5	708	1.3	251	0.5	1599	3.0	1732	3.2	1052	2.0	...	...	3931	7.4	8691	16.4	6806	286.8	4864	118.0	1321
1929	15,124	45.7	22,415	42.4	16	0.03	506	1.0	681	1.3	1861	3.5	612	1.2	...	...	3127	5.9	6695	12.7	5933	256.6	3875	94.0	1281
1930	25,662	48.5	22,839	43.2	43	0.08	188	0.4	283	0.5	2097	3.9	411	0.8	...	...	3056	5.8	6331	12.0	6258	243.9	5633	88.1	1260
1931	25,738	39.8	23,162	35.8	153	0.2	24	0.04	277	0.4	1914	3.0	1347	2.1	...	...	2746	4.2	5743	8.9	6391	248.3	3767	50.3	1318
1932	27,996	43.3	22,290	34.4	5	0.08	176	0.3	165	0.3	1747	2.7	1405	2.2	1.0	0.002	2644	4.1	5509	8.5	6622	236.5	3609	48.2	1326
1933	28,533	44.1	24,500	37.9	62	0.1	137	3.3	140	0.2	2185	3.3	519	0.8	...	...	2670	4.1	5967	9.2	7540	264.4	4154	67.7	1380
1934	28,149	43.5	25,659	36.6	166	0.3	131	0.2	193	0.3	2242	3.4	1163	1.8	...	...	2008	3.1	6905	10.6	6424	228.2	5895	65.4	1378
1935	31,051	47.9	24,955	38.6	145	0.22	59	0.09	167	0.26	2491	3.89	607	0.9	...	...	2320	3.6	7463	11.6	6948	223.9	4380	71.3	1414
1936	29,189	45.1	25,660	36.6	140	0.22	3	0.05	113	0.18	1799	2.8	601	0.9	...	...	2208	3.4	7546	11.7	6518	216.5	3990	65.0	1415
1937	30,958	47.8	25,674	39.7	232	0.36	196	0.3	78	0.12	2036	3.1	588	0.8	...	...	2133	3.3	7831	12.1	6836	220.8	4611	74.9	1400
1938	30,985	47.9	26,282	40.6	36	0.06	561	0.87	50	0.08	2183	3.4	455	0.7	...	...	2308	3.6	7389	11.4	6881	222.1	4476	72.9	1321

VITAL STATISTICS.

Showing Rainfall during 1938.

Years.	1st. quarter.	2nd. quarter.	3rd. quarter.	4th. quarter.	Total.
	January to March.	April to June.	July to September.	October to December.	
	Inches.	Inches.	Inches.	Inches.	Inches
1933	3.42	0.98	5.20	30.58	40.18
1934	2.05	2.54	11.20	20.87	36.66
1935	0.57	1.23	14.26	24.28	40.34
1936	3.70	3.53	12.39	24.63	44.25
1937	0.07	4.72	15.53	41.06	61.38
1938	1.99	2.04	1.94	10.49	26.46

VITAL STATISTICS.

TABLE C.

Showing births, deaths and infantile deaths and rates for different communities in 1937 and 1938.

Race or Caste.	Population according to the census of 1931.	1938.						1937.					
		Total number of Births.	Birth rate.	Total number of Deaths.	Death rate.	Infantile Deaths.	Infantile Death rate.	Total number of Births.	Birth rate.	Total number of Deaths.	Death rate.	Infantile Deaths.	Infantile Death rate.
Europeans ...	3,581	44	12.3	17	4.7	2	45.5	35	9.8	18	5.0	2	57.1
Anglo-Indians ...	10,657	383	36.0	228	21.4	42	109.7	384	36.0	253	23.8	46	119.8
Indian Christians ...	39,884	1,658	41.6	1,211	30.4	312	188.2	1,564	39.2	1,124	28.2	304	194.4
Hindus ...	5,20,176	25,559	49.1	21,475	41.3	5,587	218.6	25,620	49.3	21,265	40.9	5,659	220.9
Muhammadans...	70,031	3,338	47.7	3,346	47.8	938	281.0	3,350	48.0	3,011	43.0	818	244.2
Others ...	2,901	3	1.0	5	1.7	...	...	5	1.7	3	1.0	7	...
Total ...	6,47,230	30,985	47.9	26,282	40.6	6,881	222.1	30,958	47.8	25,674	39.7	6,836	220.8

VITAL STATISTICS.

TABLE D.

Showing births, deaths and rates for principal sub-divisions of the Hindu community for 1937 and 1938.

Name of Community.	Population.	1938.				1937.			
		Total Births.	Birth Rate.	Total Deaths.	Death Rate.	Total Births.	Birth Rate.	Total Deaths.	Death Rate.
Brahmins ...	58,761	2,442	41·6	1,327	22·5	2,126	36·2	1,219	20·7
Chetties ...	37,949	1,865	49·1	1,636	33·1	1,814	47·8	1,646	43·4
Vellala or Mudaliars	86,716	3,649	42·1	3,130	36·1	4,122	47·5	3,194	36·8
Baliya or Naidus ...	60,268	2,531	41·9	2,044	33·9	2,522	41·8	2,227	36·9
Vanniar or Naickers.	69,650	3,443	49·4	3,092	44·4	4,033	57·9	3,121	44·8
Adi-Dravidas ...	73,701	3,635	49·3	3,656	49·6	3,910	53·1	3,627	49·2
Patnavars ...	11,309	436	38·5	549	48·6	342	30·2	275	24·3
Yadaval or Idayars...	17,022	1,005	59·0	800	47·0	852	50·0	622	36·5
Viswakarma Brahmins or Kammalars	15,670	815	52·0	615	39·2	790	50·4	600	38·3

VITAL STATISTICS.

TABLE E.

Showing births, deaths and infantile death rates by months in 1937 and 1938.

Months.	1938						1937					
	Total No. of Births.	Birth Rate.	Total No. of Deaths.	Death Rate.	Infantile Deaths, on 1000 live Births.	Infantile Death rate on 1000 live Births.	Total No. of Births.	Birth Rate.	Total No. of Deaths.	Death Rate.	Infantile Deaths.	Infantile Death rate on 1000 live Births.
January	2111	39.1	2574	47.7	644	305.1	2157	39.6	2558	45.3	604	282.6
February	2045	37.9	2281	42.3	558	272.8	1865	34.6	1859	34.4	461	247.2
March	2454	45.1	2264	41.9	543	225.1	2245	41.6	1857	34.4	481	214.2
April	2716	50.4	1927	35.7	469	172.7	2686	49.8	1759	32.6	460	171.3
May	2652	49.2	2086	38.7	585	220.6	2542	47.1	1979	36.7	570	224.2
June	2486	46.1	1886	34.9	484	194.7	2540	47.1	1849	34.3	486	191.3
July	2759	51.1	2242	42.2	663	244.3	2600	48.2	1911	35.4	519	199.6
August	2860	53.0	2078	38.5	570	199.3	2685	49.8	2114	39.2	601	225.8
September	2588	48.0	1929	35.8	539	208.3	2760	51.2	2021	37.5	565	204.7
October	2762	51.2	2585	44.2	653	256.4	2807	52.0	2025	37.5	531	189.1
November	2617	48.5	2212	41.4	570	217.8	2759	51.2	2642	48.9	681	246.8
December	2955	54.8	2400	44.5	605	204.1	3332	62.0	3320	61.5	877	265.2
Total	2985	47.9	26282	40.6	6881	222.1	30958	47.8	25674	39.7	683.6	220.8

VITAL STATISTICS.

TABLE F.

Showing ratio of deaths among children under 1 year of age per 1000 live-births registered in 1937 and 1938.

Divisions.	1938		1937	
	Infantile Mortality.	Infantile Death-Rates.	Infantile Mortality.	Infantile Death-Rates.
1	154	277.0	155	267.7
2	142	212.6	126	204.6
3	332	218.0	297	202.7
4	290	211.2	306	232.6
5	267	228.9	303	240.1
6	109	336.4	98	257.2
7	153	237.9	145	187.4
8	49	149.8	50	166.1
9	130	193.7	134	201.2
10	94	231.5	106	279.7
11	146	206.2	156	209.1
12	55	167.7	69	235.5
13	253	231.5	267	246.5
14	195	269.7	217	286.0
15	92	253.4	91	279.1
16	86	174.8	126	310.3
17	321	262.7	306	240.5
18	215	271.1	232	242.2
19	368	252.1	355	251.1
20	219	253.2	187	223.1
21	175	198.6	163	195.9
22	82	136.9	86	156.3
23	193	221.8	208	236.1
24	102	195.0	108	196.3
25	206	256.5	185	217.4
26	194	221.9	194	212.2
27	140	156.9	148	169.0
28	133	219.8	117	188.4
29	70	158.0	103	237.9
30	214	258.8	173	209.4
31	250	238.3	205	205.4
32	160	175.8	173	179.8
33	141	227.8	138	213.9
34	150	218.0	165	224.5
35	405	240.5	373	222.3
36	131	174.2	141	201.1
37	170	211.4	174	227.2
38	85	165.7	73	157.3
39	105	194.8	100	198.8
40	105	258.6	81	243.3
Total.	6,881	222.1	6,836	220.8

VITAL STATISTICS.

TABLE G.

Showing infantile mortality by months in 1938.

Months.	Small-pox.	Measles.	Malaria.	Other fevers.	Dysentery and Diarrhoea.	Premature Birth.	Debility.	Nervous System.	Respiratory System.	All other Causes.	Total of 1938.			Total of 1937.
											Males.	Females.	Total.	
January	7	—	—	24	56	225	12	45	215	60	339	305	644	604
February	7	—	—	26	61	161	10	56	199	38	310	243	558	461
March	7	1	—	31	67	159	9	55	189	25	300	243	543	481
April	3	—	—	20	57	182	10	36	162	49	267	202	469	460
May	2	—	1	28	64	148	13	40	196	93	331	254	585	570
June	3	...	—	23	50	125	9	38	172	64	276	208	484	486
July	4	—	—	41	93	178	18	47	235	47	337	326	663	519
August	4	—	...	32	72	181	4	52	189	36	318	252	570	601
September	3	—	...	30	52	169	4	46	163	72	292	247	539	565
October	1	—	1	32	64	188	8	57	218	84	359	294	653	531
November	4	1	...	14	47	221	12	35	190	46	316	254	570	681
December	1	—	...	16	58	220	4	33	166	105	353	250	603	877
Total	46	2	2	317	741	2,107	113	540	2,294	719	3,798	3,083	6,881	6,836

VITAL STATISTICS.

TABLE H.

Showing percentage of Infantile Deaths from Principal causes in 1938.

Age Periods	Small-pox		Measles		Malaria		Other Fevers		Diarrhoea and Dysentery		Premature Birth		Debility		Nervous System		Respiratory System		All other Causes		Total	
	Total	Ratio	Total	Ratio	Total	Ratio	Total	Ratio	Total	Ratio	Total	Ratio	Total	Ratio	Total	Ratio	Total	Ratio	Total	Ratio	Total	Ratio
Under 7 days	...	...	...	...	...	...	4	0.3	10	0.7	1268	84.3	17	1.1	52	3.4	14	0.9	159	9.2	1504	21.8
7 Days and under 1 Month.	...	...	...	...	...	...	7	0.75	41	4.4	668	71.7	22	2.3	90	9.6	38	4.1	66	7.1	92	15.6
1 Month & under 4 Months.	7	0.5	...	...	...	...	51	4.04	194	15.2	159	12.5	34	2.7	160	12.5	514	40.4	154	12.1	1273	18.5
4 Months & under 7 Months.	15	1.2	1	0.08	1	0.08	69	5.4	186	14.6	12	0.9	24	1.9	117	9.1	704	55.4	141	11.1	1270	18.4
7 Months & under 10 Months	11	1.1	1	0.09	1	0.09	100	9.6	177	17.1	...	...	9	0.9	70	6.7	565	54.5	105	9.9	1037	15.1
10 Months & under 1 year...	13	1.5	...	...	...	...	86	0.9	153	15.4	...	...	7	0.8	51	5.9	459	53.1	116	13.4	865	12.6
Total	46	.7	2	.03	2	.05	517	4.6	741	10.8	2107	30.6	113	1.8	540	7.8	2294	33.4	719	10.4	6881	...

VACCINATION.

STATEMENT No. I.

Showing Vaccinations performed in the City of Madras by months during 1938.

Months	Primary Vaccinations			Result			Re-vaccinations			Result		
	Males	Females	Total	Success-ful	Un-success-ful	Un-known	Males	Females	Total	Success-ful	Un-success-ful	Un-known
January	1,860	1,772	3,632	3,607	8	17	19,688	11,199	30,887	3,255	21,854	5,798
February	1,818	1,597	3,415	3,413	2	...	21,293	9,959	31,252	3,969	23,372	3,911
March	1,721	1,611	3,332	3,331	1	...	8,785	5,763	14,548	2,019	10,169	2,360
April	1,262	1,250	2,512	2,509	2	1	3,673	2,527	6,200	871	3,907	1,422
May	1,241	1,116	2,357	2,355	...	2	2,179	1,378	3,557	589	1,969	999
June	1,362	1,207	2,569	2,565	4	...	2,540	1,503	3,843	495	1,983	1,365
July	1,460	1,388	2,848	2,824	17	7	3,465	2,465	5,930	812	2,844	2,274
August	1,463	1,485	2,948	2,939	8	1	3,341	2,052	5,393	592	2,563	2,238
September	1,442	1,355	2,777	2,767	9	1	1,588	825	2,413	276	1,210	927
October	1,327	1,178	2,505	2,494	10	1	2,373	1,174	3,547	368	1,888	1,291
November	1,467	1,415	2,882	2,875	3	4	3,464	1,602	5,066	937	2,656	1,473
December	1,310	1,276	2,586	2,583	2	1	2,857	1,648	4,505	504	3,146	855
Total	17,753	16,630	34,383	34,262	66	55	75,246	41,895	1,17,141	14,667	77,561	24,913

VACCINATION.

Showing particulars

Divisions.	Districts.	Population according to the census of 1931	Number of Depots	Number of Vaccinators	Total Number of Persons Vaccinated			Average No. of Persons Vaccinated by each Vaccinator	Primary		
					Males	Females	Total		Total		
									Males	Females	Total
1	2	3	4	5	6	7	8	9	10	11	12
1					1,823	1,500	3,323		493	467	960
2					2,637	3,419	6,056		523	526	1,049
3					4,135	3,537	7,672		713	752	1,465
4					2,256	1,968	4,224		676	614	1,290
5					2,249	1,461	3,710		748	749	1,497
6					3,074	883	3,957		235	213	448
7					1,590	738	2,328		419	359	778
8					8,260	723	8,983		202	166	368
9					827	952	1,779		525	297	622
10					1,129	460	1,589		260	226	486
11					896	1,094	1,990		385	402	787
12					303	303	606		150	140	290
13					2,392	1,325	3,717		619	562	1,181
14					1,305	1,023	2,328		467	388	855
15					704	652	1,356		196	146	342
16					1,045	677	1,722		329	223	552
17					7,270	4,113	11,383		969	926	1,895
18					3,150	1,181	4,331		628	533	1,161
19					2,728	2,327	5,055		862	832	1,694
20			16	57	2,126	1,668	3,794	2658	514	498	1,012
21					1,884	1,555	3,439		375	379	754
22					1,532	758	2,290		262	242	504
23					2,583	1,600	4,183		481	504	985
24					1,340	1,039	2,379		270	284	554
25					726	595	1,321		492	491	983
26					5,422	3,190	8,612		519	450	949
27					318	228	546		187	176	363
28					1,520	1,337	2,857		302	336	638
29					1,085	991	2,076		287	279	566
30					2,056	1,351	3,407		390	376	766
31					2,211	1,495	3,706		395	339	734
32					2,626	1,660	4,286		445	380	825
33					2,635	2,010	4,645		447	406	853
34					961	1,163	2,124		458	366	824
35					6,524	2,782	9,306		775	778	1,553
36					4,282	2,144	6,426		594	510	1,104
37					1,503	1,455	2,958		402	420	822
38					1,071	933	2,004		307	322	629
39					1,597	1,126	2,723		338	304	642
40					1,204	1,109	2,313		294	289	583
	Total ...	6,47,230			92,979	58,525	151,504		17,733	16,630	34,363

of Vaccinations during 1938.

STATEMENT No. II.

Vaccinations.					Re-Vaccinations.			Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1000 of population.	Average annual number of persons successfully vaccinated during the previous five years.		Average annual No. of deaths from Small-pox during the previous five years.		Average cost of each successful vaccination.
Successful.					Total.	Successful.	Unknown.	Primary Vaccinations.	Re-Vaccinations.		Number.	Ratio per 1000 of population.	Number.	Ratio per 1000 of population.	
Under one year.	One year and under six years.	Six years and above	Total.	Unknown.											
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
394	501	65	960		2,363	284	1,161	100.0	23.6						
465	516	66	1,047		5,007	783	2,729	99.8	34.4						
977	468	20	1,465		6,207	1,065	3,256	100.0	36.1						
779	504	7	1,290		2,954	357	528	100.0	14.0						
902	577	18	1,497		2,213	279	524	100.0	17.0						
284	164	...	448		3,509	581	1,351	99.9	27.0						
552	225	...	777		1,550	350	438	100.0	29.7						
247	121	...	368		8,615	637	6,194	100.0	26.3						
399	223	...	622		1,157	95	...	100.0	8.2						
306	180	...	486		1,103	206	418	100.0	50.1						
458	329	...	787		1,203	150	...	100.0	12.5						
157	133	...	290		316	15	...	100.0	4.7						
797	384	...	1,181		2,536	258	...	100.0	10.2						
587	268	...	855		1,473	193	160	100.0	14.7						
208	134	...	342		1,015	161	150	100.0	18.6						
332	220	...	552		1,169	191	153	99.8	18.8						
228	659	5	1,892		9,488	889	2,147	99.8	12.1						
760	392	7	1,159		3,170	316	676	100.0	12.7						
1,319	370	5	1,694		3,361	500	...	100.0	14.9						
773	234	5	1,012		2,782	441	...	100.0	15.9						
643	111	...	754		2,685	483	...	100.0	17.9						
376	123	5	504		1,786	352	...	99.4	19.7						
682	292	5	979		3,198	273	14	100.0	8.6						
404	148	2	554		1,825	580	342	98.5	39.1						
730	229	9	968		538	108	47	99.6	37.1						
674	265	6	945		7,663	2,120	1,308	100.0	33.4						
249	114	...	363		183	59	17	99.8	35.6						
478	159	...	657		2,219	306	1,220	99.8	50.6						
394	171	...	565		1,510	176	892	99.5	28.5						
543	201	18	762		2,641	253	...	99.6	9.6						
516	205	10	731		2,972	284	...	98.4	9.6						
514	254	13	781	31	3,461	21	...	98.8	0.6						
544	278	17	839	4	3,792	1	...	100.0	0.03						
491	304	29	824		1,300	127	...	100.0	9.8						
1,020	524	9	1,553		7,753	629	251	99.9	8.4						
736	364	3	1,103		5,322	464	158	100.0	9.0						
539	267	16	822		2,156	223	...	100.0	10.4						
353	263	13	629		1,375	134	...	99.9	9.7						
309	309	24	642		2,081	194	485	100.0	12.2						
280	283	20	583		1,730	169	294	100.0	11.8						
22599	11466	397	34262	35	117141	14667	24913	99.7	15.9	75.6	35524	54.9	245	0.4	

0-15-5

VACCINATION.

STATEMENT No. III.

Showing the number of Births (Divisional and Hospital) verified and the number of infants vaccinated under one year of age during 1938.

Divisions.	Total Births excluding still births.		Still Births.		Deaths under one year.		Number of infants Surviving.		No. of infants Vaccinated under one year.		Percentage of vaccinations to births registered.	
	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.	Divisional.	Hospital.
1	390	150	12	8	81	25	309	125	143	42	36.7	28.0
2	408	235	7	14	55	13	353	222	207	93	50.7	39.6
3	799	720	13	63	134	77	665	643	467	127	58.4	17.6
4	669	553	18	21	121	72	548	281	297	79	44.4	22.4
5	714	450	18	16	139	94	575	356	281	81	39.4	18.0
6	297	93	8	..	56	6	241	87	102	40	34.3	43.0
7	527	203	19	17	76	36	451	167	260	69	49.3	34.0
8	223	118	6	3	27	10	196	108	96	35	43.1	29.7
9	397	281	7	20	60	36	337	245	187	80	47.1	28.5
10	256	115	10	9	45	23	211	92	122	26	47.7	22.6
11	452	243	11	17	70	35	382	208	208	71	46.0	29.2
12	228	61	8	6	27	2	201	59	104	17	45.6	27.9
13	788	343	12	26	118	49	670	294	446	117	56.6	34.1
14	502	253	8	18	87	26	415	207	346	141	68.9	60.5
15	249	106	3	3	29	7	220	99	105	50	42.2	47.2
16	306	160	8	14	43	11	263	149	176	74	57.5	46.3
17	986	242	11	19	150	47	836	195	460	71	46.7	29.3
18	613	183	9	8	63	28	550	155	315	69	51.4	37.7
19	1067	388	24	34	177	62	890	326	706	164	66.2	42.3
20	623	256	11	20	105	36	518	220	419	139	67.3	54.3
21	586	305	21	17	80	47	506	258	334	132	57.0	43.3
22	224	363	7	36	16	33	208	330	126	80	56.3	22.1
23	496	388	6	18	79	60	417	328	286	156	57.7	40.2
24	280	248	3	9	46	51	234	197	181	111	64.6	44.8
25	497	387	10	15	95	84	402	303	330	185	66.4	47.8
26	424	486	4	17	80	95	344	391	262	243	61.8	50.0
27	176	772	4	74	35	54	141	718	91	94	51.7	12.2
28	311	297	6	12	51	41	260	256	212	173	68.2	58.2
29	301	144	2	6	50	21	251	123	199	78	66.1	54.2
30	545	315	7	12	70	35	475	280	233	76	42.8	24.1
31	675	409	8	22	88	28	587	381	164	44	24.3	10.8
32	478	501	15	48	76	64	402	437	261	122	54.6	24.4
33	405	243	8	19	60	29	345	214	187	79	46.2	32.5
34	465	247	6	8	81	35	384	212	199	67	42.8	27.1
35	1065	690	21	44	159	65	906	625	600	271	56.3	39.3
36	456	254	8	19	66	26	390	228	251	119	55.0	46.9
37	556	248	12	22	75	21	481	227	326	116	58.6	46.8
38	393	120	9	9	38	10	355	110	221	40	56.2	33.3
39	416	138	15	7	59	30	357	108	223	46	53.6	33.3
40	303	101	10	10	34	23	269	78	207	30	68.3	29.7
Total.	19546	11589	405	760	3001	1547	16545	10042	10340	3847	53.0	33.2

VACCINATION.

STATEMENT No. IV.

Showing the number of Births verified and the number of infants vaccinated under one year of age during 1938.

Year.	1	2	3	4	5	6	7	8
		Total No. of births excluding still-births.	Number of children in column 2 who died before attaining the age of one year without being vaccinated.	Number of children in column 2 who left the city before attaining the age of one year without being vaccinated.	Number of children in column 2 who were available for vaccination (column 2 minus columns 3 and 4)	Number of children in column 5 who were vaccinated before they attained the age of one year.	Percentage of column 6 to column 5.	Number of children in column 5 whose vaccination was postponed beyond one year of age for medical reasons.
1936								
	{	19,139	2,845	3,850	12,464	9,980	80.1	1,183
	{	9,859	1,248	3,538	5,083	3,136	61.7	524
1937	{	20,139	2,962	3,755	13,422	10,518	78.4	1,481
	{	10,781	1,472	2,901	6,408	3,765	59.0	724
1938	{	19,546	3,001	3,338	13,207	10,340	78.3	1,105
	{	11,589	1,547	2,913	7,129	3,847	54.0	501

SANITATION.

STATEMENT No. I.

Showing areas sewered and yet to be sewered.

Division No. (old)	Name of Area.	Length of sewers in feet laid during 1938.	Length of sewers in feet laid upto 31-12-1938.	Percentage of sewered portion upto 31-12-1938.	Percentage yet to be sewered.	Remarks
				%	%	
1	Royapuram	1,831	44,527	89	11	
2	Tondiarpet	959	39,934	78	22	
3	Washermanpet	....	57,283	97	3	
4	Korrukkupet	....	30,459	73	27	
5	Harbour	....	30,771	94	6	
6	Muthialpet	....	27,001	97	3	
7	Katchaleeswaranpet	....	35,920	92	8	
8	Kothwal Bazaar	....	23,345	100	....
9	Ammen Kovil	....	27,687	100	....
10	Seven-Wells	....	29,305	100	....
11	Sowcarpet	....	18,379	100	....
12	Peddu Naickenpet	....	33,171	99	1	
13	Trevelyan Basin	....	32,171	97	3	
14	Esplanade	....	10,586	90	10	
15	Park Town	....	21,534	95	5	
16	Perambur	5,764	42,259	68	32	
17	Choolai	....	42,246	68	32	
18	Purasawalkam	....	54,659	99	1	
19	Vepery	....	44,337	85	15	
20	Egmore	137	98,475	97	3	
21	Kilpauk	12,706	65,782	85	15	
22	Nungambakkam	26,938	93,334	75	25	
23	Chintadripet	....	41,605	87	13	
24	Thiruvateeswarnpet	....	55,842	90	10	
25	Chepauk	....	22,506	91	9	
26	Triplicane	....	29,713	89	11	
27	Amir Mahal	....	28,768	87	13	
28	Mirsahibpet	651	97,649	98	2	
29	Royapettah	7,142	90,790	82	18	
30	Mylapore	1,719	96,634	93	7	
		57,847	13,66,672	89.83	10.17	

SANITATION.

STATEMENT No. II.

Showing the disposal of applications relating to licences

No.	Description.	Number of cases dealt with.	Number sanctioned.	Number refused.	Number pending.	Remarks.
1	Aerated Water Factories ...	45	39	2	2	
2	Bakery, Sweet meat bazaars, Coffee-hotels ...	506	396	28	82	
3	Candles and Soaps ...	16	12	4	...	
4	Cocoon fibre, Flax, Hemp and jute ...	7	7	...	...
5	Cattle yards ...	2,198	1,954	92	152	
6	Bones, Hoofs, Hairs, Wool and Horns.	10	10	...	...
7	Cart Stands ...	20	18	1	1	
8	Dairy produce ...	247	244	3	...	
9	Flour ...	142	117	22	3	
10	Gilding, Condiments ...	197	165	19	13	
11	Hack Stable ...	51	51	...	...
12	Dyeing ...	61	54	2	5	
13	Onions and Garlic ...	64	63	...	1	
14	Oil, Oil Mills ...	457	426	24	7	
15	Lodging houses ...	102	92	7	3	
16	Markets ...	48	45	...	3	
17	Meat ...	277	198	77	2	
18	Spirits, Turpentine, Chemicals and Rosin ...	144	144	...	...
19	Laundries ...	179	176	3	...	
20	Fish, Fins ...	17	17	...	...
21	Skins, Hides and Leather ...	109	107	1	1	
22	Paddy boiling ...	...	...	...	...
23	Sugar ...	4	4	...	...
24	Catgut, Offal, Tallow ...	3	3	...	...
25	Snuff ...	79	73	4	2	
26	Cotton ...	29	29	...	...
27	Eating houses ...	1,524	1,082	141	101	
28	Swine ...	13	...	13	...	
29	Lime kilns ...	59	37	2	...	
30	Beedy manufacturing ...	206	205	1	...	
31	Manufacturing of Cigar or Cigarettes, Storage of Tobacco ...	149	149	...	...
32	Camphor—Storage and boiling ...	40	40	...	...
33	Shaving Saloons ...	935	887	3	45	
34	Husking of paddy ...	12	12	...	...
35	Groundnut storage ...	12	12	...	...
36	Grain storage ...	26	26	...	...
37	Gold refining ...	2	2	...	...
38	Poultry ...	7	3	4	...	
	Total ...	7,755	6,879	453	423	

STATEMENT No. III.

and prosecutions during 1938.

No. pending on 1-1-1938.	No. instituted during the year.	Total.	Prosecutions.						No. pending.
			No. convicted.	Fines imposed.		No. acquitted.	No. withdrawn.	No. in which parties were not found.	
				Rs.	A.	P.			
...	1	1	...	...	...	...	...	1	...
56	193	249	58	129	4	0	...	162	29
...
...
1	34	35	15	20	4	0	...	19	1
...	2	2	...	...	...	...	...	2	...
60	146	176	50	61	8	0	...	104	22
...	3	3	...	...	...	...	...	3	...
4	14	18	4	3	0	0	...	2	12
13	80	93	78	93	8	0	1	9	5
...	10	10	4	5	12	0	...	3	3
63	354	417	115	174	0	0	1	203	98
62	561	623	419	1579	0	0	...	111	93
4	25	29	17	99	0	0	...	12	...
195	1384	1579	1163	6217	0	0	7	187	222
...
...	10	10	7	15	0	0	1	1	1
1	6	7	1	5	0	0	...	4	2
...	3	3	2	3	0	0	...	...	1
21	238	259	121	499	8	0	2	64	72
...	2	2	2	2	0	0	...	...	...
...	10	10	4	2	6	0	...	6	...
4	14	18	11	32	0	0	...	6	1
1	14	15	2	20	0	0	...	8	5
7	40	47	27	128	0	0	...	17	3
25	182	207	147	145	2	0	1	42	17
...	4	4	4	8	0	0	...	...	...
2	11	13	4	3	4	0	...	7	2
...	51	51	27	20	12	0	...	9	15
59	168	227	165	504	4	0	...	34	28

SANITATION.
III. FOR THE YEAR

STATEMENT No. IV.

Showing unwholesome articles of food destroyed.

Appams, iddlies and other rice preparations	—	29,885 Nos.
	—	2,092 Baskets.
Beef	—	323 lbs.
Bread	—	26 Nos.
Butter	—	66 lbs.
Butter-milk	—	12 Pots.
Coffee and tea	—	4,974 Kettles.
	—	56 Buckets.
Curd	—	31 Pots.
Eggs	—	1,207 Nos.
Fish	—	1,285 Baskets.
Fish (dried)	—	415 "
	—	825 Nos.
Fruits	—	72,741 "
	—	2,859 Baskets.
	—	21 Trays.
Ghee	—	4 Viss.
Goat heads	—	35 Nos.
Goat legs	—	65 "
Grains	—	1,340 Baskets.
Milk	—	46 Bottles.
	—	32 Measures.
Mutton	—	61 Baskets.
	—	780 Seers.
	—	521 Plates.
Prawns	—	135 Baskets.
Preserved food-stuffs	—	121 lbs.
	—	81 Baskets.
	—	1 Tray.
Sweet juice of palmyra	—	122 Pots.
Sweet meat	—	222 Seers.
	—	83 lbs.
	—	33 Plates.
Syrup and aerated waters	—	3,794 Bottles.
	—	93 lbs.
	—	81 Pots.
Trash	—	547 Trays.
	—	3,174 Baskets.
	—	9,036 Nos.
Vegetables	—	1,456 "
	—	3,995 Baskets.
	—	2 Bags.

MEDICAL RELIEF.

STATEMENT No. I.

Showing cases treated in the Corporation dispensaries.

Serial No.	Name of dispensary.	The year in which the dispensary was opened.	Total no. of cases treated.		Total no. of operations performed.		Remarks.
			1937	1938	1937	1938	
1	Royapuram dispensary.	1924	91,410	78,818	197	235	
2	Washermanpet „	1913	1,35,367	1,59,989	683	328	
3	Harbour „	1929	1,70,504	1,57,709	364	253	
4	Mannady „	1938	....	10,442	....	2	Unani opened on 18-8-1938.
5	Mafuskhan „	1923	90,150	1,09,429	268	182	
6	Mint Street „	1923	1,49,207	1,67,945	481	277	
7	Trevelyan Basin „	1919	1,45,770	1,40,081	569	547	
8	Perambore „	1928	60,827	63,133	135	168	
9	Vyasarpany „	1929	63,025	61,730	3,708	637	Excludes injections for leprosy.
10	Kosapet „	1929	82,484	89,077	1,047	1,233	
11	Baliah Naidu „	1899	1,38,912	1,42,646	776	679	
12	Kilpauk „	1919	1,11,155	1,22,469	677	497	
13	Nungambakkam „	1923	84,961	86,924	137	49	
14	Chintadripet „	1909	1,89,444	1,39,165	605	650	
15	Pudupakkam „	1924	1,12,817	1,23,232	732	642	
16	Triplicane „	1918	1,43,320	1,42,971	580	267	
17	Teynampet „	1927	56,945	62,774	445	511	
18	Theagarayanagar „	1922	68,416	71,262	151	117	Shifted from Pulianthope.
19	Mylapore „	1924	1,68,980	1,70,521	659	879	
20	Unani dispensary, Pulianthope	1930	63,173	72,360	134	112	
21	Siddha dispensary, Chulalai	1931	1,41,154	1,54,896	155	160	
22	Ayurvedic dispensary, Thousand Lights	1930	76,620	73,347	484	499	
23	Unani dispensary, Thayar Sahib Street	1932	97,481	1,24,205	94	77	
24	Egmore dispensary	1923	58,473	66,993	172	265	Shifted from Mannady. Includes cases treated at Mannady. Opened on 26-8-1938.
25	Siddha dispensary, Perambur	1938	....	28,211	....	9	Opened on 26-8-1938.
26	Krishnampet dispensary	1938	....	10,775	....	36	Opened on 22-9-1938.
27	C.W.C. dispensary, Pulianthope	1936	55,326	67,400	523	208	

MEDICAL RELIEF,
 Showing the number of skin and leprosy cases treated in the various institutions during 1938 with results.

Serial No.	Name of Institution.	Date of Opening.	Number of Leprosy cases for 1938.				Results.					No. of skin cases alone excluding leprosy.	New skin and Leprosy cases Total.	Remarks.
			Infectious.	Non-Infectious.	Total.	No. Cured.	No. Improved.	No. Symptoms free.	No. Arrested.	No. Otherwise				
1	Ice House Road Skin & Leprosy clinic.	2-2-1934	156	297	453	..	255	..	6	192	4,717	5,170		
2	Vyasarpady Skin and Leprosy clinic.	4-8-1931	44	129	173	..	..	12	50	131	1,212	1,385	
3	Other Corporation Dispensaries.	From 1935	..	..	1,437	..	..	..	..	..	80,521	81,958	
	Total.		..	..	2,063	..	..	..	..	..	86,450	88,513	

STATEMENT No. III.

MEDICAL RELIEF.

Showing cases treated at the Venereal Clinic.

New Cases treated.		Old Cases treated.			New & Old Cases treated.			Daily average New & Old.	
Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.		Total.
632	138	770	9,804	1,794	11,598	10,436	1,932	12,368	33.9

MEDICAL RELIEF.

STATEMENT No. IV.

Showing the number of admissions, discharges and deaths under various diseases in the Tondiarpet Infectious Diseases Hospital during 1938.

Details.	Small-Pox.	Chicken-Pox.	Measles.	Cholera.	Diarrhoea.	Mumps.	Whooping Cough.	Pneumonia.	C. S. Fever	Malaria.	Pyrexia of unknown origin.	Pulmonary Tuberculosis.	Secondary syphilis.	Gastro Enteritis.	Dysentery.	Other diseases.	Total.
Patients remaining in the hospital on 31st December 1937 at midnight	1	1	...	11	...	...	...	...	...	...	...	...	...	...	...	1	14
Patients admitted from 1st January 1938 to 31st December 1938	1336	775	255	158	116	46	3	8	40	7	6	6	12	95	19	112	2994
Total number treated	1337	776	255	169	116	46	3	8	40	7	6	6	12	95	19	113	3008
Total number discharged	935	733	250	140	104	46	3	2	14	7	6	6	10	75	16	73	2420
Total number died	328	2	5	29	12	...	...	6	26	...	...	...	2	20	3	8	441
Mortality rate per cent	24.6	0.25	1.9	17.1	10.3	...	...	75.0	35.0	...	...	...	16.6	15.7	15.7	7.1	14.6
Patients remaining in the hospital on 31st December 1938 at midnight	74	41	...	...	...	...	...	...	...	...	...	...	...	...	...	32	147

MEDICAL RELIEF.

Showing the number of admissions, discharges and deaths under various diseases in the Krishnampet Infectious Diseases Hospital during 1938.

Details	Small-pox	Chicken-pox	Measles	Cholera	Diarhoea	Mumps	Whooping Cough	Pneumonia	Enteric Fever	Malaria	Pyrexia of un-known origin	Kala-Azar	Pulmonary Tuberculosis	Secondary Syphilis	Cerebro-Spinal Fever	Dysentery	Diphtheria	Other Diseases	Total
Patients remaining in the hospital on 31-12-1937 at midnight.	48	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	51
Patients admitted from 1-1-1938 to 31-12-1938	786	84	42	7	...	...	...	...	...	...	...	...	...	...	...	...	...	119	1038
Total number treated...	834	87	42	7	...	...	...	...	...	...	...	...	...	...	...	...	...	119	1089
" Discharged.	630	63	42	4	...	...	...	...	...	...	...	...	...	...	...	...	...	106	845
" Died	188	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	12	203
Mortality per cent	22.54	...	...	42.86	...	...	...	...	...	...	...	...	...	...	...	...	...	10.0	18.64
Patients remaining in the hospital on 31-12-1938 at midnight	16	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	41

MEDICAL RELIEF.

STATEMENT No. VI.

Showing the vaccinal condition of small-pox patients in the Tondiarpet Infectious Diseases Hospital during 1938.

Age.	Vaccinated.														Un-vaccinated.					
	Vaccinated successfully with marks visible.							Vaccinated but marks not visible.			Total.				Admissions.	Deaths.	Recovered cases.	Mortality per cent.		
	1	2	3	4	5	6	Total admitted.	Deaths.	Mortality per cent.	Deaths.	Mortality per cent.	Recovered.	Deaths.	Mortality per cent.						
Under 1 year.	1	7	2	2	...	...	12	1	8.3	5	2	40.0	17	3	14	17.6	26	16	10	61.5
1 to 2 years.	...	4	...	2	...	...	6	1	16.25	10	2	20.0	16	3	13	18.7	4	3	1	75.0
2 to 3 "	1	6	...	10	1	...	18	1	5.5	10	3	30.0	28	4	24	14.4	9	5	4	55.5
3 to 4 "	1	10	...	...	2	...	13	0	...	7	2	28.5	20	2	18	10.0	15	4	11	26.6
4 to 5 "	2	3	...	...	5	...	10	1	10.0	17	5	29.4	27	6	21	22.2	20	3	17	15.0
5 to 10 "	...	10	2	51	3	...	66	7	10.6	38	11	29.0	104	18	86	17.3	42	18	24	42.8
10 to 20 "	...	34	...	100	6	...	140	9	6.4	41	14	34.1	181	23	158	12.7	59	27	32	45.7
20 to 40 "	19	93	105	205	31	17	470	69	14.6	136	59	43.4	606	128	478	21.1	84	39	45	46.4
40 to 60 "	...	4	1	42	5	11	63	12	19.1	...	...	...	63	12	51	19.0	14	13	1	92.8
60 & upwards.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	100.0
Total ...	24	171	110	412	53	28	798	101	12.7	264	98	37.1	1062	199	863	18.9	274	129	145	33.3

MEDICAL RELIEF.

STATEMENT No. VII.

Showing the Vaccinal condition of small-pox patients in the Krishnampet Infections Diseases Hospital during 1938^F

Age	Vaccinated													Unvaccinated.							
	Vaccinated successfully with marks visible								Vaccinated with marks not visible					Total				Admissions	Deaths	Recovered cases	Mortality per cent.
	1	2	3	4	5 & 6	Total admitted	Deaths	Mortality per cent	Total admitted	Deaths	Mortality per cent	Total admitted	Deaths	Recovered	Mortality per cent						
Under 1 year.	2	5	...	3	...	10	4	40.0	...	...	...	10	4	6	40.0	33	18	15	54.55
1 to 2 years.	...	4	...	4	...	8	2	25.0	...	...	...	8	2	6	25.0	12	4	8	33.33
2 to 3 "	...	4	...	2	...	6	1	16.66	2	66.67	...	9	3	6	33.33	9	4	5	44.44		
3 to 4 "	1	1	...	1	...	3	1	33.33	7	28.57	...	10	3	7	50.0	9	3	6	33.33		
4 to 5 "	1	1	...	1	...	3	...	...	8	50.0	...	11	4	7	36.36	...	...	...	...
5 to 10 "	5	8	5	14	...	32	3	9.38	18	33.33	...	50	9	41	18.0	13	2	11	15.58		
10 to 20 "	33	59	24	74	5	175	15	8.57	50	50.0	...	225	50	195	15.53	55	11	24	31.43		
20 to 40 "	41	40	33	60	21	195	31	16.0	63	39.68	...	258	56	202	20.7	42	16	26	38.1		
40 to 60 "	4	7	9	8	9	57	10	27.05	12	58.33	...	49	17	32	34.69	1	...	1	...		
60 & upwards.	...	...	1	1	...	2	...	...	...	...	...	2	...	2	...	...	...	...	...
Total ...	87	109	72	168	35	471	67	14.2	161	37.9	61	63.2	128	504	20.3	154	58	96	37.66		

MEDICAL RELIEF.

STATEMENT No. VIII.

Showing the admissions into the I. D. H. T. according
to nationality & sex during 1938.

Nationality	Tondiarpet Hospital	
	Males	Females
Hindus ...	2034	850
Muhammadans ...	49	13
Anglo-Indians & Europeans ...	21	4
Others ...	17	6
Total ...	2121	873

MEDICAL RELIEF.

STATEMENT No. IX.

Showing the admissions into the Krishnampet Infectious Diseases
Hospital according to nationality and sex during 1938.

Nationality	Males	Females	Total
Europeans	2	1	3
Hindus	571	299	670
Muhammadans	30	15	45
Others	182	158	320
Total	585	453	1038

STATEMENT No. 1.

MEDICAL INSPECTION.

No.	Defects.	Boys.						Girls.						Remarks.
		Entrants.		Regulars.		Total of Entrants & Regulars.		Entrants.		Regulars.		Total of Entrants & Regulars.		
		No. Defective.	Percentage.	No. Defective.	Percentage.	No. Defective.	Percentage.	No. Defective.	Percentage.	No. Defective.	Percentage.	No. Defective.	Percentage.	
1	Malnutrition	1265	16.40	1572	11.79	2615	13.64	119	2.58	148	2.25	267	2.39	
2	Dirty head body & Nails	824	10.68	821	7.12	1639	8.55	221	4.79	159	2.12	360	3.22	
3	Teeth & Mouth	1265	16.40	830	14.75	2954	15.41	358	7.76	482	7.33	840	7.51	
4	Nose & Throat	1639	21.24	1954	17.2	3571	17.59	798	17.30	1241	18.88	2039	18.25	
5	Eye disease	344	4.46	214	5.81	780	4.07	145	3.14	186	2.85	331	2.96	
6	Vision	41	0.53	0.45	1.12	169	0.88	1	0.02	6	0.09	7	0.06	
7	Ear diseases	223	2.89	1.42	2.42	500	2.61	40	0.87	48	0.73	88	0.79	
8	Hearing	2	0.03	0.04	0.03	6	0.03	1	0.02	1	0.02	2	0.02	
9	Speech	22	0.29	0.21	0.30	56	0.29	2	0.04	...	...	2	0.02	
10	Circulatory System	89	1.15	0.59	1.20	209	1.09	8	0.17	14	0.21	22	0.20	
11	Tuberculosis	9	0.12	...	0.12	23	0.12	1	0.02	...	...	2	0.02	
12	Respiratory System	201	2.61	1.50	1.51	374	1.95	33	0.72	39	0.59	72	0.64	
13	Abdominal Organs	83	1.08	0.50	1.18	218	1.14	20	0.45	12	0.27	38	0.34	
14	Bones & Joints	188	2.44	1.98	2.52	476	2.48	10	0.22	28	0.33	32	0.29	
15	Nervous & Psychic System	6	0.08	0.04	0.14	22	0.11	...	...	...	...	...	...
16	Infectious & Contagious diseases	987	12.79	8.90	12.08	2370	12.37	251	5.44	397	6.04	648	5.79	
17	Other diseases & defects	476	6.17	3.91	5.24	1076	5.61	80	1.75	151	1.99	211	1.89	
18	Vaccination	60	0.78	1.17	...	60	0.31	19	0.41	...	...	19	0.17	
19	Deformities	24	0.31	0.03	0.19	46	0.24	10	0.22	8	0.12	18	0.16	

MEDICAL INSPECTION.

APPENDIX TO STATEMENT No. I.

Group.	No. on Roll.		Average daily attendance.		No. examined.		No. defective.		Percentage.		Remarks.
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.	
Entrants. } Regulars. }	22379	13569	17834	10402	7715	4614	4754	1479	61·62	32·05	
Total ...	22379	13569	17834	10402	19166	11186	10926	3796	57·01	33·94	

MEDICAL INSPECTION.

STATEMENT No. II.

Height and Weight Table

Age.	Boys.		Girls.		Remarks.
	Average height in inches.	Average weight in pounds.	Average height in inches.	Average weight in pounds.	
5 Years	39·51	32·74	39·99	31·10	
6 "	40·82	35·30	41·09	32·24	
7 "	44·45	35·74	42·93	34·86	
8 "	45·11	41·32	44·03	39·98	
9 "	47·19	46·08	45·27	43·09	
10 "	48·79	48·24	49·04	48·82	
11 "	51·73	51·07	50·87	52·02	
12 "	51·62	54·76	52·61	54·57	
13 "	54·59	59·95	54·45	62·28	
14 "	56·82	69·12	55·36	67·09	
15 "	58·01	69·92	58·25	77·34	
16 "	58·87	78·22	58·92	85·35	
17 "	62·95	88·58	59·75	93·64	
18 "	63·58	95·42	58·88	89·72	
19 "	57·88	95·12	60·00	101·29	
20 "	67·67	106·67	58·74	94·75	
21 "	...	...	59·81	89·13	
22 "	66·00	122·50	61·38	104·50	
23 "	...	...	57·00	60·00	3 Women
24 "	...	...	61·00	101·50	1 Woman
25 "	...	...	59·66	98·00	2 Women
26 "	...	...	57·59	97·00	2 Women
27 "	...	...	60·00	114·00	1 Woman
28 "	...	...	...	...	...
29 "	...	...	...	...	...
30 "	...	...	61·50	90·00	1 Woman

MEDICAL INSPECTION.

STATEMENT No. III.

Quinquennial average of heights and weights of boys and girls

No.	Age.	Average height in inches.		Average weight in pounds.	
		Boys.	Girls.	Boys.	Girls.
1	5 years.	40.29	39.15	34.29	31.70
2	6 "	42.57	40.81	37.01	35.04
3	7 "	43.85	42.88	38.25	36.22
4	8 "	45.40	46.68	40.68	39.83
5	9 "	47.38	46.83	44.38	43.68
6	10 "	49.78	48.87	50.23	46.19
7	11 "	51.34	50.95	52.09	52.06
8	12 "	53.04	52.76	54.65	53.17
9	13 "	55.02	54.78	59.84	62.77
10	14 "	55.48	57.35	64.77	68.72
11	15 "	57.88	57.53	68.99	73.95

MEDICAL INSPECTION.

STATEMENT No. IV.

Treatment Table

Group.	No. sent to Corporation dispensaries.	No. referred to Government hospitals.	No. referred to Ophthalmic Hospital and eye sections of other hospitals.	No. referred to Tuberculosis Institute.	No. of parents met.	No. of re-visits paid to schools.	No. of re-examinations of children.	Remarks.
Boys ...	9,181	1,701	113	21	3,472	144	12,157	
Girls ...	2,943	780	68	2	1,686	92	3,540	
Total ...	12,124	2,481	181	23	5,158	236	15,697	

MEDICAL INSPECTION.

STATEMENT No. V.

Teeth and Mouth Table

No.	Defects.	Entrants.				Regulars.				Total defective of boys and girls.				
		Boys.		Girls.		Boys.		Girls.						
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.		No. referred to Government Hospitals.			
1	Dirty Teeth	142	46	47	46	...	17	181	70	62	33	...	27	402
2	Dental Caries	339	207	131	102	...	66	484	244	240	123	...	109	1048
3	Stomatitis	903	900	3	205	205	...	1147	1146	1	330	330	...	2585
4	Tongue Tie	1	...	1	2	...	2	4	...	4	5	...	5	12
5	Oral Sepsis	...	...	...	3	...	3	...	...	...	...	...	...	3
6	Other Conditions	15	14	1	...	...	...	12	1	3	1	...	1	28

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

Nose and Throat Table

No.	Defects.	Entrants.						Regulars.						Total defectives of boys and girls.
		Boys.			Girls.			Boys.			Girls.			
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government Hospitals.	
1	Nasal Catarrh	220	220	...	25	...	169	169	...	30	...	444		
2	Nasal Polypus	...	...	...	...	...	1	...	1	...	...	1
3	Enlarged Tonsils	1307	1212	95	664	148	1482	1279	192	746	323	4522		
4	Granular Pharynx	2	1	1	15	...	2	2	...	...	...	19
5	Adenoids	50	7	43	...	...	82	...	82	...	...	132
6	Enlarged cervical glands	80	80	...	93	...	64	64	...	138	1	376		
7	Bifid & elongated uvula	19	...	...	1	...	14	...	...	3	...	37
8	Other Conditions	3	2	1	...	...	1	...	...	...	...	4

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

MEDICAL INSPECTION.

STATEMENT No. VII.

Eye Table

No.	Defects.	Entrants.						Regulars.						Total defective of boys and girls.
		Boys.			Girls.			Boys.			Girls.			
		No. sent to Corporation Dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Govt. Ophthalmic hospital and Ophthalmic sections of other hospitals.	No. Defective.	
1	Conjunctivitis	97	11	67	67	106	96	10	69	69	..	350		
2	Blepharitis	2	..	5	5	4	4	..	4	4	..	15		
3	Granular lids	..	2	27	7	8	4	..	35	10	25	72		
4	Corneal opacity	..	7	2	..	14	..	10	3	..	1	29		
5	Corneal ulcer	..	..	..	..	..	..	..	..	..	..	..
6	Staphyloma	..	1	..	..	5	..	4	..	..	..	6
7	Dacryocystitis	..	..	1	..	..	..	..	..	..	..	1
8	Cataract	..	..	..	..	..	..	..	..	..	..	..
9	Xerosis	180	..	27	27	239	239	..	48	48	..	449		
10	Stye	7	4	3	3	12	11	1	4	4	..	26		
11	Squint	10	2	10	..	25	..	7	10	..	10	55		
12	Kratities	..	..	..	..	1	1	..	..	..	..	1
13	Ptosis	..	..	1	..	2	..	1	..	..	..	5
14	Other conditions	1	18	1	..	31	3	24	9	..	2	63		
15	Defective vision	22	17	1	..	128	66	52	6	..	6	176		

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

Infectious Diseases Table

No.	Defects.	Entrants.						Regulars.						Total defective of boys and girls.
		Boys.			Girls.			Boys.			Girls.			
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Special sections of hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Special sections of hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Special sections of hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Special sections of hospitals.	
<i>Skin.</i>														
1	Scabies	297	297	...	166	166	448	448	...	146	146	...	1057	
2	Eczema	121	121	...	5	5	134	134	...	4	4	...	264	
3	Tinea & Fungus	116	116	...	39	39	167	167	...	89	89	...	411	
4	Lichen	81	81	...	15	15	84	84	...	9	9	...	189	
5	Dermatitis	6	6	...	4	4	11	11	...	...	...	...	21
6	Pruritis	8	8	...	...	...	22	22	...	...	...	...	30
7	Psoriasis	8	8	...	...	...	4	4	...	...	...	...	13
8	Impetigo	39	39	...	1	1	30	30	...	...	...	...	69
9	Leprosy	173	173	...	18	18	438	438	...	52	52	...	681	
10	Other conditions	10	10	...	...	...	15	15	...	...	...	...	25
<i>Other infectious diseases:-</i>														
1	Malaria	...	...	...	...	...	4	4	...	...	...	...	4
2	Kala-azar	...	...	...	...	...	2	2	...	...	...	...	2
3	Hook-worm	3	1	2	...	...	4	4	...	...	...	...	7
4	Influenza	3	3	...	...	...	...	...	...	...	...	...	3
5	Mumps	...	...	...	1	1	...	...	...	...	...	...	1
6	Whooping cough	6	6	...	2	2	...	...	...	...	...	...	8
7	Congenital Syphilis	1	1	...	...	...	...	...	...	...	...	...	8
8	Other conditions	6	4	2	...	...	11	11	...	...	...	...	17

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

Other Diseases Table

No.	Defects.	Entrants				Regulars				Total defective of boys and girls.		
		Boys.		Girls.		Boys.		Girls.				
		No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government General Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.	No. referred to Government General Hospitals.	No. Defective.	No. sent to Corporation Dispensaries.		No. referred to Government General Hospitals.	
1	Worms	111	111	...	3	...	111	109	2	11	...	236
2	Wounds, cuts, ulcers etc.	73	66	7	38	...	74	65	8	71	...	256
3	Undescended Testis.	2	...	...	...	...	11	...	2	...	...	13
4	Phimosis	183	...	183	...	...	235	...	235	...	...	418
5	Enlarged Gland	8	1	6	...	...	6	1	5	...	...	14
6	Glands	25	25	...	15	...	30	30	...	26	...	96
7	Boils and abscesses...	33	27	6	19	...	50	44	6	11	...	113
8	Keloids	...	...	...	...	...	...	...	...	...	...	...
9	Warts	1	...	1	...	...	4	...	4	...	...	5
10	Leucodermic patches	11	1	...	...	...	15	3	...	5	...	31
11	Tumours	3	...	3	1	...	4	...	4	4	...	12
12	Obesity	3	1	2	2	...	2	1	...	2	...	5
13	Whitlow	...	...	...	...	...	1	1	...	2	...	5
14	Xero-derma	14	14	...	...	...	40	40	...	...	...	54
15	Dog bite	...	...	...	...	...	3	...	3	...	...	3
16	Sinus	4	2	2	1	...	3	2	1	...	...	8
17	Burns and Scalds	...	...	...	...	...	2	1	1	...	...	2
18	Other conditions	5	4	1	1	...	9	7	2	3	...	18

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

MEDICAL INSPECTION.

STATEMENT No. X.

Showing the details of defects found on medical inspection of schools, 1938-39.

No.	Systems or Organs.	Diseases.	No. Defective.				Total defective of boys and girls.
			Entrants.		Regulars.		
			Boys.	Girls.	Boys.	Girls.	
1	Ear.	1. Otorrhoea ...	104	26	170	36	336
		2. Otitis ...	33	14	25	12	84
		3. Other ear diseases ...	85	...	92	...	177
		4. Defective hearing ...	2	1	4	1	8
2	Speech.	1. Stammering ...	19	2	27	...	48
		2. Lispng ...	2	...	6	...	8
		3. Dumb ...	1	...	1	...	2
3	Heart and Circulation.	1. Heart Diseases :—					
		(a) Organic ...	15	...	28	2	45
		(b) Fnnctional ...	21	1	22	1	45
		2. Anaemia ...	48	7	66	11	132
		3. Other conditions ...	5	...	4	...	9
4	Lungs.	1. Bronchitis (Acute & Chronic) ...	193	30	166	33	422
		2. Other non-tubercular diseases (Asthma etc.) ...	33	...	32	1	66
5	Tuberculosis.	1. Pulmonary (a) Definite ...	...	...	...	...	...
		(b) Suspected ...	7	1	12	...	20
		2. Non-Pulmonary (a) Glands ...	1	...	...	1	2
		(b) Spine ...	...	...	...	...	...
		(c) Hip ...	1	...	...	...	1
		(d) Bones & Joints ...	...	...	...	...	...
		(e) Skin ...	...	...	...	...
		(f) Other forms ...	1	...	1	...	2
6	Abdominal Organs.	1. Enlarged Spleen ...	19	2	16	1	38
		2. " Liver ...	4	...	2	...	6
		3. " Liver and Spleen ...	2	...	3	1	6
		4. " Hydrocele (a) Vaginal ...	4	...	13	...	17
		(b) Cord ...	1	...	10	...	11
		(c) Infantile ...	2	...	1	...	3
		5. Hernia (a) Inguinal ...	18	...	34	...	52
		(b) Umbilical ...	19	...	23	1	43
		(c) Femoral ...	...	...	...	...	...
		6. Stomach conditions ...	3	7	7	9	26
		7. Bowel conditions ...	7	11	18	6	42
		8. Other conditions ...	4	...	7	...	11
		9. Generative disorders in girls ...	...	...	...	...	...
7	Bones and Joints.	1. Bones (a) Fractures ...	1	...	1	1	3
		(b) Caries ...	...	...	...	...	...
		(c) Deformities ...	...	1	...	8	9
		(d) Diseases ...	2	...	...	...	2
		2. Joints (a) Dislocations & Sprains ...	2	1	4	...	7
		(b) Diseases ...	1	...	1	...	2
		(c) Deformties ...	...	...	...	...	...
		3. Rickets (a) General ...	133	...	155	...	288
		(b) Deformed chest ...	147	8	126	13	294
8	Nervous system.	1. Organic disease (Palsies etc.) ...	4	...	6	...	10
		2. Functional disorders ...	1	...	9	...	10
		3. Other conditions ...	...	...	...	...	...
9	Psychic system.	1. Mentally defective ...	1	...	...	...	1

MEDICAL INSPECTION.

STATEMENT No. XI.

Showing "Following up" work done and the results of medical advice, 1938—39.

Number	Systems or Organs	Diseases	Operations performed after medical advice	No. of cases cured after treatment	No. of cases improved after treatment	No. of cases where treatment was continued	Remarks
1	...	Malnutrition	...	707	645	1031	†Scaled °Cleaned *Extracted
2	Teeth & Mouth	Dirty Teeth	25†	60°	52°	138°	
		Dental Caries	152*	69	234	540	
		Gum Boil	2	...	...	...
		Stomatitis	...	831	648	435	
		Glossitis	...	8	8	6	
		Tongue Tie	7	...	...	...
3	Nose & Throat	Nasal Catarrh and Rhinitis	...	256	87	85	
		Enlarged Tonsils and Adenoids	134	382	1630	1875	
		Enlarged Cervical glands	...	21	119	76	
		Granular Pharynx	...	11	5	1	
		Nasal Polypus	...	...	...	...
		Elongated uvula	...	15	8	...	
4	Eye Diseases	Conjunctivitis	...	247	52	28	
		Xerosis	...	104	159	175	
		Stye	...	15	10	1	
		Granular lids	...	4	12	29	
		Blepharitis	...	...	12	3	
		Staphyloma	...	...	...	5	
		Dacryocystitis	1	...	...	...
		Corneal opacity	...	...	7	10	
		Keratitis	...	...	...	...
		Squint	1	...	...	6	
		Sub-Conjunctival Haemorrhage	...	...	...	...
5	Defective Vision	...	19	7	8	21	
6	Ear Diseases...	Otitis	...	33	25	23	
		Otorrhoea	1	123	91	82	
		Wax ear	...	157	1	...	
		Defective hearing	...	...	...	...
		...	...	17	61	51	
7	Circulatory System	Aneamia	...	...	26	6	
		Functional disease	...	...	3	24	
		Organic diseases	...	...	...	...
8	Tuberculosis	Pulmonary—	...	...	...	...
		(a) Definite	...	...	...	...
		(b) Suspected	...	...	8	13	
		Other forms	...	...	...	4	
9	Respiratory System	Bronchitis	...	229	117	54	
		Asthma	...	...	30	30	
10	Abdominal Organs	Enlarged Spleen	...	20	10	5	3 Untraced
		" Liver	...	...	...	2	
		" Liver and Spleen	...	1	...	3	

MEDICAL INSPECTION.

STATEMENT No. XI.

Showing "Following up" work done and the results of medical advice, 1938-39.—contd.

Number	Systems for Organs	Diseases	Operations performed after medical advice	No. of cases cured after treatment	No. of cases improved after treatment	No. of cases where treatment was continued	Remarks	
	Abdominal Organs—contd	Diarrhoea	...	8	4	2		
		Dysentery	...	9	2	2		
		Dyspepsia	...	12	...	...
		Chronic constipation	...	14	...	...
		Jaundice	...	...	...	1	
		Hydrocele	...	1	...	...
		Inguinal Hernia	...	1	...	...
		Umbilical Hernia	...	...	...	21	...
11	Bones & Joints	Rickety Chest and General Rickets	...	9	188	248		
		Fracture	...	2	...	...
		Diseases	...	...	1	...	
				
12	Infectious and Contagious Diseases.	Scabies	...	750	172	125		
		Eczema	...	112	68	62		
		Tinea, Fungus and Ringworm	...	181	113	75		
		Leprosy	...	*6	88	400	} *Arrested, 149 Indifferent, 36 Untraced, 2 Infective.	
		Lichen	...	22	53	68		
		Pruritis	...	9	15	4		
		Urticaria	...	6	4	1		
		Psoriasis	...	...	2	2	
		Hook-worm	...	...	7	...	
		Mumps	...	1	...	...
		Whooping cough	...	2	1	...		
		Dermatitis	...	...	...	5	
		Influenza	...	8	...	...
		Impetigo	...	57	1	2		
		Congenital Syphilis	...	...	...	...
13	Nervous and Psychic Systems.	Facial Paralysis		
		Incontinence of urine	...	1		
		Epilepsy	2	1		
14	Other diseases and defects	Worms	...	62	116	...		
		Wounds, cuts, ulcers etc.	...	1	141	60	14	
		Boils and Abscesses	...	21	50	3	...	
		Pyrexia	...	...	67	...	...
		Phimosi	...	95	...	...	...
		Leucodermic patches	...	...	...	...	5
		Burns, Scalds and Whitlow	...	4	6	...	4	
		Xeroderma	...	...	15	14	6
		Enlarged groin glands,	...	...	...	4	7
		Warts	...	...	1	...	...
		Dog bite	...	...	3	...	...
		Tumours	...	...	...	...	...
		Hyperidrosis	...	...	...	2	2
		Ganglion	...	...	...	...	...
		Cellulitis	...	...	...	...	...
		Fistula	...	1	...	...	...
Herpes	...	...	1	...	...	
Other conditions	...	...	3	3	...		

MEDICAL INSPECTION.

STATEMENT No. XI.

Showing the details of defects found on medical inspection of schools, 1938-39.
(contd.)

No.	Systems or Organs.	Diseases.	No. Defective.				Total defective of boys and girls.
			Entrants.		Regulars.		
			Boys.	Girls.	Boys.	Girls.	
10	Deformities.	1. General Deformities :—					
		(a) Spinal deformities	...	...	...	1	1
		(b) Talipes	5	4	5	1	15
		(c) Shortened limbs	2	2	3	2	9
		(d) Congenital dislocation hip	1	...	1	...	2
		(e) Ankylosis of joints	5	...	4	...	7
		(f) Amputated limbs	...	...	...	...	...
		(g) Genu varum and valgum	...	...	...	...	...
		(h) Supernumerary Fingers	...	1	4	1	6
		(i) Flat foot	2	2	...	1	5
		(j) Syndactily	...	...	...	1	1
		(k) Dwarf	...	1	...	...	1
		(l) Other conditions	4	...	4	1	9

WATER ANALYSIS.

TABLE No. I.

Showing the examinations of water samples done during 1938.

serial No.	Description.	Number Examined.
1	Complete bacteriological and chemical examination for water samples.	781
2	Partial bacteriological and chemical examination for water samples.	812
3	Water for microscopical examination from different places in the water supply system.	135
4	Identification of algae	239
5	Culture media etc, for determination and adjustment of p. h.	30
6	Samples of water tested for the presence of free chlorine, interfering substances etc.	11,300
7	Examinations for the presence of H ₂ S. in filtered waters.	4,098
	Total	17,395

TABLE No. II.
 WATER ANALYSIS.
 Showing the meteorological data for 1938 and 1927 and those for a normal year (average for 1796 to 1890.) Daily Averages.

Month	Temperature of						Wind velocity in miles per day	Hours of bright sunshine	Percentage of cloudy day			Total rainfall in inches									
	Minimum		Maximum		Mean				1938	1927	Normal	1938	1927	Normal	1938	1927	Normal				
	1938	1927	Normal	1938	1927	Normal															
January	68.6	68.5	67.5	84.3	85.4	84.6	75.7	77.0	75.1	25.6	132	144	4.9	7.7	8.6	58	51	57	Nil	0.55	0.89
February	72.3	69.7	68.0	85.7	88.7	86.6	78.3	79.0	76.7	228	144	122	8.5	9.7	9.9	45	35	24	0.54	...	0.28
March	74.4	74.9	72.1	89.9	90.7	89.2	81.5	82.4	80.0	252	144	152	9.7	9.0	9.7	36	46	24	1.45	...	0.39
April	78.2	79.0	77.2	91.9	94.9	92.9	84.4	85.4	84.0	252	196	191	10.7	9.8	9.5	39	24	28	Nil	...	0.62
May	82.9	81.9	80.8	101.0	100.1	97.8	89.5	88.5	86.7	300	207	227	10.0	8.6	8.7	59	42	38	0.12	0.37	2.12
June	79.5	81.1	80.3	95.6	99.2	98.3	85.8	88.0	86.4	261	204	220	5.1	5.5	6.7	88	65	64	1.85	5.80	2.11
July	79.5	80.0	78.5	95.5	96.6	95.6	85.4	86.6	84.5	255	190	198	5.1	4.4	4.1	91	80	71	1.96	1.08	3.87
August	78.1	78.6	77.3	93.2	95.5	95.7	84.0	85.0	83.3	260	159	174	7.0	5.5	5.2	78	72	67	4.24	3.71	4.56
September	76.8	77.6	77.1	91.0	92.6	93.2	82.5	83.6	85.0	225	155	156	6.5	6.6	5.4	79	63	62	5.81	5.01	4.69
October	76.5	76.4	75.2	91.3	91.5	89.0	85.1	82.8	80.6	260	134	125	7.9	7.1	6.5	64	55	59	7.90	2.44	11.00
November	70.7	72.2	72.3	86.0	84.4	85.0	77.8	77.5	77.5	283	163	165	7.5	5.8	6.3	60	60	59	0.25	15.14	13.21
December	69.1	70.3	69.8	83.2	85.9	85.6	75.6	76.6	75.1	326	165	183	7.5	7.4	7.2	60	47	52	2.54	2.30	5.28
Average	75.6	75.9	74.7	90.7	92.0	90.8	82.0	82.7	81.1	262	164	171	7.5	7.3	7.3	63	53	49	26.46	32.40	49.02

WATER ANALYSIS.

Bacteriological results (Average number of

Month.	Red Hills lake.								Raw-water, Kilpauk.								Number of Samples. Agar at 37°C after 48 hours.		
	Number of Samples. Agar at 37°C after 48 hours.	Lactose Fermenters in							Number of Samples. Agar at 37°C after 48 hours.	Lactose Fermenters in									
		-60 c. c.	+60 c. c.	+20 c. c.	+10 c. c.	+5 c. c.	+1 c. c.	+0.1 c. c.		-60 c. c.	+60 c. c.	+20 c. c.	+10 c. c.	+5 c. c.	+1 c. c.	+0.1 c. c.			
January ...	5	158	80.0	20.0	...	...	...	...	6	592	...	16.7	16.7	...	66.6	...	...	54	380
February ...	6	294	66.6	16.7	16.7	...	...	...	5	586	...	20.0	20.0	...	40.0	20.0	...	50	371
March ...	4	365	25.0	50.0	25.0	...	...	...	4	720	25.0	...	...	50.0	25.0	...	...	42	404
April ...	...	...	...	...	...	...	...	...	5	708	...	...	20.0	20.0	40.0	20.0	...	23	533
May ...	2	295	...	...	50.0	50.0	...	...	6	605	...	...	66.6	33.3	...	...	...	30	476
June ...	3	480	...	...	...	...	100.0	...	5	674	...	...	...	20.0	80.0	...	...	38	516
July ...	3	743	...	...	...	66.7	...	33.3	4	817	...	...	...	25.0	75.0	...	...	36	587
August ...	3	823	...	...	...	66.7	...	33.3	5	700	...	...	20.0	20.0	60.0	...	...	36	499
September ...	4	547	...	25.0	75.0	...	...	...	5	755	...	...	20.0	...	60.0	20.0	...	35	630
October ...	5	880	...	...	...	25.0	25.0	12.5	5	704	...	...	...	...	100.0	...	...	33	560
November ...	5	958	...	...	...	40.0	20.0	20.0	4	727	...	...	25.0	25.0	50.0	...	...	33	542
December ...	6	714	...	...	...	16.7	33.3	50.0	4	670	...	...	25.0	25.0	50.0	...	...	40	231
Average ...	4	569	15.6	10.2	15.2	24.1	16.2	13.6	5	688	2.1	3.1	17.8	18.2	53.9	5.0	...	34	477

WATER ANALYSIS.

TABLE No. IV.

Chemical results for 1938 (results expressed in parts per 100,000)

Month	Red Hills Lake				Kilpauk end of Raw water conduit				Filtrates from beds				Test Tap, K. P. S.				Distribution system			
	Number of Samples	Ammoniacal N	Albuminoid N	Absorbed oxygen	Number of Samples	Ammoniacal N	Albuminoid N	Absorbed oxygen	Number of Samples	Ammoniacal N	Albuminoid N	Absorbed oxygen	Number of Samples	Ammoniacal N	Albuminoid N	Absorbed oxygen	Number of Samples	Ammoniacal N	Albuminoid N	Absorbed oxygen
January	4	0.003	0.039	0.114	5	Trace	0.038	0.108	31	0.001	0.029	0.078	15	0.001	0.024	0.079	...	...	...	...
February	5	Trace	0.052	0.105	5	"	0.059	0.110	50	0.001	0.029	0.075	18	0.001	0.028	0.066	5	0.001	0.028	0.061
March	4	"	0.060	0.106	4	"	0.047	0.101	38	0.001	0.036	0.088	23	Trace	0.032	0.066	8	Trace	0.029	0.069
April	...	...	...	...	4	0.006	0.059	0.125	21	0.005	0.043	0.088	16	0.005	0.041	0.074	8	0.005	0.042	0.079
May	2	0.002	0.050	0.116	5	0.005	0.049	0.129	34	0.005	0.043	0.093	20	0.006	0.042	0.077	5	0.002	0.042	0.052
June	3	0.008	0.043	0.123	5	Trace	0.054	0.121	56	0.003	0.036	0.094	21	0.003	0.034	0.087	10	0.004	0.031	0.073
July	3	0.001	0.046	0.141	4	"	0.058	0.130	52	0.004	0.040	0.094	20	0.004	0.035	0.082	6	0.002	0.031	0.078
August	3	Trace	0.048	0.136	5	0.001	0.049	0.126	34	0.003	0.036	0.102	22	0.004	0.033	0.084	7	0.002	0.033	0.114
September	4	"	0.047	0.137	5	0.001	0.051	0.134	55	0.002	0.036	0.104	20	0.003	0.034	0.095	4	0.001	0.030	0.072
October	5	0.004	0.053	0.149	5	0.002	0.045	0.148	29	0.003	0.037	0.112	18	0.001	0.039	0.097	14	0.001	0.034	0.082
November	5	Trace	0.053	0.141	4	Trace	0.051	0.133	25	0.001	0.041	0.109	15	0.002	0.039	0.090	7	0.001	0.041	0.093
December	5	0.012	0.056	0.123	3	0.004	0.052	0.145	27	0.001	0.043	0.114	19	0.002	0.043	0.093	11	0.002	0.047	0.071
Average	4	0.003	0.050	0.126	5	0.002	0.049	0.126	31	0.003	0.037	0.096	19	0.003	0.035	0.082	7	0.002	0.035	0.077

WATER ANALYSIS.

TABLE No. V.

Showing the number of filter beds working, the quantity of water filtered and the dose of chlorine during 1918.

Month	Filter Beds				Water filtered in M. G. D.			Dose of chlorine in P. P. M.		
	Total No. of beds.	Average No. of beds per day	Maximum No. of beds per day	Minimum No. of beds per day	Average	Maximum	Minimum	Average	Maximum	Minimum
January	345	11	12	11	24.60	26.12	23.32	0.80	0.92	0.74
February	304	11	12	10	24.61	25.82	23.50	0.86	0.94	0.78
March	352	11	12	10	25.16	26.53	24.66	1.01	1.20	0.85
April	355	12	13	11	25.91	27.32	24.66	1.02	1.11	0.92
May	373	12	13	11	26.70	29.32	25.32	1.00	1.07	0.87
June	341	11	12	10	25.71	26.66	24.66	1.05	1.10	1.02
July	362	12	12	11	25.49	27.32	24.32	1.04	1.10	0.98
August	328	11	12	10	25.51	26.66	25.66	1.02	1.10	0.95
September	321	11	12	10	25.05	27.66	24.32	1.04	1.09	0.94
October	330	11	11	10	25.16	27.66	23.16	1.02	1.10	0.96
November	352	12	13	11	25.01	26.66	23.82	1.04	1.09	0.98
December	335	11	12	9	23.04	25.66	20.67	1.07	1.13	1.00
Average	341	11	12	10	25.18	26.95	23.84	0.996	1.08	0.916

WATER ANALYSIS.

TABLE No. VI.

Percentage reduction of organic matter (Tidy's 4 hours test) at different stages of the Water Purification System in 1938.

Month	Raw water Kilpauk end	Filtrates from beds.		Test tap at K.P.S.		Distribution system	
	O. A.	O. A.	% Reduction over R.W.	O. A.	% Reduction over R.W.	O. A.	% Reduction over R.W.
January	0.108	0.079	27.8	0.079	26.9	...	...
February	0.110	0.075	31.8	0.066	40.0	0.061	44.5
March	0.101	0.088	12.9	0.066	34.7	0.069	31.7
April	0.125	0.088	29.6	0.074	40.8	0.079	36.8
May	0.129	0.093	28.0	0.077	40.3	0.052	59.7
June	0.121	0.094	22.3	0.087	28.1	0.073	39.7
July	0.130	0.094	27.7	0.082	36.9	0.078	40.0
August	0.126	0.102	19.0	0.084	33.3	0.114	9.5
September	0.134	0.104	22.4	0.093	30.6	0.072	46.3
October	0.148	0.112	24.3	0.097	34.4	0.082	44.6
November	0.133	0.109	18.0	0.090	32.3	0.093	30.1
December	0.145	0.114	21.4	0.093	35.9	0.071	51.0
Average	0.126	0.096	23.8	0.082	34.5	0.070	39.4

FOOD ANALYSIS.

TABLE No. I.

	1934		1935		1936		1937		1938		
	Number of samples analysed.	Percentage of adulterated samples.	Number of samples analysed.	Percentage of adulterated samples.	Number of samples analysed.	Percentage of adulterated samples.	Number of samples analysed.	Percentage of adulterated samples.	Number of samples analysed.	Percentage of adulterated samples.	
Ghee & Ghee Mixtures	460	44.5	340	44.4	523	28.9	484	31.6	715	287	40.1
Butter	4	27.2	44	29.5	98	37.8	122	19.7	73	13	17.8
Milk	105	41.9	90	50.0	74	28.4	80	33.8	110	36	32.8
Gingelly Oil	259	27.8	305	18.0	246	5.3	263	9.1	341	39	11.4
Ground-nut Oil	...	...	...	...	62	37.1	71	23.9	134	57	42.6
Cococnut Oil	1	...	...	...	...	...	30	...	...	...	...
Coffee Powder	26	...	18	5.6	8	...	20	...	23	...	...
Tea	21	...	9	...	2	...	13	...	32	...	...
Ghee substitutes of vegetable origin	...	...	...	...	12	...	10	10.0	21	7	33.3
Other articles	...	...	...	...	3	33.3	1	...	2	2	100.0
Total	986	35.7	806	32.9	1028	23.9	1094	22.5	1451	441	30.4

FOOD ANALYSIS.

TABLE No. II.

Nature of samples.	Adulterated samples received and reported upon during 1938.				Adulterated samples of the previous year pending disposal on 1-1-1938.				Adulterated samples received in 1937 but reported upon in 1938.				Total number of adulterated samples dealt with during 1938.				Total fines levied in 1938.		Average fine per conviction in 1938.		Number of convictions in 1937.		Average fine per conviction in 1937.				
	Number of samples.	Number of convictions.	Number not convicted:—acquittals, withdrawals, etc.	Number pending disposal on 31-12-1938.	Number of samples.	Number of convictions.	Number not convicted:—acquittals, withdrawals, etc.	Number pending disposal on 31-12-1938.	Number of samples.	Number of convictions.	Number not convicted:—acquittals, withdrawals, etc.	Number pending disposal on 31-12-1938.	Number of samples.	Number of convictions.	Number not convicted:—acquittals, withdrawals, etc.	Number pending disposal on 31-12-1938.	Rs.	A. P.	Rs.	Number of convictions in 1937.	Average fine per conviction in 1937.	Rs.	A. P.	Rs.	Number of convictions in 1937.	Average fine per conviction in 1937.	
Ghee and Ghee-mixtures.	287	81	167	59	60	33	24	3	13	1	10	2	160	115	201	44	5740	0	53	16	53	5740	0	53	16	53	
Butter	13	13	...	...	11	6	5	...	...	...	...	...	24	19	5	...	490	0	26	29	21	490	0	26	29	21
Milk	36	21	2	13	12	8	3	1	...	...	...	...	48	29	5	14	533	0	18	18	24	533	0	18	18	24
Gingelly Oil	39	24	1	14	11	11	...	...	1	1	...	...	51	56	1	14	848	0	24	13	26	848	0	24	13	26
Ground-nut Oil	57	14	37	6	10	9	1	...	...	...	...	...	67	23	58	6	404	0	17	13	24	404	0	17	13	24
Cocoanut Oil
Coffee Powder
Tea
Ghee substitutes of vegetable origin	7	5	3	1	...	...	...	...	...	...	...	...	7	3	3	1	185	0	62	...	...	185	0	62	...	...
Other articles	2	1	...	1	...	...	...	...	...	...	...	...	2	1	...	1	15	0	15	...	...	15	0	15	...	...
Total	441	157	210	74	104	67	53	4	14	2	10	2	559	226	253	80	6215	0	28	209	50	6215	0	28	209	50	

**ANNUAL REPORT OF THE CHILD WELFARE SCHEME
CORPORATION OF MADRAS FOR THE YEAR 1938.**

Commissioner,

Sir.

I submit herewith my report of the Child Welfare Department for the year 1938.

During the year, an Ad Hoc Committee was formed to report on the working of the Child Welfare Scheme with special reference to the reorganisation carried on, in accordance with the recommendation of a previous Ad Hoc Committee of 1932.

The Committee considered carefully the present working of the Maternity & Child Welfare Scheme and some of their main recommendations are as follows :—

The 8 Lady Doctors previously transferred to the dispensaries as per recommendations of the 1932 Ad Hoc Committee should be reverted to the Child Welfare Scheme as before, and in addition to the 5 Lady Doctors now on the staff, each should be posted to take charge of one Child Welfare Centre, one being in reserve for relieving duty.

They also recommended that the Scheme would become more popular and useful to the public if minor ailments of expectant and nursing mothers, infants and pre-school children up to 5 years are treated in these Centres. The Committee recommended that the pre-natal advice at the pre-natal clinic should be extended to all pregnant women irrespective of the earning capacity of their husbands. But so far as Maternity service was concerned, it was recommended that Maternity Service should be free only to those who are indigent or whose income is Rs. 50/- or less per mensem. A fee of Rs. 2/- for a confinement day and annas 8 for each subsequent attendance should be charged in respect of those whose monthly income is above Rs. 50/- and not more than Rs. 100/-. For those whose income per mensem is Rs. 100/- and not more than Rs. 200/- a fee of Rs. 10/- per confinement day and Re. 1/- for each attendance thereafter should be charged.

The aims of Maternity and Child Welfare Work.

1. Care and supervision of pre-natal cases.
2. Intra-Natal care.
3. Care of young infant and mother during the puerperal period*
4. Supervision and care of the infants and Pre-school child.
5. Teaching of the mothers in health matters collectively at the Centres and individually in homes.
6. Sending in time to hospital those cases that would be benefited by hospital care and treatment.

STAFF:—

During the year under report the Scheme was worked by the Lady Superintendent, assisted by 5 Lady Doctors, 21 Health Visitors and 82 Midwives. The services of the Maternity Supervisors were terminated as the Council had not sanctioned the same.

During the year under review 2 Lady Doctors underwent Post-Graduate Course in Maternity & Child Welfare for six weeks and 12 Midwives were sent for Refresher Course training at Rajah Sir Ramaswami Mudaliar's Lying-in-Hospital, Royapuram, for a period of 3 months.

As the Scheme was already working with insufficient staff, many of the Health Visitors who worked under great strain fell sick and went on leave. Substitutes could not be appointed in their places, as candidates with prescribed qualifications were not available with the result that home visiting suffered considerably.

The Red Cross Society having closed their health school, Government started a training school for Health Visitors during the year 1938. It is hoped that Madras Corporation would be able to secure the services of a sufficient number of qualified persons in future.

PRE-NATAL CLINIC.

During the year under report, one satisfactory feature of the Scheme was the increase in the number of Booked Cases. 13,129 Booked cases which were 92.9% of the total births as against 10661 (84%) of the previous year actually attended the Clinic held in various Centres and sought medical advice and treatment. The expectant mothers have just begun to realize the importance of pre-natal clinic with the result that the attendance at various Centres was increased and in some Centres the Clinics were over crowded by pregnant women of all stages. This was really encouraging and with adequate number of Health Visitors, the Scheme is bound to be in touch with every pregnant woman in the City.

MATERNITY SERVICE.

During the year 14,118 labour cases which were 45.5% of the total births came under the care of the Scheme as against 14,589 cases (47.7%) for the year 1937.

Of these 12463 cases were conducted by the Midwives of the Scheme, 771 were taken over after the labour was conducted by Barbar women, 884 cases were sent to various Maternity Hospitals before delivery as they were mostly complicated. In a few instances, even normal cases were sent to hospitals for want of accommodation and attendance at their homes. 2,316 were Mohammadans and 11,802 were non-Mohammadans.

The Midwives paid 1,68,940 visits during the year as against 161,166 of the previous year. The total number of visits paid by the Health Visitors was 1,04,211 as against 1,36,788 for the previous year and they also registered 9,240 pre-maternity cases.

The five Lady Doctors paid 5,642 visits as against 5,322 in 1937. They also treated 3,300 morbid cases. Infants and Toddlers Clinics were also conducted by the Lady Doctors. The total attendance at the Clinic was 9599 as against 9750 of the previous year.

MATERNAL MORTALITY.

Out of a total of 30,985 births in the City during the year 14,118 cases came under the care of the Scheme, in that there were only 48 cases of Maternal Mortality which were as follows :--

Hospital	32
Private Doctors	4
Vydians	2
Child Welfare Scheme	10
	<hr/>
	48
	<hr/>

This gives 3 per mille and the maternal mortality rate practically remains the same as last year. The city rate was 9.2.

INFANTILE MORTALITY.

14,589 babies which came under the care of the Scheme in 1937 were kept under observation during their first year of life. The total number of still births was 470. The mortality among live births was 1627. This works out an infantile mortality rate of 113.3 per mille as against 112.2 of the previous year. The epidemics in the City were to a certain extent responsible for the slight increase in the rate of infantile mortality. Besides this owing to the inadequate staff of Health Visitors in the Scheme; the home visiting suffered considerably. The ignorant mothers were not in touch with the Health Visitors for advice and proper guidance as a result they did not seek medical aid at the proper time and at their proper places which led to number of deaths among infants. The City rate was 222.1.

INFANTS & TODDLERS CLINIC.

Infants and Toddlers Clinic was conducted once a week at the centers by the Lady Doctors. 6,790 infants and 2,436 toddlers were examined and given advice regarding their diet, health etc., by the Lady Doctors.

MILK SUPPLY.

441 deserving babies were supplied with Cow's Milk during the year as against 433 for 1937. The total attendance was 1,19,360 as against 1,04,589 of the previous year.

603 Expectant mothers also were given Cow's Milk during the year 1938.

BATH.

772 babies were given bath last year as against 783 during 1937.

AMBULANCE CAR.

For cases of emergency to convey patients to hospitals, an Ambulance Car is maintained by this department and the same is stationed at Ripon Buildings with a driver in attendance both day and night. There were occasions when calls were made simultaneously from various Centres and it was found that one Centre or other was handicapped by not getting the car in time. On such occasions the staff had to arrange private conveyance to take the patients to hospitals. There were 943 requisitions for the Ambulance Car during the year 1938 as against 726 for the previous year.

HEALTH PROPAGANDA. MADRAS MUNICIPAL CORPORATION

613 lectures were delivered during the year 1938 as against 609 for the year 1937. Out of these 237 lectures were conducted with the aid of magic lantern; 31 cinema shows and 345 were out-door lectures. The total attendance at these lectures was 24012 as against 23,254 for 1937.

HEALTH EXHIBITION.

Health Exhibition was held at the S. I. A. A. grounds during the Park Fair. The activities of the Scheme were exhibited by means of models and charts and explained to the public. In this connection a gold medal was awarded to the Child Welfare Scheme.

During the year the Red Cross Society offered their building at Jagannathapuram as gift to the Corporation of Madras and the Nungumbakkam Centre was shifted to the new premises where it is doing useful work in the slum areas.

Proposals have been made to open two additional Centres, one at Park Town and another at North Perambur. It would be a great relief for the poor inhabitants in these areas if the Centres are opened.

Our thanks are due to the Commissioner, Health Officer, the Members of the Standing Committee (Health) and of the Ad Hoc Committee and also to the Asst. Directress of Public Health for Maternity and Child Welfare, Madras, for their valuable advice and guidance and also for the co-operation of the staff in making the Scheme a success.

Corporation of
Madras, }
1-6-1939.

H. V. KAMALAMMAL,

1-6-39.

Lady Superintendent,

Child Welfare Scheme.

STATEMENT NO. I

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CENTRES.	How Conducted.			Total Cases.	Caste.		REMARKS.	Working Area of the Centres.
	By Nurses of the Child Welfare scheme.	Taken over after the barber women conducted	Taken to Hospital		Mahom-medans.	Non-Mahom-medans.		
Triplicane	1666	71	71	1808	656	1152	Including 19 Twins 1 Triplet	30, 31, 32, 33 & 34
George Town	1506	76	78	1660	64	1596	" 14 Twins	11, 12, 13, 14, 15 & 16
Washermanpet	1304	64	85	1453	292	1161	" 11 "	4 & 5
Perambur	1167	71	97	1335	318	1017	" 9 "	17 & 18
Choolai	1052	73	140	1265	35	1230	" 7 "	19 & 23
Mirsaibpet	1090	81	78	1249	264	985	" 14 "	35, 39 & 40
Royapuram	1096	71	72	1239	150	1089	" 10 "	1, 2, 3
Muthialpet	1012	81	83	1176	287	889	" 4 "	6, 7, 8, 9 & 10
Purusawalkkam	939	57	60	1056	30	1026	" 9 "	20, 21 & 22
Egmore	797	52	54	903	113	790	" 10 "	24, 25, 26 & 27
Royapettah	638	57	41	736	92	644	" 3 "	36, 37, 38 & 28
Coetput	196	17	25	238	15	223	" 1 "	28 & 29
Total	12,463	771	884	14,118	2,316	11,802	111 Twins 1 Triplet	

STATEMENT No. II.

Number of Visits paid by the Staff of the Child Welfare Scheme during 1938.

CENTRES.	Visits paid by				Total.
	Mid-wives.	Health Visitors.	Maternity Supervisors.	Lady Doctors.	
1. Triplicane ...	20265	11952	928	434	33559
2. Royapettah ...	11057	6097	...	356	17490
3. Mirsaibpet ...	13999	11485	...	450	25914
4. Chetput ...	4312	5568	...	326	10006
5. Egmore ...	11707	8968	...	363	21038
6. Purusawalkkam ...	13229	9197	...	448	22874
7. George Town ...	21252	9527	1018	440	32237
8. Choolai ...	13921	9701	...	411	24053
9. Muthialpet ...	13498	8807	...	349	22654
10. Washermanpet ...	16558	8101	487	412	25358
11. Perambur ...	15357	8333	...	345	24035
12. Royapuram ...	15985	6695	...	377	21057
13. R. L. D. ...	...	...	...	971	971
Total ...	168940	104211	2453	5642	281226

STATEMENT No. III.

Number of Visits paid by the Staff of the Child Welfare Scheme during the year 1938.

CENTRES.	Number of A.N. Cases registered by H.Vs.	Number of booked cases which attended A. N. Clinics.	Number of booked cases conducted by						Total.
			C. W. Staff.	Barber Women.	Hospital	Private Doctors.	Cases not traceable.	Cases not confined.	
Triplicane ...	1287	1381	379	68	225	20	85	104	1381
Royapettah ...	555	561	312	61	95	10	25	58	561
Mirsaibpet ...	840	1375	760	92	228	23	128	144	1375
Chetput ...	323	262	110	33	86	4	15	14	262
Egmore ...	791	897	486	68	92	26	46	179	897
Purusawalkkam ...	554	1119	446	114	217	8	139	195	1119
George Town ...	1442	1607	353	79	83	7	20	65	1607
Choolai ...	866	1167	1554	125	159	7	160	162	1167
Muthialpet ...	627	1178	819	93	103	25	75	63	1178
Washermanpet ...	694	1404	773	91	169	1	268	102	1404
Perambur ...	678	1066	626	38	100	...	128	174	1066
Royapuram ...	583	1112	727	36	42	6	100	201	1112
Total ...	9240	13129	7845	898	1599	137	1189	1461	13129

STATEMENT V
Maternal Morbidity (Puerperal) 1958.

CENTRES.	Anaemia.	Albuminuria.	Malaria.	V. D. H.	Bronchitis.	Dysentery.	Influenza	Retained Membrane.	Adherent Placenta.	Retained Placenta.	Relapsing.	Pneumonia.	T. B.	Ulcerated Vagina.	Retention of Urine.	Gyphitis.	Asthma.	Diarrhoea.	Jaundice.	Indigestion.	Gastritis.	Constipation.	Mastitis and Breast Abscess.	A. P. H.	P. P. H.	Skin Diseases.	Stomatitis.	Sepsis.	Ulcerated Vulva.	Fever & Hyperpyrexia.	After Pains.	General Anaesæcia.	Debility.	Swelling.	Peritonium tear.	Oedema.	Eczema.	L. P.	Other Diseases.	Total.		
... Triplicane	95	31	—	2	11	5	4	—	3	—	5	—	—	5	6	2	—	8	—	—	—	94	7	—	2	11	24	—	—	35	55	—	43	10	18	—	—	—	—	84	560	
... Royapettah	27	14	3	—	11	4	6	—	—	—	—	—	1	—	—	—	—	1	—	—	19	29	—	—	1	25	—	—	4	38	—	—	—	—	—	—	—	—	—	184		
... Mirsaibpet	12	6	2	1	10	—	8	—	—	—	—	—	—	—	—	2	1	7	—	—	—	—	—	—	—	1	7	2	6	—	—	4	—	2	4	—	—	—	—	77		
... Chetput	9	1	—	1	3	1	3	1	—	—	—	2	—	—	1	1	3	—	—	—	—	9	—	—	—	—	8	—	3	—	—	12	4	—	—	—	—	—	—	66		
... Egmore	116	20	—	—	46	11	1	—	—	—	1	—	1	4	24	—	—	15	—	—	2	80	—	2	5	4	48	—	3	175	—	28	4	3	3	—	—	—	—	596		
... Purusawakkam	55	31	8	17	29	27	16	5	1	3	5	8	25	19	55	10	8	39	8	49	16	77	20	4	4	33	—	—	—	—	—	—	—	—	—	—	—	—	—	572		
... George Town	19	21	15	1	9	14	2	—	1	—	2	1	—	—	—	—	3	17	—	2	—	72	1	—	1	—	43	—	13	37	—	21	3	—	5	—	—	—	—	311		
... Choolai	57	—	—	—	3	22	—	—	—	—	2	—	—	—	—	—	26	—	—	—	—	—	—	2	—	—	—	92	—	—	28	—	—	—	—	—	—	—	232			
... Mathialpet	19	12	4	2	10	7	3	—	—	—	2	—	2	2	—	—	5	—	—	—	—	15	—	—	—	—	—	2	11	—	—	—	—	—	—	—	—	—	104			
... Washermanpet	44	3	—	—	1	16	—	—	—	1	—	1	—	—	—	—	25	—	—	—	—	15	2	—	—	—	2	64	2	—	—	2	6	—	—	—	—	—	—	187		
... Perambur	7	5	3	1	11	2	3	1	—	—	3	1	4	8	5	2	2	8	2	4	1	13	2	1	3	3	8	—	2	1	8	2	11	4	3	—	—	—	—	—	—	141
... Royapuram	38	20	11	2	7	9	18	8	2	1	2	1	2	—	—	—	9	1	6	2	28	2	—	8	5	—	—	10	37	11	—	—	—	—	—	—	—	—	—	—	269	
Total ...	498	164	46	27	151	118	64	15	7	5	22	14	35	39	90	17	15	163	11	62	40	432	34	9	24	58	165	—	17	257	337	2	149	27	31	12	2	1	131	3300		

STATEMENT No. VI A.

Maternal Mortality (Puerperal) among Cases treated by Child Welfare Scheme for 1938.

CENTRES.	Tuberculosis.	Dysentery.	V. D. H.	Adherent Placenta.	Eclampsia.	Sepsis.	Tetanus.	P. P. H.	Advanced Anaemia.	Heart Failure.	Shock.	Total.
Triplicane	1	1	2
Royapettah
Mirsaibpet	2	...	2
Chetput
Egmore	...	1	...	...	...	...	...	...	...	...	...	1
Purusawalkkam
George Town	1	...	...	...	1
Choolai
Muthialpet
Washermanpet	2	...	2
Perambur
Royapuram	1	1	...	...	...	...	...	2
Total	...	1	...	...	1	1	...	...	1	5	1	10

STATEMENT No. VI B.

Deaths among Cases brought to the notice of the Child Welfare Scheme in 1938 but not under our treatment.

	Triplicane.	Royapettah.	Mirsaibpet.	Chetput.	Egmore.	Purusa-walkkam.	George Town.	Choolai.	Muthialpet.	Washermanpet	Perambur.	Royapuram.	Total.
1. In Hospital	1	...	4	1	1	2	...	5	4	4	8	2	32
2. Under Private Doctors	1	...	...	...	...	...	1	...	2	...	...	...	4
3. Under Vydians treatment	...	...	...	...	...	...	...	2	...	...	...	...	2
4. Under Barber Women	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	2	...	4	1	1	2	1	7	6	4	8	2	38

STATEMENT VI C.

Showing the Causes of deaths among Cases brought to the notice of the Child Welfare Scheme but not under our treatment in 1938.

CENTRES.	General Anasarca.	Toxaemia.	Fever.	Retained Placenta.	Adherent Placenta.	Eclampsia.	Uraemic Coma.	Cholera.	V. D. H.	Placenta Praevia.	Diarrhoea.	Sepsis.	Pneumonia.	P. P. H.	Dysentery.	Rupture of Uterus.	Anæmia.	Heart Failure.	Tuberculosis.	Total.		
	Triplicane	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Royapettah
Mirsaibpet	1	...	1	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	4
Chetput	1	...	...	...	...	...	...	...	...	1
Egmore	1	...	...	...	...	...	...	1
Purusawalkkam	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
George Town	1	...	...	...	...	1	...	...	...	1
Choolai	2	2	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	7
Muthialpet	1	...	2	...	...	...	...	...	...	1	...	...	1	...	...	...	1	...	...	6
Washermanpet	...	1	...	...	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	4
Perambur	1	...	1	...	...	...	...	...	1	...	1	...	...	...	2	...	2	...	...	...	...	8
Royapuram	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2
Total	...	1	1	3	2	5	7	1	...	1	...	1	1	5	1	4	...	3	1	1	...	38

MATERNAL MORTALITY RATE.

For Child Welfare Scheme		City Rate.	
1938—3·0	per mile.	1938—9·2	per mile.
1937—3·0	"	1937—9·3	"
1936—3·0	"	1936—10·1	"
1935—3·0	"	1935—9·5	"
1934—3·4	"	1934—11·1	"

STATEMENT No. VII.

Ages at Death of Infants born during 1937 and kept under observation during the 1st year of life.

From 1st January to 31st December 1937.	Total Infants Born in 1937.	Still Born.	Died within.				Total Deaths excluding Still births.	Left City or otherwise not traceable.	No. of living Children traceable when one year old.
			10 Days.	1 to 3 Months.	3 to 6 Months.	6 to 12 Months.			
Triplicane ...	1902	47	61	36	50	42	162	483	1210
Royapettah ...	626	26	12	6	9	29	56	79	465
Mirsaibpet ...	1251	44	30	25	23	57	135	358	714
Egmore ...	868	24	20	33	28	59	140	104	600
Purusawalkam ...	1159	29	32	31	35	33	131	130	869
Chetput ...	354	15	4	1	3	7	15	22	302
George Town ...	1738	62	56	23	25	42	146	263	1267
Choolai ...	1399	56	45	63	37	65	210	93	1040
Muthialpet ...	1229	21	32	23	36	53	144	265	799
Washermanpet ...	1467	58	54	43	48	64	209	302	898
Perambur ...	1393	61	30	25	9	41	105	311	916
Royapuram ...	1203	27	32	33	23	59	147	187	842
Total ...	14,589	470	408	342	326	551	1,600	2,597	9,922

INFANT MORTALITY RATE.

For infants under the care of child welfare scheme.		City Rate.	
1938—113·3	per mille.	1938—222·1	per mille
1937—112·3	„	1937—220·8	„
1936—124·2	„	1936—216·5	„
1935—138·2	„	1935—223·9	„
1934—142·2	„	1934—228·2	„

STATEMENT VIII.

Causes of death among infants born in 1937 and kept under observation during the 1st year of life.

Centres.	Total Infants born in 1937.	Still born.	Died within 10 days.	Pneumonia.	Fever.	Enteritis.	Small-Pox.	Bronchitis.	Malnutrition.	Convulsions.	Whooping Cough.	Drugged with native medicine.	Dysentery.	Debility.	Measles.	Abscess.	Skin Disease.	Constipation.	Rickets.	Scabies.	Jaundice.	Causes unknown.	Diarrhoea.	Influenza.	Swelling.	Total Deaths.	Left City and not traceable.	Number of living Children traceable.
Triplicane	1,902	47	61	7	16	2	12	3	4	12	4	9	1	2	1	2	1	2	1	2	8	18	...	...	162	483	1,210
Royapettah	626	26	12	5	25	8	...	2	...	1	...	2	1	...	1	...	...	...	...	...	...	...	...	...	56	79	465
Mirsaibpet	1,251	44	30	4	39	...	11	4	8	1	...	10	2	1	...	6	...	...	1	...	...	...	...	...	135	358	714
Chetpet	354	15	4	4	3	1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	15	22	302
Egmore	868	24	20	1	49	31	2	2	25	3	...	4	1	2	...	...	...	...	...	...	...	...	...	...	140	104	600
Purasawalkam	1,159	29	32	1	38	19	130	...	...	...	...	2	...	7	...	...	...	...	1	...	...	...	...	...	131	130	869
George Town	1,738	62	56	1	30	...	3	9	1	...	18	15	...	...	...	...	...	...	...	...	1	12	...	...	146	263	1,267
Chcolai	1,399	56	45	5	42	33	1	1	7	1	...	5	2	3	5	...	...	...	2	4	...	41	11	2	210	93	1,040
Muthialpet	1,229	21	32	...	53	1	2	7	...	...	...	2	8	2	1	...	...	...	1	...	...	10	25	...	144	265	799
Washermanpet	1,467	58	54	...	52	...	4	1	11	6	...	9	1	7	...	3	...	...	1	...	...	3	60	...	209	332	898
Perambur	1,393	61	30	...	28	25	4	3	1	2	1	1	8	...	...	...	...	2	...	...	...	...	...	...	105	311	916
Royapuram	1,203	27	32	5	23	11	4	7	3	3	3	3	3	...	6	2	2	2	1	...	2	12	26	147	187	842		
Total	14,589	470	408	33	398	131	41	64	979	19	19	69	10	15	28	3	4	6	8	3	80	171	...	2	1,600	2,597	9,922	

STATEMENT No. IX.

Showing the number of cases taken on for Milk Supply during the year 1938.

Centres.	No. taken on for Milk Supply	Yearly attendance.	Average daily attendance.
Triplicane ...	54	9210	25.2
Royapettah ...	35	9136	25.0
Mirsaibpet ...	38	11005	30.0
Chetput ...	50	9574	26.2
Egmore ...	57	12990	35.6
Purusawalkam ...	45	12197	33.4
George Town ...	57	9607	26.5
Choolai ...	35	7681	21.0
Muthialpet ...	28	5117	14.0
Washermanpet ...	33	11389	31.2
Perambur ...	44	12014	33.0
Royapuram ...	45	9440	25.8
Total ...	441	119,360	326.7

STATEMENT No. X.

Showing the number of Children who were given free baths during the year 1938.

Centres.	New Admissions.	Number of baths given to babies.	Average daily Attendance.
Triplicane ...	34	4548	12.4
Royapettah ...	41	5798	15.8
Mirsaibpet ...	37	4317	11.8
Chetput ...	84	5193	14.2
Egmore ...	199	7277	19.9
Purusawalkam ...	49	6840	18.7
George Town ...	53	3934	10.8
Choolai ...	32	3742	10.2
Muthialpet ...	23	1593	4.4
Washermanpet ...	49	5168	14.1
Perambur ...	122	5514	15.1
Royapuram ...	49	4540	12.4
Total ...	772	58464	159.8

STATEMENT No. XII.

Centres.	Municipal Divisions.	Total No. of births from 1-1-'38 to 31-12-'38.	No. of Cases Conducted by Corporation Midwives.	Percentage to Total Births.
Royapuram	1	556	256	46.1
	2	668	276	41.3
	3	1523	564	37.0
Washermanpet	4	1373	682	49.7
	5	1166	622	53.3
Muthialpet	6	324	145	44.8
	7	643	329	51.2
	8	327	132	40.4
	9	671	242	36.1
	10	406	164	40.4
George Town	11	708	369	52.1
	12	328	59	18.0
	13	1098	460	42.2
	14	723	345	47.7
	15	563	134	36.9
	16	492	159	28.3
Perambure	17	1222	762	62.4
	18	793	405	51.1
Choolai	19	1460	709	48.6
	23	870	343	39.4
Purasawalkkam	20	865	380	43.9
	21	881	438	49.7
	22	599	121	20.2
Egmore	24	523	162	51.0
	25	803	291	36.2
	26	874	311	35.6
	27	892	33	3.7
Chetpet	28part	605	81	13.4
	29	443	115	26.0
Triplicane	30	827	355	42.9
	31	1049	528	50.3
	32	910	316	34.7
	33	619	124	20.0
Mirsaiabet	34	688	343	49.9
	35	1684	708	42.0
	39	539	224	41.6
Royapettah	40	406	158	38.9
	36	752	320	42.6
	37	804	191	23.8
	38	513	69	13.5
	28part	*	*	*

* N.B.—Cases included in 28th Division in Chetput Centre.



