Report of the Medical Officer of Health / Municipality of Colombo.

With the Medical Officer of Health's Compliments,

Colombo.

MUNICIPALITY OF COLOMBO.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR 1909.

Extract from Sessional Paper XXVI. of 1910.

MUNICIPALITY OF COLOMBO.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR 1909.

I HAVE the honour to submit the Annual Report of the Public Health Department for the year 1909.

SECTION I.—GENERAL.

2. *Public Health.*—Notwithstanding the fact that the rainfall was again for the seventh year in succession far short of the average (shortage 17·70 inches), the health of the general population showed an improvement, the death-rate being 33·5 as against the average of the previous ten years of 34·3, and the rate during 1908 of 36·7. This improvement was due for the most part to a reduction in the mortality from diarrhœal diseases and fevers, and in the mortality amongst infants, all of which are well known to be closely associated with the sanitary condition of the district. In this connection one may mention the great improvement which has undoubtedly been effected during recent years in the matter of the cleansing of private premises and public streets. The infant mortality and the mortality from fevers were amongst the lowest on record, whilst the mortality from diarrhœal diseases was actually the lowest yet recorded. How far, if at all, the climatic conditions favoured the reduction in the mortality it is impossible to say, because although the rainfall was below the average and was in fact lower than in any previous year in the last decade except 1905, it was perhaps better distributed than previously. The improvement in the general death-rate would have been still more marked had it not been for the increase in the mortality from pulmonary diseases, which was the highest yet recorded, the causes of which are deeper seated and more difficult to combat than in the case of "fifth diseases," such as constitute the diarrhœal and fever groups. Every race participated in the general improvement, except the Sinhalese, whose death-rate was above their average, owing to an increase in their mortality from pulmonary diseases, notably pneumonia. The history of the mortality from the principal causes during the last eleven years is best seen by a reference to the diagrams in the Annexure.*

In common with the reduction in the mortality there was a great reduction in the number of cases of infectious diseases reported, there being only 2,305 cases of all kinds reported as against 3,371 in 1908—a reduction of 1,066. This reduction in the number of cases was mainly due to a decrease in the number of cases of enteric fever (decrease 664), smallpox (decrease 353), and measles (decrease 230), and had it not been for the great increase in the number of cases of chickenpox (increase 285), the results would have been still better. There was no case of cholera reported during the year, and the last case of the smallpox epidemic occurred in May. The great decrease in the mortality amongst Europeans from enteric fever from an average of 3·92 to 1·30 per 1,000, and the decrease in their mortality due to dysentery from 3·89 to 2·94 per 1,000, is a particularly satisfactory feature of the statistics, in view of the fact that these two diseases have long been by far the most important causes of deaths amongst Europeans in Colombo.

The exceptional number of 1,543 samples of various sorts were sent to the City Analyst during the year. These included 592 samples of milk, of which 317 or 53·5 per cent. were found to be adulterated. 37 out of 45 dairies within the town were caught adulterating their milk supply, one dairy alone being detected 49 times, and convicted 26 times in court (see sections 44 and 49).

The advisability of having a Chief Sanitary Inspector and Special Food Inspectors is becoming more apparent every year, the multiplicity of the duties which the Ward Inspectors have to perform being such that they cannot do justice to the important work of food inspection.

Much good work was done during the year by the special gangs. The Sub-Inspectors not only dealt with all cases of enteric fever, but since July 17, 1909, they have inquired into and reported upon all deaths from phthisis and carried out the disinfection of 195 phthisis-infected houses. The cleansing gang cleansed 268 enteric-infected compounds, while the limewashing gang cleansed and limewashed 904 tenements besides a number of other premises. The insect pest prevention overseer inspected the greater part of the premises in Colombo and served 492 notices to abate nuisances caused by the breeding of flies and mosquitoes ; 39 persons were prosecuted and convicted for failure to comply with these notices. A large number of structural improvements were effected to houses, compounds, drains, &c., during the year. 5,428 infected articles representing 179 loads were passed through the steam disinfector during the year. The Municipal midwives

* Not printed.

attended 567 confinements during the year. Full details in respect of these and all other matters dealt with by this Department are given under their respective headings.

Before passing on to the details, I wish to invite the attention of the Council to the great danger associated with a continuance of the present system of disposing of the scavenging refuse of the town in tips either within or on the borders of the town. The great delay which has occurred in the substitution of incinerators for these filthy fly-breeding tips is fraught with danger to those residing in the neighbourhood.

3. *Meteorology.*—The following statements kindly furnished by Mr. Barnard, the Superintendent of the Observatory, show the chief points in regard to the meteorological conditions which prevailed during the year 1909. It will be seen that the rainfall for the year totalled only 66·13 inches, as against the average of 83·83 inches for 40 years—a shortage of 17·70 inches. Although not so bad as in 1908, this is the seventh year in succession that the rainfall has been below the average, and it has no doubt adversely affected the health of the town in some respects.

TABLE I.

(*a*) Average Monthly Mean Temperature at Colombo, 40–41 Years.		(*b*) Monthly Mean Temperature at Colombo during 1909.	
January	79·1	January	78·4
February	80·2	February	79·8
March	82·1	March	81·2
April	82·6	April	83·8
May	82·3	May	81·6
June	81·0	June	79·4
July	80·5	July	78·0
August	80·7	August	77·6
September	80·8	September	78·8
October	80·0	October	78·1
November	79·8	November	78·6
December	79·1	December	77·6
Year	80·7	Year	79·4

(*c*) Average Monthly Mean Pressure at Colombo, 40–41 Years.		(*d*) Monthly Mean Pressure at Colombo during 1909.	
January	29·876	January	29·856
February	29·875	February	29·859
March	29·854	March	29·844
April	29·838	April	29·806
May	29·805	May	29·799
June	29·812	June	29·817
July	29·803	July	29·840
August	29·828	August	29·822
September	29·845	September	29·841
October	29·847	October	29·842
November	29·855	November	29·871
December	29·840	December	29·866
Year	29·840	Year	29·839

(*e*) Average Monthly Rainfall at Colombo, 40 Years.		(*f*) Monthly Rainfall at Colombo during 1909.	
January	3·48	January	1·66
February	2·03	February	1·02
March	4·47	March	3·59
April	10·26	April	3·35
May	11·25	May	5·91
June	7·65	June	3·64
July	4·61	July	10·32
August	3·62	August	7·48
Septmber	4·75	September	1·07
October	14·52	October	16·27
November	11·92	November	10·68
December	5·27	December	1·14
Year	83·83	Year	66·13

4. *Topography.*—The following table given in Mr. Mansergh's 1897 report on the Drainage of Colombo shows the acreage at different heights above mean sea level, from which it will be seen that a large part of Colombo is low-lying and difficult to drain, and in the present absence of sewers many of the houses are situated upon damp ground, which is a point of importance in connection with the very high and steadily increasing mortality from pulmonary diseases, notably phthisis.

TABLE II.—Acreage at different Heights above Mean Sea Level.

		Between Contours.																
Feet	Up to ..	4 ..	6 ..	8 ..	10 ..	12 ..	14 ..	16 ..	18 ..	20 ..	30 ..	40 ..	50 .	60 ..	70 ..	80 ..	90
Feet	4 ..	6 ..	8 ..	10 ..	12 ..	14 ..	16 ..	18 ..	20 ..	30 ..	40 ..	50 ..	60 .	70 ..	80 ..	90 ..	100
Acres	953	296	297	447	455	406	430	421	510	667	297	134	87	43	12	6	2

5. *Population.*—The following table shows the area and the estimated population in each ward in 1908, and the density per acre of the area available for building purposes:—

TABLE III.—Area and Population of Wards.

Ward.	Total Area.	Nett Area available.	Estimated Population. 1909.	Density per Acre of available Area.
Fort	220	112	2,285	20·4
Pettah	92	67	7,561	112·8
San Sebastian	116	108	10,629	98·4
St. Paul's	143	135	24,076	178·3
Kotahena	1,649	1,056	38,329	36·3
New Bazaar	289	226	20,233	89·5
Maradana	1,297	1,025	37,216	36·3
Slave Island	313	304	20,126	66·2
Colpetty	1,928	1,655	23,417	14·1
The lake	416	—	—	—
Total ..	6,463	4,688	183,872	39·2

The following table shows the estimated number of the several races in Colombo in 1909:—

TABLE IV.—Population of Races, 1909.

Race.	Estimated Population, 1909.
Europeans	3,046
Burghers	12,866
Sinhalese	76,449
Tamils	46,028
Moors	32,970
Malays	5,594
Others	6,919
All Races ..	183,872

The estimates of the population of immigrant races like the Europeans, Tamils, and " Others " are liable to be seriously at fault, and therefore the rates of these races are far from trustworthy. This particularly holds good in the case of Europeans and Tamils. It is almost certain that the estimate of the European population is below the actual, and their rates are therefore probably too high. This is a point which can only definitely be settled when the next official Census is taken, viz., in 1911. An attempt was made by this Department in 1909 to enumerate the European population by the issue of a schedule to merchants and others, but the results obtained clearly indicated that any such method was of no practical value.

SECTION II.—VITAL STATISTICS.

6. The various death-rates contained in the succeeding tables have been calculated from the crude data contained in the weekly returns of deaths furnished to this office by the Registrar-General's Department.

7. Births, 4,589 ; ratio, 25·0 ; average for previous ten years 23·5 ; increase, 1·5 per 1,000.

571 of these births were attended by the Municipal midwives. The birth-rates in Colombo and Ceylon since 1899 are shown in Table V.:—

TABLE V.—Colombo and Ceylon Birth-rates.

Year.	Birth-rate per 1,000 Population. Colombo.	Ceylon.
1899	25·4	38·5
1900	21·9	38·6
1901	20·6	37·5
1902	23·0	38·5
1903	21·8	40·0
1904	22·0	38·5
1905	23·1	38·7
1906	27·3	35·7
1907	24·2	32·8
1908	25·5	40·1
Average 1899–1908 ..	23·5	37·9
1909	25·0	—

The distribution of the births by races is shown in Table VI.:—

TABLE VI.—Racial Birth-rates.

Race.	Birth-rate per 1,000 Population. Average, 1899–1903.	1909.
Europeans	29·7	20·9
Burghers	32·4	35·8
Sinhalese	29·7	33·2
Tamils	12·5	12·8
Moors	21·1	20·2
Malays	28·2	23·9
Others	11·7	10·2
All races ..	23·5	25·0

It will be seen that as usual the Burghers have the highest birth-rate. Not only so, but they are the only race whose birth-rate is consistently higher than their death-rate, as a comparison of Tables VI. and IX. shows, and as this " natural increase " has been going on for a series of years undisturbed by migration the result has been that their population contains an unusually large proportion of young people, which is a favourable sign, and not an unfavourable one as has been stated.

The distribution of births by Wards is shown in Table VII. :—

Table VII.—Ward Birth-rates.

Ward.	Birth-rate per 1,000 Population. Average, 1899–1908.	1909.
Fort and Galle Face	4·5	3·1
Pettah	7·8	7·9
San Sebastian	21·3	20·9
St. Paul's	18·1	17·2
Kotahena	20·1	22·6
New Bazaar	25·0	23·8
Maradana	23·4	22·7
Slave Island	24·6	22·7
Colpetty	18·4	16·5
Colombo Town* ..	23·5	25·0

* The Colombo Town rate includes births in the hospitals.

8. Deaths, 6,169 ; ratio, 33·5 ; average for previous ten years, 34·3 ; decrease, 0·8 per 1,000.

The death-rates in Colombo and Ceylon since 1899 are shown in Table VIII. :—

Table VIII.—Colombo and Ceylon Death-rates.

Year.	Death-rate per 1,000 Population. Colombo.	Ceylon.
1899	31·4	30·6
1900	33·8	28·7
1901	34·7	27·6
1902	33·5	27·5
1903	34·8	25·9
1904	30·8	24·9
1905	34·7	27·7
1906	39·8	34·3
1907	32·6	30·1
1908	36·7	29·4
Average, 1899–1908 ..	34·3	28·7
1909	33·5	—

The distribution of deaths by Races is shown in Table IX. :—

Table IX.—Racial Death-rates (all Causes).

Race.	Death-rates per 1,000 Population. 1899–1908.	1909.	Increase or Decrease.
Europeans	29·9	22·5	— 7·4
Burghers	26·7	24·9	— 1·8
Sinhalese	36·9	38·4	+ 1·5
Tamils	35·4	32·3	— 3·1
Moors	32·2	29·8	— 2·4
Malays	35·5	31·7	— 3·8
Others	33·1	21·4	—11·7
All Races ..	34·3	33·5	— 0·8

It will be seen that the mortality in every race except the Sinhalese was below the average of the previous ten years. The death-rate amongst the heterogeneous group of " Others " comprising the various unclassed alien races was no less than 11·7 per 1,000 below their average, while the rate for Europeans was 7·4 below their average. This drop in the European mortality was due to a decrease from fevers (decrease 3·09), from diarrhœal diseases (decrease 2·41), and to a far less extent a decrease from pulmonary diseases (decrease 0·86). The increase in the Sinhalese rate was almost entirely due to an increased mortality from pulmonary diseases (increase 1·85), notably pneumonia (increase 1·18), for in common with other races they show a decrease in both the diarrhœal (decrease 1·0) and the fever group (decrease 0·43) of diseases.

(c) The distribution of deaths by Wards is shown in Table X. :—

Table X.—Ward Death-rates (all Causes).

Wards.	Death-rate per 1,000 Population. 1899–1908.	1909.	Increase or Decrease.
Fort	14·1	12·3	— 1·8
Pettah	13·5	13·9	+ 0·4
San Sebastian	25·3	23·1	— 2·2
St. Paul's	25·7	23·3	— 2·4
Kotahena	27·5	24·9	— 2·6
New Bazaar	30·8	28·6	— 2·2
Maradana	27·3	25·0	— 2·3
Slave Island	29·2	25·9	— 3·3
Colpetty	20·0	16·2	— 3·8
Colombo Town ..	34·3	33·5	— 0·8

As has been pointed out in previous reports, these ward death-rates are vitiated to such an extent by migration and by the deaths of Ward residents in the various hospitals that they are practically worthless for purposes of comparison, or as an indication of the relative sanitary condition of the various wards. A much more reliable test in this respect is the infant mortality given below.

For further details of births and deaths reference may be made to Tables LXXV. to LXXVIII. in the Appendix.

9. *Infant Mortality.*—Deaths, 1,423; ratio, 310; average for previous ten years, 356; decrease, 46 per 1,000 births.

The distribution of the infant mortality by wards for each of the last eleven years is shown in Table XI.:—

TABLE XI.—Infant Mortality by Wards. Rate per 1,000 Births.

Year.	Colombo Town.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana Hospitals.	Maradana exclusive of Hospitals.	Slave Island.	Kollupitiya.
1899	328	—	200	345	372	353	351	197	313	391	242
1900	395	143	448	385	492	510	387	—	345	507	281
1901	389	—	364	480	462	508	431	285	339	426	211
1902	360	—	426	429	509	417	422	—	310	399	271
1903	410	273	630	384	481	518	468	417	361	432	333
1904	353	154	419	408	482	382	452	—	336	454	232
1905	361	666	481	461	559	381	461	147	353	458	251
1906	302	76	328	418	337	310	357	210	287	311	276
1907	304	100	298	367	431	289	395	204	296	325	251
1908	355	353	467	333	412	346	467	215	426	340	340
Average, 1899 to 1908 ..	356	177	406	401	454	401	419	168	337	404	269
1909	310	286	350	326	350	354	377	161	305	359	254
Increase or Decrease ..	— 46	+109	— 56	— 75	—104	— 47	— 42	— 7	— 32	— 45	— 15

By far the most satisfactory feature of the vital statistics of Colombo is the infant mortality. It has been more or less steadily falling for a series of years, and is exactly 100 per 1,000 lower than it was six years ago. This is all the more satisfactory in view of the fact that it is admittedly the best test of the sanitary condition of the town. In view of the recognized connection between the infant mortality and the sanitary condition of the town, it may be that this steady improvement is in a measure the result of the more thorough methods of cleansing of private premises and public thoroughfares which have without doubt been effected during recent years. Possibly improved registration of births has also had some influence upon the infant mortality statistics, but as shown in sections 130 and 131 of my report No. 384 of November 12, 1907, on the Sanitation of Colombo, there is reason to believe that this does not to any material extent explain the improvement in the infant mortality during recent years. That much still remains to be effected in the matter of general cleansing of the town and in other respects is, of course, beyond question; and it is hoped that the future will see a still further reduction in the terrible waste of infant life which has been going on from year to year.

(*b*) The principal causes of the infant mortality are shown in Table XII.:—

Table XII.—Infant Mortality (Principal Causes), expressed as a Rate per 1,000 Births of each Race.

Cause:	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
All causes ..	310	141	181	292	403	386	343	366
Premature birth ..	16	16	4	22	13	13	—	—
Atrophy and debility ..	51	—	9	43	96	66	95	70
Bronchitis ..	23	—	15	18	33	31	53	—
Pneumonia ..	32	—	28	31	37	36	23	42
Diarrhœa ..	32	62	34	30	29	33	41	56
Convulsions ..	83	16	52	82	96	103	95	85
Tetanus ..	38	—	13	28	67	68	18	85
All other causes ..	35	47	26	38	32	36	18	28

As usual infantile convulsions heads the list of causes of infant mortality, while a large proportion of the deaths are returned under the headings of debility and diarrhœa, all of which indicate errors in the matter of the care and feeding of the infants. It is hoped that in time, by the aid of trained health visitors, a better knowledge of how to rear their infants will be imparted to the mothers. It will be seen that the races whose children suffer most are the Tamils with the high rate of 403, the Moors with the rate of 386, and the Malays with the rate of 343. I have been told on good authority that a practice has been steadily growing amongst Moorish women of hand-feeding instead of breast-feeding their infants. They can ill-afford to sacrifice their children in this manner, for they have always had a high rate of infant mortality, and this practice, which is said to be associated largely with the use of condensed milk, will undoubtedly tend to make it higher.

(*c*) Table XIII. shows the distribution of the infant mortality at various age periods and from several causes (see Appendix).

It will be seen that 387 or 27 per cent. of the total infant deaths occur during the first week of life, while 639 or 44 per cent. occur during the first month.

10. Mortality from groups of diseases is shown in Table XIV. :—

TABLE XIV.—Mortality in the Town of Colombo, All Races, All Ages, from Groups of Diseases, 1908 and 1909, and the Average for 1899 to 1908.

Cause of Deaths.	Total Deaths.			Mortality per 1,000 Population.			Increase or Decrease.
	Average, 1899 to 1908.	1908.	1909.	Average, 1899 to 1908.	1908.	1909.	
All causes ..	5,654	6,620	6,169	34·28	36·72	33·54	— ·74
Zymotic diseases ..	1,625	1,667	1,226	9·90	9·25	6·67	—3·23
Parasitic diseases ..	182	279	261	1·09	1·55	1·42	+ ·33
Dietetic diseases ..	18	73	51	·11	·40	·28	+ ·17
Constitutional diseases ..	713	873	938	4·31	4·84	5·10	+ ·79
Developmental diseases ..	352	405	372	2·15	2·25	2·02	— ·13
Local diseases ..	2,182	2,727	2,778	13·20	15·12	15·11	+1·91
Violence	96	110	113	·58	·61	·60	+ ·02
Ill-defined diseases ..	486	486	430	2·94	2·70	2·34	— ·60

The details of these groups are given in Table LXXVIII. in the Appendix.

11. *Principal Causes of Deaths.*—The various "causes" to which the deaths are ascribed are classified in Table LXXVIII. in the Appendix. Of these, the great majority are responsible, as a rule, for only a few deaths each year, whereas a select few are responsible year after year for a great proportion of the total mortality. These "principal causes" have been arranged for convenience into three groups, viz. :—(*a*) the pulmonary group, including phthisis, pneumonia, and bronchitis ; (*b*) the diarrhœal group, including diarrhœa and enteritis and dysentery ; and (*c*) the fever group, including typhoid or enteric fever, simple continued fever, remittent fever, and intermittent fever.

The mortality since 1899 from these three groups of diseases is shown in Table XV. and in Diagrams II., III., IV., and V.*

TABLE XV.—Mortality from Principal Groups of Diseases, 1899 to 1909.

Year.	Rate per 1,000 Population.		
	Pulmonary.	Diarrhœal.	Fevers.
1899	5·48	5·05	3·22
1900	6·65	6·12	3·17
1901	8·45	6·55	2·92
1902	7·21	6·69	2·76
1903	7·51	6·99	3·05
1904	7·54	5·43	2·16
1905	8·30	7·07	2·07
1906	9·36	8·10	3·39
1907	8·35	5·07	2·59
1908	9·52	5·63	2·84
Average, 1899 to 1908 ..	7·84	6·27	2·81
1909	9·78	5·02	2·21
Increase or Decrease ..	+1·94	—1·25	— ·60

It will be seen, particularly if reference is made to Diagram II., that the tendency of the mortality from the pulmonary group is steadily upwards, whereas the tendency of the fever mortality is steadily downwards, while the mortality from the diarrhœal group which had an upward tendency until 1906 has since then been coming rapidly down. Comparing the rates in 1909 with the average of the previous ten years, the pulmonary mortality shows an increase of 1·94 per 1,000, while the diarrhœal mortality shows a decrease of 1·25, and the fever mortality a decrease of 0·60 per 1,000.

12. The principal causes of deaths in each race during 1909, expressed as a percentage of the total deaths in each race, are shown in Table XVI. :—

TABLE XVI.—Principal Causes of Deaths in each Race, 1909, expressed as a Percentage of Total Deaths in each Race.

Cause of Death.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.	All Races.
Enteric and suspected enteric ..	5·8	6·8	6·1	3·3	5·2	2·8	3·4	5·2
Simple and ill-defined fever ..	—	1·2	·5	·7	·3	·6	1·3	·6
Remittent fever ..	1·4	—	·6	1·0	·7	1·7	2·6	·8
Intermittent fever ..	—	—	·02	—	·1	—	—	·03
All fevers ..	7·2	8·0	7·2	5·0	6·3	5·1	7·3	6·6
Diarrhœa ..	1·4	3·7	5·7	4·5	4·8	5·1	6·0	5·1
Dysentery ..	13·1	5·6	3·8	8·0	3·7	2·8	4·0	5·0
Enteritis ..	1·4	5·3	4·3	8·0	2·1	5·1	4·0	4·9
All diarrhœal ..	15·9	14·6	13·8	20·5	10·6	13·0	14·0	15·0
Phthisis ..	10·2	13·3	12·1	12·1	16·1	13·5	16·1	12·9
Pneumonia ..	2·9	13·0	11·2	16·1	13·1	10·2	15·4	12·8
Bronchitis ..	—	4·3	3·1	3·3	4·4	6·8	1·4	3·4
All pulmonary ..	13·1	30·6	26·4	31·5	33·6	30·5	32·9	29·1

* Not printed.

In considering this table, the very limited extent to which these percentage death-rates can be used for purposes of comparison must be borne in mind. Although, for instance, it is the case that phthisis was the principal cause of deaths amongst both the Burghers and the Sinhalese, and that whereas 13·3 per cent. of the total Burgher deaths and only 12·1 per cent. of the total Sinhalese deaths were due to this cause, nevertheless, as Table XXI. shows, the Sinhalese suffered more than the Burghers from phthisis in proportion to their population. The Burghers in fact suffered less in 1909, and generally have suffered less from phthisis in proportion to their population than any other race in Colombo, and it is certainly not their mortality from this disease which explains their peculiar age constitution. (See also remarks under 7 (*b*).)

13. The following table shows the principal causes of deaths for all races during 1909 compared with the average during the preceding ten years :—

TABLE XVII.—Principal Causes of Deaths, 1899 to 1909, All Races, All Ages.

Causes of Deaths.	Rate per 1,000 Population. Average, 1899 to 1908.	1909.	Increase or Decrease.
Enteric and suspected enteric	1·02	1·73	+ ·71
Simple continued fever	0·85	0·20	— ·65
Remittent fever	0·91	0·27	— ·64
Intermittent fever	0·02	0·01	— ·01
Phthisis	3·38	4·33	+ ·95
Pneumonia	3·14	4·29	+1·15
Bronchitis	1·32	1·16	— ·16
Diarrhœa and enteritis	3·95	3·34	— ·61
Dysentery	2·32	1·68	— ·64
Infantile convulsions	2·94	2·25	— ·69
Tetanus	1·12	1·18	+ ·06
Ill-defined	2·93	2·34	— ·59
Anchylostomiasis	·46	·59	+ ·13

It will be convenient to consider these diseases under their respective group headings.

14. *Pulmonary Diseases.*—Deaths, 1,798; ratio, 9·78; average for previous ten years, 7·84; increase, 1·94 per 1,000. This group includes phthisis, pneumonia, and bronchitis, each of which is dealt with in detail later. The mortality from this group during each of the last eleven years is shown in Table XVIII. :—

TABLE XVIII.—Pulmonary Diseases, 1899 to 1909. All Races, Death-rate per 1,000 Population.

Year.	Phthisis.	Pneumonia.	Bronchitis.	Total Pulmonary.
1899	2·39	1·94	1·15	5·48
1900	2·72	2·62	1·31	6·65
1901	3·21	3·63	1·61	8·45
1902	3·00	2·89	1·32	7·21
1903	3·22	3·00	1·29	7·51
1904	3·58	2·58	1·38	7·54
1905	3·65	3·32	1·33	8·30
1906	4·19	3·76	1·41	9·36
1907	4·00	3·29	1·06	8·35
1908	3·86	4·33	1·33	9·52
Average, 1899 to 1908	3·38	3·14	1·32	7·84
1909	4·33	4·29	1·16	9·78
Increase or Decrease	+ ·95	+1·15	—·16	+1·94

As the table above and Diagram III.* show, the mortality from the pulmonary group of diseases has been steadily rising since so far back as the statistics go, and is now nearly double what it was 11 years ago. This is due to the steady increase in the mortality from phthisis and pneumonia which have been rising side by side. Bronchitis, on the other hand, has remained practically stationary; it is not an infectious disease in the sense that the other two members of the group are. This steady increase in the mortality from pulmonary diseases is the most serious feature of the vital statistics of Colombo.

15. The mortality from pulmonary diseases by races since 1899 is shown in Table XIX. :—

TABLE XIX.—Pulmonary Diseases, 1899 to 1909. Death-rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899	5·48	4·27	4·99	5·44	5·39	5·19	5·81	4·15
1900	6·65	4·18	6·37	6·53	7·21	6·61	7·48	7·27
1901	8·45	5·42	7·81	9·25	8·16	7·46	6·84	10·81
1902	7·21	2·57	5·07	7·27	8·01	7·34	6·01	8·63
1903	7·51	3·25	5·68	8·06	7·26	7·36	5·65	10·53
1904	7·54	4·98	6·75	8·00	6·36	7·99	8·97	8·88
1905	8·30	3·15	5·74	8·98	7·59	8·56	8·72	10·22
1906	9·36	4·12	7·42	9·86	9·81	8·73	7·72	11·88
1907	8·35	1·69	5·60	8·73	8·13	8·78	9·39	9·69
1908	9·52	4·34	7·46	10·62	8·35	9·68	8·64	10·94
Average, 1899–1908	7·84	3·80	6·28	8·27	7·63	7·77	7·52	9·30
1909	9·78	2·94	7·64	10·12	10·21	10·01	9·61	7·03
Increase or Decrease	+1·94	— ·86	+1·36	+1·85	+2·58	+2·24	+2·09	—2·27

It will be seen that every race except European has had a steadily rising mortality rate from these causes, and that every race except the Europeans and "Others" shows an increase during 1909 compared with the average. The Tamils had the highest rate in 1909, next come the Sinhalese, and close behind these the Moors. The Tamil rate is however unreliable owing to the great and sudden variations in their population caused by immigration and emigration.

* Not printed.

16. *Pulmonary Mortality by Race and Sex.*—This is shown in Table XX. :—

TABLE XX.—Pulmonary Diseases, 1909. Death-rate per 1,000 Population of each Sex. (Calculated on the Census Population.)

Race.	Pulmonary Group. Males.	Pulmonary Group. Females.	Phthisis. Males.	Phthisis. Females.	Pneumonia. Males.	Pneumonia. Females.
All Races	11·39	11·96	4·56	6·01	5·59	4·39
Europeans	4·76	3·85	3·97	2·56	·79	1·28
Burghers	7·56	9·12	2·58	4·64	3·78	3·32
Sinhalese	11·49	11·23	4·89	5·55	5·28	4·34
Tamils	13·49	14·14	4·43	7·28	7·80	4·98
Moors	10·26	13·59	4·47	7·02	4·46	4·56
Malays	9·45	15·06	4·52	6·32	2·81	5·34
Others	11·46	12·59	5·27	7·35	5·58	5·25

The table above shows the interesting fact which has been alluded to in previous reports, viz., the higher mortality from pulmonary diseases amongst the females than amongst the males of the indigenous races. It is most strikingly exemplified in the case of the Muhammadan races, viz., the Malays and the Moors, due in a large measure no doubt to the life of seclusion to which their women are subjected. In this respect their customs and their death-rates are in strong contrast to those of the Europeans.

17. *Phthisis.*—Deaths, 796; ratio, 4·33; average for the previous ten years, 3·38; increase, 0·95 per 1,000.

The mortality from this disease in each race since 1899 is shown in Table XXI. :—

TABLE XXI.—Mortality from Phthisis, 1899 to 1909. Rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899	2·39	1·94	2·32	2.60	2·42	1·96	2·79	1·92
1900	2·72	1·90	3·23	2·76	2·48	2·55	3·85	3·41
1901	3·21	3·74	3·53	3·78	2·45	2·51	3·09	3·89
1902	3·00	1·10	2·66	3·38	2·97	2·57	3·00	2·26
1903	3·22	2·89	2·55	3·64	2·42	3·39	2·93	4·29
1904	3·58	2·49	4·07	4·03	2·64	3·57	3·88	3·52
1905	3·65	2·45	2·72	4·23	2·88	3·44	4·76	4·05
1906	4·19	2·40	3·71	4·71	4·09	3·48	3·86	4·35
1907	4·00	1·01	3·00	4·50	3·28	3·92	5·45	4·77
1908	3·86	2·67	3·14	4·54	3·08	3·76	3·86	3·80
Average, 1899–1908	3·38	2·26	3·09	3·82	2·87	3·11	3·75	3·62
1909	4·33	2·28	3·32	4·63	3·92	4·78	4·27	3·44
Increase or Decrease	+·95	+·02	+·23	+·81	+1·05	+1·67	+·52	—·18

As the table above and Diagram III.* show, the mortality from phthisis has been steadily increasing for a long series of years, in fact since as far back as the statistics go. Every race except the European has participated in this progressive rise, and during the year under review every race except the "Others" shows an increase compared with the average of the previous ten years. The race with the highest rate during 1909 was the Moors, followed closely by the Sinhalese, who have however the highest average rate.

For a fuller consideration of the causes of this increasing mortality and the preventive measures which are necessary, reference is requested to my special report upon phthisis, No. 292 of August 20, 1909, in connection with which it may be mentioned that every death from phthisis is now reported direct to this Department by the local Registrars, whereupon the Sub-Inspectors visit the home of the deceased and make inquiries and carry out disinfection (see section 57).

18. *Pneumonia.*—Deaths, 789; ratio, 4·29; average for previous ten years, 3·14; increase, 1·15 per 1,000. The mortality from this disease in each race since 1899 is shown in the table below :—

TABLE XXII.— Mortality from Pneumonia, 1899 to 1909. Rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899	1·94	1·94	1·55	1·65	2·30	1·42	2·09	1·75
1900	2·62	1·52	1·70	2·57	3·67	2·00	2·72	3·41
1901	3·63	1·31	2·35	3·85	4·45	2·75	2·43	6·27
1902	2·89	1·10	1·58	2·54	3·97	2·81	1·93	5·34
1903	3·00	0·36	2·14	3·11	3·67	2·27	2·09	5·07
1904	2·58	0·36	1·79	2·58	2·67	2·49	1·83	5·00
1905	3·32	0·70	2·09	3·51	3·92	2·80	1·58	4·76
1906	3·76	1·72	2·63	3·73	4·67	3·42	1·16	5·35
1907	3·29	0·68	2·13	3·19	3·86	3·27	2·82	4·29
1908	4·33	1·34	3·30	4·60	4·29	3·76	3·68	5·93
Average, 1899–1908	3·14	1·10	2·12	3·13	3·75	2·70	2·23	4·72
1909	4·29	0·66	3·24	4·31	5·21	3·91	3·20	3·30
Increase or Decrease	+1·15	—·44	+1·12	+1·18	+1·46	+1·21	+·97	—1·42

Practically the same remarks apply to pneumonia as to phthisis. It has steadily been increasing as a cause of deaths for many years, for practically the same reasons, and the preventive measures required are for the most part the same. The race which has suffered on an average the most (exclusive of the mixed class grouped as "Others") is the Tamils, and as usual they head the list in 1909.

No doubt the greater poverty of the Tamils as a race, and their greater exposure to vicissitudes of the weather and to hardships generally, together with the fact that a great proportion of them are not indigenous to this country, is the explanation of their high mortality compared with the other races, but it must also be borne in mind that for reasons already stated their rates are very unreliable. The Europeans suffer comparatively very little from the disease.

* Not printed.

19. *Bronchitis.*—Deaths, 213; ratio, 1·16; average for previous ten years, 1·32; decrease, 0·16 per 1,000. The mortality since 1899 is shown in the Table below :—

TABLE XXIII.—Mortality from Bronchitis, 1899 to 1909. Rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899	1·15	0·39	1·12	1·19	0·67	1·81	0·93	0·48
1900	1·31	0·76	1·44	1·20	1·06	2·06	0·91	0·45
1901	1·61	0·37	1·93	1·62	1·26	2·20	1·32	0·65
1902	1·32	0·37	0·83	1·35	1·07	1·96	1·08	1·03
1903	1·29	0·00	0·99	1·31	1·17	1·70	0·63	1·17
1904	1·38	0·13	0·89	1·39	1·05	1·93	3·26	0·36
1905	1·33	0·00	0·95	1·24	0·79	2·32	2·38	1·41
1906	1·41	0·00	1·08	1·42	1·05	1·83	2·70	2·18
1907	1·06	0·00	0·47	1·04	0·99	1·59	1·12	0·63
1908	1·33	0·33	1·02	1·48	0·98	2·16	1·10	1·21
Average, 1899–1908	1·32	0·24	1·07	1·32	1·01	1·96	1·54	0·96
1909	1·16	0·00	1·08	1·18	1·08	1·32	2·14	0·29
Increase or Decrease	—0·16	—0·24	+0·01	—0·14	—0·07	—0·64	+0·60	—0·67

Bronchitis, unlike the other two members of the pulmonary group, shows no tendency towards an increase, and as it is a comparatively insignificant cause of deaths it need not be further considered.

20. *Diarrhœal Diseases.*—Deaths, 922; ratio, 5·02; average for the previous ten years, 6·27; decrease, 1·25 per 1,000. This group includes diarrhœa and enteritis and dysentery, the mortality from which since 1899 is shown in Tables XXIV. and XXV. Cholera is excluded, as according to the returns it is not endemic here like those mentioned above.

TABLE XXIV.—Diarrhœal Diseases, 1899 to 1909, all Races. Death-rate per 1,000 Population.

Year.	Diarrhœa and Enteritis.	Dysentery.	Total Diarrhœal.
1899	2·93	2·12	5·05
1900	3·70	2·41	6·12
1901	4·38	2·16	6·55
1902	4·37	2·32	6·69
1903	4·20	2·79	6·99
1904	3·56	1·88	5·43
1905	4·32	2·75	7·07
1906	4·78	3·31	8·10
1907	3·34	1·73	5·07
1908	3·91	1·72	5·63
Average, 1899–1908	3·95	2·32	6·27
1909	3·34	1·68	5·02
Increase or Decrease	—0·61	—0·64	—1·25

TABLE XXV.—All Diarrhœal Diseases, 1899 to 1909. Death-rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899	5·05	3·49	4·55	5·06	6·64	3·95	1·40	5·75
1900	6·12	4·95	4·50	6·02	9·13	3·81	5·67	5·46
1901	6·55	5·24	3·78	5·47	11·44	4·75	5·29	5·84
1902	6·69	7·36	4·99	6·23	10·13	4·57	3·87	6·98
1903	6·99	9·04	5·73	7·32	8·48	5·18	6·27	5·27
1904	5·43	6·04	4·97	5·81	5·19	4·65	6·92	5·75
1905	7·07	5·24	6·04	7·62	8·18	5·24	5·55	5·99
1906	8·10	7·22	5·58	8·05	11·10	5·76	5·21	7·19
1907	5·07	5·74	3·24	4·39	7·90	3·86	2·41	4·61
1908	5·63	5·68	4·63	6·79	6·04	3·14	3·49	5·47
Average, 1899–1908	6·27	6·00	4·80	6·28	8·42	4·49	4·61	5·83
1909	5·02	3·59	3·63	5·28	6·61	3·19	4·09	3·01
Increase or Decrease	—1·25	—2·41	—1·17	—1·00	—1·81	—1·30	—0·52	—2·82

In view of the fact that the diseases which this group comprises all come under the heading of "filth diseases," it is very satisfactory to find that the death-rate during 1909 is the lowest on record. It is, of course, impossible to say how far the climatic conditions which prevailed during the year are responsible for the reduction, but if anything one should have expected that the prolonged shortage of rainfall and the consequent lack of natural cleansing would have tended towards a rise rather than a fall in the mortality from these diseases. Every race participated in this reduction in the mortality from diarrhœal diseases.

21. *Diarrhœa and Enteritis.*—Deaths, 614; ratio, 3·34; average for previous ten years, 3·95; decrease, 0·61 per 1,000. The terms diarrhœa and enteritis are for all practical purposes synonymous. This explains why during recent years the term enteritis has figured so much more frequently and "diarrhœa" so much less frequently than hitherto in the returns. The more common use of the term enteritis in place of "diarrhœa" merely indicates a greater tendency of late towards specificness in nomenclature. To avoid confusion therefore on this account the terms are treated in this report as synonymous.

The mortality since 1899 is shown in Table XXVI. :—

TABLE XXVI.—Diarrhœa and Enteritis, 1899 to 1909. Death-rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899	2·93	1·16	3·35	2·98	3·92	2·13	0·47	2·15
1900	3·70	1·52	2·80	3·95	5·53	1·71	3·63	2·96
1901	4·38	1·50	2·77	3·88	7·85	2·58	5·53	3·67
1902	4·37	3·68	3·82	4·31	6·77	2·17	3·01	3·70
1903	4·20	3·25	3·70	4·72	5·08	2·40	3·76	3·12
1904	3·56	1·42	3·09	4·04	3·16	3·08	4·88	3·34
1905	4·32	1·75	4·03	5·03	4·71	2·54	3·57	3·35
1906	4·84	2·06	4·07	5·10	6·01	3·20	3·86	3·85
1907	3·34	3·04	1·97	3·03	5·22	2·58	0·94	2·38
1908	3·91	1·67	2·83	5·12	3·95	2·16	2·39	2·74
Average, 1899–1908	3·95	2·11	3·24	4·22	5·22	2·45	3·00	3·12
1909	3·34	0·65	2·24	3·81	4·03	2·08	3·20	2·15
Increase or Decrease	—0·61	—1·46	—1·00	—0·41	—1·19	—0·37	+0·20	—0·97

Every race except the Malay shows a reduction in mortality, and in their case the slight increase ascribed to this cause is more than counterbalanced by the decrease in the mortality ascribed to dysentery, the other member of this group.

22. *Dysentery.*—Deaths, 308; ratio, 1·68; average for the previous ten years, 2·32; decrease, 0·64 per 1,000. The mortality from this cause since 1899 is shown in Table XXVII. :—

TABLE XXVII.—Dysentery, 1899 to 1909. Death-rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899	2·12	2·33	1·20	2·08	2·72	1·82	0·93	3·60
1900	2·41	3·43	1·70	2·07	3·60	2·10	2·04	2·50
1901	2·16	3·74	1·01	1·59	3·29	2·17	1·76	2·17
1902	2·32	3·68	1·17	1·92	3·36	2·40	0·86	3·28
1903	2·79	5·79	2·03	2·60	4·40	2·78	2·51	2·15
1904	1·88	4·62	1·88	1·77	2·03	1·57	2·04	2·41
1905	2·75	3·49	2·01	2·69	3·47	2·70	1·98	2·64
1906	3·31	5·16	1·51	2·95	5·09	2·56	1·35	3·34
1907	1·73	2·70	1·27	1·36	2·68	1·32	1·50	2·23
1908	1·72	4·01	1·80	1·67	2·09	0·98	1·10	2·74
Average, 1899–1908	2·32	3·89	1·56	2·07	3·27	2·04	1·61	2·71
1909	1·68	2·94	1·39	1·47	2·58	1·11	0·89	0·86
Increase or Decrease	—0·64	—0·95	—0·17	—0·60	—0·69	—0·93	—0·72	—1·85

Every race shows a decrease in the mortality from dysentery, the most noticeable being in the case of the Europeans, amongst whom this has always been one of their principal causes of deaths.

They still head the list in this respect, but this is partly explained no doubt by the more specific nature of the diagnosis in their case, for they have a much lower mortality than other races, ascribed to the less specific causes of diarrhœa and enteritis.

23. *Fevers.*—Deaths, 406; ratio, 2·21; average for previous ten years, 2·81; reduction 0·60; cases 913; case-rate 4·97 per 1,000. This group includes enteric fever, suspected enteric fever, simple continued fever, remittent fever, and intermittent fever. The mortality from these diseases is shown in the Tables XXVIII. to XXXIII. and Diagrams II. and V.* :—

TABLE XXVIII.—Fevers, 1899 to 1909. All Races Mortality per 1,000 Population.

Year.	All Fevers.	Enteric and Suspected Enteric.	Simple Continued Fever.	Remittent Fever.	Intermittent Fever.
1899	3·22	0·64	1·14	1·37	0·04
1900	3·17	0·83	1·32	0·93	0·07
1901	2·92	0·60	1·43	0·84	0·03
1902	2·76	0·56	1·15	1·03	0·00
1903	3·05	0·60	1·31	1·11	0·01
1904	2·16	0·55	0·58	0·99	0·03
1905	2·07	0·80	0·29	0·97	0·00
1906	3·39	1·55	0·83	1·00	0·00
1907	2·59	1·71	0·28	0·61	0·00
1908	2·84	2·39	0·18	0·27	0·00
Average, 1899–1908	2·81	1·02	0·85	0·11	0·02
1909	2·21	1·73	0·20	0·27	0·01
Increase or Decrease	—0·60	+0·71	—0·65	—0·64	—0·01

* Not printed.

TABLE XXIX.—All Fevers, 1899 to 1909. Death-rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899	3·22	4·65	2·14	3·30	3·31	3·17	4·65	1·92
1900	3·17	6·09	1·95	3·37	3·13	2·70	5·89	2·05
1901	2·92	5·24	2·10	2·72	3·05	2·75	5·52	4·61
1902	2·76	4·41	2·16	2·84	2·45	2·31	5·58	3·49
1903	3·05	2·53	3·64	3·74	2·15	2·66	5·23	1·95
1904	2·16	2·84	1·55	2·64	1·33	1·47	4·48	4·08
1905	2·07	2·10	1·69	2·45	1·64	1·74	2·77	2·11
1906	3·39	6·87	3·35	4·47	1·96	2·07	4·24	4·18
1907	2·59	4·05	2·44	3·17	1·57	2·30	3·57	2·83
1908	2·84	8·30	3·28	3·80	1·45	1·84	3·29	1·96
Average, 1899–1908	2·81	4·71	2·43	3·25	2·20	2·30	4·52	2·92
1909	2·21	1·62	2·01	2·82	1·64	1·86	1·60	1·57
Increase or Decrease	—0·60	—3·09	—0·42	—0·43	—0·56	—0·44	—2·92	—1·35

TABLE XXX.—All Fevers, 1898 to 1909. Ward Mortality-rate per 1,000 Population.

Year.	Colombo Town.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Hospitals.*	Maradana.	Slave Island.	Kollupitiya.
1899	3·22	2·63	2·25	1·65	2·76	3·86	2·72	10·33	2·06	4·17	2·53
1900	3·17	1·32	1·45	1·62	1·80	5·25	1·74	12·91	1·71	3·96	2·23
1901	2·92	3·06	2·12	2·34	1·81	3·34	1·77	12·67	1·53	5·16	2·17
1902	2·76	3·06	1·59	1·26	2·54	2·90	2·29	10·86	1·94	4·59	1·52
1903	3·05	0·44	1·72	1·54	1·97	3·59	2·79	14·48	1·61	4·77	2·09
1904	2·16	1·75	0·53	1·42	1·06	3·82	1·83	16·39	0·97	2·14	0·79
1905	2·07	0·44	1·19	0·90	2·20	1·72	2·06	19·88	1·33	2·09	1·39
1906	3·39	2·19	0·79	2·45	1·76	2·48	2·49	26·36	2·54	3·79	2·65
1907	2·59	0·00	1·19	2·41	1·64	2·33	1·88	22·27	2·63	2·26	0·99
1908	2·84	0·87	0·40	1·62	1·36	1·49	2·01	32·61	2·06	2·84	2·81
Average, 1899–1908	2·81	1·58	1·32	1·72	1·89	3·08	2·16	—	1·84	3·58	1·92
1909	2·21	0·44	0·79	1·49	1·36	1·71	1·62	34·0	1·41	1·82	0·97
Increase or Decrease	—0·60	—1·14	—0·53	—0·23	—0·53	—1·37	—0·54	—	—0·43	—1·76	—0·95

* The rates in this column are expressed as a percentage of total deaths from all fevers.

TABLE XXXI.—Fevers, 1903 to 1909. Cases notified.

Year.	Typhoid.	Suspected Typhoid.	Simple Continued Fever.	Total.
1903	262	—	—	262
1904	303	—	—	303
1905	451	3	25	479
1906	903	45	42	990
1907	890	56	121	1,067
1908	1,344	26	251	1,621
1909	764	30	119	913

N.B.—This Table includes Port, Outside, and Untraced Cases.

TABLE XXXII.—Fevers, 1909. Cases Notified by Races.

Race.	Enteric.	Suspected Enteric.	Continued Fever.	All Fevers.	Case-rate per 1,000 Population.
All Races	764	30	119	913	4·97
Europeans	44	—	2	46	15·01
Burghers	99	4	20	123	9·50
Sinhalese	417	15	66	498	6·46
Tamils	82	4	15	101	2·18
Moors	77	7	9	93	2·80
Malays	16	—	3	19	3·38
Others	29	—	4	33	4·74

TABLE XXXIII.—Fevers, 1909. Cases notified by Wards.

	A. Enteric Cases.	B. Suspected Enteric.	C. Continued Fever.	D. Total of A, B, and C.	E. Case-rate per 1,000 of A and B.	F. Case-rate per 1,000 of D.	G. Death-rate from All Fevers.
Fort	7	—	—	7	3·06	3·06	0·44
Pettah	20	—	5	25	2·65	3·31	0·79
San Sebastian	34	—	2	36	3·17	3·36	1·49
St. Paul's	55	1	10	66	2·31	4·35	1·36
Kotahena	95	13	35	143	2·79	3·70	1·71
New Bazaar	84	—	7	91	4·12	4·46	1·62
Maradana	176	10	10	196	4·95	5·22	1·41
Slave Island	29	2	11	42	1·53	2·07	1·82
Kollupitiya	84	3	29	116	3·68	4·91	0·97
Colombo Town	584	29	109	722	3·33	4·02	2·21
Port	7	—	—	7	—	—	—
Outside Limits	74	—	2	76	—	—	—
Untraced	99	1	8	107	—	—	—
Grand Total	764	30	119	913	—	—	—

The steady reduction in the mortality from "fevers" as shown on Diagram II.* is one of the most satisfactory features of the statistics. It was marred by the rise in 1906, a year of phenomenal mortality all over the Island, and Colombo has not yet quite recovered from the effects. An enormous amount of infection was implanted amongst the population during 1906, which it will take some years to eliminate, but there is evidence that this is occurring, as the steadily falling curve on Diagram II.* shows. It will be seen from Table XXIX. that as in the case of the diarrhœal group every race participated in the reduction in the mortality from "fevers" during 1909, the Europeans showing the greatest reduction.

It is satisfactory that, as Table XXXI. shows, there were only 913 cases of "fever" of all sorts notified during the year, as against 1,621 in 1908. This represents a case rate of 4·97 per 1,000 as against 8·99 in 1908, *i.e.*, only a little over half as much.

24. *Typhoid or Enteric Fever (including Suspected Typhoid).*—Cases, 764; cases traced in Colombo, 613; total case-rate, 3·33 per 1,000; deaths, 318; case mortality, 38·6 per cent.; death-rate, 1·73 per 1,000; average death-rate for previous ten years, 1·02; increase, 0·71 per 1,000. The apparent increase in mortality from enteric compared with the average is the result not of an actual increase in the amount of infection, but of improved diagnosis, whereby what would previously have been returned as simple continued fever or remittent fever, is now being returned under its correct heading of enteric fever. This is indicated by the reduction in the "All Fevers" death-rate as shown in Table XXVIII., a point which has been fully considered in my special report No. 257 of July 28, 1908, on fevers in Colombo.

(*a*) The incidence of enteric cases by years, races, and wards is shown in Tables XXXI., XXXII., and XXXIII. above.

(*b*) The death-rates by races are shown in Table XXXIV.:—

TABLE XXXIV.—Enteric Fever, 1899 to 1909. Death-rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899	0·64	3·08	0·76	0·81	0·39	0·31	0·00	0·71
1900	0·83	5·70	0·67	1·15	0·32	0·34	0·22	0·90
1901	0·60	4·49	0·58	0·66	0·37	0·30	0·22	1·51
1902	0·56	3·68	1·16	0·62	0·27	0·13	0·21	1·64
1903	0·60	1·45	1·07	0·98	0·08	0·13	0·02	0·39
1904	0·55	2·50	1·06	0·69	0·15	0·09	0·61	1·87
1905	0·80	1·41	0·97	1·16	0·29	0·41	1·00	0·88
1906	1·55	5·52	2·24	2·25	0·63	0·54	1·16	1·68
1907	1·71	3·71	1·81	2·29	0·76	1·40	1·31	1·43
1908	2·39	7·64	3·04	3·29	1·12	1·44	1·83	1·66
Average, 1899–1908	1·02	3·92	1·34	1·39	0·44	0·51	0·66	1·27
1909	1·73	1·30	1·70	2·35	1·08	1·53	0·89	0·70
Increase or Decrease	+0·71	—2·62	+0·36	+0·96	+0·64	+1·02	+0·23	—0·57

The great reduction in the mortality amongst Europeans is a most satisfactory feature, for this has long been one of their chief causes of deaths. The apparent increases recorded in respect of the indigenous races are, as stated above, in reality the result of improved diagnosis, as indicated by the reduction in their death-rates from the other members of the fever group.

(*c*) The ward death-rates given in Table XXXV. are untrustworthy for purposes of comparison, *e.g.*, as an indication of the relative prevalence of this disease in the various wards, owing in the first place to the large proportion (38·7 per cent. in 1909) of cases which are returned against the hospitals, their home addresses being untraced, in the second place owing to the unequal proportion of hospital cases furnished by the various wards, and in the third place owing to the disturbing effect upon the statistics during recent years of improvement in diagnoses. In time, however, as diagnosis becomes more uniform and reliable these ward rates should become instructive.

* Not printed.

TABLE XXXV.—Enteric Fever, 1899 to 1909. Ward Mortality-rate per 1,000 Population.

Year.	Colombo Town.	Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Hospitals.*	Maradana.	Slave Island.	Kollupitiya.
1899	0·64	1·31	0·26	0·21	0·15	0·74	0·29	38·1	0·34	0·18	0·46
1900	0·83	0·87	0·26	0·54	0·05	1·12	0·40	32·8	0·50	0·29	0·67
1901	0·60	1·31	0·26	0·63	0·14	0·26	0·39	50·5	0·19	0·35	0·27
1902	0·56	2·18	0·13	0·10	0·24	0·46	0·27	42·9	0·28	0·22	0·31
1903	0·60	0·00	0·00	0·00	0·14	0·20	0·10	62·3	0·48	0·28	0·30
1904	0·55	0·43	0·00	0·20	0·00	0·33	0·16	56·5	0·39	0·32	0·14
1905	0·80	0·00	0·26	0·00	0·17	0·69	0·31	37·5	0·50	0·69	0·86
1906	1·55	1·31	0·00	0·59	0·22	1·26	0·26	49·4	1·06	0·63	0·98
1907	1·71	0·00	0·26	1·25	0·86	1·55	0·71	32·3	2·02	0·82	0·59
1908	2·39	0·44	0·40	1·24	1·27	1·06	1·71	37·4	1·73	1·62	2·33
Average, 1899 to 1908 ..	1·02	0·78	0·18	0·48	0·32	0·77	0·46	—	0·75	0·54	0·69
1909	1·73	—	0·53	1·40	1·20	1·09	1·52	38·07	1·23	0·84	0·47
Increase or Decrease ..	+0·71	—0·78	+0·35	+0·92	+0·88	+0·32	+1·06	—	+0·48	+0·30	—0·22

* The rates in this column are expressed as a percentage of total deaths from enteric.

The accompanying photograph of the spot map* in this office shows the actual distribution of the traced cases during the year. It is instructive in that it shows a distributive typical of an endemic disease, with patches of acute local infection.

The explanation of these areas of acute infection lies for the most part in infection from case to case, but where these areas continue to show acute infection year after year there is some other reason.

There are three such areas with which we have been contending for years, viz., Dematagoda road, Forbes road, and Grandpass road.

As regards the Dematagoda road area much light has recently been thrown upon this by an inspection of the Kolonnawa district which lies just beyond the Dematagoda toll bar. This district, which contains a number of dairies, was recently taken within the town limits and was found upon inspection to be in an exceedingly filthy and insanitary condition, in regard to which a special report has been submitted. I have little doubt that the condition of this place upon our borders affords an explanation of much of the enteric fever which has prevailed so persistently in Dematagoda road.

As regards the Forbes road area, this lies on the foul sodden site of the old Suduwella swamp, and is bordered by the existing foul Suduwella ditch; perhaps this has got something to do with the persistence of enteric there. As regards the Grandpass road and Messenger street area much of the enteric there was found to be amongst either Cochins or Moors. In the case of the Cochins they are dirty in their habits, they herd together, are apparently very susceptible, and they infect each other. In the case of the Moors a dangerous practice of giving alms in the shape of food in infected houses was found to be in existence. The Moorish community were appealed to, to put a stop to this practice, which I am told has to a great extent since ceased.

Another feature of interest about the spot map is the remoteness of the bulk of the cases from the night soil depôt at Narahenpitiya (dark patch marked N. S. D.), which certainly does not lend support to the theory that this much abused place is responsible for the spread of enteric in Colombo.

(*d*) The incidence of enteric cases in each race at various age periods is shown in Table XXXVI.:—

TABLE XXXVI.—Distribution of Enteric Cases reported during 1909 in respect of Age, Race, and Sex. (Inclusive of Port and Outside Cases.)

Race.	Sex.	0 to 5 Years.	5 Years to 10 Years.	10 Years to 15 Years.	15 Years to 20 Years.	20 Years to 25 Years.	25 Years to 30 Years.	30 Years to 35 Years.	35 Years to 40 Years.	40 Years to 50 Years.	50 Years to 60 Years.	60 Years and over.	All Ages.	Total of each Race.	Case Rate per 1,000 Population.	Deaths.	Case Mortality per Cent.	Death-rate per 1,000 Population.
All races ..	Males	22	56	67	95	93	69	37	19	15	7	1	481	764	4·15	295	38·6	1·73
	Females	26	48	48	56	41	25	13	12	10	3	1	283					
Europeans	Males	—	—	1	2	8	7	10	2	3	1	—	34	44	14·36	4	9·1	1·30
	Females	—	1	—	1	1	3	1	2	1	—	—	10					
Burghers .	Males	7	7	11	10	9	4	4	1	3	1	—	57	99	7·74	22	22·2	1·70
	Females	6	6	6	12	5	3	—	2	2	—	—	42					
Sinhalese .	Males	12	38	40	44	43	32	15	8	3	4	1	240	417	5·41	124	29·7	2·35
	Females	17	32	32	33	25	13	9	7	5	3	1	177					
Tamils ..	Males	—	4	6	20	9	14	3	4	2	—	—	62	82	1·77	46	56·1	1·08
	Females	2	3	4	1	4	3	2	—	1	—	—	20					
Moors ..	Males	2	5	4	12	11	6	2	2	4	1	—	49	77	2·32	47	61·0	1·53
	Females	1	4	6	8	4	2	1	1	1	—	—	28					
Malays ..	Males	1	1	2	1	3	2	1	1	—	—	—	12	16	2·85	5	31·3	0·89
	Females	—	—	—	1	2	1	—	—	—	—	—	4					
Others ..	Males	—	1	3	6	10	4	1	2	—	—	—	27	29	4·16	4	14·1	0·70
	Females	—	2	—	—	—	—	—	—	—	—	—	2					

* Not reproduced.

It will be seen that as usual Europeans suffer most during the ealier years of their residence in the Colony, viz., between the ages of 20 and 35, for the reason no doubt that they arrive here unprotected by a previous attack of the disease, and unacclimatized.

The incidence amongst the general population on the other hand falls most during the earlier ages, viz., 15 to 25, for the reason that a large number of the adult population are protected by previous attacks in their youth.

25. *Simple Continued Fever.*—Cases, 119 ; deaths, 37 ; case mortality, 31 per cent. ; death-rate, 0·20 per 1,000 ; average death-rate during previous ten years, 0·85 ; decrease, 0·65 per 1,000.

It is obvious that a disease which has a case mortality of 31 per cent. is not entitled to be called "simple" fever. From inquiries made into every case which has been reported during the last five years it has been made manifest that the great majority of them are cases of enteric fever.

The death returns in respect of enteric fever in previous years therefore require correction in the light of our present knowledge in regard to the true nature of this so-called "simple continued" fever.

Table XXXVII. below shows the mortality ascribed to simple continued fever since 1899, while Table XXXVIII. shows the incidence of the cases notified amongst the various races. It will be seen that it is gradually becoming eliminated from the returns as a cause of deaths. The sooner it disappears altogether the better it will be from a statistical point of view.

TABLE XXXVII.—Simple Continued Fever, 1899 to 1909. Death-rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899 ..	1·14	0·77	0·34	1·20	1·00	1·34	2·79	0·71
1900 ..	1·32	0·38	0·76	1·39	1·47	0·94	4·08	0·90
1901 ..	1·43	0·00	1·18	1·41	1·25	1·27	4·85	2·16
1902 ..	1·15	0·36	0·58	1·15	0·99	1·15	4·29	1·23
1903 ..	1·31	0·36	0·74	1·71	0·98	0·83	3·78	0·58
1904 ..	0·58	0·00	0·24	0·72	0·28	0·52	2·26	0·75
1905 ..	0·29	0·35	0·24	0·26	0·27	0·28	1·00	0·35
1906 ..	0·83	1·38	0·80	1·07	0·62	0·44	1·37	0·67
1907 ..	0·28	0·28	0·24	0·25	0·21	0·28	1·50	0·16
1908 ..	0·18	0·00	0·08	0·30	0·04	0·06	0·91	0·00
Average, 1899 to 1908	0·85	0·39	0·52	0·95	0·71	0·71	2·68	0·75
1909 ..	0·20	0·00	0·00	0·21	0·24	0·09	0·18	0·29
Increase or Decrease	—0·65	—0·39	—0·52	—0·74	—0·47	—0·62	—2·50	—0·46

TABLE XXXVIII.—Simple Continued Fever, 1909. Cases reported.

Race.	Cases.	Race.	Cases.
Europeans ..	2	Malays ..	3
Burghers ..	20	Others ..	4
Sinhalese ..	66		
Tamils ..	15	Total ..	119
Moors ..	9		

The most remarkable decrease is in the case of the Malays, which accounts for the great drop in their "all fevers" rate.

26. *Remittent Fever.*—Deaths, 49 ; ratio, 0·27 ; average for previous ten years, 0·91 ; decrease, 0·64 per 1,000.

The term remittent fever is generally understood to mean malaria. There is very little primary malaria in Colombo, and a good deal of the remittent fever which appears in the death returns of past years was probably enteric. With the growing improvement in diagnosis of the fevers the term remittent fever has gradually decreased, as in the case of simple continued fever, the result being a corresponding increase in the number of deaths ascribed to enteric.

Table XXXIX. shows the mortality ascribed to this disease since 1899 :—

TABLE XXXIX.—Remittent Fever, 1899 to 1909. Death-rate of each Race per 1,000 Population.

Year.	All Races.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
1899 ..	1·37	0·00	1·02	1·21	1·86	1·49	1·86	0·47
1900 ..	0·93	0·00	0·50	0·76	1·17	1·32	1·58	0·22
1901 ..	0·84	0·74	0·33	0·62	1·28	1·16	0·44	0·43
1902 ..	1·03	0·36	0·41	1·05	1·14	1·18	1·07	0·61
1903 ..	1·11	0·72	0·49	1·01	1·09	1·69	1·05	0·98
1904 ..	0·99	0·35	0·24	1·21	0·86	0·85	1·64	1·49
1905 ..	0·97	0·35	0·48	1·01	1·06	1·03	0·80	0·89
1906 ..	1·00	0·00	0·32	1·45	0·72	1·12	1·75	1·85
1907 ..	0·61	0·33	0·39	0·61	0·60	0·62	0·56	1·11
1908 ..	0·27	0·66	0·16	0·21	0·29	0·34	0·55	0·30
Average, 1899 to 1908	0·91	0·35	0·43	0·91	1·01	1·08	1·13	0·84
1909 ..	0·27	0·32	0·31	0·25	0·32	0·21	0·53	0·58
Increase or Decrease ..	—0·64	—0·03	—0·12	—0·66	—0·69	—0·87	—0·60	—0·26

Every race shows a decrease in the mortality ascribed to this cause, the most marked decrease being in the case of the Moors.

27. *Intermittent Fever.*—Only two deaths were ascribed to this cause during the year.

SECTION III.

28. *Notifiable Infectious Diseases.*—The diseases which are required by law to be notified are plague, cholera, smallpox, chickenpox, measles, diphtheria, typhoid or enteric, simple continued fever, rabies. 2,305 cases in all were reported during the year, as against 3,371 during 1908—a reduction of 1,066 cases, due mainly to a decrease in enteric, smallpox, and measles.

Table XL. shows the incidence of each of these during the several months of the year, with their various ratios:—

TABLE XL.—Cases of Infectious Diseases reported during each Month of the Year 1909 (exclusive of those reported from the Port), with the Mortality from the same Disease.

	Plague.	Cholera.	Smallpox.	Chickenpox.	Measles.	Diphtheria.	Acute Diarrhœa.	Typhoid Fever.	Suspected Typhoid.	Simple Continued Fever.	Mumps.	Whooping Cough.	Total.
January ..	—	—	26	117	71	1	1	115	8	14	—	—	353
February ..	—	—	38	192	74	—	1	101	1	12	—	—	419
March ..	—	—	13	155	86	—	—	62	1	17	1	—	335
April ..	—	—	6	101	54	—	1	49	2	19	—	—	232
May ..	—	—	2	65	32	1	2	52	4	10	1	—	169
June ..	—	—	—	22	22	1	1	71	7	9	3	—	136
July ..	—	—	—	13	12	3	—	50	—	12	2	—	92
August ..	—	—	—	23	15	1	—	51	—	7	1	—	98
September ..	—	—	—	43	7	1	3	53	—	8	1	2	118
October ..	—	—	—	32	25	—	—	57	1	5	2	—	122
November ..	—	—	—	23	16	—	1	50	2	5	3	—	100
December ..	—	—	—	42	22	—	1	46	4	1	15	—	131
Total for the year ..	—	—	85	828	436	8	11	757	30	119	29	2	2,305
Case rate, per 1,000 population ..	—	—	·46	4·50	2·37	·04	·06	4·12	·16	·65	·16	·01	—
Deaths ..	—	—	27	—	11	2	(?)*	295	23	37	—	2	—
Case mortality, per cent.	—	—	31·8	—	2·5	25·0	—	39·0	76·7	31·1	—	100·0	—
Death rate, per 1,000 population	—	—	·15	—	·06	·01	—	·60	·12	·20	—	·01	—

* Acute diarrhœa is not as a rule differentiated in the death returns from diarrhœa.

29. *Plague.*—As hitherto, no case of plague occurred in Colombo. The preventive measure of capturing rats was transferred on January 1, 1909, from this Department to the newly formed Veterinary Department.

30. *Cholera and Acute Diarrhœa.*—No case of cholera was reported during the year from the town. 11 cases of acute diarrhœa were reported, for the most part at widely separated intervals of time, as shown in Statement XLIII. below.

The incidence of cholera cases since 1903, prior to which there are no complete records, and the mortality from cholera since 1899, are shown in Tables XLI.–XLIII.:—

TABLE XLI.—Cholera Cases reported, 1903 to 1909, exclusive of Cases from the Port.

Year.	Cases.	Case Rate per 1,000 Population.	Port and Outside Cases.
1903 ..	1	0·006	—
1904 ..	1	0·006	3
1905 ..	—	—	—
1906 ..	1	0·006	3
1907 ..	29	0·156	2
1908 ..	30	0·166	1
1909 ..	—	—	—

TABLE XLII.—Mortality from Cholera, 1899 to 1909.

Year.	Deaths.	Rate per 1,000 Population.	Year.	Deaths.	Rate per 1,000 Population.
1899 ..	—	—	1904 ..	1	0·006
1900 ..	—	—	1905 ..	—	—
1901 ..	—	—	1906 ..	2	0·011
1902 ..	2	0·012	1907 ..	19	0·108
1903 ..	—	—	1908 ..	22	0·122
			Average, 1899 to 1908	5	0·026
			1909 ..	0	0·000
			Increase or Decrease ..	— 5	—0·026

TABLE XLIII.—Acute Diarrhœa and Cholera Cases, 1906 to 1909, exclusive of Cases from the Port.

Month.	1906. Acute Diarrhœa.	1906. Cholera.	1907. Acute Diarrhœa.	1907. Cholera.	1908. Acute Diarrhœa.	1908. Cholera.	1909. Acute Diarrhœa.	1909. Cholera.
January	—	—	3	22	3	1	1	—
February	—	—	—	3	2	1	1	—
March	—	—	1	1	6	1	—	—
April	—	—	1	—	12	3	1	—
May	1	—	—	—	10	1	2	—
June	1	—	—	2	16	—	1	—
July	—	—	3	—	9	3	—	—
August	—	—	2	—	1	3	—	—
September	—	—	2	—	—	1	3	—
October	—	1	—	—	4	—	—	—
November	6	—	—	1	16	12	1	—
December	4	—	1	—	6	4	1	—
	12	1	13	29	85	30	11	—
Total	13		42		115		11	

31. *Smallpox.*—85 cases, 27 deaths; case mortality, 31·8 per cent.; case rate, 0·46 per 1,000; death rate, 0·15 per 1,000.

The annual incidence of cases since 1903, prior to which there are no complete records, is shown in Table XLIV., while the death-rates since 1899 are shown in Table XLV. :—

TABLE XLIV.—Smallpox Cases, 1903 to 1909.

Year.	Cases notified from Town.	Cases notified from Port and Outside, not included in Case-rate.	Case-rate per 1,000 Population.
1903	7	6	0·04
1904	1	3	0·006
1905	45	9	0·25
1906	40	26	0·23
1907	49	10	0·28
1908	438	7	2·43
1909	78	25	0·42

TABLE XLV.—Smallpox Deaths, 1899 to 1909.

Year.	Deaths.	Death-rate per 1,000 Population.	Year.	Deaths.	Death-rate per 1,000 Population
1899	16	0·096	1904	1	0·006
1900	9	0·058	1905	17	0·101
1901	29	0·185	1906	11	0·064
1902	27	0·169	1907	8	0·045
1903	1	0·006	1908	88	0·489
		Average, 1899 to 1908		21	0·122
			1909	27	0·15
		Increase or Decrease		+ 6	+0·03

The 1909 cases represent the end of the outbreak which began in July, 1908, as the result of a concealed case which was imported from India. The last case in the epidemic occurred in May, 1909. The measures adopted were immediate removal of all cases to the Infectious Diseases Hospital, strict isolation of all contacts and wholesale vaccination; 211 contacts were passed through the segregation camp, the period of detention in uncomplicated cases being 16 days. The cost for the year for victualling and minor charges was Rs. 1,424·13 or Rs. 6·75 per head. Full details of the outbreak are given in my special report No. 237 of July 13, 1909, in which it was recommended that vaccination should be done at the hands of qualified medical men, and not as at present at the hands of men who have no such qualification and are drawn from a class who are content to begin on a salary of Rs. 15 per month, *i.e.*, the wages of a cooly.

32. *Vaccination.*—Primary, 10,238; re-vaccination, 5,797; total, 16,035. Total for the years during which the epidemic occurred, 45,325.

The details of the vaccination performed by the Government vaccinators as furnished by the Colonial Surgeon are shown in Table XLVI., while the vaccinations performed by the special Municipal vaccinators during the first five months of the year are shown in Table XLVII. :—

TABLE XLVI.—Vaccinations performed during 1909 by the Government Vaccinators.

Ward.	Primary Vaccinations.	Re-vaccinations.	Total.
Fort and Galle Face, Pettah, San Sebastian	1,259	1,107	2,366
St. Paul's	1,378	767	2,145
Kotahena	1,197	513	1,710
New Bazaar	1,351	342	1,693
Maradana	1,240	495	1,735
Slave Island	550	662	1,212
Kollupitiya	704	266	970
Itinerating (Colombo)	653	1,205	1,858
Total	8,332	5,357	13,689

TABLE XLVII.—Vaccinations performed by the Municipal Vaccinators during the Year 1909.

Ward.	Primary Vaccinations.	Re-vaccinations.	Total.
Fort ..	—	—	—
Pettah ..	—	—	—
San Sebastian ..	—	—	—
St. Paul's ..	506	48	554
Kotahena ..	202	61	263
New Bazaar ..	98	109	207
Maradana ..	530	131	661
Slave Island ..	106	24	130
Kollupitiya ..	374	65	439
Segregation Camp ..	90	2	92
Total ..	1,906	440	2,346

33. *Chickenpox.*—Cases, 828; case-rate, 4·50 per 1,000; deaths, nil. The annual incidence of this disease since 1903, prior to which there are no complete records, is shown in Table XLVIII.:—

TABLE XLVIII.—Chickenpox, 1903 to 1909.

Year.	Cases.	Case-rate per 1,000 Population.	Deaths.
1903	230	1·41	1
1904	274	1·65	—
1905	398	2·34	2
1906	231	1·33	—
1907	259	1·47	2
1908	543	3·01	—
1909	828	4·50	—

34. *Measles.*—Cases, 436; case-rate, 2·37 per 1,000; deaths, 11; case mortality, 2·5 per cent. The statistics of this disease since 1903 are shown below :—

TABLE XLIX.—Measles, 1903 to 1909.

Year.	Cases.	Case-rate per 1,000 Population.	Deaths.
1903	119	0·72	—
1904	278	1·67	5
1905	397	2·34	16
1906	354	2·04	4
1907	74	0·41	—
1908	666	3·69	7
1909	436	2·37	11

It is probable that several more deaths than the table above shows were primarily due to this disease, but were returned under the heading of their secondary causes of broncho-pneumonia, bronchitis, &c.

35. *Diphtheria.*—Cases, 8; case-rate, 0·04; deaths, 2; case mortality, 25 per cent. The annual incidence of this disease since 1903 is shown in Table L.:—

TABLE L.—Diphtheria, 1903 to 1909.

Year.	Cases.	Case-rate per 1,000 Population.	Deaths.
1903	—	0·00	—
1904	6	0·03	4
1905	2	0·01	—
1906	10	0·05	1
1907	13	0·07	4
1908	7	0·04	4
1909	8	0·04	2

36. *Typhoid or Enteric Fever.*—See Section 24.

37. *Simple Continued Fever.*—See Section 25.

38. *Rabies and Seizure of Stray Dogs.*—All work in connection with rabies and the seizure of dogs was transferred on January 1, 1909, from this Department to the newly formed Veterinary Department.

SECTION IV.—FOOD AND MARKETS.

39. *Food Inspection.*—The inspection of food not only in the public markets, but also throughout the town and within the Customs premises, was carried out as hitherto by the Sanitary Inspectors, and as these officers have a multiplicity of other duties to perform, the result has necessarily been that the amount of food inspection done has been limited—too limited—considering the careless manner in which foodstuffs generally are prepared and stored, and the ready market which exists, especially amongst the poorer classes, for unsound and often very filthy food, and still further considering the high mortality here from diseases known to be associated with a contaminated food supply. The appointment of a special food inspector, which has been repeatedly urged by this Department and which has been approved and recommended by two separate Committees and adopted once by the Council, but lately annulled, would, if carried out, ensure a much needed improvement in this respect, and is a matter which in my opinion deserves reconsideration at the hands of the Council.

Table LI. shows the quantities of unsound food seized during the year in the public markets and in private boutiques:—

TABLE LI.—Damaged Food Stuffs seized, 1909.

	Cwt. qr. lb.		Cwt. qr. lb.
Dry fish ..	14 1 15½	Beef ..	0 3 13½
Fresh fish ..	13 1 13		Bottles.
Salted fish ..	2 2 26	Sherbet ..	14
Pork ..	0 0 26½		Number.
Potatoes ..	2 3 8	Pomegranates ..	6
Mutton ..	0 0 15	Ash pumpkins ..	4
Apples ..	0 2 13	Cucumbers ..	25
Plantains ..	0 0 21	Mangoes ..	25
Pears ..	0 0 18	Also a quantity of potatoes and putrid fish.	
Mangoes ..	0 3 0		
Sweetmeats ..	0 0 2	*Food Stuffs condemned at the Customs Premises.*	
Cured fish ..	0 1 16		
Dry prawns ..	0 0 1	Potatoes ..	40 cwt.

It will be seen that cured fish as usual heads the list of unsound foods seized. There is a ready market for such stuff, and no degree of putrefaction or pollution appears to render it unsaleable. The evidence has on several occasions pointed to the infection in cases of cholera and acute diarrhœa having been acquired through the eating of contaminated cured fish imported for the most part from India. In addition to the food seized in the town a considerable amount was condemned at the slaughter-house, as Tables LVII. (*b*) and (*c*) show. 861 animals were condemned and rejected as unfit for slaughter owing to their being so old and wasted as to render them unfit for human food.

The question of milk is dealt with in sections 44, 45, and 49.

40. *Bacteriological Work.*—The details of the analyses made on behalf of the Council by the Director of the Bacteriological Institute are given in table LII. below:—

TABLE LII.—Bacteriological Examination of Town Water, 1909, by Director, Bacteriological Institute.

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
Number of bacteria per c.c. of water (agar plate) ..	208	168	160	288
Number of bacteria per c.c. of water (gelatine plate) ..	238	208	210	320
Bacillus coli	absent	absent	absent	absent
Bacillus enteritidis sporogenes	absent	absent	absent	absent
Typhosus	absent	absent	absent	absent
Cholera vibrio ..	absent	absent	absent	absent
Streptococci	absent	absent	absent	absent
Germs liquifying gelatine ..	Nil	Nil	Nil	Nil

41. *Analytical Work.*—1,543 samples of various sorts were analysed by the City Analyst during the year. This represents an exceptionally heavy year's work, mainly owing to the large amount of milk sampling done during the year. The number of samples of various sorts examined during each of the last four years has been as follows:—1906 = 587; 1907 = 580; 1908 = 630; 1909 = 1,543.

The details of the work done by the City Analyst are shown in Table LIII., the principal items in which are referred to:—

TABLE LIII.—Analyses made by City Analyst during 1909.

Nature of Sample.	Number of Samples sent to Analyst.	Number condemned.	Number passed.	Number on which Reports were pending.
Town water	143	—	143	—
Bread	125	—	125	—
Sugar	101	—	101	—
Flour	158	—	158	—
Milk	601	275	325	1
Arrack	14	5	9	—
Soda water	33	19	9	5
Cooked rice	1	—	1	—
Well water	103	86	5	12
Lemonade	3	3	—	—
Sweetmeats	109	6	103	—
Sherbet	31	1	29	1
Ginger beer	1	—	1	—
Muttai	5	—	5	—
Muskat	16	2	12	2
Tinned milk	18	—	18	—
Rusks	1	—	1	—
Gingelly oil	1	—	1	—
Alno sweets	1	—	1	—
Pooappan	1	—	1	—
Native cakes	4	—	4	—
Jaggery	7	—	7	—
Cake	14	—	14	—
Curd milk	1	—	1	—
Lard	1	—	1	—
Beer	2	—	2	—
Whisky	5	—	5	—
Key gin	4	—	4	—
Unsweetened gin ..	4	—	4	—
Schnapps gin	6	—	6	—
Brandy	7	1	6	—

Nature of Sample.	Number of Samples sent to Analyst.	Number condemned.	Number passed.	Number on which Reports were pending.
Kasakasa ..	1	—	1	—
Water from tea boiler	6	—	6	—
Papadan ..	1	—	1	—
Glass bottles ..	1	—	1	—
Pumpkin preserve	1	—	1	—
Habalapethy ..	1	—	1	—
Pond water ..	1	1	—	—
Vermouth ..	4	—	4	—
Port wine ..	3	—	3	—
Currants ..	3	—	3	—
Total ..	1,543	399	1,123	21

42. *Town Water.*—As several inquiries have been received, especially from Naval Medical Officers, in regard to the purity of the Colombo water supply, and as some of these appeared to be under the misapprehension that it was open to suspicion and unfit to take on board the ships, it is desirable that the facts of the case should be made known.

Source.—The Colombo water supply is derived from the Labugama hills, more than 25 miles from Colombo. The whole of the catchment area right up to and for some distance beyond the watershed in every direction is uninhabited and strictly preserved. So far as one can see therefore there is no reasonable possibility of the reservoir becoming specifically contaminated. The slopes of the hills are densely covered with jungle, which is however kept cut back for a distance of 2 chains all round the margin of the reservoir so as to prevent leaves, &c., from getting into the water.

Quality.—In so far as one may judge from the reports of the City Analyst and the Government Bacteriologist given above, and the results of careful inquiry into every case of enteric fever which has been reported, there are absolutely no grounds for the suspicion with which the Colombo water appears to be viewed in some quarters. No pathogenic bacteria, nor sewage indicators such as *B. coli*, *B. enteritidis*, *sporogenes*, and *streptococci* have ever been found in it, and no case of illness has ever been traced to or had a suspicion of being attributable to its use. The evil reputation which the Colombo water has acquired must therefore have its origin in misrepresentation of the facts of the case.

It has, however, one shortcoming, in that it at times contains a considerable amount of brownish flocculent looking suspended matter, and very occasionally a number of minute fresh water crustaceans (daphina) have been found in it. The crustaceans, although certainly not a desirable costituent of potable water, are not indicative of pollution, but are on the contrary found as a rule only in pure water. The suspended matter at times gives the water a somewhat unsightly appearance, and its presence is undesirable and has induced aerated water manufacturers and many householders to adopt filtration. This has the great disadvantage that inefficient or badly kept filters, such as one so often sees in use, are more dangerous than no filters at all.

A further disadvantage in connection with this suspended matter is that it forms a deposit upon the insides of the pipes, the lumen of which in time becomes so narrowed as to seriously restrict the supply of water delivered. An examination of this deposit by the City Analyst has shown that it consists for the most part of harmless oxides of iron, with a certain amount of vegetable matter derived no doubt from the jungle-covered catchment area.

Although the town water is of a high degree of purity, both chemically and bacteriologically, it is very desirable for the reasons indicated above that some form of filtration should be adopted prior to its distribution.

Quantity.—Although there is an abundance of water at Labugama the quantity distributed to certain parts of the town is quite inadequate, and not only is great inconvenience to householders caused thereby, but with a view to minimizing this inconvenience householders in many instances have resorted to the dangerous practice of storing enough for the day in barrels and such like which are very liable to become contaminated, and are seldom properly covered or cleansed. It is therefore absolutely necessary, in my opinion, for hygienic reasons, that an improvement should be effected with as little delay as possible in respect of the quantity distributed. There would appear from the figures given in the budget to be ample funds available, for this year's figures show that whereas the estimated revenue from water is Rs. 270,100, the estimated expenditure upon waterworks is only Rs. 123,500, leaving a balance of Rs. 146,600. I would urge that as far as possible this balance should be applied to increasing the amount of water distributed, and so put an end to the present almost intolerable paucity of supply.

43. *Well Water.*—As the City Analyst's reports show the wells in Colombo are, almost without exception, grossly polluted and dangerous. Out of 103 samples examined only 5 were passed.

Many of these wells are used as public bathing wells, a charge of from 4 to 6 cents being made for each tub of water. Without exception these public bathing wells have been found to be polluted, and even repeated treatment with permanganate of potassium has had no permanent effect in improving the quality of the water, owing to the grossly polluted condition of the drainage area from which the water is derived. The closure of these wells has hitherto been postponed owing to the insufficiency of the supply of town water and the hardship which would be involved by their closure in the absence of such a supply. This is a question which can no longer be set aside with safety, and I propose at the earliest possible opportunity to submit a special report upon the subject.

44. *Milk.*—The question of the improvement of the milk supply is one to which a great deal of time and labour was devoted during the year, the immediate result of which was the disclosure of wholesale adulteration of the grossest kind going on all over the town.

Some idea of the extent to which this adulteration was practised during the earlier months of the year will be obtained from the fact that out of 183 samples taken prior to October 5, 156 or 85 per cent. were reported by the City Analyst to be adulterated, most of them being grossly adulterated (see special report).

The first effect of the prosecutions which were entered was a great deal of opposition on technical grounds in the court in regard to the interpretation of the laws, the method of sampling, and the evidence required to justify a conviction, and a good many of the earlier cases were acquitted on these grounds.

The outcome of all this litigation was that in order to comply with the requirements of an unfortunately worded by-law the courts ruled that more exacting and cumbrous methods of procedure than those first used must be adopted in the matter of taking samples and obtaining and leading evidence, all of which considerably increased the difficulty of dealing with this matter, but the work is now proceeding smoothly. As the result of repeated prosecutions and convictions coupled with the warning of more severe measures to follow conveyed in the resolution of Council dated October 15, 1909 (see Annexure A), a great improvement was observed towards the end of the year in the quality of the milk offered for sale, as shown in the City Analyst's report, dated January 29, 1910 (see Annexure B). That a mere threat, however, of heavier penalties is insufficient

is evident from the fact that the milk from one dairy alone (22, Kew road), which was sampled 66 times during the year, was found to be adulterated no fewer than 49 times, and as the result of 26 prosecutions 26 convictions were obtained (see Table LV. (*a*) in the Appendix).

TABLE LIV.—Milk Sampling in 1909.

(*a*) Summary.

	Samples from Dairies in Colombo.		Samples from Dairies outside Colombo.	Grand Total.
	Samples from Registered Dairies.	Samples from Unregistered Dairies.		
Number of samples taken ..	415 ..	13 ..	164 ..	592
Number of samples pure ..	171 ..	— ..	97 ..	268
Number of samples adulterated ..	240 ..	12 ..	65 ..	317
Number of samples from which cream was extracted	4 ..	1 ..	2 ..	7
Number of samples, the percentages of adulteration of which were not stated ..	4 ..	— ..	— ..	4*
Number of prosecutions entered ..	161 ..	7 ..	41 ..	209
Number of cases withdrawn ..	16 ..	2 ..	7 ..	25
Number of convictions ..	128 ..	5 ..	32 ..	165
Number of cases pending ..	17 ..	— ..	2 ..	19

* Included in number of samples adulterated.

(*b*) Analyses of Adulteration (Summary).

Number of Samples taken from	0–10 per Cent.	10–20 per Cent.	20–30 per Cent.	30–40 per Cent.	40–50 per Cent.	50–60 per Cent.	60–70 per Cent.	70–80 per Cent.	Total adulterated.	Number Percentage of which not stated.
(1) Registered dairies in Colombo ..	48	33	30	19	30	38	29	9	240	4
(2) Unregistered dairies in Colombo ..	—	2	2	1	3	1	3	—	12	—
(3) Registered and unregistered dairies outside Colombo ..	17	9	9	7	8	10	2	2	65*	—
Total ..	65	44	41	27	41	49	34	11	317	4

* Includes one in which the percentage is not stated.

Turning now to the results for the year as a whole, as this is a question of the first importance from a public health point of view, detailed statements showing the results of the sampling done have been prepared, a summary of which is given above, while the details are given in Tables LV. (*a*), (*b*), and (*c*), and LVI. (*a*), (*b*), and (*c*) in the Appendix.

Sampling.—592 samples of milk were taken during the year, of which 317 or 53·5 per cent. were found to be adulterated, and of these 317 adulterated samples, 94 or 29·6 per cent. showed adulteration of over 50 per cent. It is more than probable that the purity of the water used for adulteration was not a matter of concern to the delinquents responsible for its presence.

The facts mentioned above when taken in conjunction with the statistics relating to enteric fever, dysentery, and diarrhœa show the imperative necessity for the most stringent measures being adopted without delay with a view to improving the milk supply, the first step towards which is the amendment of the by-laws which was adopted by the Council on October 15, 1909.

209 prosecutions were entered during the year for adulteration of milk, of which 25 had to be withdrawn mostly for technical reasons, 165 convictions were obtained, and 19 cases were pending at the end of the year.

Out of 34 registered dairies in Colombo, 26 were caught adulterating their milk; while out of 11 unregistered dairies in the town, all were found to be adulterating.

The figures for dairies outside Colombo (Table LV. (*c*)) do not represent individual dairies, but districts, most of which include several dairies.

All the registered dairies in the town except two were sampled at one time or another during the year, and of these two, one was discontinued during the year and the other does a very small trade by taking cows to bungalows.

45. *Tinned Milk.*—An enormous and apparently steadily increasing amount of tinned milk is consumed in Colombo, the bulk of which comes from foreign countries, and I have little doubt from what I have seen of the manner in which it is used that no small amount of harm is being caused thereby to infants.

I have been informed that it is becoming more and more common to hand-feed instead of breast-feed infants, and tinned milks play a prominent part in this most harmful practice.

I have been told upon good authority that this practice of hand-feeding is on the increase, particularly amongst Moorish women, who appear to have got the idea that they retain their looks and figure better if they do not suckle their infants, and in their ignorance they are sacrificing their children. They can ill-afford to do so, for Moorish children have one of the highest infant death-rates in Colombo. Instructions to mothers amongst the poorer classes in the matter of the rearing of their infants is much required, and it is hoped that in time the Health Visitors connected with the Municipal Dispensary Scheme will effect an improvement in this respect.

The danger which exists in the use of tinned milk lies not only in the careless manner in which opened and partly used tins are left lying about exposed to contamination in often dirty houses, but also in the fact that the instructions upon the tins in regard to dilution are often such that if followed a mixture is produced which is far below the Colombo standard, and is lacking in nutritive properties. The sale of milk with such instructions should be made illegal.

46. *Arrack.*—All the arrack sold in Colombo was found upon analyses to contain copper, which is specially forbidden in the schedule referred to under section 32 of Ordinance No. 12 of 1891. Upon following the matter up it was found that the copper gained access at the distilleries which are situated outside Colombo and under the control of Government. The City Analyst, as the result of a series of experiments, suggested in a report dated January 22, 1909, that the copper still-heads should be coated with tin or silver with a view to preventing access of copper, and that fractionating still-heads should be used with a view to preventing the higher boiling point liquids which are injurious to health from passing over and mixing with the spirit which is sold. These suggestions were forwarded to Government on February 17, 1909, but the most recent analyses show that they have not yet been acted upon, for copper continues to be found in the samples taken.

47. *Aerated Waters.*—A number of aerated waters manufactured in Colombo were found upon analyses to contain copper. This was traced to the use of copper and brass fittings in the bottling apparatus. Some of these have been rectified by the substitution of block-tin for the copper and brass, but others still remain to be put right. Apart from the presence of copper, the waters were found to be good and wholesome.

48. *Slaughter-house.*—The following improvements were effected during the year: in place of the coir ropes, which were formerly in use for the hoisting of carcases and which rapidly became foul, pulleys with iron chains and hooks were substituted in the cattle and buffalo sheds. The system of stamping the various quarters of carcases of animals slaughtered, with an aniline dye, was commenced on December 4, 1909, with a view to the prevention of illicit slaughter outside the Municipal abattoir.

The buffalo shed was greatly improved by the cementing and drainage of the floor and the provision of drinking troughs. The latrines for the use of the employés within the slaughter-house were provided with modern squatting plates.

The following improvements are still required, and have been previously reported upon:—

(*a*) Hoses for flushing the sheds and drains.
(*b*) A hose for the stomach washing pit and reduction of the depth of the cisterns attached to this pit to one and a half feet.
(*c*) Improved methods of disposal of the drainage from the slaughter-house premises.
(*d*) Better ventilation of the buffalo shed. In this connection the desirability of erecting a permanent building in place of the existing cadjan sheds has been recorded by the Chairman.
(*e*) The desirability of instituting the separate system of slaughter has been recorded by the Chairman.
(*f*) General improvement to the cooly lines, including paving of the floors and of the front area, and drainage, and the provision of four new cooly rooms to provide for (*a*) the two coolies transferred from the Madampitiya slaughter-house and (*b*) to take the place of the two rooms handed over to the Society for the Prevention of Cruelty to Animals in connection with the refuge for animals.
(*g*) Improvements to the Superintendent's bungalow, including the provision of gutters and drainage, and the provision of a stable and a cart shed.

Further improvements required have been reported during the current year. The slaughter-house returns are shown on Tables LVII. (*a*), (*b*), and (*c*) below:—

TABLE LVII.—Slaughter-house Returns, 1909. Dematagoda Slaughter-house.

(*a*) *Cattle, &c., Slaughtered.*

	Cattle.	Sheep and Goats.	Pigs.
First Quarter, 1909	5,027	15,254	328
Second Quarter, 1909	5,534	17,672	401
Third Quarter, 1909	5,573	17,952	430
Fourth Quarter, 1909	5,455	19,099	462
Total ..	21,589	69,977	1,621
Total during 1908 ..	22,882	62,307	1,713

(*b*) *Carcases, Livers, &c., Condemned, and Animals found Dead.*

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
Carcases of cattle:—					
Cysticercus	9½	6	6½	3½	25½
Sarcocystis	5	6½	22½	16	49¾
Injured	—	—	2	—	2
Carcases of Pigs:—					
Cysticercus	—	1	1	—	2
Total ..	14½	13½	31½	19½	79¼
Number of animals found dead:—					
Cattle	3	1	2	2	8
Sheep and goats	2	1	4	2	9
Total ..	5	2	6	4	17
Number of Livers, &c., condemned:—					
Nature of Animals:—					
Cattle	213	216	184	159	772
Sheep and goats	—	1	1	8	10
Total ..	213	217	185	167	782
Nature of Disease:—					
Hydatis	208	213	182	166	769
Cysticercus	3	3	2	—	8
Flukes	1	—	1	1	3
Congestion	1	1	—	—	2
Total ..	213	217	185	167	782

(c) *Return of Cattle rejected.*

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
Indian :—					
Black	69	187	211	142	609
Buffalo	2	8	12	6	28
Total	71	195	223	148	637
Ceylon :—					
Black	13	17	54	47	131
Buffalo	17	13	36	49	115
Total	30	30	90	96	246
Nature of Disease :—					
Sores and abscess	—	2	5	4	11
Wasted	98	222	307	234	861
Skin disease	—	—	—	2	2
Rheumatism	—	—	1	1	2
Rinderpest	1	1	—	—	2
Sore neck	2	—	—	—	2
Injured and fever	—	—	—	3	3
Total	101	225	313	244	883

49. *Dairies.*—The work of endeavouring to improve the conditions under which the milk supply of the town is produced was continued during the year, and with a certain amount of success, but indifference and lack of co-operation with this Department on the part of the milk-using public has greatly contributed towards the difficulties which have had to be contended with. Dairymen as a class are exceedingly troublesome to deal with ; they appear to be utterly devoid of sanitary conscience, and are recklessly indifferent as regards the consequences to the health of their customers and the public generally, of filthy methods of handling and tampering with the milk they supply. They appear to have no desire, except when compelled by repeated prosecutions, to improve the conditions under which their trade is carried on, and as a matter of fact there appears to be little inducement for them to do so, apart from the penalty attached to convictions, so long as the public take no active individual interest in the matter. Every effort has been made to enlist the co-operation of the public but without much success so far ; numerous leaflets have been distributed, and reports published from time to time, pointing out the danger associated with a polluted milk supply, and the measures which should be adopted by householders. They have been advised of the danger of dealing with unregistered cowmen, and of accepting milk other than in a sealed bottle, and of using milk which has not been boiled. Lists of registered dairymen and of those whose registration has been cancelled have been published from time to time, and yet one constantly finds educated householders receiving milk, produced they know not where nor under what conditions, and supplied by unlicensed cowmen, whose existence is difficult to detect and who are not therefore under official supervision. Not only so, but the difficulty of dealing with these unlicensed cowmen has frequently been increased by the customers themselves, misguidedly aiding and abetting their unlicensed cowmen in avoiding the officers of this Department, and so escaping the consequences of carrying on their illicit trade.

One can only repeat what has been stated before that the public themselves must, if they wish to see a radical improvement in the matter of the milk supply, co-operate actively with this Department. It is quite unnecessary for them to do as so many appear to be doing, viz., to abolish fresh milk from their houses and to take to using tinned milk instead. Much of the condensed milk imported is made from skimmed milk and is greatly lacking in nutritive properties, some of it being artificially coloured to make it appear rich, whereas pure cows' milk, as it can be produced here, as proved by the standardization tests, is of excellent quality, richer in fact than the average cow's milk produced in Europe. All that is necessary for the householders to do is that they should take the trouble to exercise strict personal supervision over their milk supply, to insist upon its being supplied by a registered dairy, in clean bottles, sealed at the dairy with a good seal, and to satisfy themselves that it has been boiled before use. If they suspect that it is being tampered with, they should send a bottle as received, with the seal unbroken, to the City Analyst, Mr. M. Kelway Bamber, at the Laboratory, Hyde Park Corner, Slave Island. He has undertaken to furnish a report as to its genuineness for the nominal fee of Rs. 2·50. Should such a sample prove to be adulterated, this Department will undertake prosecution of the dairyman, it being understood that the householder will furnish the necessary evidence of sale, &c. Considering the issues at stake it is surely not too much to expect that householders should exert themselves in their own interests to this slight extent, and yet they rarely will take the trouble to do so, preferring apparently either to continue taking risks or to banish fresh milk from their houses, and to take instead often inferior quality of tinned stuff imported for the most part from foreign countries.

My reason for dwelling so much upon this question is the necessity for awakening the public to a sense of their responsibility in these matters, so that a most useful and necessary local trade may not be suppressed but may be encouraged and improved.

The details of registration are given below :—

TABLE LVIII.—Registration of Dairies.

Ward.	Number on Register at end of 1908.	Number registered during the Year.	Number discontinued during the Year.	Total at end of 1909.
Fort	—	—	—	—
Pettah	—	—	—	—
San Sebastian	—	—	—	—
St. Paul's	3	4	2	5
Kotahena	3	2	—	5
New Bazaar	4	—	2	2
Maradana	8	1	2	7
Slave Island	2	—	—	2
Kollupitiya	15	3	5	13
Total	35	10	11	34

50. *Bakeries.*—Bakeries, as a class, unlike the dairymen, have shown a desire to meet the requirements of this Department, with the result that the conditions of their trade have greatly improved during recent years. Like all trades, however, which are concerned in the preparation of food, they require constant supervision.

The details of registration are shown in Table LIX. :—

TABLE LIX.—Registration of Bakeries, 1909.

Ward.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
Fort	—	3	—	—	3
Pettah	—	4	—	1	5
San Sebastian	—	3	—	—	3
St. Paul's	—	6	2	—	8
Kotahena	—	6	2	1	9
New Bazaar	—	3	2	—	5
Maradana	—	2	8	—	10
Slave Island	—	6	—	1	7
Kollupitiya	—	1	2	—	3
Total	—	34	16	3	53

51. *Eating-houses.*—These like the bakeries show a good deal of improvement, but they also require constant supervision, otherwise their management tends to become careless.

The details of registration are given in Table LX. :—

TABLE LX.—Registration of Eating-houses.

Ward.	Number on Register at end of 1909.
Fort	34
Pettah	48
San Sebastian	17
St. Paul's	26
Kotahena North	18
Kotahena South	2
New Bazaar	12
Maradana North	48
Maradana South	24
Slave Island	40
Kollupitiya North	10
Kollupitiya South	5
Total	284

52. *Laundries.*—Considerable improvement has been effected in the matter of the dhobies' quarters, but there is practically no improvement to record in the matter of their washing places or their methods. They still continue to wash in large numbers in the foul waters of the lake and in the canals, and to pound the clothes to pieces upon their washing stones. Nothing short of the introduction of the Western methods of laundry work can effect any material improvement in their methods, while the washing in the lake and other foul places must be replaced by the use of clean town water.

New washing tanks with town water laid on were erected during the year at the Lotus Pond in place of those which used to exist on the site of the new Fort railway station.

The details of registration are shown below :—

TABLE LXI.—Registration of Laundries, 1909.

Ward.	Number on Register at end of 1909.
Fort	—
Pettah	27
San Sebastian	4
St. Paul's	—
Kotahena North	11
Kotahena South	21
New Bazaar	33
Maradana North	31
Maradana South	44
Slave Island	33
Kollupitiya North	58
Kollupitiya South	10
Total	272

53. *Offensive and Dangerous Trades.*—The number of licenses issued during the year are shown below :—

TABLE LXII.—List of Licenses issued for Trade Purposes during 1909.

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
Timber depôts	—	18	12	5	35
Straw depôts	1	8	7	—	16
Dyeing houses	—	13	1	1	15
Cotton stores	—	2	9	—	11
Manure depôts	—	14	5	2	21
Firewood depôts	2	50	27	5	84

54. *Markets.*—The new meat stalls at the Dean's road market are very satisfactory, and it is desirable that the work of completing the scheme for the improvement of this market should be pushed on, as the old stalls are most insanitary and the whole market in its present state of transition is difficult to keep clean. The market premises in their present condition cannot even be locked up at night, and in the absence of a regular police guard, such as has been frequently asked for, it is practically impossible to keep out vagrants at night. The proposed scheme for the general reorganization of the existing public market buildings throughout the town will cost a great deal of money, and will take a long time to complete when sanctioned, and it is desirable that no time should be lost in making a commencement, as the present condition of the Municipal markets is a distinct discredit to the town.

As the Slave Island market suddenly showed signs of falling down owing to subsidence caused by the pumping carried on in connection with the drainage works, the market was evacuated on September 22, the stall-holders being allowed to occupy private boutiques in the neighbourhood, pending other arrangements. This means a loss of revenue.

The arrangements for the flushing of markets are inadequate, and a scheme for fitting up standpipes and hoses was prepared by the Waterworks Engineer; but up to the present nothing has been done.

Section V.—Miscellaneous.

55. *Cemeteries.*—As it was found that the manner in which the General Cemetery was being administered was unsatisfactory, a report was submitted pointing out the necessity for reorganization.

The result was the appointment of a Special Committee of inquiry, in whose report dated September 4, 1908 (see Annexure I.), the lines upon which the General Cemetery should be administered in future were laid down. With a view to giving effect to the Committee's resolution, the Council, in March, 1909, took over the work of tending graves which had hitherto been done by private contract by the Cemetery-keeper and the sexton. A head gardener was appointed on August 1, and the staff of coolies was increased from time to time, so that the staff which at the beginning of the year consisted of a keeper, a sexton, and 8 coolies had been raised by the end of the year to a keeper, a sexton, a head gardener, and 17 coolies. During the year a number of unsightly and decayed trees were cut down, the jungle land within the Cemetery was cleared, shrubs and trees were planted, the hedges were trimmed, and the walls put in order, the result being a considerable improvement in the appearance of the Cemetery, which will however take some years to become what it ought to be, one of the most beautiful spots in Colombo.

In addition to the improvements enumerated above, the walls of the Cemetery were repaired, and the western wall was cement washed. The cab stand and office lands were cleared of undergrowth and some obstructive trees were removed. The garden seats and gates of the Cemetery were painted and the sides of the main entrance road were turfed.

A mortuary was erected by the Buddhist community upon their reserve, and chapels were erected by the Non-Anglicans and the Roman Catholics. With a view to the more orderly and economical laying out of the unused portions of the Cemetery, a detailed plan showing the sites of all future graves is under preparation by the Municipal Engineer, and if it is strictly adhered to in future, the result should be a great economy of space combined with much greater accessibility to the graves. It is impossible to keep a huge garden such as the Cemetery virtually is without a proper water supply, and a scheme for the introduction of a water main and branches with stand-posts has been drawn up by the Waterworks Engineer, which it is highly desirable should be given effect to. There are many improvements still required at the Cemetery, some of which have been under the consideration of the Council from time to time.

During the year 1909 there were 3,681 burials and 5 cremations. Two bodies were exhumed during the year. The receipts amounted to Rs. 5,670, as follows :—

	Rs. c.
Fees for digging graves	2,974 50
Fees for convicts	505 50
Sale of tombs	2,190 0
Total ..	5,670 0

The Madampitiya cemetery, like the one at Kanatta, is controlled by this Department with a keeper in charge, while the two Muhammadan cemeteries in Maradana are administered by trustees, who have a caretaker in charge.

56. *Sanitary Inspectors.*—The services of a Chief Sanitary Inspector are, as has previously been reported, required for the proper working of this Department. Such an officer has long been employed by most if not all other Municipalities, both at home and in the East. Such an appointment must, I believe, be made here sooner or later, and the sooner it is made in my opinion the better.

As regards the work done by the Sanitary Inspectors during 1909, full particulars are given in Statements LXIII. to LXVII. in the Appendix, which speak for themselves.

An effort has been made to steadily increase the number of matters in respect of which written notices are served upon householders prior to taking action in the Court. This is shown in the following statement :—

Year.	Number of Notices.	Year.	Number of Notices.
1903	173	1907	2,778
1904	841	1908	2,523*
1905	1,389	1909	4,171
1906	2,387		

* Year of smallpox epidemic.

Other noticeable features about the work done are the large number of structural improvements effected (Table LXV.) and the large amount of milk sampling done (Table LXVII). The increase in the amount recovered as fines in the Municipal Court is mainly due to the numerous fines imposed upon milkmen for adulteration of their milk supply.

57. *Sub-Inspectors.*—The work of the four Sub-Inspectors, which was previously confined to dealing with enteric fever, was made to include inquiring into and recording the facts in connection with all deaths from phthisis, and the disinfection of all houses where such deaths had occurred. This work in connection with phthisis was begun on July 17, 1909, and up to the end of the year 252 deaths from phthisis had been registered and inquired into, 195 phthisis-infected houses had been disinfected, while in 57 the house of the deceased had either not been traced, or the case was still being inquired into at the end of the year.

58. *Enteric Cleansing.*—The four cleansing gangs working under the Sub-Inspectors were reduced to one gang, consisting of 1 overseer and 4 coolies, on March 31, 1909, as it was found that enteric fever had so

far decreased that there was not enough work to keep four gangs going. This change had the advantage that whereas provision had been made in the Budget for these gangs for only six months, it was possible to keep on the one gang until the end of the year. 268 enteric-infected compounds were cleansed during the year.

59. *Lime Washing.*—The lime-washing gang which up till the end of October consisted of an overseer and 12 men was reduced to an overseer and 10 men at that date. They cleansed and lime washed 78 premises, including 904 tenements, 24 houses, 64 privies, 15 kitchens, and 6 cattle sheds during the year as shown in Table LXVIII. annexed. This gang is employed only after notice to cleanse has been served upon, but disobeyed by householders. (See Table LXVIII. in the Appendix.)

60. *Insect Pest Prevention.*—The work of insect pest prevention (flies and mosquitoes) was carried out by an overseer with 4 coolies up till June 30, when the coolies were reduced to 2 in number as this was found to be as many as 1 overseer required for this class of work. His duty is to pay systematic visits to compounds, grass gardens, stables, &c., and search for the larvæ of these insects. When found, they are immediately dealt with as far as possible, and a notice is served upon the householder to abate and to prevent recurrence of the nuisance. If upon a subsequent visit the nuisance is found not to be abated a prosecution is entered. 492 notices were served and 45 prosecutions were entered and 39 convictions obtained (6 cases pending) during the year for failure to comply with notice.

61. *Steam Disinfection.*—The equifex steam disinfector, which is under the charge of an overseer, worked satisfactorily during the year, minor repairs being required from time to time. 5,428 pieces representing 179 loads were dealt with during the year.

62. *Municipal Midwives.*—567 cases representing 571 births were conducted during the year—an increase of 24 cases compared with 1908. Amongst these there were 30 stillbirths, while 16 died within four days of birth, representing a death-rate exclusive of stillbirths of 2·80 per cent.

The work of these midwives is not under sufficient supervision. This will be rectified when the sanctioned Dispensary Scheme comes into full operation. The details of the work are shown in Tables LXIX., LXX., and LXXI. annexed.

63. *Ambulance.*—The work of removing patients to the Infectious Diseases Hospital was carried out by this Department up till June 16, 1908, entirely by means of antiquated, insanitary, uncomfortable bullock carts. On the date mentioned a new up-to-date horse ambulance of the St. John's Ambulance Association type was completed, and handed over to the Superintendent of the Fire Brigade, who had undertaken to carry out this work in future. It was most fortunate, both for the public and for this Department, that such an arrangement was made, for the work in 1908 was exceedingly heavy owing to the severe outbreak of smallpox. On October 2, 1908, the removal of contacts to the Segregation Camp was also undertaken by the Fire Brigade. As the Superintendent informs me that he has submitted special reports dealing with the work of both 1908 and 1909, it is unnecessary to refer further to it here beyond stating that it has been most satisfactorily carried out.

As it was found inconvenient and was possibly not unattended with danger to have only one ambulance for all cases, another and more comfortable one was made and taken over by the Superintendent on July 31, 1909. One of these is reserved as far as possible for the conveyance of cases of smallpox only.

Section VI.—Conservancy.

64. *General.*—The work of removal and disposal of night soil was as hitherto carried out by a contractor under the control of this Department. The most unsatisfactory features of this work have always been the cleaning of the buckets after emptying them, and the supplying of coir dust to the poorer quarters. An effort was made during the year to improve matters in these respects, special instructions being issued to the officers of this Department to make a point of finding out and reporting all neglects. The result is shown in Table LXXII. annexed. 2,347 reports of neglect to clean and 1,895 reports of neglect to supply coir were received during the year, mostly from officers of the Department. In every case where a satisfactory explanation was not forthcoming the contractor was fined.

The increase in the number of complaints in these respects, compared with 1908, does not therefore indicate increased neglect on the part of the contractor so much as increased activity on the part of the officers of the Department in finding out and reporting these neglects. I am convinced that these foul buckets, especially where coir is not used by the householders, are a very grave source of danger, particularly as regards enteric, but with 9,242 buckets scattered about the town, it is extremely difficult, in fact impossible, under existing conditions, to ensure that they shall all be properly cleaned every day, and that every person using each latrine shall use coir dust before leaving. The poorer classes will not for the most part take the trouble to use coir dust even although the necessity for doing so is impressed upon them time after time. With a view to compelling the adoption of this sanitary precaution, many prosecutions were entered and convictions obtained for failure to comply with the instructions in this matter, the charge being laid under filthy premises. Every sanitary measure, such as the use of coir dust, which is dependent upon the co-operation of each unit of the population, is bound to be more or less a failure, and only the most limited and spasmodic amount of success can attend our efforts towards improvement. There is, of course, no real remedy for this state of affairs, except the abolition of dry-earth closets and cesspits and the substitution of water-closets. Statement LXXIII. in the Appendix shows the details of the conservancy work during the year.

65. *Revenue.*—Estimate for the year, Rs. 177,520; recovered, Rs. 184,511·95. There was thus an amount of Rs. 6,991·98 recovered in excess of the estimate for the year, which is creditable to the Superintendent and staff. The details are given in Tables LXXIII. and LXXIV. annexed.

66. *Expenditure.*—Estimate for the year, Rs. 158,332; expended, Rs. 160,847. There was thus an amount of Rs. 2,515 expended in excess of the estimate. This was in part due to an unforeseen increase in the rate for coir dust, owing, I understand, to a scarcity of this commodity in or near Colombo, coir mills which used to be worked within the town having been removed to a distance.

A certain amount of the over-expenditure was incurred in connection with a vote which is under the control of the Works Department, viz., No. 223 for the construction and repair of night soil carts. Deducting the over-expenditure from the excess recovery there was a nett excess revenue of Rs. 4,476·98. The details are given in Tables LXXIII. and LXXIV. annexed.

67. *Miscellaneous.*—24 cesspits were cleared out and filled in at the owners' expense by this Department, the owners having failed to comply with notices served upon them.

Section VII.—Staff.

Dr. M. de L. Robinson, M.D., B.S., D.P.H., was appointed and took up duties on June 12, 1909, as Assistant Medical Officer of Health in succession to Dr. A. K. Pani, D.P.H., who obtained the post of Medical Officer of Health of Bangalore. Dr. E. R. Loos, who had been acting for a time as Assistant Medical Officer of Health, assumed duties as Junior Assistant. The staff, almost without exception, worked well throughout the year.

W. MARSHALL PHILIP, M.B., D.P.H.,
Medical Officer of Health.

February 23, 1910.

APPENDIX TO REPORT OF MEDICAL OFFICER OF HEALTH.

TABLE XIII.—Infant Mortality.—Deaths at different Age Periods and from several Causes.

Cause of Death.	Age.													Race.							
	Age in Weeks.					Age in Months.															
	1	2	3	4	Total.	2	3	4	5	6	6-9	9-12	Total.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.	All Races.
I.—Developmental diseases :—																					
(1) Premature birth ..	69	4	1	1	75	1	—	—	—	—	—	—	1	1	2	56	8	9	—	—	76
(2) Atalectasis ..	3	—	—	—	3	1	—	—	—	—	—	—	1	—	—	3	1	—	—	—	4
(3) Atrophy and debility ..	100	17	10	17	144	41	13	9	8	3	8	10	92	—	4	110	57	44	16	5	236
(4) Others ..	—	—	1	1	2	—	1	—	—	—	—	1	2	—	1	2	—	—	1	—	4
II.—Diseases of respiratory system:—																					
(1) Laryngitis ..	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
(2) Croup	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) Bronchitis ..	1	2	2	5	10	23	16	6	4	9	25	11	94	—	7	47	20	21	9	—	104
(4) Pneumonia ..	1	—	1	5	7	13	19	8	12	11	47	29	139	—	13	80	22	24	4	3	146
(5) Others	1	—	—	—	1	1	—	—	—	1	1	—	3	—	1	3	—	—	—	—	4
III.—Diseases of digestive system :—																					
(1) Diarrhœal ..	1	1	1	10	13	23	22	10	8	14	34	23	134	4	16	77	17	22	7	4	147
(2) Dentition ..	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
(3) Others	4	3	4	5	16	11	8	6	3	—	3	3	34	1	2	29	8	9	1	—	50
IV.—Diseases of nervous system :—																					
(1) Convulsions ..	81	35	35	27	178	52	45	21	15	16	36	19	204	1	24	209	57	69	16	6	382
(2) Laryngismus stridulus ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) Tetanus ..	118	49	4	1	172	1	—	—	—	—	—	—	1	—	6	72	40	46	3	6	173
(4) Others	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	1	—	—	—	—	1
V.—Tuberculous diseases :—																					
(1) Tabes mesenterica ..	—	—	—	—	—	1	2	1	1	2	—	1	8	—	1	6	—	1	—	—	8
(2) Tubercular meningitis ..	—	—	—	—	—	1	—	—	—	1	—	—	2	—	—	2	—	—	—	—	2
(3) Others	—	—	—	—	—	—	1	2	—	—	3	2	8	—	2	2	2	1	—	1	8
VI.—Accidents :—																					
(1) Injury	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	2
(2) Umbilical hæmorrhage ..	1	1	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	2
(3) Suffocation ..	2	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(4) Other violence ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VII.—Infectious diseases :—																					
(1) Smallpox ..	—	—	—	—	—	1	—	—	—	—	—	—	1	—	1	—	—	—	—	—	1
(2) Chickenpox ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(3) Measles ..	—	—	—	—	—	—	—	—	1	1	—	—	2	—	—	1	1	—	—	—	2
(4) Whooping cough ..	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	1	—	—	—	1
(5) Mumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(6) Diphtheria ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(7) Cerebro-spinal fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(8) Scarlet fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VIII.—Syphilis	1	3	—	—	4	3	3	1	—	1	2	—	10	—	—	12	—	2	—	—	14
XI.—All other causes ..	3	1	2	2	8	3	4	7	5	4	12	11	46	1	4	33	6	8	1	1	54
Total ..	387	116	61	75	639	176	134	71	57	64	172	110	784	9	84	747	240	259	58	26	1423

TABLE LX. (*a*).—Milk Sampling in 1909, Details. Registered Dairies in Colombo.

Dairy.	Number of Samples taken.	Number adulterated.	Number from which Cream was extracted.	Number of Convictions.	Number pending.	Number withdrawn.	Number of Prosecutions.
2, Buller's road ..	4	4	—	4	—	—	4
2, Captain's garden ..	11	6	1	3	—	2	5
7, Castle street ..	1	—	—	—	—	—	—
92, Colpetty road ..	27	15	—	12	—	—	12
149, Colpetty road ..	5	4	—	2	—	—	2
220, Colpetty road ..	2	2	—	1	—	—	2*
42, Darley road ..	1	—	—	—	—	—	—
6, Dickman's road ..	21	12	2	4	—	1	5†
1, Folly road	3	3	—	3	—	—	3
Government Dairy ..	1	1	—	—	—	—	—
6*a*, Gregory's road ..	5	—	—	—	—	—	—
19, Hill street ..	12	11	—	3	1	—	4
44, Hill street ..	1	—	—	—	—	—	—
9, Horton place ..	15	3	—	1	—	—	1
16, Horton place ..	3	—	—	—	—	—	—
22, Kew road ..	66	49	—	26	4	—	30
69, Korteboam street ..	1	1	—	—	1	—	1‡
88/89, Layard's broadway ..	1	—	—	—	—	—	—
55, Maligawatta ..	16	6	—	3	1	—	4
70, Maligawatta ..	1	1	—	1	—	—	1
75, Maligawatta ..	10	4	—	1	—	—	1
75*a*, Maligawatta ..	5	—	—	—	—	—	—
82, Maligawatta ..	8	3	—	1	1	—	2
46/48, Messenger street ..	13	13	—	10	1	—	11
8, Rudd's lane ..	1	—	—	—	—	—	—
59/60, Silversmith street ..	3	3	—	2	—	—	2
St. Thomas's College ..	4	3	—	1	—	2	3
1, Vauxhall street ..	22	11	—	5	—	—	5
42, Wall street ..	1	1	—	—	—	1	1
23, Wolfendahl street ..	39	23	1	16	1	1	18
84, Wolfendahl street ..	20	13	—	6	—	1	7
86, Wolfendahl street ..	10	8	—	2	—	4	6
90, Wolfendahl street ..	76	34	—	20	6	1	27
93, Wolfendahl street ..	6	6	—	1	1	3	5
Total ..	415	240	4	128	17	16	161

* Accused warned and discharged in one case. † Accused warned, but not fined in one case.
‡ Percentage of adulteration not stated.

TABLE LV. (*b*).—Milk Sampling in 1909, Details. Unregistered Dairies in Colombo.

Dairy.	Number of Samples taken.	Number adulterated.	Number from which Cream was extracted.	Number of Convictions.	Number pending.	Number withdrawn.	Number of Prosecutions.
120, Bambalapitiya	1	1	—	—	—	—	—
69, Colpetty road	1	1	—	—	—	—	—
240, Colpetty road	1	1	—	1	—	—	1
Dematagoda	1	1	—	—	—	1	1
7, Dhobies' lane	2	1	1	1	—	—	1
1, Flagstaff street	1	1	—	1	—	—	1
77, Maligawatta	2	2	—	1	—	—	1
90, Maligawatta	1	1	—	—	—	—	—
Railway avenue yard	1	1	—	1	—	—	1
1, Wekanda	1	1	—	—	—	—	—
22, Wolfendahl street	1	1	—	—	—	1	1
Total	13	12	1	5	—	2	7

TABLE LV. (*c*).—Milk Sampling, 1909, Details. Dairies Outside Colombo, Registered and Unregistered.

Suburb.	Number of Samples taken.	Number adulterated.	Number from which Cream was extracted.	Number of Convictions.	Number pending.	Number withdrawn.	Number of Prosecutions.
Egoda Kolonnawa	12	—	—	—	—	—	—
Kittanpahuwa	27	9	—	4	—	1	5
Kolonnawa	3	2	—	1	—	—	1
Kopiyawatta	9	8	—	4	1	—	5
Kotuwila	3	1	—	1	—	—	1
Mitotamulla	72	32	—	13	1	5	19
Nawala	1	—	—	—	—	—	—
Timbirigasyaya	2	2	—	2	—	—	2
Wellampitiya	28	7	1	4	—	1	5
Weragoda	4	2	1	2	—	—	2
Cattle mart	3	2	—	1	—	—	1
Total	164	65	2	32	2	7	41

TABLE LVI. (*a*).—Milk Sampling in 1909. Analyses of Adulteration, Registered Dairies in Colombo.

Dairy.	Number of Samples, Pure.	Adulterated. 0–10 per Cent.	10–20 per Cent.	20–30 per Cent.	30–40 per Cent.	40–50 per Cent.	50–60 per Cent.	60–70 per Cent.	70–80 per Cent.	Total adulterated.
2, Buller's road	—	1	2	1	—	—	—	—	—	4
2, Captain's garden	4	1	—	3	1	—	—	1	—	6
7, Castle street	1	—	—	—	—	—	—	—	—	—
92, Colpetty road	12	1	3	1	1	1	4	3	—	15*
149, Colpetty road	1	2	1	1	—	—	—	—	—	4
220, Colpetty road	—	—	—	2	—	—		—	—	2
42, Darley road	1	—	—	—	—	—	—	—	—	—
6, Dickman's road	7	6	2	4	—	—	—	—	—	12†
1, Folly road	—	—	1	1	—	—	1	—	—	3
Government Dairy	—	—	1	—	—	—	—	—	—	1
6*a*, Gregory's road	5	—	—	—	—	—	—	—	—	—
19, Hill street	1	1	—	1	—	2	4	3	—	11
44, Hill street	1	—	—	—	—	—	—	—	—	—
9, Horton place	12	—	1	—	—	1	—	—	—	3‡
16, Horton place	3	—	—	—	—	—	—	—	—	—
22, Kew street	17	11	11	7	3	4	7	6	—	49
69, Korteboam street	—	—	—	—	—	—	—	—	—	1‡
88/89, Layard's Broadway	1	—	—	—	—	—	—	—	—	—
55, Maligawatta	10	4	—	—	—	1	—	—	—	6*
70, Maligawatta	—	—	—	—	—	—	1	—	—	1
75, Maligawatta	6	3	1	—	—	—	—	—	—	4
75*a*, Maligawatta	5	—	—	—	—	—	—	—	—	—
82, Maligawatta	5	2	—	—	1	—	—	—	—	3
46/48, Messenger st.	—	—	—	1	1	4	4	2	1	13
8, Rudd's lane	1	—	—	—	—	—	—	—	—	—
59/60, Silversmith street	—	—	—	—	—	1	2	—	—	3
St. Thomas's College	1	—	1	—	1	1	—	—	—	3
1, Vauxhall street	11	6	1	2	—	1	—	—	1	11
42, Wall street	—	—	—	—	—	—	1	—	—	1
23, Wolfendahl street	15	2	2	2	2	7	5	1	2	23§
84, Wolfendahl street	7	—	—	—	2	2	2	4	3	13
86, Walfendahl street	2	—	1	—	2	1	3	1	—	8
90, Wolfendahl street	42	8	5	4	5	4	1	6	1	34
93, Wolfendahl street	—	—	—	—	—	—	3	2	1	6
Total	171	48	33	30	19	30	38	29	9	240‖

* Percentage of one not given.
† Cream extracted from two samples.
‡ Percentage of one not stated.
§ Cream extracted from one sample.
‖ Percentage of four samples not given.

TABLE LVI. (*b*).—Milk Sampling in 1909. Analyses of Adulteration, Unregistered Dairies in Colombo.

Dairy.	Number of Samples, Pure.	Adulterated. 0–10 per Cent.	10–20 per Cent.	20–30 per Cent.	30–40 per Cent.	40–50 per Cent.	50–60 per Cent.	60–70 per Cent.	70–80 per Cent.	Total adulterated.
120, Bambalapitiya	—	—	1	—	—	—	—	—	—	1
69, Colpetty road	—	—	—	1	—	—	—	—	—	1
240, Colpetty road	—	—	—	1	—	—	—	—	—	1
Dematagoda	—	—	—	—	—	—	—	1	—	1
7, Dhobies' lane	—	—	—	—	—	—	—	1	—	1
1, Flagstaff street	—	—	—	—	1	—	—	—	—	1
77, Maligawatta	—	—	1	—	—	1	—	—	—	2
90, Maligawatta	—	—	—	—	—	—	1	—	—	1
Railway avenue yard	—	—	—	—	—	1	—	—	—	1
1, Wekanda	—	—	—	—	—	—	—	1	—	1
22, Wolfendahl street	—	—	—	—	—	1	—	—	—	1
Total	—	—	2	2	1	3	1	3	—	12

TABLE LVI. (*c*).—Milk Sampling in 1909. Analyses of Adulteration, Dairies Outside Colombo, Registered and Unregistered.

Suburb.	Number, Pure.	Adulterated. 0–10 per Cent.	10–20 per Cent.	20–30 per Cent.	30–40 per Cent.	40–50 per Cent.	50–60 per Cent.	60–70 per Cent.	70–80 per Cent.	Total adulterated
Egoda Kolonnawa	12	—	—	—	—	—	—	—	—	—
Kittanpahuwa	18	3	1	—	3	1	1	—	—	9
Kolonnawa	1	—	1	1	—	—	—	—	—	2
Kopiyawatta	1	4	1	2	—	—	1	—	—	8
Kotuwila	2	—	—	—	1	—	—	—	—	1
Mitotamulla	40	8	2	3	2	6	6	2	2	32
Nawala	1	—	—	—	—	—	—	—	—	—*
Timbirigasyaya	—	—	1	1	—	—	—	—	—	2
Wellampitiya	20	2	2	1	1	—	1	—	—	7
Weragoda	1	—	—	1	—	—	1	—	—	2†
Cattle mart	1	—	1	—	—	1	—	—	—	2†
Total	97	17	9	9	7	8	10	2	2	65

* Percentage of one not stated.

† Cream extracted from one sample.

TABLE LXIII.—Work done by Ward Inspectors during 1909.

	Fort.	Pettah.	San Sebastian.	St. Paul's.	Kotahena North.	Kotahena South.	New Bazaar.	Maradana North.	Maradana South.	Slave Island.	Kollupitiya North.	Kollupitiya South.	Total.
Number of inspections	4,713	4,907	5,428	4,339	3,974	6,856	5,545	2,501	3,713	4,622	4,730	2,744	54062
Number in which sanitary defects were found	682	979	1,773	894	756	801	910	650	951	697	944	228	10,265
Number of notices served	154	255	713	327	527	539	320	142	222	407	519	46	4,171
Number of notices voluntarily complied with	149	222	385	136	227	148	168	120	126	254	318	40	2,293
Number of premises where defects were rectified after warning	488	658	1,168	542	421	145	259	412	577	153	582	155	5,560
Number of wells closed (*vide* particulars annexed)	—	1	9	6	3	5	9	9	10	1	15	6	74
Number of cesspits closed (*vide* particulars annexed)	1	1	30	16	3	21	35	16	2	—	1	4	130
Number of houses disinfected (*vide* particulars annexed)	20	51	80	119	109	267	265	231	141	122	107	120	1,632
Number of prosecutions	194	321	616	392	188	461	651	207	381	548	362	73	4,394
Number of convictions	181	231	476	302	146	425	489	146	316	459	277	64	3,512
Number discharged or otherwise dealt with	11	30	53	25	11	16	14	9	24	47	27	3	280
Number pending at end of quarter	2	60	87	75	31	20	148	53	31	42	58	6	613
Number of premises limewashed by the Municipal cleansing gang	3	—	16	6	11	—	21	1	5	7	8	—	78
Number of type plan latrines erected	6	25	132	59	30	148	85	97	82	40	335	21	1,050
	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.	Rs. c.
Amount of fines	1,360 72	1,830 50	3,856 50	1924 84	1,007 0	1,534 25	5,695 0	1,177 42	2,693 67	4,396 41	2,353 24	418 80	28248 35

TABLE LXIV.—Details of Prosecutions by Ward Inspectors during 1909.

Nature of Offence.	Fort.	Pettah.	San Sebastian.	St. Paul's.	Kotahena North.	Kotahena South.	New Bazaar.	Maradana North.	Maradana South.	Slave Island.	Kollupitiya North.	Kollupitiya South.	Total.
Filthy premises	33	212	177	249	87	243	418	114	158	323	190	50	2,254
Filthy roadside and drain	29	5	9	6	4	36	—	—	2	—	3	—	94
Unregistered eating-house	2	1	5	4	—	2	—	10	4	—	1	11	40
Food exposed to dust and flies	36	17	35	24	12	7	16	27	28	54	20	2	278
Sale of adulterated milk	41	3	23	9	6	12	26	4	22	31	25	7	209
Sale of unwholesome food	3	26	19	1	5	2	9	6	9	7	7	2	96
Selling milk without a card	3	2	12	6	6	3	22	8	9	2	5	—	78
Throwing rubbish on roadside	—	7	—	6	—	6	—	2	—	1	—	—	22
Obstruction of passages in public market	6	37	47	—	—	—	—	—	8	14	4	—	116
Neglect to fill up well after notice	—	—	6	1	—	—	2	—	—	1	7	1	18
Filthy eating-house	12	—	1	—	—	—	16	—	—	—	—	—	29
Filthy bakery	1	—	1	—	—	—	14	—	3	—	3	2	24
Unlicensed bakery	—	—	1	2	1	3	6	1	1	—	2	—	17
Neglect to pay limewashing bills	2	—	12	3	3	—	10	—	2	7	8	—	47
Neglect to report cases of infectious diseases	1	—	4	—	—	—	6	3	6	2	4	1	27
Foul cesspit	1	—	97	1	3	6	12	1	6	—	—	—	127
Filthy stalls	16	—	77	11	2	8	9	4	44	28	11	—	210
Cattle rearing nuisance	3	1	10	18	28	108	32	17	3	28	38	2	288
Unregistered laundry	—	—	18	2	15	—	8	2	22	27	7	1	102
Filthy bathing tubs	—	—	4	—	1	1	—	—	3	5	3	—	17
Occupying portions of public market without license	—	—	1	—	—	—	—	—	—	—	—	—	1
Unregistered cattle shed	—	—	1	—	—	—	5	—	—	3	1	1	11
Unregistered dairy	—	—	2	8	—	—	1	—	2	1	4	—	18
Unclean workmen in bakery	—	—	3	7	—	5	2	1	—	6	1	—	25
Unlicensed stall	—	—	—	4	2	—	—	—	—	—	1	—	7
Filthy dairy	—	—	—	—	—	—	2	—	—	—	3	2	7
Burial of night soil	—	—	—	1	—	—	2	—	—	—	—	—	3
Resistance to a public officer	—	—	—	—	—	—	1	—	10	1	—	—	12
Neglect to report death of an animal	—	—	—	—	—	—	2	1	—	—	—	—	3
Uncemented floor of eating-house	—	1	4	1	—	—	—	1	5	—	—	—	12
Boiling offal	—	—	—	—	—	—	—	—	—	1	—	—	1
Filthy laundry	—	—	—	—	—	5	—	—	—	—	8	—	13
Hawking for selling fish in streets	—	—	—	—	1	—	—	—	—	—	2	—	3
Unlicensed firewood depôt	—	1	—	1	—	4	—	4	1	—	—	—	11
Unlicensed cotton depôt	—	3	3	—	—	—	—	—	—	—	—	—	6
Unlicensed straw depôt	—	—	—	10	—	—	—	—	—	—	—	—	10
Unlicensed soap manufactory	—	—	—	1	8	—	14	—	—	—	—	—	23
Unlicensed dyeing house	—	—	—	—	—	2	—	—	—	—	—	—	2
Unlicensed timber depôt	—	—	2	3	—	2	—	1	4	1	—	—	13
Disorder in markets	1	—	—	—	—	—	—	—	—	—	—	—	1
Child committing nuisance	—	1	1	5	—	1	—	—	—	—	—	—	8
Unregistered servants in meat stall	—	—	—	—	—	1	—	—	—	—	—	—	1
Transport of bread in open vehicle	—	—	—	—	—	—	1	—	—	—	—	—	1
Closing meat stall without permit	1	—	—	—	—	1	—	—	4	—	—	—	6
Storing milk in unsuitable places	—	—	—	—	—	—	—	—	—	2	1	—	3
Keeping manure for over 24 hours	—	—	—	—	—	—	—	—	—	—	1	—	1
Overcrowding	1	—	5	—	—	—	8	—	4	—	—	—	18
Establishing factory without license	—	—	—	—	1	—	—	—	—	—	—	—	1
Unregistered milk vendor	2	—	—	—	—	—	2	—	—	—	—	—	4
Unlicensed private markets	—	—	2	—	—	—	—	—	—	—	—	—	2
Picketting cattle on Municipal land	—	—	2	—	—	—	—	—	—	—	—	—	2
Keeping a dog in public market	—	—	1	—	—	—	—	—	—	—	—	—	1
Throwing rubbish on passages in public market	—	—	3	—	—	—	—	—	—	—	—	—	3
Unlicensed aerated water manufactory	—	—	1	—	—	—	—	—	—	—	—	—	1
Filthy cattle shed	—	—	1	—	—	—	—	—	—	—	—	—	1
Rank vegetation	—	—	1	—	—	—	—	—	—	—	—	—	1
Bakery used for other purposes	—	—	1	—	—	—	—	—	—	—	—	—	1
Keeping stall in public market closed to the public	—	—	2	—	—	1	2	—	11	—	—	—	16
Unlicensed hide depôt	—	1	—	—	—	—	—	—	—	—	—	—	1
Unlicensed poultry mart	—	2	—	—	—	—	—	—	2	—	—	—	4
Neglect to provide privy accommodation	—	—	—	—	2	—	1	—	—	—	—	—	3
Insanitary laundry	—	—	—	—	—	3	—	—	—	—	2	—	5
Allowing urine, &c., to flow into public drain	—	—	—	—	—	—	1	—	—	—	—	—	1
Refusal to allow sample of milk to be taken for analysis	—	—	—	—	—	—	1	—	—	—	—	—	1
Throwing rubbish on the roadside	—	1	14	7	—	—	—	—	—	3	—	—	25
Goat nuisance	—	—	1	—	—	—	—	—	—	—	—	—	1
Unwholesome offal in meat stall	—	—	2	—	—	—	—	—	1	—	—	—	3
Neglect to produce meat passes	—	—	—	—	—	—	—	—	1	—	—	—	1
Bathing at the market standpipe	—	—	—	—	—	—	—	—	1	—	—	—	1
Total	194	321	611	391	187	462	651	207	376	548	362	82	4,392

TABLE LXV.—Structural Improvements during 1909.

Nature of Improvement.	Fort Ward.	Pettah Ward.	San Sebastian.	St. Paul's.	Kotahena North.	Kotahena South.	New Bazaar.	Maradana North.	Maradana South.	Slave Island.	Kollupitiya North.	Kollupitiya South.	Colombo Town.
1. Windows and skylights	92	11	368	192	9	91	726	166	51	222	44	—	1,792
2. Ventilators	60	5	379	673	89	85	610	56	19	55	645	—	2,676
3. Latrines	9	27	118	116	17	133	324	97	82	56	335	22	1,336
4. Children's latrines	—	—	21	12	—	—	69	—	—	3	7	—	112
5. Drains	—	—	11	32	3	19	12	12	13	6	29	6	143
6. Paving of passages and compounds (premises)	—	4	23	19	1	7	39	5	8	31	3	—	140
7. Insanitary tenements demolished ..	—	1	4	1	—	—	5	—	—	7	22	—	40
8. Obstructive eaves cut back	—	1	9	4	—	—	4	1	—	3	—	—	22
9. Obstructive verandahs demolished ..	—	—	6	18	2	—	8	—	—	—	1	—	35
10. Insanitary cattle sheds demolished ..	—	—	2	—	7	—	15	—	—	—	7	—	31
11. Masonry receptacles for dung ..	—	—	—	1	—	—	—	—	—	—	—	—	1
12. Cementing walls of eating-houses, bakeries, &c.	—	—	12	4	7	—	1	—	—	16	21	2	63
13. Cementing walls of meat stalls ..	—	—	—	—	18	—	15	—	—	—	2	—	35
14. Cementing walls and floors of laundries ..	—	—	—	—	5	—	1	—	—	23	17	—	46
15. Cementing walls and floors of cattle sheds ..	—	—	1	—	15	—	—	—	—	—	6	—	22
16. Cementing walls of bathing wells ..	—	—	—	—	—	1	—	—	—	1	—	—	2
17. Construction of new cattle sheds ..	—	1	—	—	7	—	—	—	—	—	—	—	8
18. Aerated water factories improved to remove the presence of copper	—	—	1	—	—	—	—	—	—	—	2	—	3
19. Removal of permanent ceilings ..	—	—	7	—	—	—	—	—	—	—	—	—	7
20. Cementing floor of barber shop ..	—	—	—	—	—	—	—	—	—	4	—	—	4

TABLE LXVI.—Return of Samples taken for Analysis by each Inspector during the Year 1909.

Nature of Sample.	J. A. Carnie.	W. D. Serasinha.	W. Blacker.	M. Samabin.	H. E. de Silva.	T. E. Karunatilleke.	R. L. Stouter.	R. A. Horan.	E. Ambrose.	J. Dabera.	H. W. Davidson.	F. E. Abayasekara.	Total.
Town water ..	12	13	12	12	12	11	12	12	12	12	11	12	143
Well water ..	8	—	18	8	8	9	1	12	11	21	1	6	103
Milk (including nine tins of condensed milk) ..	19	79	51	48	89	69	44	59	32	50	32	29	601
Bread	5	3	3	29	5	26	13	2	18	3	5	13	125
Flour	4	4	4	29	5	27	21	4	23	6	5	24	156
Sugar	4	3	1	14	6	28	19	2	14	3	4	13	111
Soda water ..	—	—	5	—	6	—	5	7	—	6	1	3	33
Sweets	6	5	15	11	30	7	30	4	—	13	3	15	139
Sherbet	3	2	1	—	9	1	3	1	5	1	4	1	31
Lemonade ..	—	—	—	—	—	—	—	—	—	—	—	3	3
Arrack	3	2	—	1	1	2	—	—	1	2	—	2	14
Brandy	—	—	—	—	—	—	4	—	—	2	1	—	7
Whisky	—	—	—	—	—	—	4	—	—	—	1	—	5
Vermouth	—	—	—	—	—	—	4	—	—	—	—	—	4
Port wine	—	—	—	—	—	—	3	—	—	—	—	—	3
Key gin	—	—	—	—	—	—	4	—	—	—	—	—	4
Schnapps gin ..	—	1	—	—	—	—	4	—	—	2	3	—	10
Jaggery	—	—	—	—	1	—	—	—	—	—	4	—	5
Musket	—	—	—	—	—	—	2	2	—	5	—	—	9
Cooked rice ..	—	—	—	—	—	—	1	—	—	—	—	—	1
Papadan	—	1	—	—	—	—	—	—	—	—	—	—	1
Habalapethy ..	—	—	—	—	—	—	—	—	—	—	1	—	1
Hot water for tea ..	—	—	—	—	—	—	—	6	—	—	—	—	6
Kasa-kasa	—	—	—	—	—	—	—	1	—	—	—	—	1
Gingelly oil ..	—	—	—	—	—	1	—	—	—	—	—	—	1
Ginger beer ..	—	—	—	—	—	—	—	1	—	—	—	—	1
Tinned milk ..	—	7	2	—	1	1	4	2	—	1	—	—	18
Currants	—	—	—	—	—	—	3	—	—	—	—	—	3
Beer	—	—	—	—	—	—	—	1	—	—	1	—	2
Glass bottles ..	—	—	1	—	—	—	—	—	—	—	—	—	1
Water of pond ..	—	—	—	—	—	—	—	1	—	—	—	—	1
Total ..	64	120	113	152	173	182	181	117	116	127	77	121	1,543

TABLE LXVII.—Details of Milk Samples taken with regard to Purity, and action taken by the Inspector, against Dairymen and Vendors.

Names of Inspectors.	Number of Samples taken.	Number of Samples Pure.	Number of Samples Adulterated.	Number deficient in Fat or from which Cream was extracted.	Number of Prosecutions.	Number of Convictions.	Number of Cases withdrawn.	Number pending.	Number withheld.
J. A. Carnie ..	21	7	14	—	7	6	1	—	—
W. D. Serasinghe ..	75	21	54	—	34	30	4	—	—
W. Blacker ..	51	16	34	1	23	15	2	6	3
M. Samahin ..	52	20	31	1	21	18	2	1	3*
H. E. de Silva ..	89	44	45	—	32	25	7	—	5
T. E. Karunatillake ..	66	41	24	1†	16	14	1	1	—
R. L. Stouter ..	42	29	13	—	2	—	—	2	3
R. A. Horan ..	56	19	35	2	24	19	—	5	4
E. Ambrose ..	29	20	8	1‡	3	2	—	1	1
J. Dabera ..	50	22	28	—	22	22‡	—	—	—
H. W. Davidson ..	32	22	9	1	8	6	1	1	—
F. E. Abeyasekara ..	29	7	22	—	17	8	7	2	3
Total ..	592	268	317	7	209	165	25	19	22

* Dairyman warned in one case. † Milk said to be sold at a lower price. ‡ Accused warned.

TABLE LXVIII.—Limewashing in 1909.

Name of Ward.	Number of Premises.	Number of Tenements.	Number of Houses.	Number of Dry-earth Closets.	Number of Kitchens.	Number of Cattle Sheds.
New Bazaar ..	23	356	5	22	8	3
Slave Island ..	12	96	1	5	—	1
San Sebastian ..	15	131	4	9	3	1
Pettah ..	7	—	10	—	—	—
Fort ..	—	—	—	—	—	—
St. Paul's ..	8	109	—	9	—	—
Maradana North	1	5	—	—	—	—
Maradana South	5	60	—	7	4	1
Colpetty North	8	108	1	8	—	—
Colpetty South	—	—	—	—	—	—
Kotahena North	6	39	3	4	—	—
Kotahena South	—	—	—	—	—	—
Total ..	85	904	24	64	15	6

TABLE LXIX.—Number of Cases conducted by Municipal Midwives during the Year 1909.

Name of Midwife.	Ward.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
A. Wickremasinha ..	St. Paul's ..	12 ..	12 ..	14 ..	15 ..	53
M. P. Muruger ..	do. ..	26 ..	20 ..	23 ..	25 ..	94
Sarah Dias ..	New Bazaar ..	15 ..	16 ..	19 ..	30 ..	80
Agida Perera ..	Kotahena ..	37 ..	29 ..	32 ..	36 ..	134
Nonno Hamy ..	San Sebastian ..	28 ..	30 ..	21 ..	24 ..	103
A. M. Wickramaratna ..	Slave Island ..	28 ..	21 ..	29 ..	25 ..	103
	Total ..	146 ..	128 ..	138 ..	155 ..	567

TABLE LXX.—Statistics of Cases conducted by Municipal Midwives during 1909.

Ward and Name of Midwife.	Burghers.		Sinhalese.		Tamils.		Moors.		Malays.		Others.		All Races.			Mortality.	
													Persons.	Males.	Females.	Death.	Death-rate per Cent.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.					
St. Paul's, A. Wickramasinha ..	3	2	19	12	7	8	3	1	—	—	—	—	55	32	23	8	14·2
Kotahena, Agida Perera	12	6	47	44	10	9	—	6	—	—	1	—	135	70	65	7	5·2
San Sebastian, Nonno Hamy ..	2	2	19	16	9	1	15	26	3	5	5	1	104	53	51	9	8·7
St. Paul's, M. P. Muruger	1	—	7	7	35	25	4	4	—	—	—	1	94	47	47	10	10·6
Slave Island, A. M. Wickramaratna ..	5	6	21	24	20	17	1	1	2	6	—	—	103	49	54	8	7·8
New Bazaar, Sarah Dias	4	7	16	17	9	4	10	6	6	1	—	—	80	45	35	3	3·8
Total of each Sex ..	27	23	129	120	90	74	33	44	11	12	6	2					
Grand Total ..	50		249		164		77		23		8		571*	296	275	46	8·1

* Including 4 multiple births.

TABLE LXXI.—Births and Deaths, Still-births, and Deaths within Four Days.

Race.	Births.			Deaths.			Death-rate per Cent.
	Persons.	Males.	Females.	Persons.	Males.	Females.	
All Races ..	571	296	275	46	23	23	8·1
Burghers ..	50	27	23	5	2	3	10·0
Sinhalese ..	249	129	120	13	9	4	5·2
Tamils ..	164	90	74	17	7	10	10·4
Moors ..	77	33	44	6	3	3	7·8
Malays ..	23	11	12	4	1	3	17·4
Others ..	8	6	2	1	1	—	12·5

TABLE LXXII.—Conservancy Branch. Statement of Complaints and Fines during 1909.

Month.	Nature of Offence.													Amount.
	Depôt.	Miscellaneous.	Lids or Parts of Carts left open whilst at Work.	Public Latrines.	Non-reporting of Vacations.	Coolies without Badges.	Neglect to conserve.	Neglect to clean Buckets.	Neglect to Supply Coir Dust.	Neglect of Day Cooly.	Neglect of Special Cooly.	Neglect to return Cart Chits.	Late Arrival of Carts at Depôt.	
														Rs. c.
January ..	1	8	6	19	3	—	55	73	97	5	3	—	3	68 25
February ..	—	19	9	11	5	—	85	257	167	11	—	—	—	141 0
March ..	5	20	4	11	1	—	118	271	208	27	—	6	1	168 0
April ..	12	8	2	6	—	—	89	146	134	12	1	4	—	103 50
May ..	—	21	3	28	3	2	131	153	144	11	—	14	47	139 25
June ..	—	15	—	29	6	—	123	178	202	21	—	—	—	143 50
July ..	2	14	17	24	6	—	107	277	221	11	—	—	—	169 75
August ..	—	6	3	20	1	3	115	321	224	13	1	—	—	176 75
September ..	2	7	4	18	2	—	62	335	168	17	—	—	—	153 75
October ..	3	16	2	6	2	—	92	114	109	15	1	—	—	140 0
November ..	—	5	—	25	1	—	87	118	130	17	1	—	—	143 50
December ..	8	3	1	10	3	—	64	104	91	8	—	—	—	90 50
Total ..	33	142	51	207	33	5	1,128	2,347	1,895	168	7	24	51	1,637 75

TABLE LXXIII.—Conservancy Branch, Revenue and Expenditure in 1909.

Division.	Total Amount collected in respect of Conservancy of Buckets.*	Total Amount due in respect of Conservancy of Buckets.†	Buckets Daily conserved in Private Premises.	Buckets Daily conserved in Public Latrines.	Cesspits cleared.	
					By Conservancy Contractor.	By Private Contractors.
	Rs. c.	Rs. c.				
I. ..	32,942 50	35,167 20	1,567	—	3	2
II. ..	54,193 12	59,031 12	2,777	144‡	59	29
III. ..	46,561 90	49,331 0	2,603	25§	54	28
IV. ..	39,059 65	39,298 0	2,295	128‖	48	37
Total ..	172,757 17	182,827 32	9,242	297	164	96

* Includes arrears of previous years and advance payments.
† Represents amount due for the year under reference.
‡ Thirteen standard buckets.
§ Five standard buckets.
‖ Eight standard buckets.

Cost recovered on account of arrears, Rs. 3,482·75.

Amount paid to Contractor.	Rs. c.
(*a*) Bulls and conservancy of dry-earth closets	105,074 25
(*b*) On account of clearing cesspits	2,734 15
Total ..	107,808 40

Fines imposed by Chairman on Contractor, Rs. 1,637·75.

TABLE LXXIV.—Conservancy Receipts and Expenditure, 1909.

		Estimate.		Receipt in 1909.	
		Rs	c	Rs	c.
57	By recoveries for conserving private latrines ..	165,000	0	172,750	87
58	Buckets sold	250	0	252	0
59	Disinfectants sold	1,000	0	1,816	24
60	Clearing cesspit privies	750	0	697	0
61	Lease of grass lands at night soil depôt ..	5,520	0	5,542	50
62	By cost	5,000	0	3,453	34
	Total ..	177,520	0	184,511	95

To Vote. No.		Estimate.		Expended in 1909.	
		Rs	c	Rs	c.
107	Salaries and wages	16,996	0	16,455	62
108	House allowance	480	0	480	0
109	Conservancy of dry-earth closets ..	65,000	0	65,322	57
110	Supply of coir dust	7,500	0	10,158	70
111	Stationery	600	0	476	79
112	Refunds	300	0	545	58
113	Hire of bulls	39,500	0	38,920	50
114	Postage	600	0	150	0
115	Uniform, &c.	500	0	499	56
116	Cost of disinfectants	2,000	0	3,564	93*
117	Rent of night soil depôt, Narahenpitiya ..	1,638	0	1,637	50
118	Miscellaneous	600	0	1,416	93
119	Transport allowance	1,200	0	1,200	0
120	Oil allowance	48	0	36	0
121	Supply of latrine buckets†	600	0	1,320	0
122	Supply of storage buckets for latrine† ..	300	0	236	0
181	Conservancy buildings, repairs of cart and cattle shed†	2,000	0	1,590	71
190	Repairs and maintenance of roads, night soil depôt†	3,900	0	2,598	2
191	Metalling, Narahenpitiya road†	2,800	0	362	52
223	Construction and repairs of night soil carts† ..	10,000	0	12,434	13
224	Septic tanks†	250	0	194	64
232	Storage buckets for latrine†	300	0	82	0
250	Erection of latrines, night soil depôt† ..	620	0	565	20
276	Cost of four bicycles for night supervisors ..	600	0‡	600	0
	Total ..	158,332	0	160,847	90

* Expenditure incurred in Sanitary and Conservancy Branch.
† Votes controlled by Municipal Engineer.
‡ Supplementary Budget.

TABLE LXXV.—Births and Deaths and their Rates for each Race in the Town of Colombo for the Year 1909, and the Average for 1899 to 1908.

Race.	Estimated Population, inclusive of the Military, for the Middle of 1909.	Births.			Deaths.			Birth-rate per Mille per Annum.			Death-rate per Mille per Annum.		
		Average, 1899 to 1908.	1908.	1909.	Average, 1899 to 1908.	1908.	1909.	Average, 1899 to 1908.	1908.	1909.	Average, 1899 to 1908.	1908.	1909.
All Races ..	183,872	3,868	4,602	4,589	5,654	6,620	6,169	23·5	25·5	25·0	34·3	36·7	33·5
Europeans ..	3,046	83	77	64	84	105	69	29·7	25·7	20·9	29·9	35·1	22·5
Burghers ..	12,866	392	434	463	323	386	323	32·4	34·1	35·8	26·7	30·3	24·9
Sinhalese ..	76,449	2,106	2,608	2,556	2,623	3,312	2,958	29·7	34·5	33·2	36·9	43·9	38·4
Tamils ..	46,028	466	562	595	1,316	1,343	1,502	12·5	12·6	12·8	35·4	30·2	32·3
Moors ..	32,970	627	678	671	965	1,067	990	21·1	20·9	20·2	32·2	32·9	29·8
Malays ..	5,594	134	172	169	169	196	178	28·2	31·6	23·9	35·5	36·0	31·7
Others ..	6,919	60	71	71	174	211	149	11·7	10·8	10·2	33·1	32·1	21·4

[For Table LXXVI. see page 93.]

TABLE LXXVII.—Deaths of Males and Females at different Age Periods for each Race in the Colombo Municipality during the Year 1909.

Age at Death.	Europeans.		Burghers.		Sinhalese.		Tamils.		Moors.		Malays.		Others.		All Races.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year of age (see particulars on statement) ..	6	3	47	37	401	346	134	106	143	116	35	23	11	15	777	646
Under Five Years—																
1 year and under 2 ..	2	—	14	10	104	126	38	39	34	31	9	6	2	3	203	215
2 years and under 3 ..	—	1	5	10	59	72	15	24	26	25	3	3	—	2	108	137
3 years and under 4 ..	—	—	6	6	31	38	13	15	10	15	3	3	2	—	65	77
4 years and under 5 ..	—	—	1	4	25	23	8	6	12	15	1	4	1	2	48	54
Over Five Years—																
5 years and under 10 ..	1	—	10	2	64	66	20	17	20	16	2	4	4	4	121	109
10 years and under 15 ..	—	—	5	3	38	43	22	12	12	10	2	3	1	—	80	71
15 years and under 20 ..	—	—	4	4	53	55	81	29	22	27	—	3	5	2	165	120
20 years and under 25 ..	6	—	8	8	83	80	98	35	22	25	6	6	10	2	233	156
25 years and under 35 ..	16	2	14	12	186	160	176	87	68	45	3	8	26	3	489	317
35 years and under 45 ..	8	2	10	8	141	103	125	44	46	21	4	5	12	3	346	186
45 years and under 55 ..	6	3	11	10	126	81	91	37	37	17	4	1	7	—	282	149
55 years and under 65 ..	7	1	15	18	105	65	87	23	40	11	3	2	10	—	267	120
65 years and under 75 ..	3	1	9	10	55	43	39	18	24	18	9	7	5	1	144	98
75 years and under 85 ..	—	—	7	7	50	52	22	13	18	19	4	5	6	6	107	102
85 years and over ..	—	1	4	4	30	54	17	11	17	28	4	3	3	1	75	102
Total ..	55	14	170	153	1551	1407	986	516	551	439	92	86	105	44	3510	2659
Persons ..	69		323		2,958		1,502		990		178		149		6,169	

TABLE LXXVI.—Births and Deaths and their Rates with the Principal Causes of Deaths for each Ward in the Town of Colombo during the Year 1909.

Ward.	Estimated Population (inclusive of the Military) for the Middle of the Year 1909.	Births.										Deaths.																					
		Total Births.			Nationality.							Total Deaths.			Nationality.							Principal Causes.											
		Persons.	Males.	Females.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.	Persons.	Males.	Females.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.	Smallpox.	Measles.	Fevers.	Phthisis.	Pneumonia and Bronchitis	Diarrhœa and Dysentery.	Infantile Convulsions and Tetanus.	Old Age.	Violence			
																														Accident.	Homicide.	Suicide.
COLOMBO TOWN..	183,872	4,589	2,426	2,163	64	463	2,556	595	671	169	71	6,169	3,510	2,659	69	323	2,958	1,502	990	178	149	27	11	406	796	1,002	622	631	290	87	15	11
Fort and Galle Face	2,285	7	5	2	4	—	1	2	—	—	—	28	26	2	12	—	3	6	3	1	3	—	—	1	—	6	1	—	—	3	—	—
Pettah ..	7,561	60	28	32	—	10	31	12	4	—	3	105	66	39	—	7	31	41	21	—	5	2	—	6	16	28	5	8	1	5	—	—
San Sebastian ..	10,629	224	117	107	—	14	80	14	100	9	7	247	134	113	—	12	75	30	112	9	9	—	—	16	36	57	15	45	13	—	—	—
St. Paul's ..	24,076	417	218	199	—	22	116	181	82	2	14	565	313	252	—	16	114	299	121	2	13	2	4	33	84	111	47	93	23	4	—	1
Kotahena ..	38,329	874	464	410	7	94	598	96	61	12	6	964	477	487	2	40	627	176	103	5	11	4	—	66	86	179	78	118	60	10	3	—
New Bazaar ..	20,233	486	251	235	1	47	225	49	151	7	6	584	298	286	—	35	237	67	221	6	18	2	1	33	96	108	46	101	37	4	—	1
Maradana Hospitals		818	428	390	4	54	677	55	23	2	3	1,827	1,233	594	34	58	1,042	582	76	7	28	1	—	138	215	247	280	18	48	44	11	7
Maradana (exclusive of Hospitals)	37,216	853	467	386	11	130	436	66	157	41	12	940	486	454	4	92	452	128	204	37	23	11	5	53	160	151	66	132	49	9	—	1
Slave Island ..	20,126	460	247	213	7	24	182	70	70	90	17	526	275	251	2	22	156	105	101	107	33	3	1	37	61	73	45	60	44	6	—	1
Kollupitiya ..	23,417	390	201	189	30	68	210	50	23	6	3	383	202	181	15	41	221	68	28	4	6	2	—	23	42	42	39	56	15	2	1	—

Ward.	Rate per Mille per Annum.						Infant Mortality.	
	Births.			Deaths.				
	Average, 1899 to 1908.	1908.	1909.	Average, 1899 to 1908.	1908.	1909.	Children under One Year.	Proportion to 1,000 Births.
COLOMBO TOWN ..	23·5	25·5	25·0	34·3	36·7	33·5	1,423	310
Fort and Galle Face ..	4·5	7·4	3·1	14·1	11·4	12·3	2	286
Pettah	7·8	5·9	7·9	13·5	11·9	13·9	21	350
San Sebastian ..	21·3	22·4	20·9	25·3	24·0	23·1	73	326
St. Paul's ..	18·1	19·0	17·2	25·7	25·0	23·3	146	350
Kotahena ..	20·1	23·1	22·6	27·5	26·7	24·9	309	354
New Bazaar ..	25·0	22·8	23·8	30·8	33·6	28·6	183	377
Maradana Hospitals ..	—	—	—	—	—	—	165	161
Maradana (exclusive of Hospitals) ..	23·4	22·5	22·7	27·3	29·8	25·0	260	305
Slave Island ..	24·6	26·7	22·7	29·2	30·5	25·9	165	359
Kollupitiya ..	18·4	16·1	16·5	20·0	24·7	16·2	99	254

TABLE LXXVIII.—Causes of Deaths which occurred in the Colombo Municipality during the Year 1909.

Causes of Deaths.	Colombo Town.	Ward.										Nationality.						
		Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana Hospitals.	Maradana, exclusive of Hospitals.	Slave Island.	Kollupitiya.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
All Causes ..	6169	28	105	247	565	964	584	1827	940	526	383	69	323	2958	1502	990	178	149
I. Specific, febrile, or zymotic diseases ..	1226	3	15	37	105	171	90	480	156	100	69	18	67	603	306	176	26	30
II. Parasitic diseases ..	261	—	—	3	11	57	17	109	31	23	10	1	2	144	79	25	7	3
III. Dietetic diseases ..	51	—	—	1	—	24	2	10	11	2	1	1	3	31	6	7	2	1
IV. Constitutional diseases ..	938	1	17	41	89	105	106	265	186	73	55	11	54	434	204	180	28	27
V. Developmental diseases ..	372	—	1	13	23	98	38	74	59	47	19	1	19	211	55	58	16	12
VI. Local diseases ..	2778	20	57	133	289	412	290	732	452	202	191	30	160	1262	722	461	79	64
VII. Violence ..	113	3	5	—	5	13	5	62	10	7	3	4	6	56	35	7	1	4
VIII. Ill-defined and not specified diseases ..	430	1	10	19	43	84	36	95	35	72	35	3	12	217	95	76	19	8
I. Specific, febrile, or zymotic :																		
1. Miasmatic diseases ..	411	1	7	16	38	68	37	128	63	35	18	5	30	223	75	62	8	8
2. Diarrhœal diseases ..	622	1	5	15	47	78	46	280	66	45	39	10	30	281	187	85	14	15
3. Malarial diseases ..	68	1	1	3	7	10	1	22	9	6	8	1	1	28	20	11	3	4
4. Zoogenous diseases ..	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—
5. Venereal diseases ..	21	—	—	1	3	1	1	9	2	3	1	—	—	15	3	3	—	—
6. Septic diseases ..	103	—	2	2	10	13	5	41	16	11	3	2	6	56	21	14	1	3
II. Parasitic diseases ..	261	—	—	3	11	57	17	109	31	23	10	1	2	144	79	25	7	3
III. Dietetic diseases ..	51	—	—	1	—	24	2	10	11	2	1	1	3	31	6	7	2	1
IV. Constitutional diseases ..	938	1	17	41	89	105	106	265	186	73	55	11	54	434	204	180	28	27
V. Developmental diseases ..	372	—	1	13	23	98	38	74	59	47	19	1	19	211	55	58	16	12
VI. Local diseases :—																		
1. Diseases of nervous system ..	807	2	13	53	115	136	119	40	158	74	97	6	47	389	150	164	28	23
2. Diseases of organs of special sense ..	2	—	—	—	—	—	—	2	—	—	—	—	—	1	1	—	—	—
3. Diseases of circulatory system ..	181	8	4	4	11	27	9	53	29	15	21	9	13	92	35	22	6	4
4. Diseases of respiratory system ..	1054	7	30	58	112	194	109	259	156	82	47	2	57	453	309	177	31	25
5. Diseases of digestive system ..	475	3	3	4	13	31	13	280	88	18	22	10	32	213	159	41	11	9
6. Diseases of lymphatic system and ductless glands ..	3	—	1	—	—	—	—	2	—	—	—	—	—	1	1	—	—	1
7. Diseases of urinary system	119	—	2	6	22	10	23	43	5	4	4	2	6	51	32	27	—	1
8. Diseases of reproductive system—																		
(*a*) Organs of generation	21	—	2	—	1	1	—	13	1	3	—	—	1	13	5	2	—	—
(*b*) Parturition ..	70	—	2	6	13	9	10	13	13	4	—	—	1	29	20	17	3	—
9. Diseases of organs of locomotion ..	3	—	—	—	—	—	1	2	—	—	—	—	—	2	1	—	—	—
10. Diseases of integumentary system ..	43	—	—	2	2	4	6	25	2	2	—	1	3	18	9	11	—	1
VII. Violence :—																		
1. Accidents or negligence	87	3	5	—	4	10	4	44	9	6	2	4	3	42	27	6	1	4
2. Homicide ..	15	—	—	—	—	3	—	11	—	—	1	—	—	11	4	—	—	—
3. Suicide ..	11	—	—	—	1	—	1	7	1	1	—	—	3	3	4	1	—	—
4. Execution ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
VIII. Ill-defined and not specified causes ..	430	1	10	19	43	84	36	95	35	72	35	3	12	217	95	76	19	8
Miasmatic Diseases.																		
Smallpox	27	—	2	—	2	4	2	1	11	3	2	—	2	11	9	4	1	—
Chickenpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	11	—	—	—	4	—	1	—	5	1	—	—	1	6	1	2	1	—
Whooping cough ..	2	—	—	—	1	—	1	—	—	—	—	—	—	1	1	—	—	—
Mumps	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	2	—	—	—	—	1	—	1	—	—	—	—	—	1	1	—	—	—
Typhus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Simple and ill-defined fever ..	37	—	2	—	—	14	2	1	—	14	4	—	4	16	11	3	1	2
Enteric fever	295	—	4	15	29	32	31	123	33	17	11	4	22	167	46	47	5	4
Suspected enteric fever ..	23	—	—	—	—	10	—	—	13	—	—	—	—	14	4	4	—	1
Influenza	8	—	—	1	2	2	1	1	1	—	—	—	1	3	2	2	—	—
Other epidemic diseases ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhœal Diseases.																		
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhœa	314	—	4	11	16	57	23	103	46	37	27	1	12	168	67	48	9	9
Dysentery	308	1	1	14	31	21	23	177	20	8	12	9	18	113	120	37	5	6
Malarial Diseases.																		
Remittent fever	49	1	—	1	3	9	—	14	7	6	8	1	—	19	15	7	3	4
Ague	2	—	—	—	1	1	—	—	—	—	—	—	—	1	—	1	—	—
Malarial cachexia ..	17	—	1	2	3	—	1	8	2	—	—	—	1	8	5	3	—	—

Causes of Deaths, &c.—*contd.*

Causes of Deaths.	Colombo Town.	Ward.										Nationality.						
		Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana Hospitals.	Maradana, exclusive of Hospitals.	Slave Island.	Kollupitiya.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
Zoogenous Diseases.																		
Hydrophobia	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—
Glanders	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cowpox and other effects of vaccination	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Venereal Diseases.																		
Syphilis	21	—	—	1	3	1	1	9	2	3	1	—	—	15	3	3	—	—
Gonorrhœa, stricture of urethra	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Septic Diseases.																		
Phagedæna	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	10	—	—	—	—	1	1	5	1	1	1	—	1	5	1	3	—	—
Pyæmia, septicæmia	70	—	1	2	8	3	3	36	11	4	2	2	4	37	15	8	1	3
Puerperal fever	23	—	1	—	2	9	1	—	4	6	—	—	1	14	5	3	—	—
Parasitic Diseases.																		
Thrush	5	—	—	—	—	2	—	2	1	—	—	—	—	4	—	1	—	—
Worms (animal)	147	—	—	3	11	53	17	5	26	23	9	1	2	97	21	18	7	1
Dochmius duodenalis	109	—	—	—	—	2	—	102	4	—	1	—	—	43	58	6	—	2
Dietetic Diseases.																		
Starvation, want of breast milk	46	—	—	—	—	23	2	9	9	2	1	—	1	30	5	7	2	1
Scurvy	1	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—
Chronic alcoholism	3	—	—	1	—	—	—	1	1	—	—	1	1	1	—	—	—	—
Delirium tremens	1	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—
Constitutional Diseases.																		
Rheumatism	14	—	—	1	—	3	1	2	4	—	3	—	—	4	4	3	2	1
Rickets	4	—	—	—	—	3	—	—	1	—	—	—	1	2	1	—	—	—
Cancer	14	—	—	1	—	1	—	5	3	2	2	2	3	4	1	3	1	—
Tabes mesenterica	19	—	—	—	—	1	1	11	4	1	1	—	1	16	—	2	—	—
Tubercular meningitis	35	1	—	2	—	2	3	17	6	3	1	2	2	21	3	6	—	1
Phthisis	796	—	16	36	84	86	96	215	160	61	42	7	43	357	182	159	24	24
Other forms of tuberculosis scrofula	7	—	—	—	1	1	—	4	—	—	1	—	—	4	2	1	—	—
Purpurea hæmorrhagic diathesis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Anæmia, chlorosis, leucocy-thæmia	17	—	—	2	4	1	3	3	2	2	—	—	10	5	2	—	—	
Diabetes mellitus	18	—	1	—	4	2	3	5	1	2	—	2	10	2	3	1	—	
Leprosy	5	—	1	—	1	—	1	1	—	1	—	—	1	3	1	—	—	
Elephantiasis	1	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	
Parangi	1	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	
Other and undefined constitutional diseases	7	—	—	—	—	—	1	3	—	2	1	—	1	2	2	1	1	—
Developmental Diseases.																		
Premature birth	75	—	—	—	—	33	1	25	10	3	3	1	2	56	8	8	—	—
Atelectasis	3	—	—	—	—	3	—	—	—	—	—	—	—	3	—	—	—	—
Cyanosis	1	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—
Spina bifida	2	—	—	—	—	—	—	1	—	—	1	—	—	1	1	—	—	—
Imperforate anus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cleft palate	1	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—
Other congenital defects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Old age	290	—	1	13	23	60	37	48	49	44	15	—	16	151	45	50	16	12
Diseases of Nervous System.																		
Inflammation of the brain or its membranes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Softening of brain	11	—	—	—	—	—	—	—	—	—	11	—	—	11	—	—	—	—
Apoplexy	17	2	2	—	6	1	3	—	1	—	2	2	1	1	10	3	—	—
Paralysis	58	—	—	—	6	7	9	11	10	8	7	2	6	25	11	9	3	2
Epilepsy	9	—	1	—	1	1	—	1	1	—	4	—	1	4	1	3	—	—
Convulsions	51	—	2	3	7	9	4	1	9	6	10	—	1	24	12	11	1	2
Infantile convulsions	414	—	4	20	46	60	57	5	127	52	43	2	25	221	62	77	21	6
Laryngismus stridulus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Collapse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tetanus	217	—	4	25	47	58	44	13	5	8	13	—	9	92	48	55	3	10
Mania	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—
Paraplegia, diseases of the spinal cord	5	—	—	1	—	—	1	1	1	—	1	—	1	3	—	1	—	—
Other undefined diseases of brain	24	—	—	4	2	—	1	7	4	—	6	—	3	8	5	5	—	3
Other undefined diseases of nervous system	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Organs of Special Sense.																		
Conjunctivitis and other diseases of the eye	1	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—
Otitis and other diseases of ear	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—
Epistaxis and other diseases of nose	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Causes of Deaths, &c.—*contd.*

Causes of Deaths.	Colombo Town.	Ward.										Nationality.						
		Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana Hospitals.	Maradana, exclusive of Hospitals.	Slave Island.	Kollupitiya.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
Circulatory System.																		
Pericarditis	4	—	—	—	—	—	—	3	1	—	—	—	1	2	1	—	—	—
Morbus cordis (disease of heart) ..	62	5	2	3	3	7	2	16	13	5	6	7	4	26	10	9	4	2
Valve disease of heart ..	14	2	—	1	1	2	—	2	3	—	3	1	—	5	6	2	—	—
Hypertrophy of heart ..	6	1	1	—	1	1	—	2	—	—	—	—	1	3	2	—	—	—
Angina pectoris syncope ..	9	—	—	—	2	3	1	2	1	—	—	—	2	3	4	—	—	—
Aneurism	3	—	1	—	—	1	—	—	1	—	—	—	—	1	1	—	—	1
Embolism thrombosis ..	4	—	—	—	—	—	—	3	—	—	1	—	1	2	1	—	—	—
Phlebitis	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—
Varicose veins	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other and undefined diseases of heart or circulatory system ..	78	—	—	—	4	13	6	24	10	10	11	1	4	49	10	11	2	1
Respiratory System.																		
Laryngitis	1	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—
Croup	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bronchitis	213	—	5	14	33	58	43	21	19	11	9	—	14	91	50	44	12	2
Asthma	20	—	—	—	—	11	1	2	3	3	—	—	—	13	5	2	—	—
Pneumonia	789	6	23	43	78	121	65	226	132	62	33	2	42	332	242	130	18	23
Pleurisy	10	—	1	—	—	1	—	8	—	—	—	—	—	4	6	—	—	—
Other and undefined diseases of respiratory system ..	21	1	1	1	1	2	—	2	2	6	5	—	1	12	6	1	1	—
Digestive System.																		
Stomatitis	10	—	—	1	1	—	3	1	2	2	—	—	—	4	1	4	1	—
Dentition	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quinsy	5	—	—	—	1	1	1	—	2	—	—	—	1	3	—	1	—	—
Sore throat	3	—	—	—	—	—	1	—	2	—	—	—	2	—	1	—	—	—
Dyspepsia	7	—	—	—	—	2	—	—	4	1	—	—	—	5	1	—	—	1
Hæmatemesis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malæma	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of stomach ..	1	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—
Enteritis	300	—	1	—	4	12	2	198	71	6	6	1	17	126	120	21	9	6
Ulceration of intestines ..	4	—	—	—	—	—	—	1	—	—	3	—	—	4	—	—	—	—
Ileus, obstruction of intestines ..	9	—	—	—	—	—	2	5	1	1	—	—	1	7	1	—	—	—
Stricture or strangulation of intestines	1	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—
Intussusception of intestine ..	2	—	—	—	—	—	—	2	—	—	—	—	—	1	1	—	—	—
Hernia	7	—	—	—	1	2	—	4	—	—	—	—	—	3	1	2	1	—
Fistula	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Peritonitis	31	1	1	1	1	5	—	16	1	4	1	—	2	14	8	6	—	1
Ascites	7	—	—	—	1	4	1	1	—	—	—	—	—	2	4	1	—	—
Gallstones	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cirrhosis of liver	31	—	—	—	1	2	1	24	1	—	2	1	3	18	9	—	—	—
Other diseases of liver ..	30	1	1	—	2	—	2	17	1	—	6	5	2	14	6	3	—	—
Other and undefined diseases of digestive system ..	26	1	—	2	1	3	—	9	2	4	4	3	2	11	6	3	—	1
Diseases of Lymphatic System and Ductless Glands.																		
Diseases of lymphatic system ..	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Diseases of spleen ..	2	—	1	—	—	—	—	1	—	—	—	—	—	1	1	—	—	—
Diseases of Urinary System.																		
Nephritis	63	—	2	5	16	4	15	16	3	2	—	1	1	16	23	21	—	1
Bright's disease	35	—	—	1	4	4	5	16	2	1	2	1	4	20	5	5	—	—
Uræmia	4	—	—	—	2	1	—	1	—	—	—	—	—	2	2	—	—	—
Suppression of urine ..	3	—	—	—	—	—	2	1	—	—	—	—	—	1	1	1	—	—
Calculus (stone)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hæmaturia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of bladder ..	2	—	—	—	—	—	—	2	—	—	—	—	—	2	—	—	—	—
Other and undefined diseases of urinary system ..	12	—	—	—	—	1	1	7	—	1	2	—	1	10	1	—	—	—
Diseases of Organs of Generation.																		
Ovarian diseases	4	—	1	—	1	—	—	2	—	—	—	—	—	3	1	—	—	—
Diseases of uterus and vagina ..	12	—	1	—	—	—	—	8	—	3	—	—	1	7	4	—	—	—
Disorders of menstruation ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Perineal abscess	1	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—
Pelvic abscess	1	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—
Diseases of testes, penis, scrotum, &c.	3	—	—	—	—	—	—	2	1	—	—	—	—	1	—	2	—	—
Diseases of Parturition.																		
Abortion or miscarriage ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal mania	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal convulsions ..	5	—	—	—	2	—	1	—	1	1	—	—	—	2	1	2	—	—
Placenta prævia, flooding ..	6	—	—	—	1	1	2	—	—	2	—	—	—	3	1	2	—	—
Phlegmasia dolens ..	1	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—
Other and undefined accidents of childbirth	58	—	2	5	11	8	7	12	12	1	—	—	1	23	18	13	3	—

Causes of Deaths, &c.—*contd.*

Causes of Deaths.	Colombo Town.	Ward.										Nationality.						
		Fort and Galle Face.	Pettah.	San Sebastian.	St. Paul's.	Kotahena.	New Bazaar.	Maradana Hospitals.	Maradana, exclusive of Hospitals.	Slave Island.	Kollupitiya.	Europeans.	Burghers.	Sinhalese.	Tamils.	Moors.	Malays.	Others.
Diseases of Organs of Locomotion.																		
Caries, necrosis	1	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—
Arthritis, ostitis, and periostitis	2	—	—	—	—	—	1	1	—	—	—	—	—	1	1	—	—	—
Other and undefined diseases of organs of locomotion	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases of Integumentary System.																		
Carbuncle	5	—	—	—	2	—	1	1	—	—	—	—	—	1	2	2	—	—
Phlegmon, cellulitis	17	—	—	1	—	3	2	11	—	—	—	—	3	7	3	3	—	1
Lupus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ulcer, bed sore	11	—	—	—	—	—	1	8	1	1	—	—	—	6	3	2	—	—
Eczema	3	—	—	—	—	1	2	—	—	—	—	—	—	1	—	2	—	—
Pemphigus	4	—	—	—	—	—	—	4	—	—	—	1	—	2	1	—	—	—
Other and undefined diseases of integumentary system	3	—	—	—	1	—	—	1	1	—	—	—	—	1	—	2	—	—
Accident or Negligence.																		
Fractures, contusions	19	—	1	—	1	2	—	10	3	2	—	2	—	11	5	1	—	—
Gunshot wounds	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cut, stab	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
Burn, scald	12	—	—	—	2	—	—	9	1	—	—	—	—	7	3	2	—	—
Poison	5	—	1	—	—	—	—	4	—	—	—	—	—	4	1	—	—	—
Drowning	20	2	1	—	—	6	3	1	4	2	1	1	—	8	7	3	—	1
Snake-bite	1	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—
Otherwise	29	1	2	—	1	2	1	18	1	2	1	1	3	11	11	—	1	2
Homicids.																		
Murder, manslaughter	15	—	—	—	—	3	—	11	—	—	1	—	—	11	4	—	—	—
Suicide.																		
Gunshot wounds	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cut, stab	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poison	6	—	—	—	—	—	—	6	—	—	—	—	2	2	2	—	—	—
Drowning	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hanging	4	—	—	—	1	—	1	—	1	1	—	—	1	—	2	1	—	—
Otherwise	1	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	—
Execution.																		
Hanging	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ill-defined and not Specified Causes.																		
General dropsy	53	—	—	2	4	10	3	1	17	10	6	—	3	26	11	11	1	1
Debility	346	1	10	15	39	65	32	83	16	59	26	1	6	173	80	62	18	6
Sudden deaths (causes unascertained)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Abscess	17	—	—	1	—	6	—	5	1	3	1	—	2	10	3	2	—	—
Tumour	5	—	—	—	—	2	—	3	—	—	—	—	—	5	—	—	—	—
Hæmorrhage	6	—	—	1	—	—	1	2	1	—	1	2	1	1	1	1	—	—
Other ill-defined and not specified causes	3	—	—	—	—	—	1	1	—	—	1	—	—	2	—	—	—	1