Administration report / Public Health Department, Colombo Municipality.

COLOMBO MUNICIPALITY.

Administration Report

1917

Public Health Department.

REPORT BY WM. MARSHALL PHILIP, M.B., D.P.H.,
Medical Officer of Health.

Colombo:

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Part I.

THE mean temperature of the air during 1917, was slightly below the average. The rainfall was considerably below the average owing chiefly to the failure of the South West Monsoon rains during the months April to July. The birth-rate (22·7) was slightly below the average. The death-rate (24·3) was the lowest recorded. If the death-rate in 1917 is compared with that of the decennium 1901—1910, the result expressed in terms of lives shows a saving of 2,248 lives during the year. The improvement in the death-rate began in 1907, but has been most marked during the last 6 years. Compared with 1916, there were fewer cases of Plague, Enteric Fever, Phthisis, Chicken-pox and Measles, while there was only one imported case of Small-pox and no Cholera ; 14 cases of Diphtheria were recorded as against 7 in 1916. The infant death-rate (251) was slightly higher than in 1916, but was lower than in any other preceding year. It has been steadily improving since 1903, the first marked drop having occurred in 1906, since which year, with the single exception of 1908 when there was a slight set back, it has steadily continued to fall. Compared with the infant death-rate during the decennium 1901—1910, the 1917, infant death-rate shows a saving of 505 infant lives during the year.

1. Population.

Race.		Population estimated to middle of 1917.
All races	...	258,050
Europeans	...	3,606
Burghers	...	16,922
Sinhalese	...	115,763
Tamils	...	62,511
Moors	...	45,463
Malays	...	6,413
Others	...	7,372

No. 2.—Area and estimated population by Wards, 1917.

Ward.		Total area (in acres)		Net available area (in acres)		Estimated population.		Density per acre of available area.
Fort	...	220	...	112	...	4,128	...	36·9
Pettah	...	92	...	67	...	9,364	...	139·8
San Sebastian	...	116	...	108	...	13,567	...	125·6
St. Paul's	..	143	...	135	...	29,069	...	215·3
Kotahena	...	1,649	...	1,056	...	47,669	...	45·1
New Bazaar	...	289	...	226	...	26,218	...	116·0
Maradana	...	1,297	...	1,025	...	51,414	...	50·2
Slave Island	...	313	...	304	...	25,841	...	85·0
Kollupitiya	...	1,928	...	1,655	...	29,427	...	17·8
Eastward Extension	...	1,593	...	1,593	...	12,829	...	8·1
Wellawatte Extension	...	620	...	620	...	8,524	...	13·8
The Lake	...	416	...	—	...	—	...	—
Colombo Town	...	8,676	...	6,901	...	258,050	...	37·4

The population of Colombo estimated to the middle of 1917 was 258,050 which, reckoned on the area available for building (6,901 acres), represents an average density of 37·4 persons per acre. This seems far from overcrowded, but the vast majority of the people in Colombo are housed in "ground storey" buildings, the "upstairs" bungalow which favours concentration of population, being as yet very much the exception here. This is fortunate in view of the narrowness of the majority of the streets, the smallness of the backyards, and the general absence of back lanes. The wards with the highest average densities are St. Paul's, Pettah, San Sebastian, and New Bazaar, with average densities ranging from 215·3 to 116·0 per acre.

The lowest average densities occur in East Extension, Wellawatte and Kollupitiya. Densities far higher than those quoted occur in various smaller areas, and it is there that the highest rates of mortality occur, especially from diseases like Phthisis.

The question of Housing in Colombo is a serious problem, the accomodation being far short of the requirements. This makes the work of dealing with houses unfit for habitation very difficult, and it has recently been suggested (53 of 31st January, 1918) that as the landowners are hanging back in the matter of building houses suitable for the poorer classes, the Council should give a lead by building a sufficient number of model tenements to accomodate all the workmen whom they employ in their service.

2. Births.

No. 3.—Racial Birth-rates.

Race.	Average per 1000 population 1907 to 1916.		Births, 1917.		Birth-rate per 1000 population 1917.
All races	... 23·4	...	5860	...	22·7
Europeans	... 24·5	...	81	...	22·5
Burghers	... 32·5	...	519	...	30·7
Sinhalese	... 29·6	...	3232	...	27·9
Tamils	... 12·3	...	795	...	12·7
Moors	... 19·5	...	895	...	19·7
Malays	... 34·5	...	227	...	35·4
Others	... 13·8	...	111	...	15·1

No. 4—Ward Birth-rates.

Ward.	Average per 1000 population 1907 to 1916.	Births. 1917.	Birth-rate per 1000 population, 1917.
Colombo ...	23·4 ...	5860 ...	22·7
Fort ...	2·7 ...	9 ..	2·2
Pettah ...	5·2 ...	36 ...	3·8
San Sebastian ...	19·4 ...	250 ...	18·4
St. Paul's ...	16·3 ...	428 ...	14·7
Kotahena ...	22·2 ...	1038 ...	21·8
New Bazaar ...	22·2 ...	525 ...	20·0
Maradana ...	20·3 ...	955 ...	18·6
Slave Island ...	22·4 ...	562 ...	21·8
Kollupitiya ...	16·7 ...	497 ...	16·9
Eastward Extension ...	15·8 ...	263 ...	20·5
Wellawatte Extension ...	26·1 ...	206 ...	24·2
Hospitals ...	— ...	1091 ...	—

5860 births were registered in Colombo during the year, representing a birth-rate of 22·7 per 1000. In these days when national birth-rates are being so anxiously scrutinised in connection with man-power, it may be of interest to state that although the birth-rate of Colombo, *as recorded*, is invariably lower than the death-rate, this does not really mean that the indigenous population is dying out, or in other words that there is a "natural decrease" here. The Census proved on the contrary that there is a very good "natural increase," here, and that the indigenous population is rapidly increasing. The explanation of this paradox lies in the fact that many of the births of children born of Colombo parents are not registered *in the town*. As has previously been explained at length this is due, not to defective registration in Colombo, but to the custom which prevails, especially amongst the Sinhalese, whereby prospective mothers go to the homes of their parents, which in many cases are in the country, for the birth of their children—especially their first born. Such children are presumably registered in the district where they are born, but that does not help the Colombo birth-rate. Such of these children as survive long enough are brought into Colombo by their mothers when they return to their husbands' homes, where without increasing the birth-rate they help to swell the infant population, and incidentally to create a fallaciously high infant death-rate, since the infant death-rate is always reckoned on the number of births *registered in the town* during the year.

The true birth-rate of Colombo is therefore undoubtedly higher, while the true infant death-rate is equally certainly lower than the records indicate. It has unfortunately not been found practicable so far to obtain the data necessary for ascertaining the true infant rates here.

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3. Deaths.

6280 deaths at all ages were recorded in Colombo during 1917, representing a crude death-rate of 24·3 per 1000, which is the lowest yet recorded. To these must be added 48 deaths of Colombo residents which occurred in the extra-urban Hospital for advanced cases of Phthisis at Ragama. On the other hand 649 deaths of non-residents of the town which occurred in the Colombo Hospitals must be deducted leaving a corrected total of 5679 deaths of Colombo residents during the year, which represents a death-rate of 22·0 per 1000. A further correction for age and sex constitution gives a death-rate of 25·9 per 1000, which is the nearest approach to the correct death-rate of Colombo that can at present be obtained.

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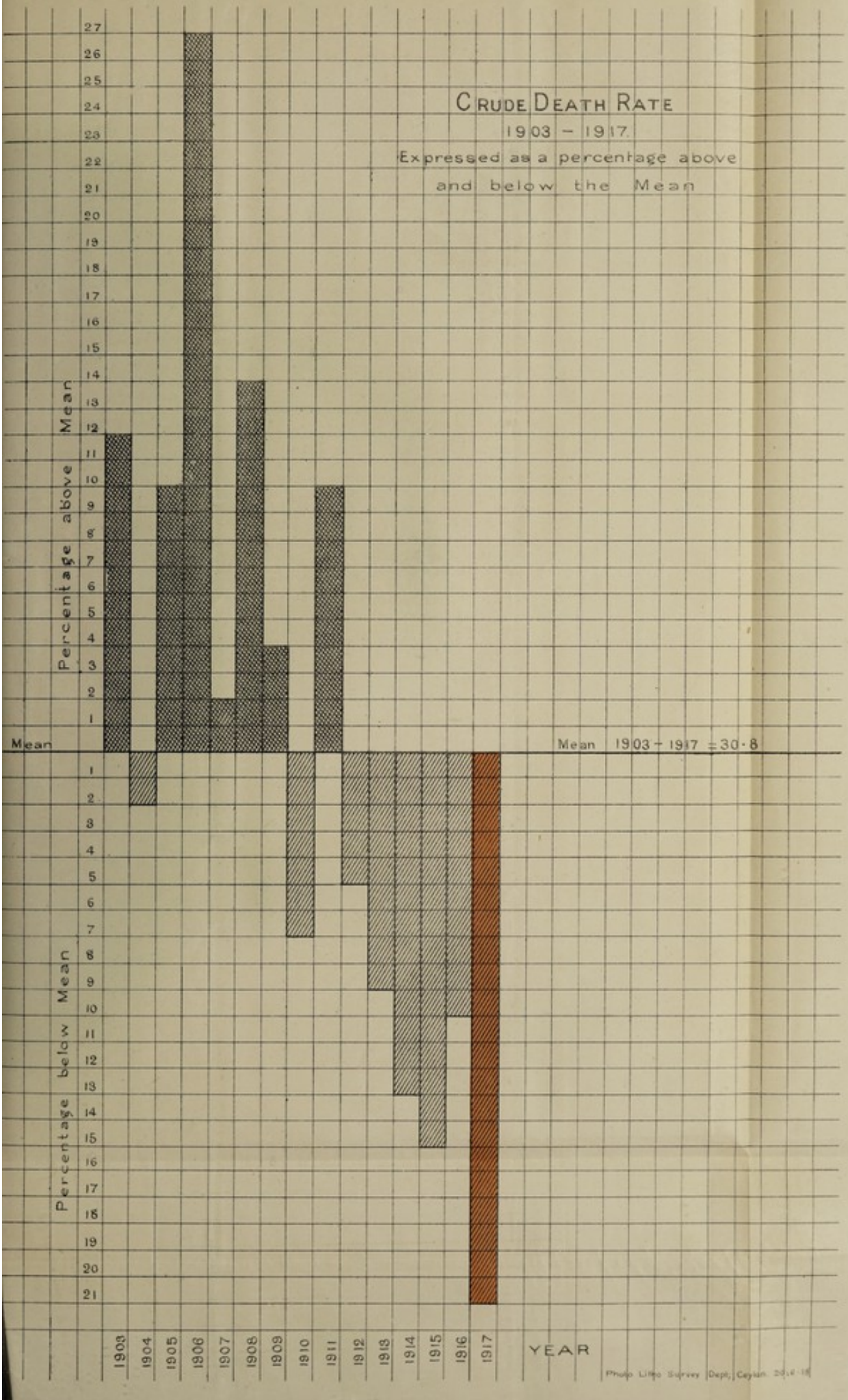
4. Ward Death Rates.

When the necessary corrections for deaths of ward residents in the Hospitals have been made, it is found that the ward death-rates during 1917 were as shown in the following statement, from which it will be seen that Kotahena had the highest death-rate during 1917. A comparison between the corrected rates for 1917 and 1916 shows that whereas the densely populated central wards such as San Sebastian, St. Paul's and New Bazaar had much lower death-rates in 1917 than in 1916, the outlying, sparsely populated wards such as East Extension, Kotahena Kollupitiya and Wellawatte had either higher rates or showed only a very slight improvement. The explanation of this probably is that there has been a certain amount of migration from the central densely populated wards where rents are very high, to the more outlying parts of the town where rents are lower. This explanation is in accordance with what one has observed—especially in Wellawatte and East Extension. This point is however being further enquired into.


CRUDE DEATH RATE
1903 – 1917.
Expressed as a percentage above
and below the Mean
Percentage above Mean
Percentage below Mean
Mean
Mean 1903 – 1917 = 30·8
YEAR
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
Photo Litho Survey Dept, Ceylon

No. 5.—Colombo Ward Death-rates. (All causes.)

Death-rate per 1,000 population.

Wards.	Average 1907 to 1916.	1917 Deaths.	1917 Crude rate.	Corrected for Deaths in Hospital* 1917.	Corrected for Deaths in Hospital* 1916.	Increase or decrease in 1917 compared with 1916.
Colombo Town	29·6	6280	24·3	22·0	24·9	—2·9
Fort	9·4	36	6·9	9·4	16·2	—6·8
Pettah	10·2	63	6·7	11·0	18·3	—7·3
San Sebastian	22·5	202	14·9	17·4	25·5	—8·1
St. Paul's	22·8	469	16·1	18·5	24·1	—5·6
Kotahena	22·7	1007	21·1	24·1	24·0	+0·1
New Bazaar	25·9	495	18·9	22·6	27·7	—5·1
Maradana	22·8	898	17·5	21·3	25·6	—4·3
Slave Island	22·5	474	18·3	21·3	25·2	—3·9
Kollupitiya	16·2	435	14·8	17·3	16·8	+0·5
Eastward Extention.	13·6	234	18·2	22·7	18·8	+3·9
Wellawatte Extension.	17·9	141	16·5	20·0	21·7	—1·5
Hospitals	—	1826	—	—	—	—

* The Town rate has been calculated exclusive of the deaths of non-residents which occurred in the Hospitals. the ward rates include the deaths of ward residents that occurred in the Hospitals.

5. Race Death Rates.

The deaths for each race were as follows :—

No. 6.—Colombo Racial Death-rates. (All causes.)

Death-rate per 1,000 population.

Race.	Average 1907 to 1916.	Deaths 1917.	Crude rate 1917.	Rate corrected for deaths in institutions	Increase or decrease on the average (crude.)	Decrease due to correction for institutional deaths	Rate corrected for age and sex 1917.
All Races	29·6	6280	24·3	22·0	—5·3	2·5	25·9
Europeans	22·5	46	12·8	10·3	—9 7	2·5	—
Burghers	23·9	336	19·9	19·3	—4·0	·6	—
Sinhalese	32·3	3168	27·4	22·9	—4·9	4·5	—
Tamils	27·6	1321	21·1	19·8	—6·5	1·3	—
Moors	27·1	964	21·2	21·0	—5·9	·2	—
Malays	33·4	172	26·8	26·7	—6·6	·1	—
Others	33·5	273	37·0	34·0	+3·5	3·0	—

The rates of exotic races like Europeans and Tamils are liable to considerable vitiation as the result of migration of these people to and from their homelands. Thus during the last three years large numbers of young European males have left Ceylon in order to take part in the War, while on the other hand numbers of old people and children, who would in normal times have gone home, have remained in the Island. Scarcity of employment has doubtless led to a good many Tamils returning to their own country.

6. Infant Mortality.

No. 7.—Infant Mortality, 1917.

By Wards. Rate per 1,000 Births.

Wards.	Average 1907 to 1916.	1917.	Increase or decrease.
Colombo	291	251	— 40
Fort	266	222	— 44
Pettah	341	222	—119
San Sebastian	347	276	— 71
St. Paul's	384	357	— 27
Kotahena	292	287	— 5
New Bazaar	375	329	— 46
Maradana	335	301	— 34
Slave Island	313	228	— 85
Kollupitiya	244	171	— 73
Eastward Extension	256	259	+ 3
Wellawatte Extension	220	150	— 70
Hospitals	166	153	— 13

No. 8.—Infant Mortality, 1917.

Principal Causes. Expressed as a rate per 1,000 births.

Cause.	All races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
All causes ...	215	111	160	234	355	303	172	261
Premature birth ...	18	—	15	21	20	11	4	27
Atrophy and debility ...	71	12	27	66	110	94	44	72
Bronchitis ...	8	—	8	6	10	8	9	9
Pneumonia ...	23	12	33	24	25	20	9	18
Diarrhoeal ...	26	25	21	28	19	27	22	36
Convulsions ...	69	25	27	56	118	105	53	54
Tetanus ...	4	—	—	3	9	7	13	—
All other causes ...	32	37	29	30	44	31	18	45

The infant death-rate during the year was 251 per 1,000. Great as this wastage of infant life is, it is nevertheless a great improvement upon what used formerly to occur here as the diagram annexed shows. It has fallen from a rate of 410 in 1903 to 251 in 1917, *i.e.*, from being 34 per cent above, to 24 per cent below the mean for the 15 years 1903–1917.

The diseases which were chiefly responsible for the deaths of infants during the year were Atrophy and Debility (71), Premature Births (18), Convulsions (69), Diarrhoea (26), and Pneumonia (23). The highest infant death-rates occurred in St. Paul's (357), New Bazaar (329), Maradana (301), Kotahena (287), San Sebastian (276). Compared with the average of the preceding 10 years, every ward except the East Extension shows an improvement which was most marked in the Pettah, Slave Island, Kollupitiya, San Sebastian and Wellawatte Wards. The chief causes of infant mortality in Colombo are (*a*) those which affect the mother, and through her the child before birth, *e.g.*, bad housing and insanitary conditions generally in and around the home, such as prevail to a great extent in the slums, (*b*) those conditions which affect the child after birth, including those referred to in (*a*) and in addition improper feeding, contamination of food by flies and otherwise, and the debilitating effect of epidemic diseases, especially measles.

Thus one finds that the highest *average* infant ward mortalities occur in the wards with the highest average densities, which in turn denote the existence of slums, and it is not to be expected that the infant death-rate of Colombo will fall to what may be considered a satisfactory level, until these slums have been abolished. This, as has been explained elsewhere in this Report, can only be achieved as the result of carrying out of large schemes of improvement and rehousing on sanitary lines, as provided for in Ordinance No. 19 of 1915. Another very important sanitary measure in connection with the infant mortality here is the abolition of the insanitary, fly-breeding and disease-spreading dry-earth latrines, and the substitution of water-carriage, in which respect the progress made hitherto has been painfully slow, although sewers are now nearly every-where available in the more densely populated parts of the town.

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7. Notifiable Infectious Diseases.

No. 9.—Notifiable Infectious Diseases, 1917.

Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total for the year.	Cases reported from the Port.	Cases reported from outside limits.	Grand total of cases.
Plague ...	25	40	61	34	11	3	6	1	3	7	10	6	207	—	12	219
Cholera ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Smallpox ...	—	1	—	—	—	—	—	—	—	—	—	—	1	4	—	5
Chickenpox ...	194	220	405	186	95	36	32	30	20	10	45	22	1295	6	30	1331
Measles ...	143	150	202	103	111	72	81	113	64	43	39	6	1127	22	15	1164
Diphtheria ...	1	—	1	—	—	—	2	4	1	—	1	4	14	1	1	16
Acute Diarrhoea ...	1	4	1	—	—	—	1	—	—	—	—	—	7	—	—	7
Enteric Fever ...	29	37	43	45	38	38	27	30	15	37	22	32	393	1	30	424
Continued Fever ...	7	6	8	4	4	5	4	4	4	6	5	9	66	—	—	66
Phthisis ...	75	58	46	55	72	64	57	53	53	83	52	45	713	5	97	815
Total ...	475	516	767	427	331	218	210	235	160	186	174	124	3823	39	185	4047

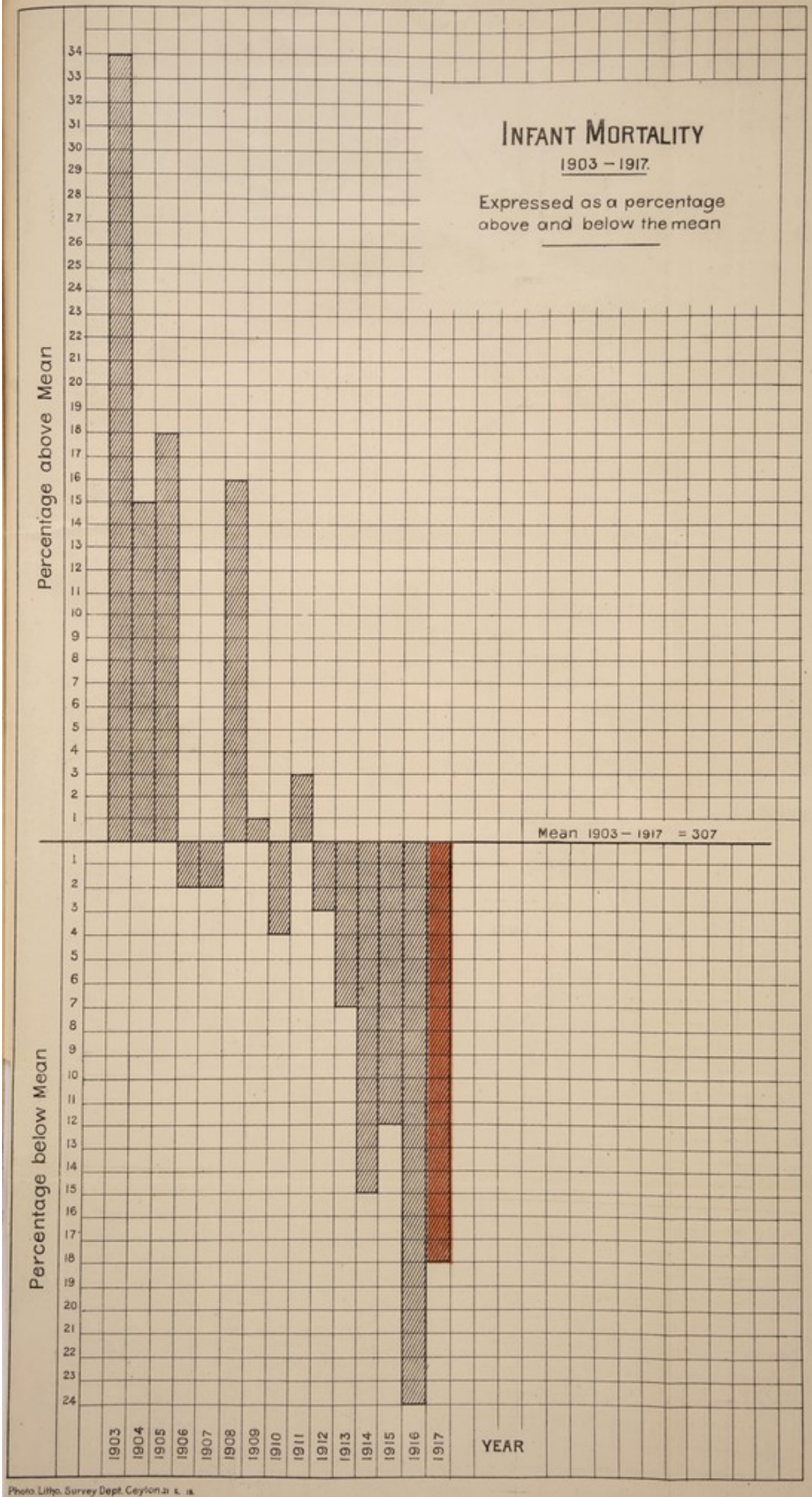
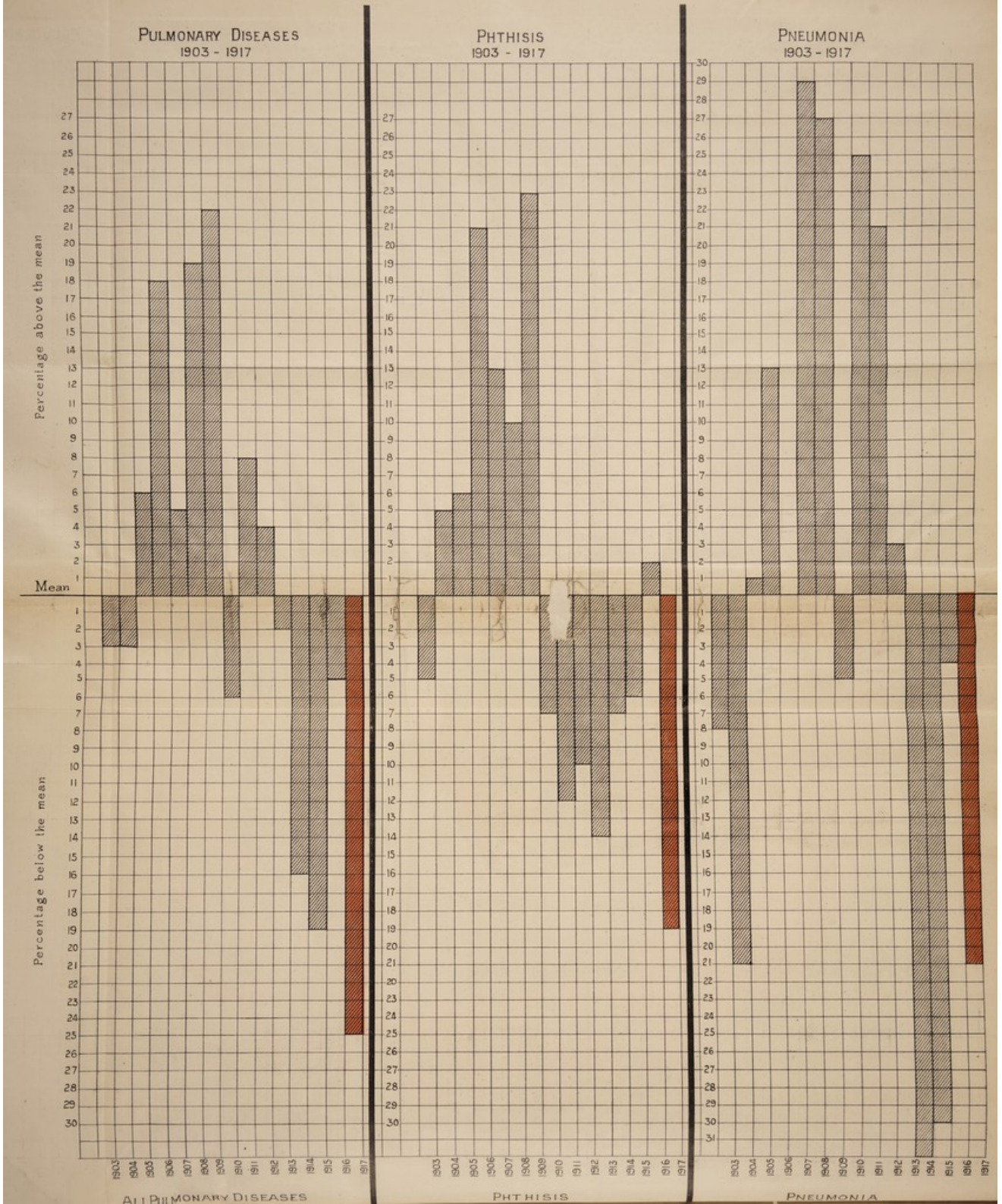


Photo. Litho. Survey Dept. Ceylon.31 5. 18.


PULMONARY DISEASES
1903 - 1917
PHTHISIS
1903 - 1917
PNEUMONIA
1903 - 1917
Percentage above the mean
Mean
Percentage below the mean
1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917
ALL PULMONARY DISEASES
PHTHISIS
PNEUMONIA

8. Principal Causes of Deaths.

No. 10.—Principal Causes of Deaths in 1917 at all ages.

The following were the principal causes of deaths in 1917 :—

Phthisis	(657)	Total pulmonary—1431 deaths.	
Pneumonia	(654)		
Bronchitis	(120)		
Diarrhoea	(148)	Total diarrhoeal—645 deaths.	
Enteritis	(363)		
Dysentry	(134)		
Enteric fever	(174)	Total fevers—239 deaths.	
Simple continued fever	(20)		
Remittent fever	(44)		
Intermittent fever	(1)		
Infantile convulsions			404 deaths.
Debility			311 „
Plague			188 „
Intestinal parasites			112 „

Amongst minor causes the following are the interest :—

Ankylostomiasis	93 deaths.
Puerperal Septicaemia	80 „
Malaria	71 „
Tetanus	63 „
Cancer	42 „
Syphilis	36 „
Diabetes	29 „
Measles	15 „
Rabies	6 „
Diphtheria	4 „
Chickenpox	1 „
Smallpox	1 „
Beri-beri (imported)	1 „

9. Pulmonary Diseases.

No. 11.—Pulmonary Diseases, 1917. Rate per 1,000 population. By Race.

Disease.		All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
Phthisis	Deaths	657	2	39	321	156	81	21	37
	Death-rate	2·55	·55	2·30	2·77	2·50	1·78	3·27	5·02
Pneumonia	Deaths	654	2	44	337	132	74	11	54
	Death-rate	2·53	·55	2·60	2·91	2·11	1·63	1·72	7·33
Bronchitis	Deaths	120	1	14	54	18	19	12	2
	Death-rate	·47	·28	·83	·47	·29	·42	1·87	·27
All Pulmonary	Deaths	1431	5	97	712	306	174	44	93
	Death-rate	5·55	1·39	5·73	6·15	4·90	3·83	6·86	12·62

Pulmonary Diseases.

Deaths 1,431. *Rate 5·55* per 1,000.

Under this heading are included Phthisis (657), Pneumonia (654) and Bronchitis (120).

To this must be added 48 deaths from Phthisis amongst Colombo residents which occurred at the Hospital for advanced cases of Phthisis at Ragama. This makes the true Phthisis total 705, and the total Pulmonary Rate *5·73 per 1,000*. The death-rate from these causes is of special interest not only because Phthisis and Pneumonia are the two greatest causes of mortality in Colombo but also for the reason that whereas it rose steadily during a period of at least 13 years, from 5·41 per 1,000 in 1897 (prior to which the statistics are unreliable) to the extraordinarily high rate of 9·32 in 1909, it has since fallen rapidly during the last 8 years to 5·73 in 1917 per 1,000 *i.e.*, nearly half what it had been.

There are thus two distinct periods to be considered, one a period of degeneration extending from 1897 to 1909 and the other a period of improvement extending from 1909 to 1917.

1897—1909. Period of degeneration. The gradual increase of mortality from pulmonary diseases during the period 1897—1909 was undoubtedly due to a gradual degeneration in the housing conditions in extensive areas of the town, concurrently with or more correctly as a sequence to the increase of the population at a time when there was no proper legal control in respect of such important sanitary matters as the lighting and ventilation of dwellings, the erection of new buildings, the provision of drainage, &c.

Thus, the increase of the population necessarily created a steadily growing need for more house accomodation which, in the absence of a sufficient number of houses to meet the demand, led to overcrowding and a rise in rents. This in turn encouraged landlords to increase the rent—earning capacity of their properties, which, in the absence of effective legal control, and in defiance of the efforts of the Council's Officers to direct it on sanitary lines, they proceeded to do by (*a*) subdividing their houses so that each house might accomodate more than one family. This was effected by nailing up communication doors or by erecting partitions, both of which tended greatly to obstruct the lighting and ventilation of the buildings, (*b*) by making obstructive additions to their houses, which further interfered with lighting and ventilation, (*c*) by erecting new buildings upon such open space as remained upon their properties, which still further interfered with the lighting and ventilation not only of their own, but also in many cases of their neighbour's houses as well, and in addition rendered access for scavenging more and more difficult and the problem of drainage more and more complicated.

Thus whole properties, and as time went on whole blocks and eventually whole areas of the town became covered with a medley of irregularly disposed, badly designed, defectively constructed, ill lighted and insufficiently ventilated dwellings, stretching in many cases far back from the public street. In this manner what are now known as the "insanitary areas" or "slums" of Colombo, were gradually created, and it is just in such areas that the mortality from pulmonary diseases, but especially from Phthisis, is always highest. As an illustration of this point two adjoining areas were selected for comparison in 1911 in connection with the prevalence of Phthisis. Area (*a*) comprising Kochchikadde, Brassfounder street, Gintupitiya, Wolfendhal and Siripina lane is a congested insanitary area which has grown up as described above, while area (*b*) which adjoins and comprises Hill street, New Chetty street, Green street and Van Rooyan street is relatively non-congested and sanitary. The population of each of these areas having been obtained from the Census, the number of cases of Phthisis which had occurred in each during the year was as far as possible ascertained, whereupon it was found that whereas the non-congested area (*b*) had had 1·33 cases per 1,000 of its population, the congested area (*a*) had had 4·70 cases or more than 3 times as many in proportion to its population.

This gives some idea of the penalty which nature exacts for breaches of her sanitary laws, and explains why the death-rate from Pulmonary diseases kept rising up till 1909.

1909—1907. Period of improvement—In view of the explanation which has just been given of the gradual rise in the death-rate from Pulmonary diseases, as a sequence to the progressive increase of the population, the question naturally arises as to why, since the population has continued steadily to increase, did the death-rate not also continue to rise? Why on the contrary has it been steadily falling since the last quarter of 1909?

The answer to these questions is to be found in a study of the sanitary records of Colombo, from which it may be concluded that the improvement has taken place as follows.

Although the insanitary conditions in the town had been carefully investigated and are recorded in a Report by a Special Committee of the Municipal Council, as far back as 1898, and although moreover the crude data required for the calculation of the death-rates were available in the Registrar General's Reports on vital statistics, no attempt appears to have been made prior to 1906 to work out and tabulate in comparative form the death-rates from individual diseases in Colombo.

The result of this was that although various large schemes for the general sanitary improvement of the town were recommended, and some of them, such as the Mansergh drainage scheme, were adopted and taken in hand, there was a want of specific knowledge in regard to the relative importance of, and a consequent lack of concentrated effort directed towards the prevention of individual diseases such as Phthisis, although the cost of such special measures was in some cases insignificant compared with the benefits to be derived therefrom. As an illustration of this point it will be found that whereas epidemic diseases such as cholera, smallpox and enteric fever, are frequently referred to in the older reports, Phthisis is seldom or never even mentioned, although as will presently be shown, it was then as it is now the chief cause of deaths in Colombo.

The necessity for ascertaining the exact relative importance of each disease as a cause of deaths, so that the sanitary policy of the Public Health Department might be directed on the most effective lines, having been recognised, the task of calculating and tabulating the death-rates for each of the principal diseases from 1897 onwards was undertaken, and the results were submitted to the Council in a Report No. 383 dated 11th June, 1906.

In that Report attention was for the first time, so far as can be ascertained, directed to the fact that the diseases of the Pulmonary Group, but espicially Phthisis, were the greatest causes of deaths in Colombo.

Following upon this disclosure special measures for the prevention of Phthisis were undertaken by the Public Health Department at the earliest opportunity. Thus in view of the well known fact that deficiency of light and air in dwellings is a powerfully predisposing factor in the causation of Phthisis, an effort was made to improve matters in these respects in the small tenement class of dwellings in the insanitary areas. Although no account was kept of the work done in this connection in 1907, it is recorded that in 1908 no fewer than 3275 skylights, ventilators and smoke vents were provided at the instance of the Public Health Department in tenement dwellings. A further 4468 were provided in 1909, and 2675 in 1910, making the large total of 10,418 during these 3 years alone. This work has been continued up to date, and has had a very considerable effect in improving the lighting and ventilation of these small dwellings, and may therefore fairly be regarded as having been in a measure responsible for the reduction in Pulmonary mortality which was first observed during the last quarter of 1909.

In view of the fact that Phthisis is what is known as a "house disease"—the infection once implanted in a house tending to linger there and attack subsequent occupants, the direct preventive measure of disinfecting every house where a death from Phthisis occurred was undertaken as soon as the necessary staff was available, in July, 1909. During the remainder of that year 195 Phthisis death-houses were thus disinfected, while 257 were similarly dealt with in 1910, 364 in 1911, 419 in 1912, 452 in 1913, and so on up to the present time. This work must have had a powerful effect in preventing the spread, and in reducing the mortality from Phthisis from July, 1909 onwards.

A great deal of information having been gradually accumulated as the result of the enquiries made in connection with these deaths from Phthisis, a special Report (No. 292 of 20th August, 1909) was submitted to the Council in which the various causes of the prevalence of the disease in Colombo were described, and the measures which it was considered were necessary for its prevention were detailed.

Following upon this the Government appointed a Commission in January, 1910, to inquire into and report upon Tuberculous diseases generally in Ceylon, and upon the most effective measures for checking their dissemination. Their report dated 6th June, 1910, endorsed most of the recommendations contained in the report referred to above including (*a*) the introduction of compulsory notification, (*b*) the establishment of a hospital for advanced cases, (*c*) the segregation of the sick from the healthy, (*d*) the establisment of sanatoria, (*e*) the education of the people in matters relating to the prevention of Phthisis, (*f*) the prevention of spitting in public places, and the abolition of coir mats as spittoons, (*g*) the prevention of dust, &c., &c.

In addition the Commission made the important recommendation that an Anti-tuberculosis Dispensary should be established in Colombo, on the lines of the original one which was founded by Sir R. W. Philip in Edinburgh.

As a result of all this investigation and representation the following measures were subsequently adopted, and have without doubt had their share at various stages in reducing the mortality from Pulmonary diseases.

Phthisis was made a compulsory notifiable disease in August, 1910.

Spitting in public conveyances and public places was made a punishable offence by by-law in November, 1910.

The evacuation and closure pending improvement, of houses unfit for habitation was rendered possible by the advent of Plague which automatically brought the Plague Regulations in respect of such buildings into force in January, 1914.

The Anti-tuberculosis Institute was opened in October, 1916.

The Hospital at Ragama for advanced cases of Phthisis was opened in February, 1917.

To sum up therefore, the improvement in the mortality from Pulmonary diseases which has been going on during the period 1909 to 1917 has been due chiefly to the following.

From 1907.—Improvement in the lighting and ventilation of insanitary tenements.

Improvement in the general cleansing and scavenging of the town—especially (since 1909) in the matter of dust prevention. The effect of both of these measures would necessarily be cumulative and take some time to produce any effect upon the death-rate.

From July, 1909.—Disinfection of Phthisis "death-houses". The effect of this measure would be immediate.

From August 1910.—Compulsory notification of Phthisis, followed by visitation, instruction of occupants and adoption of precautions in connection with persons suffering from the disease.

From October, 1916.—Establishment of the Anti-tuberculosis Institute.

From February, 1917.—Establishment of the Hospital at Ragama for advanced cases of Phthisis.

The establishment of the Anti-tuberculosis Institute being of recent date has scarcely had time yet to produce much effect upon the death-rate, bnt it opens a vast field of useful work and is expected to have a powerful effect in reducing the prevalence of and the mortality from Phthisis in Colombo. A complete understanding with a view to co-operation between the Institute and the Public Health Deparment has been arrived at.

Phthisis.—*Deaths* 657. *Rate* 2·55 per 1,000.

To these figures must be added the deaths of 48 residents of Colombo who were removed to and died in the Hospital for advanced cases of Phthisis at Ragama. The corrected figures would then be—*Deaths* 705. *Rate* 2·73 per 1,000 which is the lowest recorded since the year 1900. No other single disease caused so many deaths in Colombo during the year as Phthisis, which has held the premier place as a cause of deaths, for a number of years and therefore merits the title of "The captain of the men of death" which was conferred upon it over 200 years ago in England by John Bunyan.

The mortality from this disease has been steadily falling since 1909, for the reasons stated in the preceding section to which reference is requested.

The following are the death-rates per 1,000 for the various races during 1917. Others (5·02); Malays (3·27); Sinhalese (2·77); Tamils (2·50); Burghers (2·30); Moors (1·78); Europeans (0·55). The chief point of interest in regard to these race rates is the improvement in the case of Mohamedans, especially in the case of Mohamedan women who always have a higher mortality from Phthisis than the males. This is shown by the following comparative statement :—

No. 12.—Death-rate from Pulmonary Diseases in 1909 and 1917. Calculated on Census population 1911.

Race.	MALES. 1909.	1917.	Reduction.	FEMALES. 1909.	1917.	Reduction.
Burghers	7·56	7·51	0·05	9·12	6·89	2·23
Sinhalese	11·49	7·08	4·41	11·23	8·16	3·07
Moors	10·26	3·89	6 37	13·59	5·72	7·89
Malays	9·45	6·70	2·75	15·06	9 89	5·17
All races	11·39	6·19	5·20	11·96	7·69	4·27

The improvement recorded above in the case especially of the Mohamedan females is very encouraging.

Pneumonia.—*Deaths* 654. *Rate* 2·53 per 1,000.

The death-rate during 1917 was lower than in 1916 (3·09) and than the average during the preceding 10 years (3·22). It is probable that a good many of the deaths ascribed to this disease are in reality due to other causes such as Measles which prevailed in epidemic form in 1917.

Bronchitis.—*Deaths* 120. *Rate* 0·47 per 1,000.

Here again it is doubtful whether so many deaths as appear in the returns are really due to Bronchitis. It is probable that a number of deaths which are really due to Phthisis are returned under this heading.

10. Diarrhoeal Diseases.

No. 13.—Diarrhoeal Diseases, 1917. Deaths and death-rate per 1,000 population.

Disease.		All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
Diarrhœa & Enteritis.	Deaths	511	2	29	252	127	70	10	21
	Death-rate	1·98	·55	1·71	2·18	2·03	1·54	1·56	2·85
Dysentry	Deaths	134	1	5	70	35	16	2	5
	Death-rate	·52	·28	·30	·60	·56	·35	·31	·68
All Diarrhoeal	Deaths	645	3	34	322	162	86	12	26
	Death-rate	2·50	·83	2·01	2·78	2·59	1·89	1·87	3·53

Diarrhoeal diseases. Deaths 645. *Rate* 2·50 per 1000.

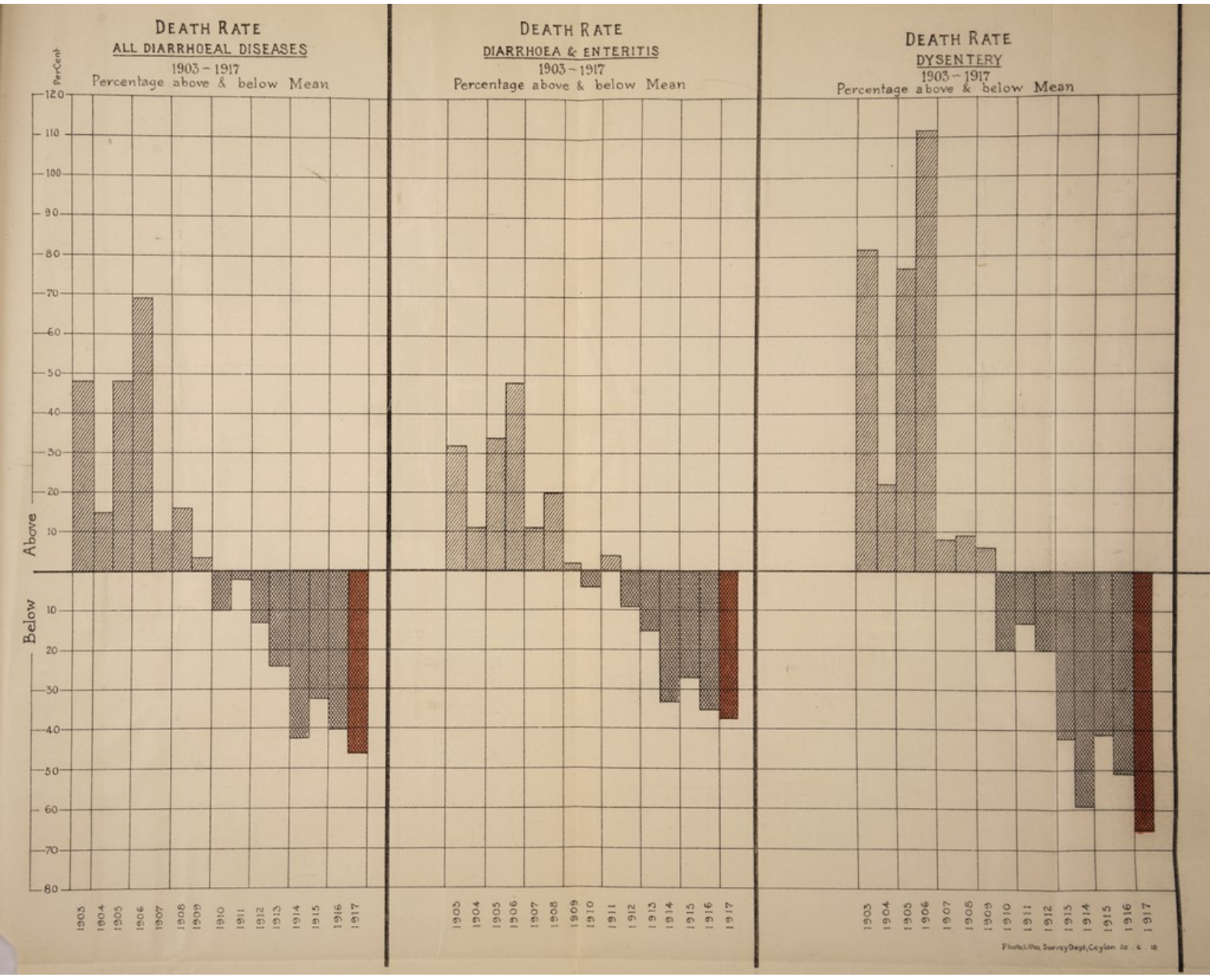
Under this heading are included Diarrhoea and Enteritis with 511 deaths, and Dysentery with 134 deaths. The more specific terms 'Enteritis' is gradually supplanting the term 'diarrhoea' in the death returns.

The diseases in this group are all what are sometimes described aptly as 'filth diseases,' and their mortality therefore affords a valuable indication of the state of the town as regards general cleanliness and scavenging. Judged by this standard Colombo began to improve in cleanliness in 1904; it then had a set back during 1905 and 1906 when there was a rise in mortality all over Ceylon owing apparently to unfavourable meteorological conditions; from 1906 onwards there has been steady improvement.

The remarkable association between the 'diarrhoea' mortality and the state of the town as regards general cleanliness is shown by the following brief histories of the scavenging and cleansing on the one hand, and the 'diarrhoea' mortality on the other hand.

History of scavenging and cleansing.—Prior to 1903 no systematic inspection with a view to the cleansing and scavenging of private premises was carried on. During 1903 and 1904 a system of routine house-to-house inspection was gradually evolved and introduced with the result that there was an undoubtedly great improvement in the state of the town as regards cleanliness of compounds, &c. This work of private scavenging was however much hampered by the very unsatisfactory manner in which the public scavenging at that time was conducted, so much so indeed that one was frequently faced with the remark from householders that it was not much use their putting their rubbish out into the street when it was not removed for days at a time by the town scavengers. At that time the public scavenging was carried on by a system of contract which as the result of two years of strenuous endeavour to make it a success was ultimately demonstrated to the satisfaction of the Council to be a wholly impracticable system of carrying out such work. The Council therefore decided to abandon the contract system in favour of Departmental work, which was accordingly undertaken by the Works Department in 1905. It necessarily took some time to organise this work, but by 1907 it had been placed upon a fairly satisfactory footing and has since then been steadily improved until now it must be patent to every one that the scavenging of Colombo is an exceptionally well conducted public service.

History of mortality from Diarrhoeal Diseases.—The death-rate from diarrhoeal diseases which had been gradually rising since 1899, prior to which statistics are unreliable, suddenly dropped in 1904 coincidently with the improvement in scavenging of private premises referred to above. It however rose during 1905 and 1906, largely it is believed owing to the prevalence of abnormally unfavourable meteorological conditions which affected the mortality all over Ceylon, but partly as the result of a break-down in the contract system of scavenging. It began to fall again in 1907 as the result mainly of the improvement in public scavenging at the hands of the Works Engineer, and it has continued to fall ever since, until in 1917, the record low death-rate of 2·50 was attained.


DEATH RATE
ALL DIARRHOEAL DISEASES
1903 – 1917
Percentage above & below Mean
Per Cent
Above
Below
120
110
100
90
80
70
60
50
40
30
20
10
10
20
30
40
50
60
70
80
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
DEATH RATE
DIARRHOEA & ENTERITIS
1903 – 1917
Percentage above & below Mean
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
DEATH RATE
DYSENTERY
1903 – 1917
Percentage above & below Mean
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
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The following statement shows what has occurred in a striking manner :—

No. 14.—Diarrhoeal Mortality and Scavenging.

	Year.	Diarrhoeal Death-rate.	Rubbish loads removed.	Weight of rubbish tons.	
Rise in Mortality.	1897	4·69	—	—	
	1898	5·26	—	—	
	1899	5·05	—	—	
	1900	6·12	—	—	
	1901	6·55	—	—	
	1902	6·64	—	—	
	1903	6·89	—	—	
Fall	1904	5·32	57035	—	Contract work.
Rise in Ceylon generally.	1905	6·89	—	—	Department work.
	1906	7·85	—	—	
Fall in Mortality.	1907	5·11	101902	—	
	1908	5·40	105557	—	
	1909	4·78	136489	—	
	1910	4·19	169050	—	East Extension.
	1911	4·57	198521	—	Wellawatte Extension.
	1912	4·05	239937	12303	
	1913	3·53	223689	15980	
	1914	2·70	225551	17477	
	1915	3·17	184679	17511	
	1916	2·76	184832	17986	
	1917	2·50	—	—	

Diarrhoea and Enteritis.—*Deaths* 511. *Rate* 1·98 per 1000. This is the lowest rate on record.

Dysentery.—*Deaths* 134. *Rate* 0·52 per 1000. This also constitutes a record low rate.

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11. Fevers.

No. 15.—Fevers 1917. Cases, Deaths, and Rates per 1000 population of each race.

	All races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
Enteric fever.								
Cases	424	7	58	235	45	39	6	34
Case rate	1·64	1·94	3·43	2·03	·72	·86	·94	4·61
Deaths	174	1	12	98	27	18	4	14
Deaths-rate	·67	·28	·71	·84	·43	·40	·63	1·90
Continued fever								
Cases	66	1	11	43	6	3	1	1
Case rate	·26	·28	·65	·37	·10	·07	·15	·14
Deaths	20	—	3	7	4	3	2	1
Death-rate	·08	—	·18	·06	·06	·07	·31	·13
Remittent fever.								
Deaths	44	1	1	16	13	8	2	3
Death-rate	·17	·28	·06	·14	·21	·17	·31	·41
Intermittent fever.								
Deaths	1	—	—	1	—	—	—	—
Death-rate	·004	—	—	·009	—	—	—	—
All fevers.								
Cases	490	8	69	278	51	42	7	35
Case rate	1·90	2·22	4·08	2·40	·82	·93	1·09	4·75
Deaths	239	2	16	122	44	29	8	18
Death-rate	·92	·56	·95	1·05	·70	·64	1·25	2·44

No. 16.—Fevers by Wards 1917. Cases and case rate per 1,000 population.

Disease.	Colombo.	Fort.	Pettah.	San Sebastian	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Wellawatte Extension.	Port.	Outside limits	Untraced.
Entric Fever.															
Cases ...	424	1	6	11	20	84	43	80	28	43	24	26	1	30	27
Cases rate ...	1·64	·24	·64	·81	·69	1·76	1·64	1·56	1·08	1·46	1·87	3·05	—	—	—
Continued Fever.															
Cases ...	66	—	2	—	5	20	—	15	1	11	5	2	—	—	5
Cases rate ...	·26	—	·21	—	·17	42	—	·29	·04	·37	·39	·23	—	—	—
All Fevers.															
Cases ...	490	1	8	11	25	104	43	95	29	54	29	28	1	30	32
Cases rate ...	1·90	·24	·85	·81	·86	2·18	1·64	1·85	1·12	1·83	2·26	3·28	—	—	—

All Fevers.—*Cases* 490; *Deaths* 239; *Death-rate* 0·92 per 1,000. Under this heading are included Enteric fever with 424 cases and 174 deaths; Continued fever with 66 cases and 20 deaths; Remittent fever with 44 deaths; and Intermittent fever with one death.

The death-rate from this group of diseases gradually fell from 3·75 in 1897 to 2·01 in 1905. It then rose to 3·28 during the abnormally unhealthy year of 1906, and as a result, a great deal of Enteric infection was implanted in the town in the shape of 'carriers' and otherwise. Since 1906 it has with two exceptions steadily fallen, the exceptions being the years 1911 and 1916 during each of which there was a slight set back in respect of Enteric fever. Every race has shared in the improvement, and none so strikingly as the Europeans whose rate is however liable to fallacious variations owing to the smallness of the community and their habit of migrating to England. Thus since the War began, although there are no complete statistics available, it is well known that a large number of the young and susceptible males have left Ceylon and this no doubt accounts to some extent for the very marked drop in their mortality from Enteric fever which has occurred during the last three years.

Enteric Fever.—*Cases* 424; *Case-rate* 1·64 per 1,000; *Deaths* 174; *Death-rate* 0·67 per 1,000.

The incidence of Enteric fever in propertion to the population of each race was highest amongst 'Others' (4·61 cases per 1,000); next come Burghers (3·43); then Sinhalese (2·03). Europeans (1·94)—compare which with the European case-rate of 23·5 in 1908.

The case mortality ranged from 14·3 per cent amongst European cases, to 66·6 per cent amongst Malay cases—this latter case mortality strongly indicating non-notification of mild cases.

No. 17.—Enteric cases reported during 1917. (Inclusive of Port and Outside cases). Distribution by races, age and sex.

Race.	Sex.	0 to 5 years	5 to 10 "	10 to 15 "	15 to 20 "	20 to 25 "	25 to 30 "	30 to 35 "	35 to 40 "	40 to 50 "	50 to 60 "	60 years and over.	All Ages.	Total of each race.	Case rate per 1,000 popul.	Deaths.	Case mortality per cent.	Mortality per 1,000 popul.
All races.	M	8	28	35	30	40	30	18	12	21	10	7	239	424	1·64	174	41·0	·67
	F	11	23	28	30	24	21	14	9	10	11	4	185					
Europeans.	M	1	1	1	—	—	—	—	2	—	—	—	5	7	1·94	1	14·3	·28
	F	—	—	1	—	—	—	—	1	—	—	—	2					
Burghers.	M	—	8	8	1	3	5	—	1	3	2	—	31	58	3·43	12	20·7	·71
	F	2	1	5	4	4	4	—	1	1	4	1	27					
Sinhalese.	M	5	17	20	18	14	15	8	6	9	7	4	123	235	2·03	98	41·7	·84
	F	4	18	16	22	12	9	10	5	6	7	3	112					
Tamils ...	M	—	—	3	3	8	4	3	1	2	1	2	27	45	·72	27	60·0	·43
	F	4	—	2	2	2	4	2	1	1	—	—	18					
Moors ...	M	2	2	3	4	1	—	3	2	2	—	1	20	39	·86	18	46·2	·40
	F	1	4	2	1	5	2	1	1	2	—	—	19					
Malays ...	M	—	—	—	—	—	—	—	—	1	—	—	1	6	·94	4	66·6	·63
	F	—	—	2	—	1	2	—	—	—	—	—	5					
Others ...	M	—	—	—	4	14	6	4	—	4	—	—	32	34	4·61	14	41·2	1·90
	F	—	—	—	1	—	—	1	—	—	—	—	2					

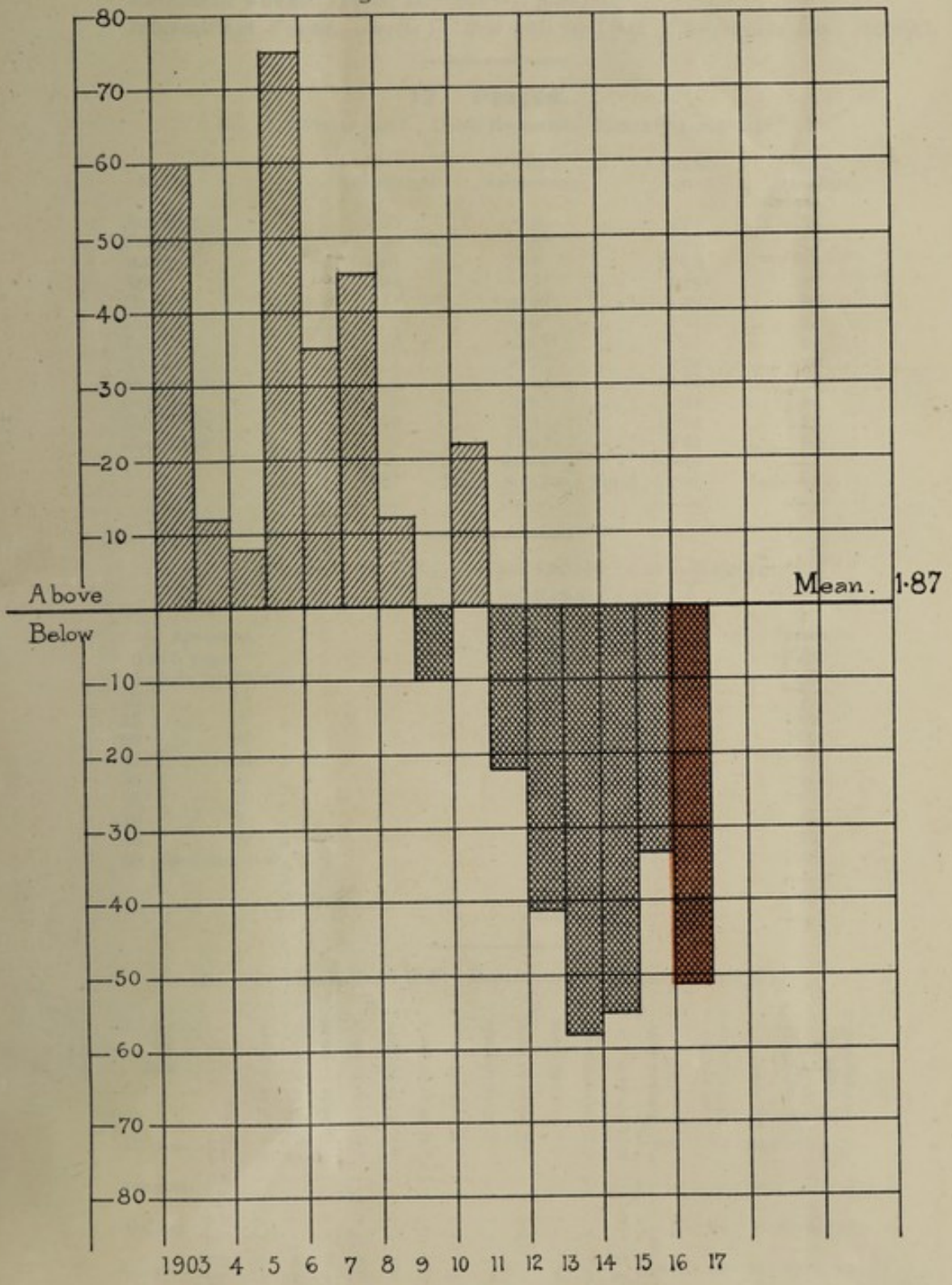
The incidence of cases in the various wards was highest in Wellawatte with 3·05 cases per 1,000 of the ward population; next comes Eastern Extension (1·87); then Kotahena (1·76); New Bazaar (1·64); Maradana (1·56); Kollupitiya (1·46). The lowest rates were in Fort, Pettah, St. Paul's and San Sebastian. The incidence of Enteric was thus highest in the wards in which rural conditions exist to the greatest extent, and where in consequence drainage and disposal of excreta are still in a more or less primitive state, manuring of gardens and grassfield is carried on and flies in consequence abound.

DEATH RATE

1903 – 1917

ALL FEVERS.

Percentage above & below Mean



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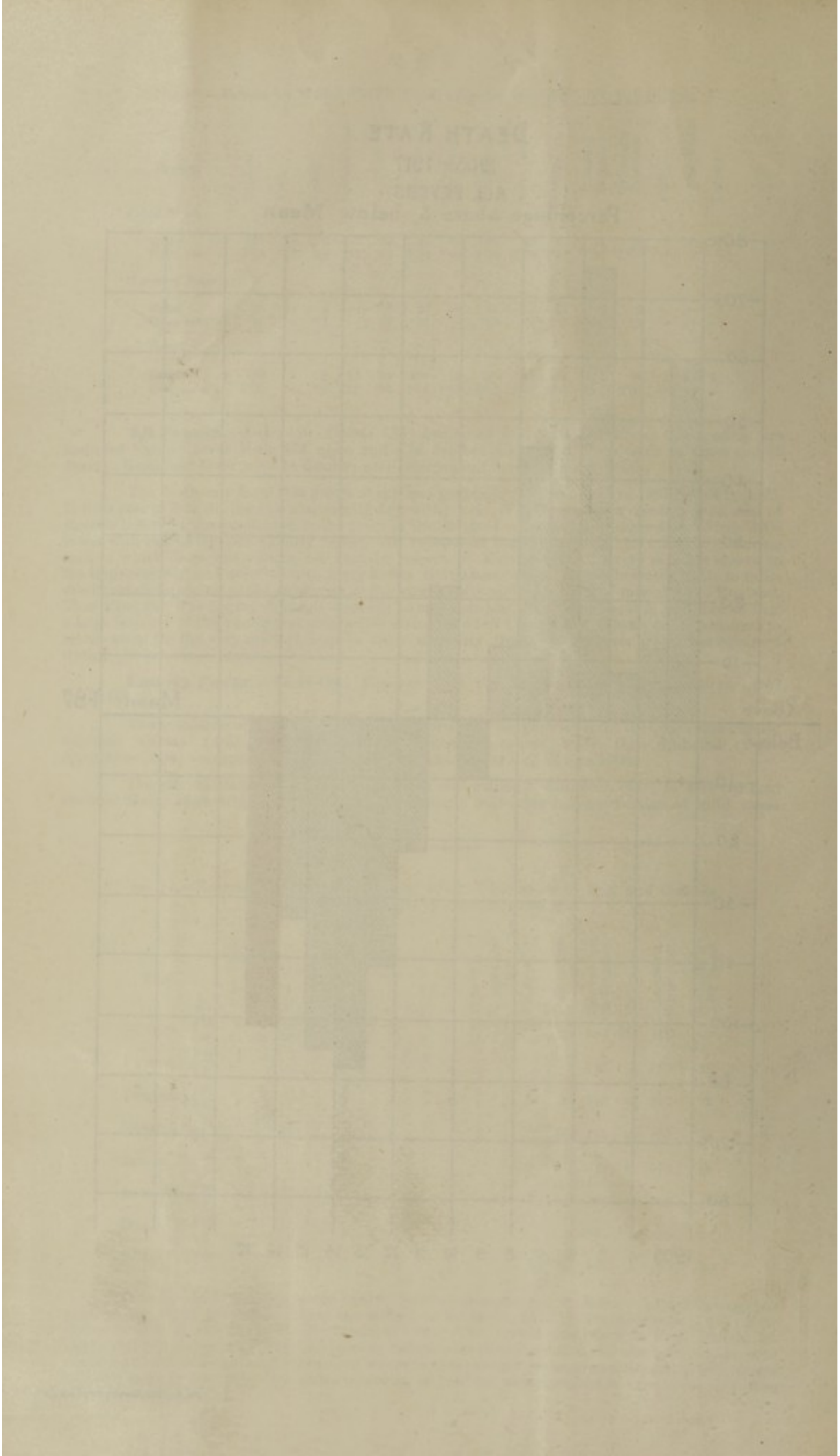


With a view to the prevention of Enteric fever in Colombo, it is essential that not only should the work of connecting latrines to the sewers be pressed on as fast as possible, but also that every other measure which will tend to reduce the prevalence of flies should be adopted. Thus the open storing of manure for garden purposes, and the top-dressing of grass fields with manure and scavenging rubbish in proximity to residential quarters must be rigorously put down, otherwise there is no hope of controlling the fly nuisance with its associated dangers of Enteric, Dysentry, Diarrhoea of infants, &c., and with this object in view the introduction of a By-law was recommended (Report 573 of 7th December, 1917).

Remittent Fever.—*Deaths* 44. *Rate* 0·17 per 1,000.

Intermittent Fever.—*Deaths* 1. *Rate* 0·004 per 1,000. (See remarks under Malaria).

12. Plague.

No. 18.—Plague 1917. Cases Reported. Monthly Incidence.

Month.	Plague cases.	Mean temperature.	Rainfall (inches).	Mean Humidity. %
January	25	78·2°	4·34	75
February	40	78·8°	5·57	79
March	61	79·8°	10·03	82
April	34	82·2°	4·78	82
May	11	82·0°	5·59	80
June	3	81·0°	5·41	84
July	6	81·8°	1·71	80
August	1	81·2°	2·28	80
September	3	79·9°	12·74	83
October	7	79·8°	4·24	80
November	10	79·2°	11·04	82
December	6	77·6°	4·30	80
Total	207	Mean 80·1°	Total 72·03	Mean 81

No. 19.—Plague Cases 1917. Rate per 1,000 living at each age period. Calculated on the population at Census.

Age period.	No. of cases.	Case rate.
0 to 5 years	6	·29
5 years to 10 years	19	·89
10 „ 15 „	19	·77
15 „ 20 „	43	1·80
20 „ 25 „	27	1·00
25 „ 30 „	22	·89
30 „ 35 „	20	1·10
35 „ 40 „	15	1·07
40 „ 50 „	15	·85
50 „ 60 „	7	·65
60 years and over.	14	1·62
All ages	207	·97

No. 20.—Plague Cases 1917. Distribution by Race, Age and Sex.

Race.	Sex.	0 to 5 years.	5 to 10 years.	10 to 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 35 years.	35 to 40 years.	40 to 50 years.	50 to 60 years.	60 years & over.	All Ages.	Total of each race.	Case rate per 1000 population	Deaths.	Case mortality per cent.	Mortality per 1000 population
All races...	M	4	7	13	35	22	18	15	11	12	6	12	155	207	·80	196	94·7	·76
	F	2	12	6	8	5	4	5	4	3	1	2	52					
Europeans.	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—					
Burghers	M	—	—	—	1	—	—	—	—	—	—	—	1	2	·12	2	100·0	·12
	F	—	1	—	—	—	—	—	—	—	—	—	1					
Sinhalese.	M	2	4	8	8	2	2	1	—	4	—	6	37	65	·56	61	93·8	·52
	F	2	4	4	5	5	3	—	2	1	1	1	28					
Tamils ...	M	1	3	3	14	12	10	11	8	4	4	2	72	87	1·39	83	95·4	1·32
	F	—	2	2	2	—	1	3	2	2	—	1	15					
Moors ...	M	1	—	1	10	3	6	3	—	4	2	4	34	40	·88	39	97·5	·86
	F	—	4	—	1	—	—	1	—	—	—	—	6					
Malays ...	M	—	—	—	1	—	—	—	1	—	—	—	2	4	·62	4	100·0	·62
	F	—	1	—	—	—	—	1	—	—	—	—	2					
Others ...	M	—	—	1	1	5	—	—	2	—	—	—	9	9	1·22	7	77·8	·95
	F	—	—	—	—	—	—	—	—	—	—	—	—					
Grand Total ...		6	19	19	43	27	22	20	15	15	7	14	207					

Plague.—*Cases* 207 ; *Case rate* 0·80 : *Deaths* 196 ; *Death-rate* 0·76 per 1,000 ; *Case mortality* 94·7 per cent.

The chief points of interest in regard to Plague during 1917 were as follows :—

There was an unusually large number of cases during the first 3½ months of the year, and the outlook at one time threatened to be serious. Thus whereas the average number of cases during the first 15 weeks of the 3 previous years, was only 5·6 cases per week, the average during the corresponding period in 1917 was 10·3 per week or nearly double.

It was observed that as hitherto, the cases were occurring almost exclusively amongst the occupants of insanitary ranges of tenements, and as the ordinary measures of isolation, segregation, fumigation of rat runs, &c., failed to check the spread of the disease, it was decided to resort to the more drastic measures of evacuation and closure of the worst of these insanitary tenements. Thus, whereas only 33 insanitary dwellings had been closed during the first quarter, 129, mostly in the infected localities, were closed during the second quarter.

The effect of this measure was that as the accompanying diagram very clearly shows, the number of cases of plague suddenly dropped during the 16th week, from being far above the average for the corresponding period of the previous 3 years, to below the average and remained much below during the rest of the year. The result was that the total number of cases for the year was only 207, as against 291 during 1916, and the average of 280 during the 3 years 1914–1916.

This experience confirms the conclusion which had previously been arrived at that *evacuation and closure of insanitary dwellings is by far the quickest and most effective of the measures for the prevention and suppression of Plague, in insanitary areas.*

The effect of evacuation appears to go further than merely the removal of the occupants from immediate danger. It appears very often to have the effect also of stamping out the disease amongst the rats in the locality. The healthy vigorous hungry rats no doubt move into the adjoining occupied areas in search of food, while the Plague rats, on the other hand especially those in the acute and most infectious stages, have no desire for food, are languid, weak and in the later and most infectious stages are even paretic, and in consequence probably remain for the most part in and die in their tunnels or are killed there later by the fumigation. The rat fleas which live and breed in the rat nests being thus deprived of both human and rat hosts perish in a very short time and thus the place becomes plague free. No doubt a certain number of rats in the early stages of the disease, or suffering from chronic Plague, or "carriers" still retain sufficient vitality and interest in food to range away from the evacuated dwellings into the adjoining areas, but the system of establishing a circle of Clayton fumigators around the infected house and working towards it as a centre tends to prevent migrations of this sort.

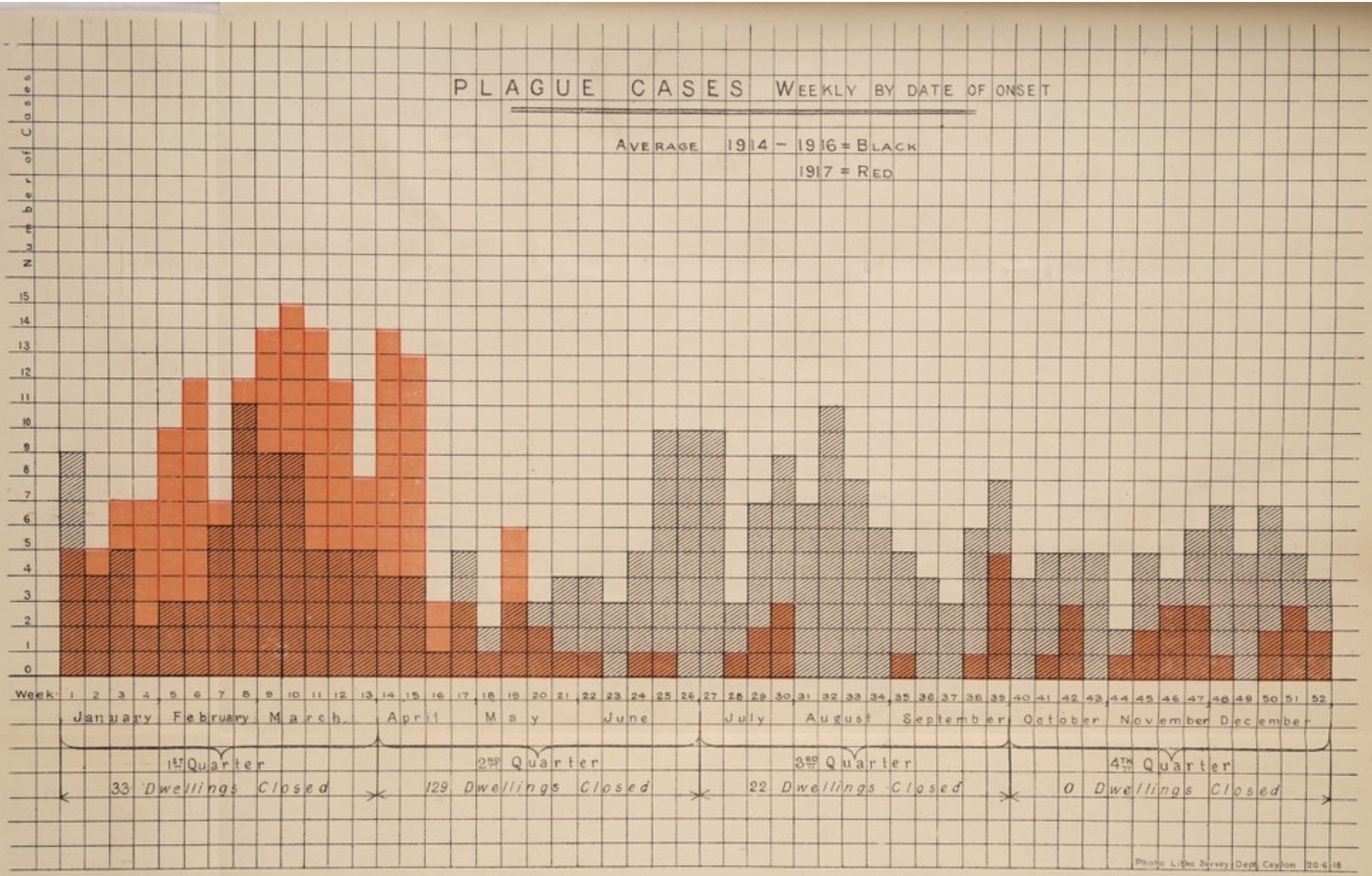
No. 21.—Plague 1917. Distribution by Wards.

Wards.	Cases.	Deaths.
Fort	—	—
Pettah	25	23
San Sebastian	12	10
St. Paul's	30	20
Kotrhena	56	54
New Baxaar	23	22
Maradana	20	19
Slave Island	17	15
Kollupitiya	—	—
Eastward Extension	8	8
Wellawatte Extension	1	1
Vagrants and Unknown	15	15
Total	207	196

Bubonic.	
Cases	83
Deaths	72
Septicaemic.	
Cases	124
Deaths	124
Case Mortality per cent.	
All cases	94·7
Bubonic	86·7
Septicaemic	100·0

Distribution of Plague in 1917.—The sporadic character of the disease is shown by the fact that 199 cases, the home addresses of which were traced, were scattered over no fewer than 73 streets, in 24 of which rat plague was also detected. On the other hand 15 streets in which no human cases occurred were found to be infected by rat plague—making a grand total of 88 infected streets in the town. This wide distribution of infection greatly complicates the problem of dealing with the disease, and shows the necessity for a much larger number of Clayton machines than we at present possess, *viz* :—six, of which only five are in working order. An order has accordingly been passed for a further six Clayton's of the petrol-driven type, those at present in use being all of the old hand-driven type.

Although the distribution of the cases was on the whole essentially sporadic, there were *seven centres* where the disease threatened to assume a more epidemic character. The chief of these was as usual the *Sea Street area*. Thus Sea Street alone had 13 cases, while there were 5 amongst the insanitary tenements in the adjoining Sea Beach Road, 3 in Chekku Street, 5 in Kochikadde, 3 in Wolfendahl, and 3 in St. John's Road, making a total of 32 cases in this area. *A second centre* developed in the *Modera Street area* which was first invaded in December 1915. Only a few scattered cases however occurred during 1916. The first real outbreak began in February 1917 when there was a series of 22 cases in Modera Street alone, mostly in the Rajamalwatte insanitary area. 27 cases in all occurred in this area. *A third centre* developed in the *Grandpass Road area* where a sharp outbreak occurred, mostly in the lanes amongst insanitary tenements. 20 cases in all occurred in this area. *A fourth centre* which at one time threatened to become serious developed amongst the insanitary tenements at *Nagalagam Street*. This outbreak was however promptly and effectually suppressed by evacuation and closure of some ranges of highly insanitary tenements with the result that only 13 cases in all occurred in this area. *A fifth centre* appeared in *Slave Island* where the cases occurred chiefly in the Java Lane, Leechman Lane


PLAGUE CASES WEEKLY BY DATE OF ONSET
AVERAGE 1914 – 1916 = BLACK
1917 = RED
No. of Cases
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
Week 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52
January February March April May June July August September October November December
1st Quarter
33 Dwellings Closed
2nd Quarter
129 Dwellings Closed
3rd Quarter
22 Dwellings Closed
4th Quarter
0 Dwellings Closed
Photo Litho Survey Dept Ceylon 20-6-18

insanitary tenements, but a few scattered cases also occurred amongst the Wekande and Church Street tenements, the total number of cases for this area being 15. *A sixth centre* appeared amongst the old *Dean's Road* insanitary tenements, with a total however of only 9 cases. *A seventh centre* appeared amongst the insanitary tenements at *Silversmith Street*, but this was quickly suppressed, only 6 cases in all occurring.

A feature common to all these infected areas is the existence of ranges of insanitary tenements amongst the occupants of which the cases occur and to which they are almost invariably confined. The Sea Street area alone is somewhat peculiar in that cases tend to recur there year after year not only in insanitary tenements, as for example in Sea Beach Road, but also in houses which are much superior to the average tenement class of house. This is attributed to the fact that within this area there are many retail grain stores, and in addition there are a number of large old underground rain water drains which discharge into the harbour and which in many cases have not only untrapped connections to house drains, but have also been found to be in direct communication with the interiors of the buildings by means of rat tunnels. These old drains are without doubt great highways for rats which cannot thus be got at by means of the Clayton fumigators, and plague appears to have become thoroughly established amongst the rat population there, hence its regular recurrence in this area every year since the disease first appeared. It is therefore essential, if plague is to be stamped out here, that difficult and costly though it may be, this system of old untrapped underground drains should either be abolished or be made rat proof in so far at least as communication with houses is concerned. At present these drains cannot even be fumigated with Cyanide gas or sulphur owing to the free communication which exists between them and the houses.

In this connection the City Sanitation Engineer reported (184 of 14th October, 1915,) that "what is required is a thorough survey of the whole of the affected area so that a scheme could be prepared which would enable redrainage to be undertaken (by combined schemes or otherwise) in the most advantageous and economical manner. Powers to undertake such a comprehensive scheme are provided in the amended drainage ordinance."

Type of Disease.—Of the 207 cases which were recorded during 1917, 124 or 60 per cent were septicaemic, while 83 or 40 per cent were bubonic in character. In view of the statement which has recently appeared in a daily newspaper that the majority of the cases of plague in Colombo are of the Pneumonic tyee—it may be as well to state that this is entirely erroneous. No authenticated case of Pneumonic Plague has ever been recorded in Colombo.

The fatality amongst the septicaemic cases was 100 per cent; while amongst the bubonic cases it was 86·7 per cent, making a total case mortality for the year of 94·7 per cent, which is slightly higher than in 1916. There has thus been no reduction in the virulence of the infection which has, on the contrary, slightly increased each year since the disease appeared in 1914, and it is therefore gratifying that the total number of cases during the year was fewer than in the previous year.

No. 22.—Statement complied from the monthly returns furnished by the Veterinary Surgeon showing rats trapped and found dead during 1917.

Month.	Number of rats trapped.	Number of dead rats found.	Total.
January ...	15,197	16	15,213
February ...	13,435	21	13,456
March ...	14,768	39	14,807
April ...	12,862	13	12,875
May ...	13,634	40	13,674
June ...	13,271	10	13,281
July ...	14,407	23	14,430
August ...	14,340	18	14,358
September ...	13,217	16	13,233
October ...	11,499	22	11,521
November ...	11,593	6	11,599
December ...	12,038	4	12,042
Total ...	160,261	228	160,489

No. 23.—Municipal Bacteriological Laboratory Rat Examinations.

Month.	Total rats examined.	No. found infected.	Percentage infection.
January ...	2,042	6	0·29
February ...	2,252	18	0·80
March ...	2,717	14	0·66
April ...	1,557	5	0·32
May ...	1,787	2	0·11
June ...	1,443	1	0·07
July ...	2,317	2	0·09
August ...	2,185	3	0·14
September ...	1,901	2	0·10
October ...	2,068	4	0·19
November ...	1,815	7	0·39
December ...	1,298	6	0·46
Total ...	23,382	70	0·30

In addition to the above, three domestic cats were found infected.

Rat plague.—Out of a total of 23,382 rats examined for plague, 70 or 0·30 per cent were found to be infected, as against 0·26 per cent in 1916. The highest rates of infection occurred in February and March, and the lowest in May to September. Six domestic cats, all of which were found looking ill in premises known to be plague infected, were examined with the result that 3 were found to be plague infected.

The 73 cases of animal plague recorded during the year came from 39 streets, in 24 of which cases of human plague also occurred. Rat plague occurred in 15 streets where no human cases occurred.

1256 rats were killed by the Clayton fumigators during the year, and 16 mummified rats, which had probably died of plague, were found either within or close to the infected houses. Although infected rats were found in 24 *streets* in which human cases occurred, they were found in only 9 of the actual houses in which human cases occurred.

Preventive measures.—The preventive measures adopted were as usual, removal of the patient to Hospital, segregation of contacts, pesterining floors, unroofing of infected houses to let the sun in, fumigation of rat holes, and, where dangerous outbreaks were threatening, evacuation and closure of insanitary tenements pending the carrying out of the necessary improvements by the owners of the properties.

Thus during 1917, 1699 dwellings were pesterined, 35,262 rat holes in 8285 buildings were fumigated by means of the Clayton machines and filled up with cement, &c., and 196 dwellings where plague had actually occurred were unroofed.

The work of rat capture and poisoning is carried out by the Department of the Veterinary Surgeon to whom I am indebted for the information that 160,261 rats were trapped and 228 were found dead making a total of 160,489 for the year.

13. Intestinal Parasites.

Deaths 112.—Although the species of parasite is not recorded in the death returns, the result of enquiries indicates that most of these deaths are due to round and thread worms, 75 of the deaths having occurred amongst Sinhalese. So many deaths from worms indicates the need for an extension of the free dispensary system where the poorest classes can conveniently get treatment for such minor ailments.

14. Ankylostomiasis.

Deaths 93.—This disease does not, if one may judge by the statistics, appear to be very common in Colombo, many of the deaths which occur being in persons who have come from other cdstricts for treatment. It is not however a notifiable disease in Colombo, as it ought to be, and it is therefore impossible to judge what the actual prevalence here is, or where it exists.

15. Puerperal Septicaemia.

Deaths 80.—So many deaths from this cause shows the necessity for a more extended system of properly trained midwives, and the strict prohibition against untrained women carrying on this work.

16. Malaria.

Deaths 71.—Malarial infection is probably seldom if ever acquired in Colombo. There has so far as is known been no specific instance of this disease having been acquired in Colombo, since the outbreak which occurred at Mutwal in 1904, and which promptly disappeared upon the finding and abolition of the breeding places of Anopheles Culicifacies, chiefly in the Government quarry near the Fishery Harbour.

17. Tetanus.

Deaths 63.—24 or 38 per cent of these deaths were cases of tetanus neonatorum, *i.e.*, they occurred within two weeks of birth as the result of infection through the umbelicus. Here again we see the dirty hand of the untrained midwife.

There has been a noteworthy improvement in the mortality from tetanus during the last 6 years or so, as the following table shows :—

Year.	Tetanus deaths.	Year.	Tetanus deaths.
1903 ...	263 ...	1910 .	191
1904 ...	255 ...	1911 ...	171
1905 ...	203 ...	1912 ...	116
1906 ...	160 ...	1913 ...	85
1907 ...	170 ...	1914 ...	85
1908 ...	174 ...	1915 ...	73
1909 ...	217 ...	1916 ...	59
		1917 ...	63

The establishment of a system of Municipal Midwives in 1905 and the opening of free Municipal Dispensaries with Health Visitors in 1910 have no doubt been in a measure responsible for this improvement.

18. Measles.

Cases 1127. *Deaths* 15.—The number of deaths recorded almost certainly does not truly represent the mortality caused by this disease. A number of the deaths of children under 1 year of age ascribed to Convulsions (404), Pneumonia (137), and Bronchitis (43) were in all probability primarily due to Measles which is credited with having caused only 3 deaths amongst infants.

19. Rabies. (*Hydrophobia*).

Deaths 6.—Six deaths in one year from this dread disease shows the necessity for the stringent measures which have been adopted within the Municipality in regard to stray dogs. It also shows the need which exists for the Pasteur Institute which Government is providing and which it is expected will soon be opened in Colombo.

20. Diphtheria.

Cases 16. *Deaths* 4.—This disease is probably more prevalent in a mild form than the records of either cases or deaths indicate. Of the 16 cases recorded, one was from the Port and one from outside the town.

21. Beri-Beri.

Death 1.—The case recorded was an imported one in the person of a Chinaman from one of the ships in the Harbour. A reference to past records shows that this disease has not up-to-date occurred as an indigenous disease in Ceylon. Since the close of the year under review however a few indigenous cases have been reported from the Lunatic Asylum.

22. Chickenpox.

Cases 1295. *Death* 1.—One death has been ascribed to this disease, the victim being a Moor. As however this disease is practically never a cause of death *per se* it is probable that there was some unrecorded complication which caused the death.

23. Smallpox.

1 case (recovered). This case arrived from India during the incubation period of the disease, having been infected prior to starting.

24. Vaccination.

Ward.	Primary Vaccination.	Revaccination.	Total.
Fort, Galle Face, Pettah and San Sebastian ...	927	456	1383
St. Paul's ...	1104	427	1531
Kotahena ...	894	92	986
New Bazaar ...	738	165	903
Maradana ...	698	14	712
Slave Island ...	676	2	678
Kollupitiya ...	876	68	944
Eastward Extension ..	624	—	624
Itinerating (Colombo) ...	508	51	559
Total ...	7045	1275	8320

Part II. ADMINISTRATION.

25. Sanitary Inspection.

72,406 inspections were made by the Sanitary Inspectors during the year, as the result of which the following sanitary improvements were effected :—

(*a*) **Non-structural improvements.**—*Number of defects found 5,120.*—The defects come chiefly under the heading of "Filthy premises" and include such gross defects as dirty dwellings, collections of garbage and household rubbish generally, in the compounds, dirty latrines, catchpits, drains, &c., unclean bakeries, eating houses, boutiques, dairies, aerated water factories, laundries, &c., nuisances associated with the keeping of animals, nuisances associated with offensive trades and such like.

As the result of personal instruction and warning, and where this failed, then as the result of written notice or prosecution 4,066 of the defects were rectified during the year. For details of prosecutions see statement 43 annexed.

(*b*) **Insanitary Dwellings.**

Structural improvements. Number of defects found 1,534.—The defects fall into two classes (*a*) defects in the premises exclusive of the buildings, *e.g.*, broken drains, lack of drains, lack of paving in compounds, &c., (*b*) defects in buildings, *e.g.*, obstructive buildings, obstructive partitions, obstructive eaves, insufficient door or window space, lack of smoke vents, enclosed verandahs, &c., &c. As the result chiefly of written notices 495 dwellings, and 514 buildings other than dwellings were structurally improved during the year. 184 dwellings (*i.e.* separately assessed tenements) which were so defective and insanitary as to be unfit for human habitation were closed, while 111 which were hopelesly obstructive or otherwise defective, were demolished during the year. The total number of tenements remaining closed at the end of the year was 255, which, if an average of 4 persons per tenement is assumed, represents accommodation for 1,020 persons. It would however, be quite wrong, for the reasons stated below, to deduce from these figures that the work of closing insanitary tenements has resulted in the loss of house accommodation for 1,020 persons during the year. Such an assumption takes no account of the additional accommodation which has been provided during the year by the erection of new buildings. It is a well known fact that badly designed and irregularly disposed buildings, such as the closure notices invariably deal with, not only obstruct lighting and ventilation, but are at the same time far more prodigal of space than are properly designed and methodically arranged buildings. Thus the condemnation of a medley of insanitary tenements frequently results in the erection in their place of ranges of healthy new dwellings the total accommodation of which is much in access of what has been abolished. As a good illustration of this point see the annexed photos of old and new tenements in Gintupitiya Street and Ferry Street. The lesson to be drawn from this is that, so long as condemnation of insanitary dwellings does not go too far ahead of construction of new buildings, there is nothing at all to be gained by putting a stop to this work. On the contrary many of the existing dwellings are so grossly insanitary that nothing can justify their being allowed to remain and occupied by human beings, since they constitute a perpetual danger to the health and life not only of those who reside in them but also to the health and safety of the public at large, as the experience here in connection with such diseases as Plague and Phthisis has demonstrated again and again. It has therefore been urged (53 of 31st January, 1918) that the work of condemnation should be allowed to proceed at the discretion of the sanitary authorities, and that with a view to encouraging private owners and employers of labour to press on with the erection of new buildings, and so facilitate the work of improving insanitary areas, the Municipal Council should take the lead by erecting a sufficient number of model dwellings to accommodate the whole of the labour force employed in their service.

For the details of the improvements effected in each Ward of the town see statement No. 42 annexed.

In addition to the premises referred to above which were condemned or improved, 664 premises including 4,157 tenements were reported as insanitary, and as plans were required before the necessary improvements could be ascertained and indicated, these were asked for from the Works Engineer. Plans were received during the year in respect of 205 premises, 46 of which including 425 tenements were condemned, the improvements required were noted on the plans, and they were then returned to the Works Engineer for action under the Housing and Town Improvement Act.

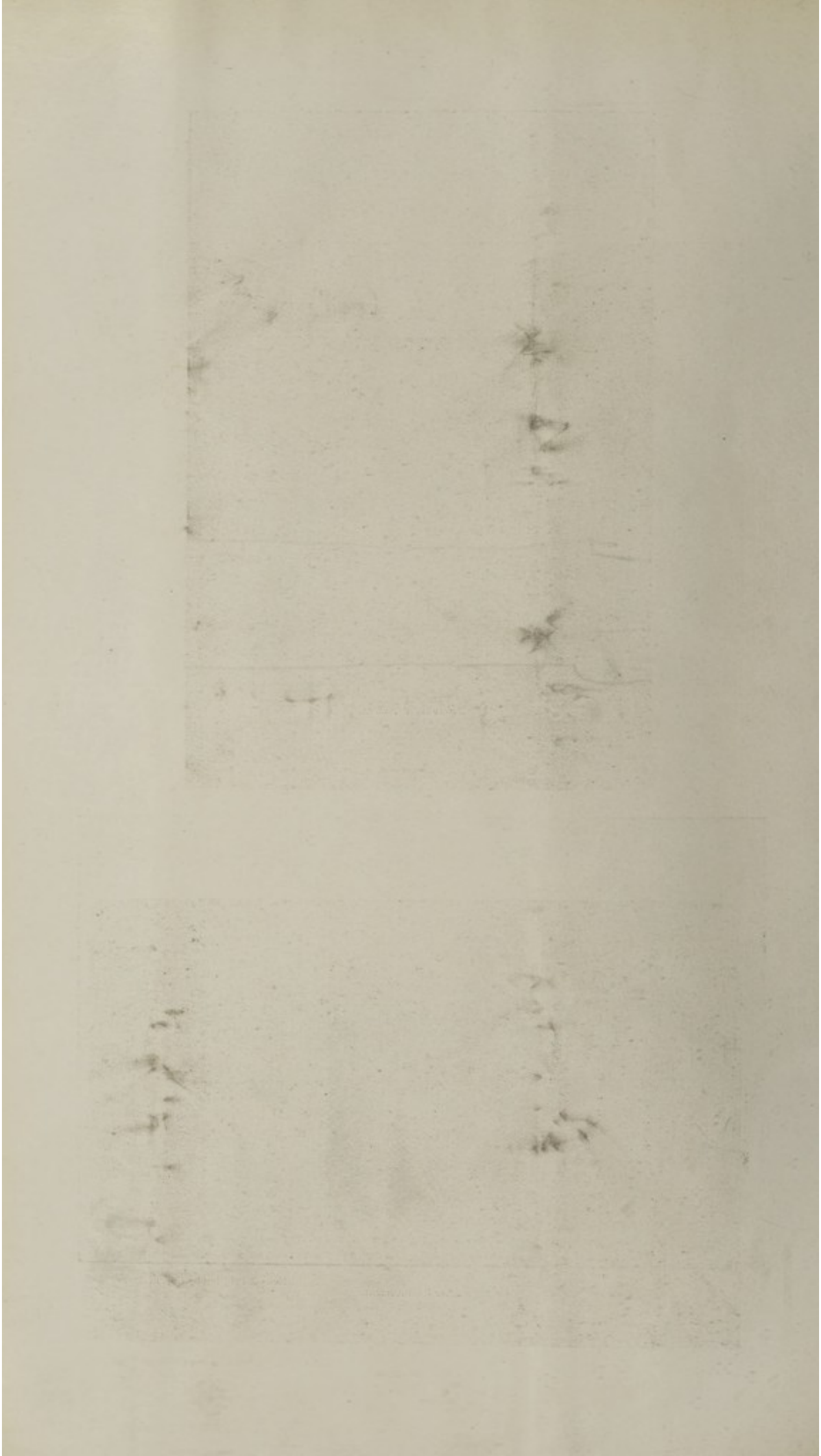
Notices.—2,479 notices were served during the year.

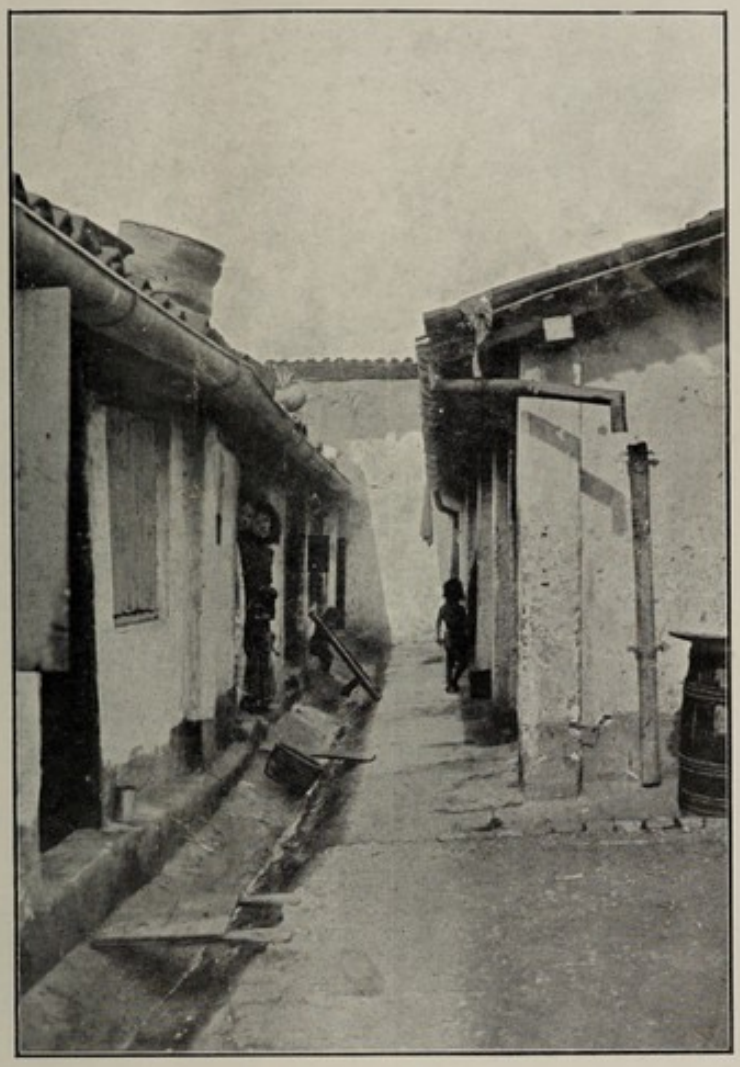
Cleansing and Disinfection.—756 filthy premises were scavenged by the emergency gang kept by the Public Health Department for this purpose, while 2,259 houses were disinfected. 138 loads comprising 6,514 articles were passed through the steam disinfector.

Before Improvement.

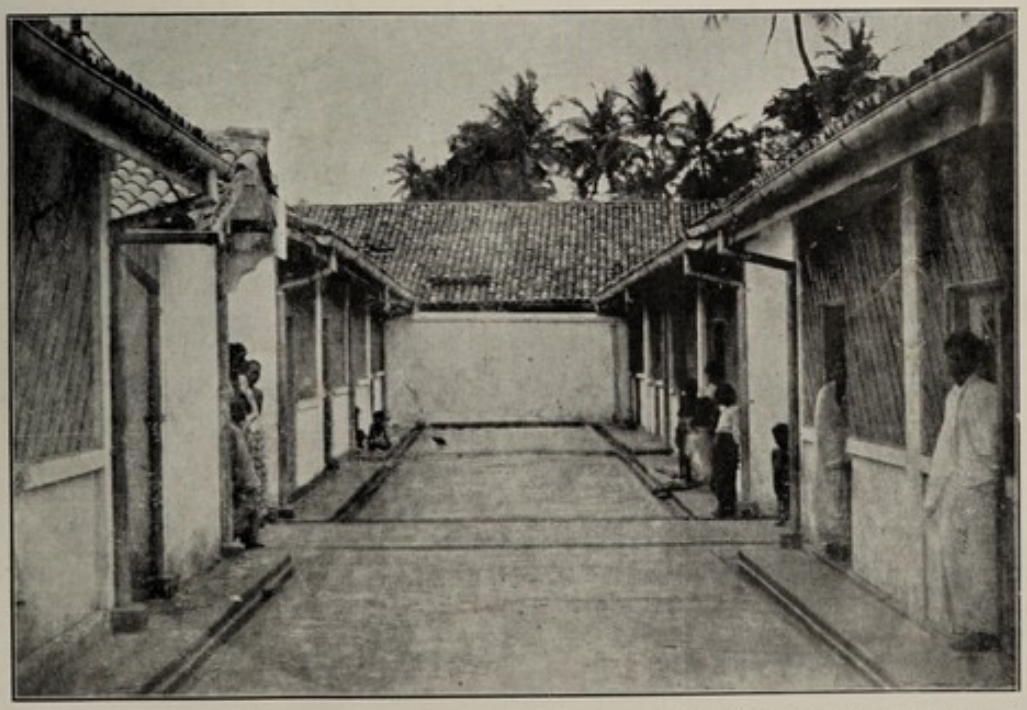
Blocks & Printing by Ceylon Survey Dept.

After Improvement.





Before Improvement.



After Improvement.

Blocks & Printing by Ceylon Survey Dept.

No. 25.—Work done at the Disinfecting Station during, 1917.

	Number of pieces disinfected.	Number of loads.
January	578 ...	12
February	991 ...	21
March	1476 ...	25
April	590 ...	13
May	437 ...	10
June	599 ...	12
July	266 ...	6
August	80 ...	6
September	64 ...	3
October	470 ...	12
November	344 ...	9
December	619 ...	9
	6514	138

Wells.—49 dangerously contaminated wells were filled up.

Cesspits.—14 cesspits were filled up.

Prosecutions.—2,074 cases were instituted, in 1,777 of which convictions were obtained, while 98 were acquitted or withdrawn, and 36 were still pending at the end of the year. The total amount imposed as fines was Rs. 22,307·50. For details see statements 42 and 43 annexed.

No. 26.—Registered Trades, 1917.

	No. on Register at end of previous year.	No. discontinued during the year.	New Regn. during the year.	Total on Reg. at end of year.
Bakeries	44 ...	4 ...	— ...	40
Dairies	41 ...	5 ...	6 ...	42
Eating Houses	321 ...	107 ...	207 ...	421
Laundries	357 ...	157 ...	108 ...	308
Aerated Water factories	16 ...	3 ...	1 ...	14
Opium Divans.	16 ...	16 ...	— ...	—

26. Dairies and Milk supply.

The ordinary cow-men and milk vendors have no sanitary conscience, and constant supervision is therefore necessary in the conduct of dairy operations, otherwise all sorts of abominations are liable to be perpetrated. As the supervision which can be exercised by the Sanitary Officers is necessarily very occasional, it is fortunate that a few of the better classes have within the last year or two taken up the business of owning and personally conducting dairies. They will agree with the opening remarks of this section. It is also fortunate that this work has attracted the interest of the Colombo Ladies League, which had done much to encourage emulation by offering a number of prizes and certificates each year for the best kept dairies.

The sanitary condition of dairies is vastly better now than it used to be but it still leaves much to be desired. The great improvement which has been effected in the matter of adulteration is shown by the following statement :—

Year.	Samples analysed.	Samples adulterated.	Proportion adulterated to number examined.
1907 ...	89 ...	65 ...	73 per cent.
1908 ...	— ...	— ...	—
1909 ...	592 ...	317 ...	53 „ „
1910 ...	1026 ...	243 ...	24 „ „
1911 ...	1100 ...	182 ...	16 „ „
1912 ...	1200 ...	150 ...	12 „ „
1913 ...	571 ...	57 ...	10 „ „
1914 ...	405 ...	49 ...	12 „ „
1915 ...	518 ...	80 ...	15 „ „
1916 ...	473 ...	64 ...	13 „ „
1917 ...	457 ...	75 ...	16 „ „

As the foregoing shows, adulteration having been reduced from 73 per cent of the samples examined in 1907, to 10 per cent in 1913 has since then increased to 16 per cent in 1917. This change for the worse coincides with the advent of plague, since when it has been impossible for the Sanitary Officers to devote so much attention to this work as previously. The remedy is more frequent sampling and heavier penalties, and this course will be adopted in so far as these matters are within the powers of this Department.

6 new dairies were registered during the year, and 5 of the old ones were discontinued, leaving a total of 42 on the register at the end of the year. 5 prosecutions were entered for carrying on unlicensed dairies, 73 for sale of adulterated milk, 4 for refusing samples to be taken, and 103 for vending milk without a license.

27. Bakeries.

The condition of the bakeries during the year was on the whole satisfactory, but much difficulty is experienced in securing compliance with the rule that the workmen shall wear clean aprons and caps, and shall keep their hands and nails clean. To engage in the mixing and kneading of dough with dirty hands or nails is an unpardonable offence. No new bakeries were registered during the year, but 4 were discontinued, leaving a total of 40 on the register at the end of the year.

As in the case of dairies a great deal has been done by the Colombo Ladies' League to encourage emulation amongst the bakers by offering prizes and certificates, and I take this opportunity of acknowledging and recording the valuable assistance which has thereby been rendered in what is a very difficult and often a very disheartening task. The thanks not only of the Public Health Department but of the whole community are due to these ladies who at much personal inconvenience pay periodical visits of inspection to all the dairies and bakeries which have been entered for competition.

28. Eating Houses.

207 new eating houses were registered during the year, while 107 of the previously registered ones were discontinued, leaving a total of 421 upon the register at the end of the year. As these figures indicate new eating houses are constantly springing up and old ones vanishing, with the result that it is difficult to keep a correct record of them. They are for the most part very simple and indeed primitive in their arrangements, as one cannot set the standard too high in regard to the quality of the accommodation, furnishing, &c., without entailing an undue limitation in the number of these essential establishments. The manner in which they are conducted and their general sanitary condition has however been greatly improved, and there are now a number of really well furnished and very well conducted eating houses or restaurants in the City.

29. Laundries.

108 new laundries were registered during the year while 157 which had been previously registered were discontinued, leaving a total of 308 on the register at the end of the year. As these figures indicate, laundry houses like eating houses, are constantly springing up and disappearing all over the town, with the result that it is a most difficult trade to supervise, or to keep a correct register of. This is due to the fact that laundry work, as conducted here, requires practically no stock-in-trade, and can be started practically anywhere, at a moment's notice, all that the laundryman requires being water, soap, a washing stone, a heating iron, a table, and an utter disregard for the rapid destruction of one's most cherished linen. The sanitary requirements, although also quite simple, are less easy to attain, *viz:*—clean water, separate accommodation for clean linen, soiled linen, and domestic purposes, paved floors and cement faced walls in the linen rooms so that bugs and other vermin may not find these places too convenient and secure a refuge from which to sally forth and torment and possibly convey disease to the dhoby's customers.

The question of improving laundry work in Colombo has been engaging attention for many years past, but it is full of difficulties. It is recognised that to allow washing of clothes in such places as the Lake,* in the stagnant water of swamps and such like, is grossly insanitary, and with a view to prohibition of this, proposals have been submitted for the establishment in various localities of Municipal washing places with clean pipe water, linen stores, dhobies' dwellings and drying grounds. The difficulty of securing the necessary ground in suitable places is great, and the cost of carrying out such scheme is considerable, but, for public health and other reasons the time has come when the old order must be abolished and new methods must be adopted, and it is hoped that it will be possible to record some substantial progress in these matters in the next Annual Report.

30. Offensive Trades.

None of the offensive trades such as plumbago curing, copra storing, manure storing, &c., which are enumerated in Section 212 of Ordinance 6 of 1910, and in a by-law published on 3rd March, 1916, may be established in Colombo without a license from the Chairman. The principle which has been followed in the past in regard to the granting of such licenses, has been to restrict, so far as possible, the issue of license to places where, under the conditions *existing at the time*, the trade would not be likely to be a source of nuisance to the residents in the locality. This policy served its purpose fairly well for a time but, as the town continued to develop, many of these approved sites have since ceased to be suitable, and the problem of dealing with such cases and of deciding in regard to new licenses has become more and more difficult, until it is now felt that the time has come when the adoption of a new policy is absolutely necessary in the interests both of the householders and of the tradesmen. The interests of the public health demand that the residents of the town shall be protected against nuisance, while, in the interests of legitimate trade and as a matter of equity, where licenses have already been granted, the tradesmen should be granted reasonable facilities for the establishment of, and should be secured against undue disturbance in the carrying on of these trades. With a view to bringing this matter to a head the whole question of offensive trades was gone into at length in a report (No. 459) which was submitted on 25th September, 1917, in which it was represented that the only satisfactory way of dealing with this problem was for the Council to take advantage of the powers granted by Section 27 of Ordinance 19 of 1915, and to reserve and declare by-law a number of areas within the town for the purposes of establishing offensive trades therein. Areas suitable for the establishment of the various trades were indicated, and the manner in which the new policy which it is thought should be introduced was outlined.

As the present discretionary method of granting license is most unsatisfactory, and if continued, will, it is feared, result in much trouble, and possibly great expenditure in the future, it is urged that the matter be considered at the earliest opportunity and that a definite policy be adopted for the guidance of the executive officers of the Council on the one hand and of the tradesmen concerned on the other hand.

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* N.B.—Over 300 dhobies, including servants, were found carrying on washing of clothes in the Lake during 1917.

31. Cemeteries.

One of the curious anomalies of the Municipal Service is that the administrative control of cemeteries is vested in the Medical Officer of Health. In a review of the administration of cemeteries (No. 3 of 5th January, 1916) it has already been suggested that they should properly be regarded as gardens or parks, and like these would be more fittingly administered by the Works Engineer, who already controls all public gardens and parks, for which purpose he has at his disposal a staff of trained gardeners, &c. The present arrangement is a relict of bygone days when the proper functions and scope of the Sanitary Department do not appear to have been realised, and when in consequence it was regarded as a convenient organisation for the carrying out of all sorts of odd jobs, some of which had no connection with sanitation. As the transfer of control referred to above has not yet been sanctioned, it is urged that the time and attention of the Public Health Department should be devoted entirely to safeguarding the health of the peoples' bodies while they are alive, and should not be distracted by having to attend also to their resting places when they are dead.

There are 3 general cemeteries in Colombo, *viz* :—Kanatte, Madampitiya and Liveramentu. As has previously been pointed out the ground available for burial in Kanatte Cemetery is becoming so limited that it would be well to set about securing further space elsewhere. With the object of relieving temporarily the demand made upon this cemetery, and at the same time of effecting a very desirable improvement in a rapidly growing residential quarter of the town, the improvement of the long neglected cemetery of Liveramentu was undertaken by this Department during the year. Good progress was made as the result of a small expenditure of Rs. 800, and the Council has since sanctioned the expenditure during 1918 of a further sum of Rs. 2285 on this work, including the provision of a water supply for gardening purposes.

The work is being carried out departmentally under the Cemetery-keeper Mr. A. B. Brohier, with the skilled advice of Mr. E. G. LaBrooy who has done so much to improve the Madampitiya Cemetery, and it is hoped that before the end of the year Liveramentu will have been converted from a snake infested jungle into a pleasant garden.

32. Markets.

There are two types of market in Colombo, *viz* :—Public Markets, built and owned by the Municipal Council, the stalls in which are let or leased ; and private markets, represented for the most part by roadside shops or boutiques. In one or two instances private markets on a larger scale, providing accomodation for a number of traders have been established, *e. g.*, the private vegetable and fish markets at Nagalagam, the private vegetable market at Borella and the private fish market at Slave Island.

While the public markets leave much to be desired, and require for the most part complete rearrangement and *re* construction on up-to-date lines, the private markets, but especially the roadside boutiques in which meat and fish are sold, are infinitely worse. They are in fact without exception, primitive, grossly insanitary and a constantly recurring source of public nuisance. A definite policy in regard to the market service of the town being urgently required, the whole question was gone into and a number of proposals were submitted (425 of 1st September, 1917,) for the establishment of a series of public markets throughout the town to serve the needs of the population.

The expenditure which will be involved in the acquisition of the necessary land, and in the erection of buildings, will necessarily be considerable ; but the longer action is delayed the greater will the cost of the land become, and the more difficult will it be to secure sites in suitable centres. It has therefore been recommended that a definite policy be adopted of acquiring suitable sites in the various centres indicated, so that when funds permit, public markets may be established, and the insanitary roadside meat, fish and vegetable boutiques be then abolished.

33. Slaughter-house.

No. 27.—Slaughter-house.

Number of	cattle slaughtered	24,892
„ „	sheep and goats slaughtered	67,235
„ „	pigs slaughtered	3,122
„ „	cattle rejected before slaughter	223
„ „	cattle rejected owing to poor condition	200
„ „	sheep and goats rejected	41
„ „	cattle rejected after slaughter	58½
„ „	pigs rejected after slaughter	1

No slaughter of animals for food, is allowed except in the Municipal Slaughter-house at Welikade, unless a special license is obtained for private slaughter.

A considerable number of applications for private slaughter in connection with religious ceremonies are received annually and they are generally allowed.

The cruel method of slaughter by cutting the animal's throat without previous stunning, is adhered to by the Mohamedan butchers on religious grounds and has for that reason been allowed to continue. An attempt was made some years ago and was at the request of the Society for Prevention of Cruelty to Animals renewed during 1917, to induce the Sinhalese butchers to stun the animals before bleeding, by using the Humane Cattle Killer—(a species of gun,) but without success, the butchers refusing to use it on the mercenary grounds that it damaged the brains of the animals and made them unmarketable. If stunning is to be introduced here it must be made compulsory by law, but there are almost insuperable difficulties in the way of introducing this, even in the case of animals the flesh of which is destined for the use of non-Mohamedans.

The Public Slaughter-house is merely a paved shed, open all round, in which animals are slaughtered within sight of each other, and corresponds therefore to the Slaughter-house system which has been adopted on the continent. This has been objected to on humanitarian grounds, and the adoption of a system of 'separate slaughter' has been advocated by some people. There are however, arguments both for and against each system, and in the writer's opinion the balance is, on sanitary grounds, distinctly in favour of the Hall system

The Slaughter-house is accessible to crows which infest the place and foul the meat. Crow proofing by means of wire netting should be carried out as has previously been recommended.

Cattle and pigs are reared in Ceylon but practically all the sheep are imported from India. As the result of war conditions there was an increase compared with 1913 of 3,958 cattle (including buffaloes,) and 2,342 pigs, and a decrease of 9,890 sheep slaughtered during 1917.

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34. Food Supplies.

As the result of enquiries which were made in all the Wards of the town at the middle of the year (307 of 20th June, 1917,) the following increases and decreases in the price of food stuffs compared with pre-war prices were disclosed.

No. 28.—Rise and fall in the price of food stuffs compared with 1913.

*Red onions	Increase.	146·0	per cent.
*Sugar	do	61·6	do
*Potatoes	do	50·0	do
*Tinned Milk	do	36·8	do
*Mutton	do	34·3	do
*Dry-fish	do	33·8	do
*Flour	do	30·0	do
*Maldive Fish	do	24·3	do
Bread	do	15·4	do
*Bombay onions	do	15·3	do
*White rice	do	14·8	do
Milk (fresh)	no change	—	—
Fish (fresh)	do	—	—
Coconuts	decrease.	44·4	per cent.
*Muttu samba rice	do	10·5	do
*Rice, other grades	do	6·5 to 8·8	do
Beef	do	5·0	do
Chillies	do	4·4	do

The articles marked with an asterisk are imported.

Food inspection is carried on with difficulty in Colombo owing to the lack of a special staff for that purpose. It is comparatively easy to detect unsound food in the public markets where whole ranges of stalls can be inspected in a few minutes, but it is very different when one has to deal with scores of small boutiques scattered all over the 100 miles of streets in the town. It is therefore not surprising that the quantity of unsound food seized is compartively small and does not accurately represent the true state of affairs here as regards the sale of unsound food.

A considerable amount of difficulty is experienced in inspecting damaged rice imported through the Customs, as this task has to be carried out by the Pettah Ward Inspector in addition to his multifarious other sanitary duties.

No. 29.—Damaged food stuffs condemned, 1917.

Beef	60¾	lbs.	
Fish	6¼	,,	
Dry-fish	31½	,,	
Sausage	5	,,	
Sweets	½	,,	
Tinned Fish	76	,,	
Potatoes	50	,,	and 20 bags.
Rice	63	bags.	
Flour	3½	,,	
Dhal	4½	,,	
Green peas	4	,,	

At Customs.

Onions	134	bags.	and 3 cwts.
Dry-fish	23	,,	
Rice	457¾	,,	
Potatoes	196	lbs.	

At Chalmer's Granaries

Rice	158½	bags.	

35. Vagrancy and Offences due to want.

An investigation was held in regard to whether, as the result of war conditions, there was any considerable amount of unemployment in the town. If so what classes of labour were affected, and whether it was accompanied by real distress. The conclusion arrived at (582 of 13th December, 1917), was, that owing to reduction in the amount of work available, considerable numbers of people had been thrown out of employment for a time. Most of them had however found other jobs, but were only partially employed, *i.e.*, on only 2 or 3 days a week instead of every day, and that in consequence a good many families were living in straightened circumstances, although not in actual want. The classes chiefly affected were lower grade clerks, masons, builders, mechanics, and plumbago workers, and of these the lower grade clerks were hardest hit owing to the limited sphere of the employment which they are capable of undertaking, or are willing to engage in. There did not appear to be any greater prevalence of real distress, *i.e.*, actual starvation, than during normal times, but it appeared probable that this would soon appear unless steps were taken to provide more employment.

36. House drainage. Public Latrines and Bathing Places.

The slowness, for unavoidable reasons, of the progress which has been and is being made in the matter of connecting house latrines to the sewers, and the abolition of the insanitary, fly-breeding, disease-spreading dry-earth privies may be judged from the fact disclosed in the City Sanitation Engineer's reports, that up to the end of 1917 only 3,496 water closets had been installed in the town, thus enabling only 2,912 dry-earth privies to be removed.

A more satisfactory feature is the establishment up to the end of the year, of a total of 28 public latrines throughout the town, with seating or rather squatting accommodation for 430 persons. In conjuction with a number of these latrines, bathing accommodation is provided with places for a total for the town of 198 persons. The principle has now been adopted of building a greater number of small public latrines in different parts of the town, as it was considered that this would meet the public needs and convenience better than having a smaller number of large latrines.

37. Mosquito and Fly Prevention.

With a staff of only 1 Sub-Inspector, 6 Overseers and 12 Coolies, for both mosquito and fly work throughout the whole town, it is obviously not possible to do much towards prevention of either, especially in the absence of legislation making the householder and the owner of the property responsible for preventing the breeding of mosquitos or flies on their premises. As everyone knows, the average householder will do practically nothing in sanitary matters unless he is required to do so by law. The very fact that there is no specific law on any particular subject induces those who have not had the necessary scientific teaching to enlighten them, to believe that any attempt on the part of officials to enforce preventive measures is merely an unwarrantable and vexatious interference with their liberties, which they are liable to resent accordingly.

Notwithstanding the smallness of the staff and the lack of specific powers for dealing with insect pest nuisances, a good deal of useful work was done during the year, including practical demonstration to householders of mosquito breeding in their premises.

Thus 3,319 premises were inspected in connection with mosquito breeding with the result that 155,791 'potential' and 4,863 'actual' breeding places were discovered and abolished during the year. By 'potential' breeding place is meant any receptacle or place which is capable of holding water and which is either found with water in it or is in such a situation that water—rain or otherwise—could gain access to it; but which at the time of inspection had no mosquito larvae in it. By 'actual' breeding places are meant all collections of water in which mosquito larvae were actually found at the time of inspection.

It is unfortunate for the safety and comfort of the inhabitants of Colombo that the very practical recommendations which were submitted 4 years ago by Major James, I.M.S., after a year's work in connection with mosquitos in Colombo, have not yet been given effect to, even in the simple matter of making it a punishable offence for householders or owners of property to permit the breeding of mosquitos on their premises.

The special work in connection with the prevention of fly-breeding consist chiefly of an attempt to prevent (*a*) the open storing of manure for gardening purposes (*b*) the topdressing, with dung and other filth, of grassfields in proximity to residential quarters, (*c*) the location and abolition of special breeding places.

No. 30.—Anti-Mosquito Work.

(*a*) *Complaints from householders.*			
Number of complaints received	...	...	45
Number of premises visited	...	...	366
Number of potential breeding places found	..	...	24373
Number of actual breeding places	...	...	1287
(*b*) *General inspection work.*			
Number of premises inspected	...	...	2,953
Number of tenements inspected	...	...	2,460
Number of potential breeding places	...	...	131,418
Number of actual breeding places	...	...	3,576
(*c*) *Summary.*			
Number of premises inspected	...	...	3,319
Number of tenements inspected	...	...	2,460
Number of potential breeding places	...	...	155,791
Number of actual breeding places	...	...	4,863

38. Bacteriological Laboratory.

During the absence of the Bacteriologist Dr. Hirst, on War Service, ths routine work of the Laboratory was carried on by Mr. C. A. Woutersz the Laboratory Assistant, under the supervision of Dr. Aserappa acting as Bacteriologist in addition to his own duties as Chief Assistant Medical Officer of Health.

The following statement shows the work carried out during the year :—

No. 31.—Work done at the Municipal Bacteriological Laboratory during 1917.

Specimens of blood sent by Medical Practitioners	...	57
„ „ from the Enteric Hospital and Municipal Dispensaries	...	58
„ „ sent by Public Health Department	...	427
Specimens of urine and fæces sent by Medical Practitioners	...	12
„ „ „ „ sent by Public Health Department	...	14
Throat swabs sent by Medical Practitioners	...	10
Specimens of sputum sent by Medical Practitioners	...	34
„ „ „ Public Health Department	...	9
Spleens from suspected plague cases	...	184
Brains of dogs	...	4
Animals' ears	...	1245
Total	...	2054

		Samples received.		Separate tests applied.
Town water analyses	...	156	...	1,178
Specimens of blood, sputa, spleens, etc.	...	2,054	...	2,623
Rat examinations	..	23,382	...	46,764
Total	...	25,592		50,565

39. Chemical Analyses.

The following statement shows the work done in this connection during the year :—

No. 32.—Analyses made by the City Analyst during 1917.

Nature of samples sent to Analyst.		No. of samples.		No. condemned.		No. passed.
Town water	...	168	...	—	...	168
Well water	...	38	...	28	...	6*
Milk	...	457	...	75	...	382
Sweets	...	1	...	—	...	1
Tea	...	4	...	3	...	1
Ghee	...	3	...	—	...	3
Tallow	...	1	...	—	...	1
Total	...	672		106		562

* Two well water samples were returned as suspicious and the reports of two other samples are pending.

40. Municipal Free Dispensaries.

Slave Island.—This Dispensary was removed on 1st June, from No. 51, Church street to No. 44, Union Place.

The following is a summary of the work carried out during the year :—

No. 33.—Statement of work done at the Slave Island Dispensary during 1917.

Medical Officer.

Number of patients treated	...	17,360
„ visits by patients	...	34,080
Daily average attendance	...	109·23
Number of Municipal employees treated	...	123
„ outdoor visits paid by the Medical Officer	...	318
„ confinement cases visited by the Medical Officer	...	58

Health Visitors.

Number of visits paid to houses	...	10,610
„ houses where instructions *re* infant feeding were given		1,969
„ visits to hand fed children	...	601
„ labour cases visited	...	41
„ dispensary tickets issued	...	9

34.—St. Paul's Dispensary. Summary of work carried out :—

Medical Officer.

Number of patients treated	...	8,517
„ visits by patients	...	12,754
Daily average attendance	...	34·9
Number of outdoor visits paid by Medical Officer	...	166
„ confinements visited by the Medical Officer	...	103

Health Visitors.

Number of visits paid to houses	...	28,241
„ houses where instruction *re* infant feeding were given		1,538
„ visits to hand fed children	...	1,174
„ labour cases visited	...	114
„ dispensary tickets issued	...	59

Municipal Midwives.

There are 7 of these women employed and the following is a summary of the work done during the year :—

No. 35.—Work done by Midwives during 1917.

Number of confinements attended	..	662
„ children born	...	671
„ still births	...	40
„ deaths within two weeks	...	13
Death-rate exclusive of still births	...	1·92%

41. Enteric Hospital.

No. 36.—Enteric Hospital.

Number of patients remaining from previous year	...	2
„ admissions during the year	...	62
„ patients discharged cured	...	48
„ died	...	12
Case mortality per cent	...	18·7%

A fire, started by a bottle lamp, occurred on 26th October, and resulted in the total destruction of Ward No. 3, which was being used as quarters for the attendants. No harm was done to the patients in the other Wards.

I am, &c.,

WM. MARSHALL PHILIP,
Medical Officer of Health.

MALIGAKANDE,
Colombo, 5th March, 1918.

No. 37.—(*a*) Average monthly mean temperature at Colombo Observatory, (C. G.)

Years.	Jan. °	Feb. °	Mar. °	April. °	May. °	June. °	July. °	Aug. °	Sept. °	Oct. °	Nov. °	Dec. °	Year. °
10	78·9	79·9	81·4	82·7	82·6	81·6	81·0	81·2	81·0	80·1	79·5	78·9	80·7

(*b*) Monthly mean temperature at Colombo Observatory during 1917.

Year.	Jan. °	Feb. °	Mar. °	April. °	May. °	June. °	July. °	Aug. °	Sept. °	Oct. °	Nov. °	Dec. °	Year. °
1917	78·2	78·8	79·8	82·2	82·0	81·0	81·8	81·2	79·9	79·8	79·2	77·6	80·1

(*c*) Average monthly mean pressure at Colombo Observatory, (C. G.) altitude 24 feet above mean sea level.

Years.	Jan. in.	Feb. in.	Mar. in.	April. in.	May. in.	June. in.	July. in.	Aug. in.	Sept. in.	Oct. in.	Nov. in.	Dec. in.	Year. in.
8-9	29·915	29·894	29·883	29·852	29·832	29·826	29·841	29·848	29·860	29·875	29·874	29·890	29·866

(*d*) Monthly mean pressure at Colombo Observatory during 1917.

Year.	Jan. in.	Feb. in.	Mar. in.	April. in.	May. in.	June. in.	July. in.	Aug. in.	Sept. in.	Oct. in.	Nov. in.	Dec. in.	Year. in.
1917	29·908	29·879	29·857	29·830	29·850	29·816	29·816	29·828	29·838	29·857	29·874	29·866	29·852

(*e*) Average monthly rainfall at Colombo Observatory (C. G.) and Colombo Fort.

Station.	Years.	Jan. in.	Feb. in.	Mar. in.	April. in.	May. in.	June. in.	July. in.	Aug. in.	Sept. in.	Oct. in.	Nov. in.	Dec. in.	Year. in.
Col: Observatory ...	10	3·09	2·15	4·44	7·44	12·55	7·90	6·60	2·68	4·89	13·28	11·52	4·29	80·83
Colombo Fort ...	40	3·32	2·00	4·45	9·74	10·93	7·40	4·59	3·26	4·70	13·72	11·83	5·13	81·07

(*f*) Monthly rainfall at Colombo Observatory, Cinnamon Gardens and Colombo Fort, during 1917. Observatory gauge 25 feet and Fort 70 feet above mean sea level.

Station.	Year.	Jan. in.	Feb. in.	Mar. in.	April. in.	May. in.	June. in.	July. in.	Aug. in.	Sept. in.	Oct. in.	Nov. in.	Dec. in.	Year. in.
Col: Observatory ...	1917	4·34	5·57	10·03	4·78	5·59	5·41	1·71	2·28	12·74	4·24	11·04	4·30	72·03
Colombo Fort ...	1917	2·99	3·18	10·31	5·39	3·53	3·24	1·12	0·70	12·29	3·28	11·55	4·68	62·26

(*g*) Average monthly mean Humidity at Colombo Observatory (C. G.)

Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
%	%	%	%	%	%	%	%	%	%	%	%	%
77	77	79	81	83	83	82	80	81	83	83	79	81

(*h*) Monthly mean Humidity at Colombo Observatory during 1917.

Year.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
	%	%	%	%	%	%	%	%	%	%	%	%	%
1917	75	79	82	82	80	84	80	80	83	80	82	80	81

No. 38.—Births and Deaths by Wards, 1917.

WARD.	BIRTHS.										DEATHS.									
	Total Births.			Nationality.							Total Deaths.			Nationality.							
	Persons.	Males.	Females.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.	Persons.	Males.	Females.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.	Infant Deaths.
COLOMBO TOWN ...	5860	2993	2867	81	519	3232	795	895	227	111	6280	3481	2799	46	336	3168	1321	964	172	273	1470
Fort ...	9	7	2	5	1	1	1	—	1	—	36	36	—	8	1	3	3	2	—	19	2
Pettah ...	36	15	21	—	1	20	6	2	2	5	63	44	19	—	—	17	20	19	—	7	8
San Sebastian ...	250	147	103	1	5	95	20	114	8	7	202	116	86	—	2	67	38	80	5	10	69
St. Paul's ...	428	225	203	—	10	100	118	109	4	17	469	257	212	—	11	88	231	120	2	17	153
Kotahena ...	1038	543	495	1	82	714	155	68	9	9	1007	539	468	2	60	654	173	98	7	13	298
New Bazaar ...	525	281	244	2	60	202	45	188	17	11	495	238	257	1	31	179	69	191	7	17	173
Maradana ...	955	481	474	6	88	498	73	224	58	8	898	439	459	10	69	423	113	227	35	21	288
Slave Island ...	562	255	307	8	34	202	72	110	104	32	474	243	231	3	21	148	75	94	90	43	128
Kollupitiya ...	497	251	246	33	69	270	67	41	7	10	435	233	202	4	41	260	81	37	7	5	85
Eastward Extension ...	263	125	138	5	15	194	40	2	2	5	234	120	114	1	16	170	38	7	—	2	68
Wellawatte Extension ...	206	119	87	10	29	118	29	14	3	3	141	64	77	—	13	91	22	10	2	3	31
Hospitals (Town residents)											824	527	297	7	52	397	233	55	13	67	
do (Untraced ...	1091	544	547	10	125	818	99	23	12	4	353	242	111	1	9	159	141	13	3	27	167
do (Non-residents)											649	383	266	9	10	512	84	11	1	22	

No. 39.—Infant Mortality during 1917, Deaths at different age periods and from several causes.

Cause of Death.	Age.												Race.							
	Age in Weeks.					Age in Months.							Europeans.	Burghers.	Sinhalese.	Tamil.	Moors.	Malays.	Others.	All races.
	1	2	3	4	Total.	2	3	4	5	6	7-9	10-12	Total.								
I. Development Diseases—																				
1. Premature birth ...	92	7	3	1	103	2	—	—	—	—	—	—	2	—	8	67	16	10	1	3	105
2. Atalectasis ...	9	—	—	—	9	—	—	—	—	—	—	—	—	—	—	4	2	1	2	—	9
3. Atrophy and debility ...	168	49	24	21	262	52	26	22	13	10	21	11	155	1	14	213	87	84	10	8	417
4. Others ...	4	2	2	2	10	4	2	6	3	5	6	6	32	—	4	23	7	7	—	1	42
II. Diseases of respiratory system																				
1. Laryngitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2. Croup ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3. Bronchitis ...	2	3	—	2	7	6	3	4	3	4	9	7	36	—	4	21	8	7	2	1	43
4. Pneumonia ...	—	—	1	2	3	14	12	15	17	19	34	23	134	1	17	77	20	18	2	2	137
5. Others ...	—	—	—	—	—	1	—	—	—	1	—	—	2	—	—	2	—	—	—	—	2
III. Diseases of digestive system—																				
1. Diarrhœal ...	4	7	6	2	19	15	25	10	11	14	29	28	132	2	11	90	15	24	5	4	151
2. Dentition ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3. Others ...	8	6	4	7	25	9	6	8	3	3	6	4	39	—	2	27	14	17	2	2	64
IV. Diseases of nervous system—																				
1. Convulsions ...	107	44	25	19	195	66	37	16	19	21	29	21	209	2	14	182	94	94	12	6	404
2. Laryngismus stridulus ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3. Tetanus ...	18	6	—	—	24	—	—	—	—	—	1	—	1	—	—	9	7	6	3	—	25
4. Others ...	4	—	—	—	4	—	—	—	—	—	—	—	—	—	1	2	1	—	—	—	4
V. Tuberculous diseases—																				
1. Tabes mesenterica ...	—	—	—	—	—	—	1	—	—	1	1	—	3	—	—	2	1	—	—	—	3
2. Tubercular meningitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3. Others ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VI. Accidents—																				
1. Injury ...	2	—	—	—	2	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	2
2. Umbilical haemorrhage...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3. Suffocation ...	3	—	—	—	3	—	—	—	—	—	—	—	—	2	—	1	—	—	—	—	3
4. Other violence ...	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
VII. Infectious diseases—																				
1. Small-pox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2. Chicken-pox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3. Measles ...	—	—	—	—	—	—	1	—	—	—	2	—	3	—	2	1	—	—	—	—	3
4. Whooping cough ...	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	1	—	—	—	—	1
5. Mumps ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6. Diphtheria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
7. Cerebro-spinal fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8. Scarlet fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VIII. Syphilis—	1	2	1	—	4	6	—	3	—	—	2	1	12	—	—	13	3	—	—	—	16
IX. All other causes—	6	1	1	2	10	1	2	5	1	5	5	9	28	—	6	21	7	2	—	2	38
Total ...	129	127	67	58	681	176	115	89	71	83	145	110	789	9	83	757	282	271	39	29	1470

No. 40—Deaths of Males and Females at different age periods for each Race in the Colombo Municipality during the year, 1917.

RACE.	Under 1 year of age see particulars of statement.		Under 5 years.								Over 5 years.																				Total.		
			1 year & under 2.		2 years & under 3.		3 years & under 4.		4 years & under 5.		5 years & under 10.		10 years & under 15.		15 years & under 20.		20 years & under 25.		25 years & under 35.		35 years & under 45.		45 years & under 55.		55 years & under 65.		65 years & under 75		75 years & under 85		85 years & over.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Persons.	Males.	Females.
Europeans ...	2	7	1	1	—	—	—	—	—	—	1	—	—	1	—	—	—	—	6	1	6	2	4	1	2	2	3	1	3	1	1	—	46	29	17
Burghers ...	43	40	14	20	9	3	5	4	1	2	3	6	3	2	4	7	7	5	8	14	11	17	11	6	21	13	16	11	10	14	3	3	336	169	167
Sinhalese ...	415	342	81	95	71	68	43	48	28	24	47	61	48	36	54	60	71	107	141	193	156	114	139	99	134	75	92	76	75	68	45	62	3168	1640	1528
Tamils ...	165	117	24	26	18	21	12	11	5	6	19	13	15	8	52	23	64	43	126	79	118	62	77	26	46	15	26	18	23	16	23	24	1321	813	508
Moors ...	143	128	32	23	9	14	8	12	4	10	7	19	15	16	20	16	20	24	41	33	42	19	39	16	35	14	46	31	35	36	33	24	964	529	435
Malays ...	14	23	7	10	1	1	1	3	2	1	4	5	1	2	2	4	3	3	9	12	6	8	7	2	5	3	3	3	9	5	7	4	172	81	91
Others ...	13	16	6	1	1	3	—	—	1	1	3	2	3	2	18	7	39	3	62	4	37	3	14	3	13	—	6	2	4	3	—	3	273	220	53
All races ...	795	673	165	176	109	110	69	78	41	44	84	106	85	67	150	117	204	185	393	336	376	225	291	153	256	122	192	142	159	143	112	120	6280	3481	2799

41.—Causes of Deaths Registered in Colombo during the Year, 1917.

Causes of Deaths.	Colombo Town.	Ward.												Hospitals.			Nationality.						
		Fort & Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Wellawatte Extension.		Town Residents.	Untraced.	Non-Residents.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
ALL CAUSES ...	6280	36	63	202	469	1007	495	898	474	435	234	141			1826		46	336	3168	1321	964	172	273
I. General Diseases :—																							
1. Epidemic Diseases...	607	—	—	—	—	—	—	—	—	—	—	—		—	—	—	4	25	274	168	87	12	37
2. Septic Diseases ...	71	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	2	41	14	7	—	7
3. Tuberculous Diseases	686	—	—	—	—	—	—	—	—	—	—	—		—	—	—	3	39	341	158	87	21	37
4. Venereal Diseases ...	37	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	1	28	5	2	—	1
5. Cancer or Malignant Diseases ...	42	—	—	—	—	—	—	—	—	—	—	—		—	—	—	1	2	32	4	2	1	—
6. Other General Diseases ...	228	—	—	—	—	—	—	—	—	—	—	—		—	—	—	4	11	122	38	40	6	7
II. Diseases of the Nervous System and Organs of Special Sense ...	738	—	—	—	—	—	—	—	—	—	—	—		—	—	—	4	38	352	145	159	19	21
III. Diseases of the Circulatory System ...	157	—	—	—	—	—	—	—	—	—	—	—		—	—	—	3	16	64	36	25	3	10
IV. Diseases of the Respiratory System ...	866	—	—	—	—	—	—	—	—	—	—	—		—	—	—	3	69	441	171	102	26	61
V. Diseases of the Digestive System ...	926	—	—	—	—	—	—	—	—	—	—	—		—	—	—	4	51	497	204	112	15	43
VI. Non-venereal Diseases of the Genito-Urinary and Annexa ...	242	—	—	—	—	—	—	—	—	—	—	—		—	—	—	3	15	124	54	29	10	7
VII. The Puerperal State ...	147	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	6	78	35	22	4	2
VIII. Diseases of the Skin and of the Cellular Tissue ...	85	—	—	—	—	—	—	—	—	—	—	—		—	—	—	2	5	50	19	7	1	1
IX. Diseases of the Bones and of the Organs of Locomotion ...	8	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	1	5	2	—	—	—
X. Malformations ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
XI. Diseases of Early Infancy	522	—	—	—	—	—	—	—	—	—	—	—		—	—	—	3	22	266	111	94	15	11
XII. Old Age ...	411	—	—	—	—	—	—	—	—	—	—	—		—	—	—	4	13	186	72	107	19	10
XIII. Affections produced by External Causes :—																							
1. Suicide ...	15	—	—	—	—	—	—	—	—	—	—	—		—	—	—	2	—	7	5	—	—	1
2. Homicide ...	2	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	2	—	—	—	—
3. Judicial Hanging or Execution ...	17	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	15	1	1	—	—
4. Accident and other External Violence	85	—	—	—	—	—	—	—	—	—	—	—		—	—	—	3	3	46	13	10	1	9
XIV Ill-defined Diseases ...	388	—	—	—	—	—	—	—	—	—	—	—		—	—	—	3	24	197	66	71	19	8
1. GENERAL DISEASES *Epidemic Diseases.*																							
1. Enteric Fever ...	174	—	—	—	—	—	—	—	—	—	—	—		—	—	—	1	12	98	27	18	4	14
2. Typhus Fever ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
3. Relapsing Fever ...	1	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	1	—	—	—	—
4. *a* Malaria ...	44	—	—	—	—	—	—	—	—	—	—	—		—	—	—	1	1	16	13	8	2	3
4. *b* Malarial Cachexia ...	27	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	8	12	6	—	1
5. Smallpox *a* Vaccinated ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
5. Smallpox *b* Not Vaccinated	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
5. Smallpox *c* Doubtful ...	2	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	1	—	—	1
6. Measles ...	15	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	2	11	1	—	—	1
7. Scarlet Fever ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
8. Whooping Cough ...	3	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	3	—	—	—	—
9. *a* Diphtheria ...	4	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	1	2	1	—	—	—
9. *b* Membranous Laryngitis ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
9. *c* Croup ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
10. Influenza ...	2	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	2	—	—	—	—
11. Miliary Fever ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
12. Asiatic Cholera ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
13. Cholera Nostras ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
14. *a* Amœbic Dysentery ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
14. *b* Bacillary Dysentery ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
14. *c* Dysentery (type not distinguished ...	134	—	—	—	—	—	—	—	—	—	—	—		—	—	—	1	5	70	35	16	2	5
15. Plague ...	188	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	2	58	76	36	4	12
16. Yellow Fever ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
17. Leprosy ...	1	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	1	—	—	—
18. Erysipelas ...	8	—	—	—	—	—	—	—	—	—	—	—		—	—	—	1	1	3	1	2	—	—
19. *a* Mumps ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
19. *b* Varicella (Chickenpox ...	1	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	1	—	—
19. *c* Other Epidemic Diseases...	3	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	1	2	—	—	—	—
Septic Diseases. 20. *a* Pyæmia ...	11	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	8	1	1	—	1
Septic Diseases. 20. *b* Septicæmia ...	60	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	2	33	13	6	—	6
Septic Diseases. 20. *c* Vaccinia ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
21. Glanders ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
22. Anthrax ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
23. Rabies, Hydrophobia ...	6	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	1	4	1	—	—	—
24. Tetanus ...	63	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	1	26	17	14	4	1
25. Mycoses ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
26. Pellagra ...	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	—
27. Beri-Beri ...	1	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—	—	—	—	—	1

Causes of Deaths, &c.,—*contd.*

Causes of Deaths.	Colombo Town.	Ward.												Nationality.						
		Fort & Galle Face.	Pettah	San Sebastian.	St. Paul's	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension	Wellawatte Extension.	Hospitals.	Europeans	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
													Town Residents. / Untraced. / Non-Residents.							
ALL CAUSES ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
Tuberculosis Diseases. 28. *a* Acute Pulmonary Tuberculosis ...	653	—	—	—	—	—	—	—	—	—	—	—	— / — / —	2	39	318	156	80	21	37
28. *b* Chronic Pulmonary Tuberculosis ...	4	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	3	—	1	—	—
29. Acute Miliary Tuberculosis ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
30. Tuberculous Meningitis ...	3	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	3	—	—	—	—
31. Abdominal Tuberculosis ...	2	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	2	—	—	—	—
32. Tuberculosis of the Spine ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
33. Tuberculosis of Joints ...	2	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	1	—	1	—	—
34. Tuberculosis of other Organs (Lymphatism excepted) ...	14	—	—	—	—	—	—	—	—	—	—	—	— / — / —	1	—	8	—	5	—	—
35. Disseminated Tuberculosis ...	8	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	6	2	—	—	—
36. Rickets ...	91	—	—	—	—	—	—	—	—	—	—	—	— / — / —	1	5	61	9	12	2	1
37. Syphilis ...	36	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	1	28	4	2	—	1
37*a*. Parangi (Frambœsia Tropicum, Yaws) ...	1	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	1	—	—	—
38. Gonococcus Infection ...	1	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	1	—	—	—
Cancer or Malignant Diseases. 39. Cancer and other malignant Tumours of the Buccal Cavity ...	7	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	5	1	—	1	—
40. Cancer and other malignant Tumours of the Stomach, Liver ...	1	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	1	—	—	—	—
41. Cancer and other malignant Tumours of the Peritoneum, Intestines, Rectum ...	2	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	1	—	1	—	—
42. Cancer and other malignant Tumours of the Female Genital Organs	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
43. Cancer and other malignant Tumours of the Breast ...	2	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	1	1	—	—	—	—
44. Cancer and other malignant Tumours of the Skin ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
45. Cancer and other malignant Tumours of other Organs or of Organs not specified ...	30	—	—	—	—	—	—	—	—	—	—	—	— / — / —	1	1	24	3	1	—	—
46. Other Tumours (Tumours of the Female Genital Organs excepted) ...	8	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	1	6	—	1	—	—
47. Acute Rheumatic Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
48. *a* Rheumatoid Arthritis ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
48. *b* Osteo-Arthritis ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
48. *c* Chronic Rheumatism ...	9	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	2	1	2	4	—	—
48. *d* Gout ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
49. Scurvy ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
50. Diabetes (Mellitus) ...	29	—	—	—	—	—	—	—	—	—	—	—	— / — / —	1	1	16	5	6	—	—
51. Exophthalmic Goitre ...	2	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	2	—	—	—	—
52. Addison's Disease ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
53. *a* Leucocythæmia ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
53. *b* Lymphadenoma ...	1	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	1
54. *a* Anæmia ...	14	—	—	—	—	—	—	—	—	—	—	—	— / — / —	1	—	5	2	3	—	3
54. *b* Chlorosis ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
55. *a* Diabetes Insipidus ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
55. *b* Purpura ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
55. *c* Hæmophilia ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
55. *d* Other General Diseases ...	1	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	1	—	—	—	—
56. Alcoholism (acute or chronic)	2	—	—	—	—	—	—	—	—	—	—	—	— / — / —	1	—	—	1	—	—	—
57. Chronic Lead Poisoning ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
58. Other Chronic Poisonings (occupational) ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
59. Other Chronic Poisonings (non-occupational) ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
II. DISEASES OF THE NERVOUS SYSTEM AND OF THE ORGANS OF SPECIAL SENSE.																				
60. Encephalitis ...	1	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	1	—	—	—	—
61. *a* Simple Meningitis ...	23	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	1	14	2	2	1	3
61. *b* Cerebro-Spinal Fever ...	1	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	1
61. *c* Septic Meningitis from various causes ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
62. Locomotor Ataxia ...	—	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	—	—	—	—	—
63. Other Diseases of the Spinal Cord ...	9	—	—	—	—	—	—	—	—	—	—	—	— / — / —	—	—	1	—	6	—	2

Causes of Deaths, &c.,—*contd.*

Causes of Deaths	Colombo Town.	Ward.												Hospitals.			Nationality.						
		Fort & Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Wellawatte Extension.	Town Residents.	Untraced.	Non-Residents.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
ALL CAUSES ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
64. Cerebral Hæmorrhage Apoplexy ...	49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	25	10	7	1	1
65. Softening of the Brain ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
66. Paralysis without special cause ...	118	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	9	64	11	28	2	3
67. General Paralysis of the Insane ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
68. Other forms of mental alienation ...	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3	—	—	—	—
69. Epilepsy ...	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	7	4	—	—
70. Convulsions (non-puerperal)	91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	44	19	15	3	3
71. Convulsions of Infants ...	404	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	14	182	94	94	12	6
72. Chorea ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
73. Neuralgia and Neuritis ...	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—
74. Other Diseases of the Nervous System ...	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	4	2	2	—	1
75. Diseases of the Eyes and their Annexa ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
76. *a* Mastoid Disease ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
76. *b* Other Diseases of the Ears	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
III. DISEASES OF THE CIRCULATORY SYSTEM.																						
77. Pericarditis ...	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	4	—	—	—
78. *a* Simple Acute Endocarditis	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—
78. *b* Infective Endocarditis ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
79. *a* Myocarditis ...	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	1	4	—	1
79. *b* Valvular Disease ...	21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	6	7	2	1	3
79. *c* Other Organic Diseases of the Heart ...	78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	37	15	11	2	4
80. Angina Pectoris ...	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—
81. *a* Aneurism ...	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3	1	—	—
81. *b* Atheroma, Arteriosclerosis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
81. *c* Other Diseases of the Arteries ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
82. *a* Cerebral Embolism and Thrombosis ...	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	4	—	—
82. *b* Embolism and Thrombosis other than Cerebral ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
83. *a* Phlebitis ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—
83. *b* Varicose Veins ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
83. *c* Hæmorrhoids ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
83. *d* Other Diseases of the Veins	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
84. *a* Lymphatism, Status Lymphaticus ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
84. *b* Elephantiasis Arabum (Filariasis) ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
84. *c* Other Diseases of the Lymphatic System ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
85. *a* Hæmorrhage from any part	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	8	1	1	—	1
85. *b* Other Diseases of the Circulatory System ...	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—	1
IV. DISEASES OF THE RESPIRATORY SYSTEM.																						
86. Diseases of the Nose ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
87. *a* Laryngismus Stridulus ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
87. *b* All forms of Laryngitis (Diphtheritic excepted)	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
87. *c* Other Diseases of the Larynx ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
88. Diseases of the Thyroid Body ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
89. Acute Bronchitis ...	96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	14	39	16	13	11	2
90. *a* Chronic Bronchitis ...	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	2	6	1	—
90. *b* Bronchiectasis ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
91. Broncho-Pneumonia ...	288	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	30	166	43	39	3	6
92. Pneumonia ...	366	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	14	171	89	35	8	48
93. *a* Empyema ...	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	1	—	1
93. *b* Other Pleurisy ...	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	11	3	—	—	1
94. Pulmonary Congestion, Pulmonary Apoplexy ...	25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	7	1	—	2
95. Gangrene of the Lungs ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
96. Asthma ...	30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	12	6	6	3	1
97. Pulmonary Emphysema ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
98. Other Diseases of the Respiratory System (Tuberculosis excepted) ...	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	3	1	—	—

Causes of Deaths, &c.,—*contd.*

Causes of Deaths.	Colombo Town.	Ward.												Hospitals.			Nationality.						
		Fort & Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Wellawatte Extension.	Town Residents.	Untraced.	Non-Residents.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
ALL CAUSES ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
V. DISEASES OF THE DIGESTIVE SYSTEM.																						
99. *a* Diseases of the Teeth and Gums (Oral Sepsis) ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
99. *b* Thrush, Stomatitis ...	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	5	4	5	1	—
99. *c* Parotitis (Septic) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
99. *d* Other Diseases of the Mouth and annexa ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
100. *a* Tonsillitis (other than Diphtheritic) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
100. *b* Quinsy ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
100. *c* Other Diseases of the Pharynx ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
101. Diseases of the Œsophagus ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
102. Gastric Ulcer ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
103. *a* Gastritis, Gastric Catarrh	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	8	2	—	—	—
103. *b* Other Diseases of the Stomach (Cancer excepted)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
104. & 105. *a* Epidemic Diarrhœa ...	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	1	—	1
104. & 105. *b* Diarrhœa Infantile, Diarrhœa due to food ...	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	20	3	7	—	1
104. & 105. *c* Diarrhœa undefined ..	111	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	55	29	14	1	2
104. & 105. *d* Enteritis ...	308	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	15	147	88	34	7	15
104. & 105. *e* Gastro-enteritis ...	55	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	28	7	14	2	2
104. & 105. *f* Colic ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
104. & 105. *g* Intestinal Ulceration, Colitis ...	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	7	3	2	—	2
104. & 105. *h* Duodenal Ulcer ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
106. Anchylostomiasis ...	93	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	50	30	6	1	5
107. Intestinal Parasites ...	112	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	75	13	12	2	3
108. Appendicitis and Typhlitis	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2	—	—	—	—
109. *a* Hernia ...	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	5	3	3	—	—
109. *b* Intestinal Obstruction ...	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	4	5	—	2
110. *a* Psilosis (Sprue or Ceylon Sore-mouth) ...	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	1	—	—	1
110. *b* Other Diseases of the Intestine ...	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	4	1	—	—	1
111 Acute Yellow Atrophy of the Liver ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
112. Hydatid Tumour of the Liver ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
113. *a* Cirrhosis of the Liver (Alcoholic) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
113. *b* Cirrhosis of the Liver (Toxic) ...	48	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	29	8	4	—	3
114. Gallstones ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
115. Other Diseases of the Liver	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	8	2	—	—	1
116. Diseases of the Spleen ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
117. Peritonitis (cause unknown)	47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	33	6	3	1	3
118. Other Diseases of the Digestive System (Cancer and Tuberculosis excepted)	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—	1	—	1
VI. NON-VENEREAL DISEASES OF THE GENITO-URINARY SYSTEM AND ANNEXA.																						
119. Acute Nephritis ...	120	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	65	28	15	5	4
120. Bright's Disease ...	46	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	18	13	9	3	1
121. Chyluria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
122. Other Diseases of the Kidneys and Annexa ...	35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	6	17	4	5	—	1
123. Urinary Calculi ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
124. Diseases of the Bladder ...	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	4	2	—	—	—
125. Diseases of the Urethra, Urinary Abscess, &c ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
126. Diseases of the Prostate ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
127. Diseases of tha Male Genital Organs (non-venereal)...	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3	—	1	1
128. Uterine Hæmorrhage (non-puerperal) ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
129. Uterine Tumour (non-cancerous) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
130. Other Diseases of the Uterus	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	8	4	—	1	—
131. Cysts and other Tumours of the Ovary ...	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—
132. Salpingitis and other Diseases of the Female Genital Organs ...	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3	—	—	—	—
133. Non-puerperal Diseases of the Breast (Cancer excepted) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Causes of Deaths, &c.,—*contd.*

Causes of Deaths.	Colombo Town.	Ward.											Hospitals.			Nationality.						
		Fort & Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana	Slave Island.	Kollupitiya.	Eastward Extension.	Wellawatte Extension.	Town Residents.	Untraced.	Non-Residents.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
ALL CAUSES ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VII. THE PUERPERAL STATE																						
134. *a* Abortion, Miscarriage ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—
b Ante-partum Hæmorrhage ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
c Ectopic Gestation ...	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—
d Other Accidents of Pregnancy ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
135. Puerperal Hæmorrhage ...	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	9	2	1	1	1
136. Other accidents of Childbirth ...	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	1	1	—	—
137. Puerperal Septicæmia ...	80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	44	20	9	3	1
138. *a* Puerperal Albuminuria, Nephritis, &c. ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
b Puerperal Eclampsia ...	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	6	4	—	—
139. *a* Puerperal Phlegmasia Alba Dolens ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
b Puerperal Embolism, Sudden Death, &c. ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
140. *a* Puerperal Insanity ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
b Consequences of Childbirth (not otherwise defined) ...	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	12	6	5	—	—
141. Puerperal Diseases of the Breast ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VIII. DISEASES OF THE SKIN AND OF THE CELLULAR TISSUE.																						
142. Gangrene ...	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	16	6	2	1	1
143. *a* Carbuncle ...	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	1	—	—
b Furuncle (Boil) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
144. *a* Phlegmon ...	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	11	5	2	—	—
b Acute Abscess, Abscess unqualified ...	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2	6	3	—	—	—
145. *a* Ulcer, Bedsore ...	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	8	4	2	—	—
b Eczema ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
c Pemphigus ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
d Other Diseases of the Integumentary System (Elephantiasis Arabum excepted) ...	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	4	1	—	—	—
IX. DISEASES OF THE BONES AND OF THE ORGANS OF LOCOMOTION.																						
146. Diseases of the Bones (Tuberculosis and Mastoid Disease excepted)...	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	4	2	—	—	—
147. Diseases of the Joints (Tuberculosis and Rheumatism excepted) ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
148. Amputations ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
149. Other Diseases of the Organs of Locomotion...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
X. MALFORMATIONS.																						
150. *a* Congenital Hydrocephalus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
b Congenital Diseases of the Heart ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
c Other Congenital Malformation (Stillbirths excluded) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
XI. DISEASES OF EARLY INFANCY.																						
151. *a* Premature Birth ...	105	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8	67	16	10	1	3
b Debility ...	311	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	12	152	75	59	7	5
c Want of Breast Milk ...	50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	22	12	11	3	2
d Atrophy, Icterus, Sclerema Neonatorum ...	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	2	1	—	—
152. *a* Atelectasis ...	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	2	1	2	—
b Injuries at Birth ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—
c Other Diseases peculiar to early Infancy ...	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	2	1	—	—	—
153 Lack of care ...	34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	15	3	12	2	1
XII. OLD AGE.																						
154. Senility ...	411	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	13	186	72	107	19	10

Causes of Deaths, &c.,—*contd.*

Causes of Deaths.	Colombo Town.	Ward.												Hospitals.			Nationality.						
		Fort & Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana.	Slave Island.	Kollupitiya.	Eastward Extension.	Wellawatte Extension.	Town Residents.	Untraced.	Non-Residents.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others
ALL CAUSES ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
XIII. AFFECTIONS PRODUCED BY EXTERNAL CAUSES.																						
155. Suicide by Poison ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
156. Suicide by Asphyxia ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
157. Suicide by Hanging or Strangulation ...	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	3	—	—	—
158. Suicide by Drowning ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
159. Suicide by Firearms ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
160. Suicide by Cutting or Piercing Instruments ...	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	1
161. Suicide by Jumping from high places ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
162. Suicide by Crushing ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
163. Suicide by other means ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
164. Poisoning by Food ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
165. *a* Snake-bite ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
165. *b* Insect Stings (Venomous)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
165. *c* Other Acute Poisonings...	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	—	—	—
166. Conflagration ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
167. Burns (Conflagration excepted) ...	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	10	6	2	—	1
168. Absorption of Deleterious Gases (Conflagration excepted) ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
169. Accidental Drowning ...	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	—	—	—	2
170. Traumatism by Firearms ...	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2
171. Traumatism by Cutting or Piercing Instruments ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—
172. *a* Traumatism by Fall from trees ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—
172. *b* Traumatism by Fall from heights other than trees	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
172. *c* Traumatism by other Accidental Fall ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
173. Traumatism in Mines and Quarries ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
174. Traumatism by Machines...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
175. Traumatism by other Crushing (Vehicles, Rail-road, Landslides, &c.) ...	14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	5	1	4	—	2
176 Injuries by Animals ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
177. Starvation ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
178. Excessive Cold ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
179. Effects of Heat ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
180. Lightning ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
181. Electricity (Lightning excepted ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
182. Homicide by Firearms ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
183. Homicide by Cutting or Piercing Instruments ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
184. Homicide by other means...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
185. Fractures (cause not specified) ...	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	17	4	3	1	—
186. *a* Judical Hanging or Execution ...	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	1	1	—	—
186. *b* Other External Violence	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—
XIV. ILL-DEFINED DISEASES.																						
187. *a* Dropsy ...	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	2	2	1	—
187. *b* Ascites ...	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	5	6	—	—	—
187. *c* Other Ill-defined Organic Disease ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—
188. *a* Syncope ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
188. *b* Sudden Death (not otherwise defined) ...	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	—	—	—
189. *a* Heart-failure ...	42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	8	18	4	7	2	1
189. *b* Atrophy, Debility, &c. (one year and over) ...	127	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	67	24	23	7	1
189. *c* Teething ...	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—
189. *d* Pyrexia ...	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	7	4	3	2	1
189. *e* Marasmus and Asthenia	163	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	5	88	23	34	7	5
189. *f* Other Ill-defined Causes...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
189. *g* Diseases not specified ...	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	4	2	2	—	—

42. Work done by Ward Inspectors, 1917.

	Nature of Work.	Fort	Pettah	San Sebastian	St. Paul's	Kotahena North	Kotahena South	New Bazaar	Maradana North	Maradana South	Slave Island	Kollupitiya E.	Kollupitiya W.	Eastward Extension	Wellawatte Ext.	Total.
1	No. of inspections ...	4487	3382	5027	6190	5496	7327	3860	5887	6386	6043	4966	4326	5012	4017	72406
2	No. of premises in which sanitary defects were found (*a*) non-structural ...	218	313	213	418	373	366	306	365	457	498	479	318	364	432	5120
3	No. of premises in which sanitary defects were found (*b*) structural ...	99	84	17	209	42	162	100	202	104	117	91	121	45	141	1534
4	No. of premises where non-structural defects were rectified	195	213	143	282	251	228	256	298	333	444	390	223	311	499	4066
5	No. of premises where structural defects were rectified ...	35	26	14	136	29	30	42	59	18	46	7	30	23	2	497
6	No. of insanitary dwellings structurally improved ...	20	7	6	118	10	118	23	26	51	64	14	26	3	9	495
7	No. of buildings, other than dwellings, structurally imprd.	23	1	—	45	29	44	39	58	28	38	42	66	24	77	514
8	No. of insanitary dwellings closed under Plague Regulations	—	5	—	46	56	10	22	2	—	18	—	—	34	—	193
9	No. of insanitary dwellings remaining closed at end of year (total) ...	—	3	3	158	55	9	2	2	9	9	—	—	5	—	255
10	No. of insanitary dwellings demolished ...	—	—	17	47	1	4	—	—	—	1	8	—	29	4	111
11	No. of insanitary premises in which plans have been called for ...	17	33	121	50	55	171	80	18	24	91	—	3	1	—	664
12	No. of insanitary dwellings included in (11) ..	92	37	974	250	210	378	905	144	244	862	—	36	25	—	4157
13	No. of insanitary premises in which plans have been recd.	—	21	9	8	2	124	27	3	8	2	—	—	1	—	205
14	No. of insanitary premises condemned and referred to W. E. for improvement ...	—	10	11	11	—	1	—	1	3	9	—	—	—	—	46
15	No. of insanitary dwellings included in (14) ...	—	13	118	95	—	7	—	15	57	120	—	—	—	—	425
16	No. of insanitary premises scavg. by P.H.D. cleansing gang.	3	3	11	32	35	53	44	338	163	47	8	4	15	—	756
17	No. of dwellings pesterined ...	—	32	104	158	189	220	264	123	193	345	10	2	57	2	1699
18	No. of dwellings claytonised ...	25	444	529	1715	1149	423	652	482	1217	1442	30	23	153	1	8285
19	No. of dwellings unroofed ...	—	5	11	34	32	18	23	14	30	19	2	1	5	2	196
20	No. of rat-holes found, claytonised and filled up ...	185	2877	2085	4821	5306	2156	3757	2883	4577	5577	136	147	740	15	35262
21	No. of dwellings disinfected ...	124	55	131	184	139	293	235	202	173	280	69	171	69	134	2259
22	No. of notices served ...	136	102	141	346	133	171	289	215	159	248	122	139	82	196	2479
23	No. of wells filled up ...	2	—	—	—	—	4	—	4	3	—	6	2	5	23	49
24	No. of cesspits filled up ...	—	—	—	1	1	—	—	6	—	—	1	1	1	3	14
25	No. of prosecutions ...	86	162	179	227	147	114	159	208	213	153	82	126	75	143	2074
26	No. of convictions ...	66	137	152	204	131	102	128	164	184	145	74	114	63	113	1777
27	No. of cases acquitted, withdrawn or otherwise dealth with.	13	13	15	9	2	6	6	9	7	5	1	3	5	4	98
28	No. of cases pending at end of year ...	3	—	—	3	2	2	2	8	8	—	1	2	2	3	36
29	Amount of fines Rs.	573·00	2018·00	1713·50	2070·00	1074·50	1071·00	1863·00	1894·50	2405·50	1643·50	1156·00	1463·50	796·50	2565·00	22307·50

N.B.—" Premises " denotes the whole property including compound and such tenements as it may contain.
" Dwelling " denotes each separately assessed tenement.

43. Prosecutions—Details, 1917.

Ordinance or By-law.							Offence.	No. of cases.
Section	1	Sub-Sec.	1	of Ord.	15	of 1862	Filthy premises	1,121
„	1	„	2	„	15	„	Foul drain cesspit, &c.	21
„	1	„	4	„	15	„	Nuisance by cattle, swine &c.	57
„	1	„	9	„	15	„	Selling unwholesome food	10
„	1	„	11	„	15	„	Storing onions so as to be a nuisance	2
„	206	of Ord.	7	of 1887			Additional privy accomodation	1
„	39	„	1	of 1896			Unregistered dairy	5
„	53	Chapter	3	of Ord.	1	of 1896	Unregistered laundry	48
„	110	of Ord.	6	of 1910			Spitting in market	4
„	178	„	6	„			Failure to limewash	81
„	186	„	6	„			Neglect to provide privy accomodation	3
„	189	„	6	„			Neglect to fill up a well	4
„	194	„	6	„			Allowing a child to ease on roadside	1
„	205	„	6	„			Failure to report infectious diseases	1
„	212	„	6	„			Unlicensed dangerous trades	7
Rule	29	of Chapter	VIII	By-laws			Digging wells without permission	7
„	31	„	VIII	„			Throwing rubbish on roadside	4
„	4	„	IX	„			Filthy bathing well	6
„	1	„	XI	„			Unlicensed bakery	6
„	3	„	XI	„			Uncemented floor of eating house	11
„	7	„	XI	„			Filthy bakery	31
„	8	„	XI	„			Unclean workmen in bakery	13
„	11	„	XI	„			Unregistered eating house	20
„	2	„	XIII	„			Resistence to a public officer	2
„	3*d*	„	XIII	„			Misbehaving in public market	30
„	3*f*	„	XIII	„			Pollution of market premises	2
„	9	„	XIII	„			Hawking beef for sale	1
„	11	„	XIII	„			Filthy stall	87
„	14	„	XIII	„			Selling unauthorised articles in stall	11
„	23	„	XIII	„			Selling fish in passage of market	21
„	28	„	XIII	„			Throwing rubbish in market	6
„	31	„	XIII	„			Keeping stall closed without permission	9
„	34	„	XIII	„			Obstruction of passages in public market	56
„	2*a*	„	XIV	„			Exposing food to dust and flies	192
„	3	„	XIV	„			Sale of adulterated milk	73
„	5	„	XIV	„			Refusing to allow a sample to be taken	4
„	7	„	XIV	„			Unlicensed milk vendors	103
„	2	„	XV	„			Disregard to carry out order of court	1
„	169 (1) & 100 (5*a*) By-laws (special)						Growing vegetables with polluted water	2
Regulation	26	made under	Ord. 3	of 1897			Neglect to report infectious diseases	7
„	38	„	Sec. 5	of Ord. 3	of	1897	Neglect to fill up well	1
„	49	„	Ord. 3	of 1897			Occupying premises condemned as unfit for human habitation	2
							TOTAL	2,074

44. Statement of premises improved during, 1917.

Ward.		Premises.	Number of premises.	Number of dwellings originally.	Number of dwellings demolished.	Number of dwellings existing.
St. Paul's.	11/17	Fish Market Square	1	27	14	13
	18/28	do	1	44	26	18
	43,	Siripina Lane	1	16	3	13
	63,	Chekku Street	1	10	3	7
	70,	Sea Street	1	7	5	2
San Sebastian.	6/7	Mohandiram's Lane	1	29	11	18
	8/9	do	1	26	12	14
	4,	do	1	6	4	2
	4 a4.	do	1	2	2	—
	3,	do	1	3	3	—
	1,	San Sebastian Street	1	4	1	3
Pettah.	90,	Maliban Street	1	5	4	1
	2,	1st Fishers' Lane	1	9	5	4
	3,	do	1	4	2	2
	65,	Keyzer Street	1	6	5	1
New Bazaar.	22 a,	Grandpass Road	1	1	—	1
	96/103	Barber Street	1	20	—	20
Kotahena South.	48,	Galpotta Street	1	10	2	6
Slave Island.	81,	Church Street	1	3	3 back rooms demolished.	3*

* Converted into Beef, Mutton and Fish Stalls.

N.B.—The terms dwelling here includes tenements and cubicles used by separate families but not necessarily separately assessed.

45. Changes in the personnel of the staff—1917.

Clerks.

Mr. V. H. Schoorman appointed Assistant Statistical Clerk on 8th March, 1917, in place of Mr. S. D. Blacker resigned.

Mr. G. B. Silva appointed Assistant Registering Clerk on 9th July, 1917, in place of Mr. D. E. P. Karunaratne appointed Sub-Inspector.

Inspectors.

Mr. C. B. Brohier appointed Inspector on 1st May, 1917, in place of Mr. W. D. Serasinghe deceased.

Mr. S. C. Forbes appointed Inspector on 1st June, 1917, in place of Mr. R. L. Stouter resigned.

Sub-Inspectors.

Mr. D. E. P. Karunaratne appointed Sub-Inspector on 14th June, 1917, in place of Mr. C. B. Brohier promoted.

Mr. M. M. Molligoda appointed Sub-Inspector on 25th June, 1917, in place of Mr. S. C. Forbes promoted.

Mr. J. P. J. Mendis appointed Sub-Inspector on 1st November, 1917, in place of Mr. N. Schokman left for War Service.

Apothecaries.

Mr. M. S. Mohideen appointed Temporary Dispenser, St. Paul's Dispensary on 1st November, 1917, in place of Mr. J. P. J. Mendis appointed Sub-Inspector.

Health Visitors.

Miss Elsie Wountersz appointed Health Visitor of St. Paul's Dispensary on 1st February, 1917, in place of Mrs. C. V. M. Barnett resigned.

Mrs. W. Paton appointed Health Visitor of St. Paul's Dispensary on 26th September, 1917, in place of Miss Elsie Wountersz resigned.

Midwives.

Mrs. Emily Direckze appointed midwife on 11th May, 1917, in place of Mrs. M. P. Murnger resigned.

Overseers.

Mr. L. T. Perera appointed Overseer of Mosquito Gang on 1st November, 1917, in place of Mr. Shaik Mohideen resigned.

Peons.

Don Thegis appointed Peon on 20th November, 1917, in place of B. D. Cornelis appointed Telephone Operator.

Coolies.

Hendrick Perera appointed Cooly Segregation Camp on 21st July, 1917, in place of P. Banda dismissed.

Sollamuttu appointed Cooly of Slaughter-house, Demetagoda, on 1st April, 1917, in place of Miguel retired.